

THE STATE OF NEW HAMPSHIRE

SUPREME COURT

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Docket No: _____

Appeal of Comcast Phone of New Hampshire, LLC and
Comcast IP Phone II, LLC

APPENDIX TO APPEAL BY PETITION
ON BEHALF OF COMCAST PHONE OF NEW HAMPSHIRE, LLC AND
COMCAST IP PHONE II, LLC

VOLUME II

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Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)	
)	
Federal-State Joint Board on	)	CC Docket No. 96-45
Universal Service	)	(Report to Congress)

REPORT TO CONGRESS

Adopted: April 10, 1998

Released: April 10, 1998

By the Commission: Chairman Kennard and Commissioners Ness, Powell and Tristani
issuing separate statements; Commissioner Furchtgott-Roth dissenting and issuing a statement.

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APPENDIX A Parties Filing Comments

APPENDIX B Parties Filing Reply Comments

1. On November 26, 1997, in a recent Appropriations Act,¹ Congress directed the

¹ Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 1998, Pub. L. No. 105-119, 111 Stat. 2440, 2521-2522, § 623 (the "Appropriations Act"). Specifically, the Appropriations Act requires the Commission to submit a report to Congress, no later than April 10, 1998, providing:

a detailed description of the extent to which the Commission's interpretations [identified below] are consistent with the plain language of the Communications Act of 1934 (47 U.S.C. 151 et seq.), as amended by the Telecommunications Act of 1996, and shall include a review of --

- (1) the definitions of "information service", "local exchange carrier", "telecommunications", "telecommunications service", "telecommunications carrier", and "telephone exchange service" that were added to section 3 of the Communications Act of 1934 (47 U.S.C. 153) by the Telecommunications Act of 1996 and the impact of the Commission's interpretation of those definitions on the current and future provision of universal service to consumers in all areas of the Nation, including high cost and rural areas;
- (2) the application of those definitions to mixed or hybrid services and the impact of such application on universal service definitions and support, and the consistency of the Commission's application of those definitions, including with respect to Internet access under section 254(h) of the Communications Act of 1934 (47 U.S.C. 254(h));
- (3) who is required to contribute to universal service under section 254(d) of the Communications Act of 1934 (47 U.S.C. 254(d)) and related existing Federal universal service support mechanisms, and of any exemption of providers or exclusion of any service that includes telecommunications from such requirement or support mechanisms;
- (4) who is eligible under sections 254(e), 254(h)(1), and 254(h)(2) of the Communications Act of 1934 (47 U.S.C. 254(e), 254(h)(1), and 254(h)(2)) to receive specific Federal universal service support for the provision of universal service, and the consistency with which the Commission has interpreted each of those provisions of section 254; and

Commission to report to Congress on the Commission's implementation of certain provisions of the Telecommunications Act of 1996² regarding the universal service system. In response to this mandate, we have undertaken a thorough review of the Commission's interpretations of the relevant provisions of the 1996 Act with respect to each of the subjects identified in the Appropriations Act.

2. We are mindful of the fact that telecommunications is an industry characterized by extremely rapid changes, as technological advances lead to the introduction of revolutionary services. A few years ago, few consumers in this country were aware of the Internet and the notion that a packet-switched network could be used to complete a long distance call placed from a residential telephone probably would have been regarded as far-fetched. Today, millions of consumers, both in the United States and around the world, daily obtain access to the Internet for a wide variety of services. We can only speculate about the technologies and services that will be offered in the future. We must take care to preserve the vibrant growth of these new technologies and services. But we also must remain constant in our commitment to ensuring universal service.

3. In this Report, we find, under the framework of the 1996 Act, that universal service and the growth of new Internet-based information services are mutually reinforcing. The development and continued growth of information services depends upon the preservation and advancement of universal service. By connecting our nation's telecommunications networks to all citizens, we expand the potential customer basis for information services. At the same time, the growth of Internet-based information services greatly stimulates our country's use of telecommunications, and thereby the revenue base from which we now fund universal service. As we confirm below in our Report, the parties supplying the underlying interstate transmission services used by those information services contribute to universal service based on their telecommunications service revenues. Because Internet service providers are major users of telecommunications, they make substantial indirect contributions to universal service support in the charges they pay to their telecommunications suppliers. We also consider below the regulatory status of various forms of "phone-to-phone" IP telephony service mentioned generally in the record. The record currently before us suggests that certain of these services lack the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services," but we do not believe it is appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual service offerings. To the extent we conclude that the services should be characterized as "telecommunications services," the providers of those services would fall within the 1996 Act's mandatory requirement to contribute to universal service mechanisms. Thus, in general,

(5) the Commission's decisions regarding the percentage of universal service support provided by Federal mechanisms and the revenue base from which such support is derived.

Id.

² Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996 Act), codified at 47 U.S.C. §§ 151 et seq. (Hereinafter, all citations to the 1996 Act will be to the 1996 Act as it is codified in the United States Code.) The 1996 Act amended the Communications Act of 1934 (the Act).

continued growth in the information services industry will buttress, not hinder, universal service.

4. We recognize that we are in the midst of a transition from an outmoded system of universal service support that will be undermined by the emergence of local competition to one that is compatible with competitive local markets. We underscore that during and after this transition, it is our duty and intention to ensure that financial support for federal universal service support mechanisms is maintained. In carrying out those responsibilities, we must think ahead, so that our policies are right not just for the present but for the future as well. Our rules should not create anomalies and loopholes that can be exploited by those seeking to avoid universal service obligations.

5. In this Report, we also commit to a reexamination of the issues regarding the respective federal and state responsibilities for maintaining and advancing universal service goals, including a full consideration of the specific alternatives to the Commission's decisions last May that parties have placed in the record before us. This will include a reevaluation of the decision regarding the federal share of high cost support (the "25-75" decision) prior to January 1, 1999. Section 254(b)(3) of the Act establishes the principle that federal and state universal service mechanisms be "specific, predictable and sufficient." We plan to redouble our efforts to work with state commissions to ensure that this statutory principle is fully realized. Therefore, in full recognition of the importance of the mission given to us by Congress in the Appropriations Act, we respectfully submit this Report to Congress on universal service.

I. INTRODUCTION

6. This Report to Congress focuses on the Commission's implementation of the 1996 Act's provisions regarding universal service. The universal service system is designed to ensure that low-income consumers can have access to local phone service at reasonable rates. Universal service also ensures that consumers in all parts of the country, even the most remote and sparsely populated areas, are not forced to pay prohibitively high rates for their phone service.

7. Before passage of the 1996 Act, universal service was promoted through a patchwork quilt of implicit and explicit subsidies at both the state and federal levels.³ Charges to long distance carriers and rates for certain intrastate services provided to carriers and to end users were priced above cost, which enabled local telephone companies to keep rates for basic local telephone service at affordable levels throughout the country. The effect of these subsidies was to increase subscribership levels nationwide by ensuring that residents in rural and high cost areas were not prevented from receiving phone service because of prohibitively high telephone rates.

³ See 47 U.S.C. § 151. The Commission's specific programs pursuant to the 1934 Act's mandate include the high cost loop fund, the dial equipment minutes (DEM) weighting program, long term support, Lifeline, and Link-Up. In addition, the Commission's interstate access charge system provided implicit subsidies for universal service support.

8. Recognizing the vulnerability of these implicit subsidies to competition, Congress, in the 1996 Act, directed the Commission and the states to restructure their universal service support mechanisms to ensure the delivery of affordable telecommunications services to all Americans in an increasingly competitive marketplace. Congress specified that universal service support under the new federal system "should be explicit," and that "every telecommunications carrier that provides interstate telecommunications service shall contribute, on an equitable and non-discriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service."⁴ In addition, Congress specified that a telecommunications carrier meeting the statutory requirements in section 214(e) of the Act would be eligible to receive federal universal service support and required states to designate more than one eligible telecommunications carrier for service areas other than those served by a rural telephone company.⁵ To sustain universal service in a competitive environment, Congress recognized that: (1) the appropriate amount of the universal subsidy must be identifiable; (2) all carriers (rather than only interexchange carriers) that provide telecommunications service should contribute to universal service, on an equitable basis; and (3) any carrier (rather than only the incumbent LEC) should receive the appropriate level of support for serving a customer in a high cost area.

9. In the 1996 Act, Congress codified the long-standing commitment to ensuring universal service first expressed in section 1 of the Act,⁶ and directed that "[c]onsumers . . . in rural, insular, and high cost areas should have access to telecommunications and information services . . . that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to [those] in urban areas."⁷ Congress

⁴ 47 U.S.C. § 254(d)-(e).

⁵ 47 U.S.C. § 214(e); *see also* 47 U.S.C. § 153(37), which provides that:

The term "rural telephone company" means a local exchange carrier operating entity to the extent that such entity --

(A) provides common carrier service to any local exchange carrier study area that does not include either --

(i) any incorporated place of 10,000 inhabitants or more, or any part thereof, based on the most recently available population statistics of the Bureau of the Census; or

(ii) any territory, incorporated or unincorporated, included in an urbanized area, as defined by the Bureau of the Census as of August 10, 1993;

(B) provides telephone exchange service, including exchange access, to fewer than 50,000 access lines;

(C) provides telephone exchange service to any local exchange carrier study area with fewer than 100,000 access lines; or

(D) has less than 15 percent of its access lines in communities of more than 50,000 on the date of enactment of the Telecommunications Act of 1996.

⁶ 47 U.S.C. § 151.

⁷ 47 U.S.C. § 254(b)(3).

also expanded the concept of universal service by requiring, for the first time, universal service support for eligible schools, libraries and rural health care providers.⁸

10. Consistent with the timetable established in the 1996 Act, the Commission issued the *Universal Service Order* in May 1997 implementing the new universal service provisions and setting forth a plan that fulfills the universal service goals established by Congress.⁹ In the *Universal Service Order*, the Commission announced its plan for establishing a system of universal service support for rural, insular, and high cost areas that will replace the existing high cost programs and the implicit federal subsidies with explicit, competitively-neutral federal universal service support mechanisms. The Commission made some modifications to the existing high cost support mechanisms that took effect on January 1, 1998. Those changes were the first steps in moving to a support system that is sustainable in a competitive environment, as Congress has directed. For example, the Commission modified the funding methods for the existing federal universal service support programs, beginning January 1, 1998, so that such support is not generated exclusively through charges imposed on long distance carriers. Instead, as the statute requires, the new universal service rules require equitable and non-discriminatory contributions from all telecommunications carriers and require other providers of interstate telecommunications service to contribute when the Commission finds that the public interest so requires. In addition, the Commission modified the existing high cost support programs so that implicit subsidies previously recovered through interstate access charges will be recovered through the new explicit federal universal service funding mechanism. The Commission also adopted rules to implement the new programs created by Congress in the 1996 Act to encourage and promote universal service for eligible schools, libraries and health care providers.

⁸ 47 U.S.C. § 254(h).

⁹ Federal-State Joint Board on Universal Service, CC Docket No. 96-45, *Report and Order*, 12 FCC Rcd 8776 (1997) (*Universal Service Order*), as corrected by Federal-State Joint Board on Universal Service, *Errata*, CC Docket No. 96-45, FCC 97-157 (rel. June 4, 1997), *appeal pending in Texas Office of Public Utility Counsel v. FCC and USA*, No. 97-60421 (5th Cir. 1997); Federal-State Joint Board on Universal Service, *Order on Reconsideration*, CC Docket No. 96-45, 12 FCC Rcd 10095 (rel. July 10, 1997); Changes to the Board of Directors of the National Exchange Carrier Association Inc., Federal-State Joint Board on Universal Service, *Report and Order and Second Order on Reconsideration*, 12 FCC Rcd 18400 (1997), as corrected by Federal-State Joint Board on Universal Service, *Errata*, CC Docket No. 96-45, DA 97-2477 (rel. Dec. 3, 1997); Changes to the Board of Directors of the National Exchange Carrier Association Inc., Federal-State Joint Board on Universal Service, *Order on Reconsideration, Second Report and Order and Further Notice of Proposed Rulemaking*, CC Docket Nos. 97-21, 96-45, FCC 97-292, 12 FCC Rcd 12437 (rel. Aug. 15, 1997); Federal-State Joint Board on Universal Service, *Third Report and Order*, 12 FCC Rcd 22480 (1997), as corrected by Federal-State Joint Board on Universal Service, *Erratum*, CC Docket Nos. 96-45 and 97-160 (rel. Oct. 15, 1997); Changes to the Board of Directors of the National Exchange Carrier Association, Inc., Federal-State Joint Board on Universal Service, *Second Order on Reconsideration in CC Docket 97-21*, 12 FCC Rcd 22423 (1997); Federal-State Joint Board on Universal Service, *Third Order on Reconsideration*, 12 FCC Rcd 22801 (1997); Federal-State Joint Board on Universal Service, Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Transport Rate Structure and Pricing, End User Common Line Charge, *Fourth Order on Reconsideration*, CC Docket Nos. 96-45, 96-262, 94-1, 91-213, 95-72, FCC 97-420 (rel. Dec. 30, 1997), as corrected by Federal-State Joint Board on Universal Service, *Errata*, CC Docket Nos. 96-45, 96-262, 94-1, 91-213, 95-72, DA 98-158 (rel. Jan 29, 1998) ("*Fourth Order on Reconsideration*"), *appeal pending in Alenco Communications, Inc., et al. v. FCC and USA*, No. 98-1064 (D.C. Cir. 1998).

11. The Commission's revised universal service rules seek to ensure that the Commission's long-standing commitment to maintaining affordable rates throughout the country, codified in the 1996 Act,¹⁰ is maintained in a competitive environment. Although the Commission has many decisions still before it that will affect the ultimate amount of universal service support that will be provided by federal mechanisms,¹¹ there is no indication that the revised universal service rules will result in a reduction in federal support from the current level. The Commission also intends to continue to consult with the Universal Service Joint Board and other state regulators and take additional steps, if necessary, to ensure that rates remain affordable. At the same time, however, the Commission recognizes the 1996 Act's mandate that universal service reforms must accommodate and encourage competition. The Commission also is aware that affordable rates can best be maintained through support mechanisms that provide as much support as is necessary, but no more than is necessary.

12. We are mindful that the proper implementation of these provisions is critical to the success and survival of the nation's universal service system and, accordingly, have taken our obligations very seriously. In preparing this Report, we have sought and reviewed thousands of pages of public comments. We have considered more than 5,000 informal public comments filed via electronic mail. We have held two *en banc* hearings during which panels of experts -- including representatives of the Internet community, telecommunications companies, educators and state officials -- discussed their views with us concerning the interpretive issues surrounding the relevant provisions of the 1996 Act. Although many of the rules at issue have been in place for nearly a year, we have considered each rule and interpretation anew and without preconceptions, in light of both the plain language and overall purposes of the 1996 Act.

II. EXECUTIVE SUMMARY

A. Definitional Issues

13. Section 623(b)(1) of the Appropriations Act directs the Commission to review "the definitions of 'information service,' 'local exchange carrier,' 'telecommunications,' 'telecommunications service,' 'telecommunications carrier,' and 'telephone exchange service.'" In response to Congress's directive, we have revisited the Commission's findings with regard to the way the Commission interpreted these statutory terms when it implemented the universal service provisions of the 1996 Act. In particular, we have carefully evaluated the impact of those definitions on the treatment of Internet-based offerings under the universal service system. We conclude, as the Commission did in the *Universal Service Order*, that the categories of "telecommunications service" and "information service" in the 1996 Act are mutually exclusive. Reading the statute closely, with attention to the legislative history, we conclude that Congress intended these new terms to build upon frameworks established prior

¹⁰ 47 U.S.C. § 254.

¹¹ For example, the Commission must select a mechanism to determine non-rural carriers' forward-looking cost to provide the supported services and determine the relevant benchmark against which to compare cost to determine support levels.

to the passage of the 1996 Act. Specifically, we find that Congress intended the categories of "telecommunications service" and "information service" to be mutually exclusive, like the definitions of "basic service" and "enhanced service" developed in our *Computer II* proceeding, and the definitions of "telecommunications" and "information service" developed in the Modification of Final Judgment that divested the Bell Operating Companies from AT&T.¹² We recognize that the 1996 Act's explicit endorsement of the goals of competition and deregulation represents a significant break from the prior statutory framework. We find generally, however, that Congress intended to maintain a regime in which information service providers are not subject to regulation as common carriers merely because they provide their services "via telecommunications."¹³

B. Application of Definitions

14. The Appropriations Act also requires the Commission to review "the application of those definitions [set forth in section 623(b)(1)] to mixed or hybrid services and the impact of such application on universal service definitions and support, and the consistency of the Commission's application of those definitions, including with respect to Internet access under section 254(h)." Pursuant to that directive, we have reviewed various mixed or hybrid services, including those services that are commonly described as Internet telephony services. The record currently before us suggests that certain forms of "phone-to-phone" IP telephony services lack the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services." We do not, however, believe it is appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual service offerings. To the extent that we conclude that IP certain forms of "phone-to-phone" IP telephony services should be characterized as "telecommunications services," the providers of those services would fall within the 1996 Act's mandatory requirement to contribute to universal service mechanisms.

15. Moreover, we clarify that the provision of transmission capacity to Internet access providers and Internet backbone providers is appropriately viewed as "telecommunications service" or "telecommunications" rather than "information service," and that the provision of such transmission should also generate contribution to universal service support mechanisms. Thus, we find, in general, that continued growth in the information services industry will buttress, not hinder, universal service. In those cases where an Internet service provider owns transmission facilities, and engages in data transport over those facilities in order to provide an information service, we do not currently require it to contribute to universal service mechanisms. We believe it is appropriate to reexamine that result, as one could argue that in such a case that the Internet service provider is furnishing raw transmission capacity to itself. We recognize, however, that there are significant operational difficulties associated with determining the amount of such an Internet service

¹² *United States v. American Tel. & Tel. Co.*, 552 F. Supp. 131, 229 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983).

¹³ 47 U.S.C. § 153(20).

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provider's revenues to be assessed for universal service purposes and with enforcing such requirements. We intend to consider these issues in an upcoming proceeding. Finally, we find that Internet service providers generally do not provide telecommunications. Our analysis, we believe, reflects a consistent approach that will safeguard the current and future provision of universal service to all Americans, and will achieve the Congressionally-specified goals of a "pro-competitive, deregulatory communications policy."

C. Who Contributes to Universal Service Mechanisms

16. Section 623(b)(3) of the Appropriations Act requires the Commission to review "who is required to contribute to universal service under section 254(d) of the Communications Act . . . and related existing mechanisms, and of any exemption of providers or exclusion of any service that includes telecommunications from such requirement or support mechanisms." Accordingly, we have reviewed our decision regarding which entities must contribute to universal service support mechanisms, which entities should contribute, and which entities should be exempt from contributing. We affirm that the plain language of section 254(d), which mandates contributions from "every telecommunications carrier that provides interstate telecommunications services," requires the Commission to construe broadly the class of carriers that must contribute.¹⁴ In addition, we find that the Commission properly exercised the permissive authority granted by section 254(d) to include other providers of interstate telecommunications in the pool of universal service contributors. We have also re-examined the Commission's implementation of the limited authority set forth in section 254(d) to exempt *de minimis* contributors and affirm that the Commission has not exceeded the boundaries established by the statute. We conclude that the Commission appropriately exercised the flexibility that section 254(d) grants it to exempt those entities whose contributions would be *de minimis* and to include in the pool of contributors those providers of telecommunications whose contributions are required by the public interest.

D. Who Receives Universal Service Support

17. Section 623(b)(4) of the Appropriations Act requires the Commission to review who is eligible under sections 254(e), 254(h)(1), and 254(h)(2) of the Communications Act ". . . to receive specific federal universal service support for the provision of universal service, and the consistency with which the Commission has interpreted each of those provisions of section 254." We have carefully evaluated the general standards of eligibility for support set forth in section 254(e) of the 1996 Act, as well as the eligibility standards for providers of services to schools and libraries under section 254(h)(1)(B) and for providers of services to health care providers under section 254(h)(1)(A). Although we observe that certain of the provisions of the 1996 Act appear to render the statute susceptible to more than one interpretation with respect to eligibility for the receipt of universal service support, we conclude that the Commission properly implemented eligibility rules that are consistent with both the language and the spirit of the 1996 Act.

E. Revenue Base and Percentage of Federal Funding

¹⁴ See *Universal Service Order*, 12 FCC Rcd at 9177, para. 783.

18. Finally, as required by section 623(b)(5) the Appropriations Act, we reexamine "the Commission's decisions regarding the percentage of universal service support provided by federal mechanisms and the revenue base from which such support is derived." As explained in detail below, we find that the Commission's decisions with respect to the appropriate revenue base for universal service contributions are legally consistent with the 1996 Act and fulfill the intended goal of establishing an orderly transition from federal implicit subsidies to federal explicit subsidies. After analyzing the Commission's conclusions regarding the jurisdictional parameters placed on the Commission and on states, we agree that the Commission has the authority to assess universal service contributions on both the interstate and intrastate revenues of telecommunications providers.

19. With respect to the percentage of federal universal service funding, as discussed below, we regard the Commission's earlier decision as a place holder, an initial step in its plan for implementing section 254. States and other affected entities have raised serious concerns about the extent of federal support for high cost areas. In this Report, we commit to reconsidering those aspects of the Universal Service Order prior to fully implementing high cost universal service mechanisms. We conclude that a strict, across-the-board rule that provides 25 percent of unseparated high cost support to the larger LECs might provide some states with less total interstate universal service support than is currently provided. The Commission will work to ensure that states do not receive less funding as we implement the high cost mechanisms under the 1996 Act. We find that no state should receive less federal high cost assistance than it currently receives. The Commission decided to provide an evolving level of support and to revise funding mechanisms as necessary to maintain adequate support to ensure reasonable rates. Some of the larger LECs that have higher than average costs, however, currently recover more than 25 percent of their cost from the interstate jurisdiction. Beginning on January 1, 1999, this additional allocation above 25 percent is eliminated. At the same time, however, the basis for providing high cost support is fundamentally altered. We are mindful that the Commission's work in this regard is not yet complete. We are committed to issuing a reconsideration order in response to the petitions filed asking the Commission to reconsider the decision to fund 25 percent of the required support amount. In the course of that reconsideration, we will take all appropriate steps, including continued consultation with the states, to ensure that federal funding is adequate to achieve statutory goals. We also recognize that Congress assigned to the Commission, after consultation with the Joint Board, the ultimate responsibility for establishing policies that ensure that: 1) quality services are available at just, reasonable and affordable rates; 2) all consumers have "access to telecommunications and information services" at rates that are reasonably comparable to the rates charged for similar services in urban areas; and 3) there are "specific, predictable, and sufficient" federal and state mechanisms to preserve and advance universal service. We are committed to implementing section 254 consistent with these objectives.

20. We note that the discussion of the issue of federal support for high cost in this Report relates only to non-rural local exchange carriers. With respect to *rural* LECs, the Commission has determined that there shall be no change in the existing high cost support mechanisms until January 1, 2001 at the earliest. We do not revisit that determination in this

Report. Thus, the method of determining federal support for rural local exchange carriers will remain unchanged until at least January 1, 2001, meaning that the amount of universal service support for rural local exchange carriers will be maintained initially at existing levels and then should increase in accordance with specified factors, such as inflation, that have historically guided changes in such support. Any possible change in the support mechanism for rural local exchange carriers would require a separate rulemaking proceeding.

III. STATUTORY DEFINITIONS

A. Overview

21. All of the specific mandates of the 1996 Act depend on application of the statutory categories established in the definitions section. The 1996 Act added or modified several of the definitions found in the Communications Act of 1934, including those that apply to "telecommunications," "telecommunications service," "telecommunications carrier," "information service," "telephone exchange service," and "local exchange carrier." In section 623(b)(1) of the Appropriations Act, Congress directed us to review the Commission's interpretation of these definitions, and to explain how those interpretations are consistent with the plain language of the 1996 Act.¹⁵ Reading the statute closely, with attention to the legislative history, we conclude that Congress intended these new terms to build upon frameworks established prior to the passage of the 1996 Act. Specifically, we find that Congress intended the categories of "telecommunications service" and "information service" to parallel the definitions of "basic service" and "enhanced service" developed in our *Computer II* proceeding, and the definitions of "telecommunications" and "information service" developed in the Modification of Final Judgment breaking up the Bell system. We recognize that the 1996 Act's explicit endorsement of the goals of competition and deregulation represents a significant break from the prior statutory framework. We find generally, however, that Congress intended to maintain a regime in which information service providers are not subject to regulation as common carriers merely because they provide their services "via telecommunications."¹⁶

B. Background

22. The Communications Act of 1934. The Communications Act of 1934, as amended, gives the Commission extensive authority over all "common carriers," defined as all persons "engaged as a common carrier for hire, in interstate and foreign communication."¹⁷

¹⁵ Appropriations Act, § 623(b)(1).

¹⁶ 47 U.S.C. § 153(20).

¹⁷ *Id.* § 153(10). Section 2(a) of the Act makes plain that the Commission has authority only over communication, and persons engaged in communication, "by wire or radio." *Id.* § 152(a).

Title II of the Act, derived from the federal Interstate Commerce Act,¹⁸ includes (among other things) requirements that common carriers provide service at just and reasonable prices, and subject to just and reasonable practices, classifications, and regulations;¹⁹ that they make no unjust or unreasonable discrimination;²⁰ that they file tariffs, subject to Commission scrutiny;²¹ and that they obtain Commission approval before acquiring or constructing new lines.²²

23. Computer II. More than three decades ago, the Commission recognized that "the growing convergence and interdependence of communication and data processing technologies" threatened to strain its existing interpretations of Title II.²³ It began an inquiry into the regulatory and policy problems posed by that confluence. In 1980, it issued the *Computer II* decision,²⁴ embodying its thinking on how it could best advance its regulatory goals of "minimiz[ing] the potential for improper cross-subsidization, safeguard[ing] against anticompetitive behavior, and [protecting] the quality and efficiency of telephone service" while "foster[ing] a regulatory environment conducive to . . . the provision of new and innovative communications-related offerings" and "enabl[ing] the communications user to [take] advantage of the ever increasing market applications of computer . . . technology."²⁵

24. In *Computer II*, the Commission classified all services offered over a telecommunications network as either *basic* or *enhanced*. A basic service consisted of the offering, on a common carrier basis, of pure "transmission capacity for the movement of information."²⁶ The Commission noted that it was increasingly inappropriate to speak of carriers offering discrete "services" such as voice telephone service. Rather, carriers offered communications paths that subscribers could use as they chose, by means of equipment located on subscribers' premises, for the analog or digital transmission of voice, data, video or

¹⁸ Interstate Commerce Act of 1887, 24 Stat. 379 (1887).

¹⁹ 47 U.S.C. § 201(b).

²⁰ *Id.* § 202(a).

²¹ *Id.* §§ 203-05.

²² *Id.* § 214.

²³ *Regulatory & Policy Problems Presented by the Interdependence of Computer and Communications Services & Facilities (Computer I)*, 7 FCC 2d 11, 13 (1966) (*Notice of Proposed Rulemaking*); 28 FCC 291 (1970) (*Tentative Decision*); 28 FCC 2d 267 (1971) (*Final Decision*), *aff'd in part sub nom. GTE Service Corp. v. FCC*, 474 F.2d 724 (2d Cir. 1973), *decision on remand*, 40 FCC 2d 293 (1973).

²⁴ *Amendment of Section 64.702 of the Commission's Rules and Regulations (Computer II)*, *Tentative Decision and Further Notice of Inquiry and Rulemaking*, 72 FCC 2d 358 (1979) (*Tentative Decision*), 77 FCC 2d 384 (1980) (*Final Decision*), *recon.*, 84 FCC 2d 50 (1980) (*Reconsideration Order*), *further recon.*, 88 FCC 2d 512 (1981) (*Further Reconsideration Order*), *affirmed sub nom. Computer and Communications Industry Ass'n v. FCC*, 693 F.2d 198 (D.C. Cir. 1982), *cert. denied*, 461 U.S. 938 (1983).

²⁵ *See Computer II Tentative Decision*, 72 FCC 2d at 389-90.

²⁶ *Computer II Final Decision*, 77 FCC 2d at 419, para. 93.

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other information.²⁷ The Commission therefore defined basic transmission service to include the offering of "pure transmission capability over a communications path that is virtually transparent in terms of its interaction with customer supplied information."²⁸

25. An enhanced service, by contrast, was defined as "any offering over the telecommunications network which is more than a basic transmission service."²⁹ Specifically, the Commission defined enhanced services to include

services, offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information.³⁰

26. Enhanced service providers, the Commission found, were not "common carriers" within the meaning of the Communications Act of 1934, and hence were not subject to regulation under Title II of that Act. Enhanced services involve "communications and data processing technologies . . . intertwined so thoroughly as to produce a form different from any explicitly recognized in the Communications Act of 1934."³¹ Seeking to regulate enhanced services, the Commission concluded, would only restrict innovation in a fast-moving and competitive market.³²

27. The Commission stressed that the category of enhanced services covered a wide range of different services, each with communications and data processing components. Some might seem to be predominantly communications services; others might seem to be predominantly data processing services. The Commission declined, however, to carve out any subset of enhanced services as regulated communications services. It found that no regulatory scheme could "rationally distinguish and classify enhanced services as either communications or data processing,"³³ and any dividing line the Commission drew would at best "result in an unpredictable or inconsistent scheme of regulation" as technology moved forward.³⁴ Such an attempt would lead to distortions, as enhanced service providers either artificially structured

²⁷ *Id.* at 419, para. 94.

²⁸ *Id.* at 419-20, paras. 93, 96.

²⁹ *Id.* at 420, para. 97.

³⁰ 47 C.F.R. § 64.702(a).

³¹ *Computer II Final Decision*, 77 FCC 2d at 430, para. 120.

³² *See id.* at 434, para. 129.

³³ *Id.* at 428, para. 113.

³⁴ *Id.* at 425, paras. 107-08.

their offerings so as to avoid regulation, or found themselves subjected to unwarranted regulation.³⁵ The Commission therefore determined that enhanced services, which are offered "over common carrier transmission facilities," were themselves not to be regulated under Title II of the Act, no matter how extensive their communications components.³⁶ The Commission reaffirmed its definition of enhanced services in the *Computer III* proceeding.³⁷

28. The Modification of Final Judgment. On August 11, 1982, the District Court for the District of Columbia entered a consent decree, commonly known as the Modification of Final Judgment or MFJ, settling the United States Government's long-running antitrust lawsuit against AT&T. Under the MFJ, AT&T was required to divest itself of the Bell Operating Companies. The MFJ distinguished between "telecommunications" and "information" services: the Bell Operating Companies were to provide local exchange telecommunications service, but were forbidden to provide interexchange telecommunications service or information services.³⁸

29. The Telecommunications Act of 1996. On February 8, 1996, the 1996 Act became law.³⁹ Whereas historically the communications field had been dominated by a few, heavily regulated providers, Congress sought to establish "a pro-competitive, deregulatory national policy framework," making "advanced telecommunications and information technologies and services" available to all Americans, "by opening all telecommunications markets to competition."⁴⁰

30. Although the 1996 Act left intact most of the existing provisions of Title II, it added new provisions referring to "telecommunications" and "information service." The 1996 Act defined "telecommunications" to mean "the transmission, between or among points

³⁵ See *id.* at 423-28, paras. 102-13.

³⁶ See *id.* at 428, paras. 114.

³⁷ See *Amendment of Section 64.702 of the Commission's Rules and Regulations (Computer III)*, Report and Order, Phase II, 2 FCC Rcd 3072, 3081-82 (1987) (*Phase II Order*), recon., 3 FCC Rcd 1150 (1988) (*Phase II Recon. Order*), further recon., 4 FCC Rcd 5927 (1989) (*Phase II Further Recon. Order*), Phase II Order vacated, *California v. FCC*, 905 F.2d 1217 (9th Cir. 1990) (*California I*); *Computer III Remand Proceedings*, 5 FCC Rcd 7719 (1990) (*ONA Remand Order*), recon., 7 FCC Rcd 909 (1992), *pets. for review denied*, *California v. FCC*, 4 F.3d 1505 (9th Cir. 1993) (*California II*); *Computer III Remand Proceedings: Bell Operating Company Safeguards and Tier 1 Local Exchange Company Safeguards*, 6 FCC Rcd 7571 (1991) (*BOC Safeguards Order*), recon. dismissed in part, Order, CC Docket Nos. 90-623 and 92-256, 11 FCC Rcd 12513 (1996); *BOC Safeguards Order vacated in part and remanded*, *California v. FCC*, 39 F.3d 919 (9th Cir. 1994) (*California III*), *cert. denied*, 115 S.Ct. 1427 (1995), *on remand*, 10 FCC Rcd 8360 (1995) (*Computer III Further Remand Notice*), Further Notice of Proposed Rulemaking, CC docket No 95-20, FCC 98-8 (rel. Jan. 30, 1998) (*Computer III Further Remand Proceedings*).

³⁸ See *United States v. American Tel. & Tel. Co.*, 552 F. Supp. 131, 226-32 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983).

³⁹ Pub. L. No. 104-104, 110 Stat. 46, codified at 47 U.S.C. §§ 151 et seq.

⁴⁰ Joint Statement of Managers, S. Conf. Rep. No. 104-230, 104th Cong. 2d Sess. 1 (1996).

specified by the user, of information of the user's choosing, without change in the form or content of the information as sent or received."⁴¹ It defined "telecommunications service" to mean "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available to the public, regardless of the facilities used."⁴² It defined "telecommunications carrier" to include "any provider of telecommunications services, except that such term does not include aggregators of telecommunications services."⁴³ It defined "information service" to mean

the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and [such term] includes electronic publishing, but does not include any use of any such capability for the management, control or operation of a telecommunications system or the management of a telecommunications service.⁴⁴

31. The 1996 Act redefined "telephone exchange service" to include not only "service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers interconnecting service of the character ordinarily furnished by a single exchange," but also "comparable service provided through a system of switches, transmission equipment, or other facilities (or combination thereof) by which a subscriber can originate and terminate a telecommunications service."⁴⁵ It defined "local exchange carrier" to include "any person that is engaged in the provision of telephone exchange service or exchange access." The definition excludes persons "engaged in the provision of a commercial mobile service . . . except to the extent the Commission finds that such service should be included in the definition of such term."⁴⁶

32. The 1996 Act imposes a wide variety of obligations on telecommunications carriers, including, among other things, obligations relating to interconnection⁴⁷ and privacy of subscriber information.⁴⁸ One such obligation relates to universal service: section 254(d)

⁴¹ 47 U.S.C. § 153(43).

⁴² *Id.* § 153(46).

⁴³ *Id.* § 153(44). An aggregator is an entity that, in the ordinary course of its operations, makes telephones available to the public or to transient users of its premises, for interstate telephone calls using operator services. *Id.* § 226(a)(2). Restaurant owners who make pay telephones available to their customers, for example, are aggregators.

⁴⁴ *Id.* § 153(20).

⁴⁵ 47 U.S.C. § 153(47).

⁴⁶ *Id.* § 153(26).

⁴⁷ *See id.* §§ 251-52.

⁴⁸ *See id.* § 222.

dictates that every telecommunications carrier that provides interstate telecommunications services must contribute to the mechanisms established by the Commission to preserve and advance universal service.⁴⁹ The 1996 Act does not impose obligations on telecommunications providers who do *not* provide interstate "telecommunications services" (and therefore are not "telecommunications carriers"), except that the Commission may require any provider of interstate telecommunications to contribute to universal service mechanisms if the public interest requires.⁵⁰ The Act imposes no regulatory obligations on information service providers as such.

C. Discussion

1. "Telecommunications," "Telecommunications Service," "Telecommunications Carrier" and "Information Service" Definitions

33. The proper interpretation of the terms "telecommunications" and "telecommunications service" in the 1996 Act raises difficult issues that are the subject of heated debate. The Commission previously concluded that the 1996 Act's definitions of telecommunications service and information service essentially correspond to the pre-existing categories of basic and enhanced services, in that they were intended to refer to separate categories of services. After finding in the *Non-Accounting Safeguards Order* that "the differently-worded definitions of 'information services' and 'enhanced services' . . . should be interpreted to extend to the same functions,"⁵¹ the Commission ruled in the *Universal Service Order* that entities providing enhanced or information services are not thereby providing "telecommunications service."⁵² It found that the 1996 Act's definition of telecommunications, which "only includes transmissions that do not alter the form or content of the information sent," excludes Internet access services, which "alter the format of information through computer processing applications such as protocol conversion and

⁴⁹ See *id.* § 254(d).

⁵⁰ *Id.*; see also *Universal Service Order*, 12 FCC Rcd at 9182-9184, paras. 793-96.

⁵¹ *Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended*, CC Docket No. 96-149, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 21905, 21955-56, para. 102 (1996) (*Non-Accounting Safeguards Order*), Order on Reconsideration, 12 FCC Rcd 2297 (1997), further recon. pending, Second Report and Order, 12 FCC Rcd 15756 (1997), *aff'd sub nom. Bell Atlantic Telephone Companies v. FCC*, 131 F.3d 1044 (D.C. Cir. 1997). The Commission in the *Non-Accounting Safeguards Order* treated the category of information services as distinct from telecommunications. It reaffirmed its conclusion that protocol processing services were information services, rejecting the possibility of treating such services as telecommunications and thus potentially making them subject to Title II regulation. *Id.* at 21956-57, paras. 104-05.

⁵² *Universal Service Order*, 12 FCC Rcd at 9179-80, paras. 788-89.

interaction with stored data."⁵³ In the *Pole Attachments Telecommunications Rate Order*, we relied on the Commission's finding that Internet access service does not constitute a telecommunications service,⁵⁴ and in *Use of Customer Proprietary Network Information* we summarized Commission precedent as indicating that telecommunications services and information services are "separate, non-overlapping categories, so that information services do not constitute 'telecommunications' within the meaning of the 1996 Act."⁵⁵

34. Senators Stevens and Burns, along with commenters including some incumbent local exchange carriers, urge in their comments that this approach is incorrect. The 1996 Act's definition of "telecommunications," they state, creates a new category unrelated to anything in the Commission's earlier regulatory approach.⁵⁶ Senators Stevens and Burns state that Congress, in defining "telecommunications" and "information service" in the 1996 Act, intended to replace the Commission's existing regulatory structure. As mentioned above, under the regulatory structure in place in 1996, a service could fall into either the "basic" or the "enhanced" category, but not both.⁵⁷ An entity offering a service with both communications and computer-processing components was deemed to be providing an

⁵³ *Id.* at 9180, para. 789. The Commission also noted that section 254(h)(2)(A) calls on it to enhance "access to advanced telecommunications and information services," and concluded that the phrase would be redundant if "information services were a subset of advanced telecommunications." *Id.*

⁵⁴ *Amendment of the Commission's Rules and Regulations Governing Pole Attachments*, Report and Order, Further Notice of Proposed Rulemaking, CC Docket No. 97-151 (rel. Feb. 6, 1998), at para. 33 (*Pole Attachments Telecommunications Rate Order*).

⁵⁵ *Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information*, Second Report and Order and Further Notice of Proposed Rulemaking CC Docket No. 96-115, FCC 98-27 (rel. Feb. 26, 1998), at para. 46. In both the *Pole Attachments Order* and *Use of Customer Proprietary Network Information* we noted the pendency of this Report, and we made clear that we did not intend to foreclose the Report's reexamination of the underlying issues:

We are currently seeking comment on whether

the 1996 Act's definition of "telecommunications service" should be interpreted to extend to the same functions [covered by the Commission's "basic services" category, and] whether there is any basis to conclude that, by using the term "telecommunications services," Congress intended a significant departure from the Commission's usage of "basic services."

Computer III Further Remand Proceedings, at para. 41. We have not yet received reply comments in that proceeding.

⁵⁶ See, e.g., Senators Stevens and Burns comments at 1-6, TDS comments at 2. See also, e.g., Low Tech Designs comments at 1-3, RTC comments at 10-17, Reply Comments of Bell Atlantic at 7-9. But see GTE Comments at 17.

⁵⁷ See *Computer II Final Decision*, 77 FCC 2d at 419-22, paras. 93-97; *supra* Section II.B.

enhanced service, not a basic one.⁵⁸ Senators Stevens and Burns state that Congress rejected that approach, intending instead that a service could fall simultaneously into both of the new categories created by the 1996 Act.⁵⁹ Under this approach, an information service provider is deemed a telecommunications carrier to the extent it engages in "transmission" of the information it provides.⁶⁰ In particular, Senators Stevens and Burns indicate, an information service provider transmitting information to its users over common carrier facilities such as the public switched telephone network is a "telecommunications carrier."⁶¹

35. In support of their position, Senators Stevens and Burns note that the terms "basic" and "enhanced" do not appear in the 1996 Act; rather, Congress defined new categories.⁶² Their interpretation of the statute, they explain, flows naturally from the statute's definition of "telecommunications" as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information, as sent and received," its definition of "telecommunications service" as "the offering of telecommunications for a fee directly to the public . . . regardless of the facilities used," and its definition of telecommunications carrier as including "any provider of telecommunications services."⁶³ These definitions taken together, they state, "make it plain that Congress intended [the term 'telecommunications carrier'] to include anyone engaged in the transmission of 'information of the user's choosing.'"⁶⁴ Senators Stevens and Burns note that other language in the definition of "telecommunications carrier" makes clear that a given entity may simultaneously offer telecommunications and other services.⁶⁵ They also point out that Congress failed to adopt language, included in the House version of the 1996 Act,

⁵⁸ See *Computer II Final Decision*, 77 FCC Rcd at 420-21, 423-28, paras. 97, 102-13; see also *id.* at 432, para. 125 (notwithstanding that enhanced services providers are not "common carriers" subject to Title II, they are subject to the Commission's jurisdiction because they provide "the electronic transmission of writing, signs, signals, pictures, etc., over the interstate telecommunications network"); *id.* at 435, para. 132 (enhanced services have "a communications component"); *supra* Section II.B.

⁵⁹ Senators Stevens and Burns comments at 3-6.

⁶⁰ *Id.* at 4.

⁶¹ *Id.* at 5 & n. 19; see also, e.g., RTC comments at 12-13, TDS comments at 5.

⁶² Senators Stevens and Burns comments at 1-2; see also, e.g., TDS comments at 2.

⁶³ 47 U.S.C. § 153(43), (44), (46).

⁶⁴ Senators Stevens and Burns comments at 4.

⁶⁵ Senators Stevens and Burns comments at 3-5; see 47 U.S.C. § 153(44): "A telecommunications carrier shall be treated as a common carrier under this Act only to the extent that it is engaged in providing telecommunications services . . ."

providing that the term "'telecommunications service' . . . does not include an information service."⁶⁶ Somewhat similar language in the text of the Senate bill was deleted as well.⁶⁷

36. Finally, Senators Stevens and Burns assert that the Commission's current understanding of the statutory terms could "seriously undermine the universal service, competitive neutrality, and local competition goals that were at the heart" of the 1996 Act.⁶⁸ The regulatory provisions of the 1996 Act are addressed to "telecommunications carriers" and "telecommunications services."⁶⁹ They explain that, to the extent that the categories of telecommunications and information services are interpreted to be mutually exclusive, the scope of the "telecommunications carrier" and "telecommunications service" categories is accordingly narrowed, and the reach of the 1996 Act is correspondingly limited.

37. Other Senators and other interested parties, however, have filed comments in this proceeding expressing a contrary view. Senator McCain urges that "[n]othing in the 1996 Act or the legislative history supports the view that Congress intended to subject information services providers to the current regulatory scheme applicable to common carriers which is, if anything, too intrusive and burdensome."⁷⁰ Rather, he explains, "[i]t certainly was not Congress's intent in enacting the supposedly pro-competitive, deregulatory 1996 Act to *extend* the burdens of current Title II regulation to Internet services, which historically have been excluded from regulation."⁷¹ Senator McCain states, in defining "telecommunications," "telecommunications service" and "information service," Congress "distinguished between information services and telecommunication services to reflect the distinction set forth on the Modification of Final Judgment and the Commission's *Second Computer Inquiry* proceeding between those services that offer pure transmission capacity and others that somehow enhance the transmission capacity."⁷² An information service, he continues, "is the offering of particular capabilities via telecommunications, but is itself not telecommunications or a telecommunications service."⁷³ For the Commission to rule that some or all information

⁶⁶ See Senators Stevens and Burns comments at 5 ("Language that specifically stated that a telecommunications service did not include an information service was struck before the final definitions were adopted."); see also February 19, 1998 *en banc* transcript at 24 (testimony of Mr. Comstock).

⁶⁷ We discuss the Senate language below.

⁶⁸ Senators Stevens and Burns comments at 1.

⁶⁹ See *supra* Section II.B.

⁷⁰ Senator McCain letter at 1.

⁷¹ *Id.* at 2 (emphasis in original).

⁷² *Id.* at 3.

⁷³ *Id.*

service providers should simultaneously be deemed telecommunications carriers would ignore a "clear distinction" drawn by Congress, and would have "disastrous" results.⁷⁴

38. Senators Ashcroft, Ford, John F. Kerry, Abraham and Wyden emphasize that "[n]othing in the 1996 Act or its legislative history suggests that Congress intended to alter the current classification of Internet and other information services or to expand traditional telephone regulation to new and advanced services."⁷⁵ Like Senator McCain, they state: "Rather than expand regulation to new service providers, a critical goal of the 1996 Act was to diminish regulatory burdens as competition grew."⁷⁶

39. In addressing the difficult interpretation issues posed by the conflicting positions, we start by observing that the 1996 Act effected landmark changes in a variety of areas of communications policy. We recognize that the interpretation presented by Senator Stevens would serve the goal of eliminating distinctions that result in different regulatory treatment for firms that arguably provide similar functionalities based on whether firms provide "telecommunications" or "information services." We find, however, that in defining "telecommunications" and "information services," Congress built upon the MFJ and the Commission's prior deregulatory actions in *Computer II*. After careful consideration of the statutory language and its legislative history, we affirm our prior findings that the categories of "telecommunications service" and "information service" in the 1996 Act are mutually exclusive.⁷⁷ Under this interpretation, an entity offering a simple, transparent transmission path, without the capability of providing enhanced functionality, offers "telecommunications." By contrast, when an entity offers transmission incorporating the "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information," it does not offer telecommunications. Rather, it offers an "information service" even though it uses telecommunications to do so. We believe that this reading of the statute is most consistent with the 1996 Act's text, its legislative history, and its procompetitive, deregulatory goals.

40. We begin our analysis with the statutory text. Senators Stevens and Burns contend that a service qualifies as a "telecommunications service" whenever the service provider transports information over transmission facilities, without regard to whether the service provider is using information-processing capabilities to manipulate that information or provide new information.⁷⁸ That approach, however, seems inconsistent with the language

⁷⁴ *Id.* at 4.

⁷⁵ Senator Ashcroft, et al., letter at 1.

⁷⁶ *Id.* at 2.

⁷⁷ As we explain *infra* Section IV.B, we interpret the Act to contemplate that a single entity can be both a telecommunications provider and an information services provider, but only in connection with its offering of separate services; it cannot gain that dual status merely as a result of its offering of a single service.

⁷⁸ See Senators Stevens and Burns comments at 4-5. At one point, the comments of Senators Stevens and Burns suggest a second argument: that a firm provides both a "telecommunications service" and an "information service" when it provides information content via the public switched telephone network. In that context, the

Congress used to define "telecommunications." That language specifies that the transmission be "without change in the form or content of the information as sent and received." It appears that the purpose of these words is to ensure that an entity is *not* deemed to be providing "telecommunications," notwithstanding its transmission of user information, in cases in which the entity is altering the form or content of that information.

41. The statutory text suggests to us that an entity should be deemed to provide telecommunications, defined as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form and content of the information," only when the entity provides a transparent transmission path, and does not "change . . . the form and content" of the information.⁷⁹ When an entity offers subscribers the "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information via telecommunications," it does not provide telecommunications; it is using telecommunications.⁸⁰

42. We also find that the legislative history supports our initial conclusions drawn from the statutory text. The 1996 Act's definition of "telecommunications" was closely patterned on the corresponding definition in the MFJ. The MFJ defined "telecommunications" as

the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the

firm would be deemed to be providing transmission of its data, to the consumer, over the telephone company's facilities. See Senators Stevens and Burns comments at 5 & n. 18 (describing it as irrelevant whether the information service provider "make[s] the transmission" over "the ISP's own facilities, leased facilities, private lines, wireless facilities, cable facilities, broadcast facilities [or] common carrier facilities"). The statutory definition of "telecommunications service," however, requires that the provider be "offering . . . to the public" the "transmission . . . of information of the user's choosing." Where users rely on the public switched network to reach the information service provider, it is the telephone company, not the information service provider, that is offering to the public transmission over the public switched network. The information service provider, therefore, is not providing telecommunications service in those circumstances.

⁷⁹ One might make the more limited argument that Congress, rejecting the *Computer II* approach, intended that a service qualify as both "telecommunications" and an "information service" if the service provider transported information of the user's choosing over facilities it owns or leases, and did so "without change in the form or content of the information as sent and received," but nonetheless offered a capability for "generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information." It is difficult to determine, though, what services would fall in this category. A service that generates, acquires, transforms, processes, retrieves, utilizes or makes available information is by definition not merely transmitting the user's information without change. Arguably, a service involving simple storage of user information could transmit it without change, and thus fall within both the "telecommunications service" and "information service" definitions. Our examination of the legislative history, however, convinces us that Congress intended the two categories to be mutually exclusive, and did not contemplate any such overlap. See *infra* paras. 39-42.

⁸⁰ See, e.g., CIX comments at 5-6; Compuserve comments at 3-4; Coalition comments at 4-9; ITI and ITAA comments at 3-6; Reuters comments at 3-4; Worldcom comments at 3-5. But see TDS comments at 2-3; RTC reply comments at 5-10 (characterizing the distinction as an "irrational, disparate, discriminatory, marketplace-distorting" fiction).

information as sent and received, by means of electromagnetic transmission medium, including all instrumentalities, facilities, apparatus, and services (including the collection, storage, forwarding, switching, and delivery of such information) essential to such transmission.⁸¹

The Senate and House bills echoed that language. The House bill defined telecommunications as

the transmission, between or among points specified by the subscriber, of information of the subscriber's choosing, without change in the form or content of the information as sent and received, by means of an electromagnetic transmission medium, including all instrumentalities, facilities, apparatus, and services (including the collection, storage, forwarding, switching, and delivery of such information) essential to such transmission,⁸²

and the Senate bill truncated the definition to include

the transmission, between or among points specified by the user, of information of the user's choosing, including voice, data, image, graphics, and video, without change in the form or content of the information, as sent and received, with or without benefit of any closed transmission medium.⁸³

By contrast, the two bills took different approaches in defining "information service." The House bill derived its definition of "information service" from the MFJ.⁸⁴ The Senate, however, used the Commission's definition of enhanced services as its model.⁸⁵

43. The language and legislative history of both the House and Senate bills indicate that the drafters of each bill regarded telecommunications services and information services as

⁸¹ *United States v. American Tel. & Tel. Co.*, 552 F. Supp. 131, 229 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983).

⁸² H.R. 1555, § 501(a)(48), reprinted in H.R. Rep. No. 204, 104th Cong., 1st Sess. 46 (1995) (*House Report*). The House Report explicitly noted that its definition was "based on the definition used in the Modification of Final Judgment." *Id.* at 125.

⁸³ S. 652, § 8(b), 104th Cong., 1st Sess. (1995).

⁸⁴ See *House Report* at 125.

⁸⁵ S. Rep. No. 23, 104th Cong., 1st Sess. 18 (1995) (*Senate Report*). We note that Judge Greene, in the opinion approving the MFJ, referred to the enhanced-services and information-services categories as "essentially . . . equivalent." *United States v. AT&T*, 552 F. Supp. 131, 178 n. 198 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983); see also *United States v. Western Electric Co.*, 673 F. Supp. 525, 575 (D.D.C. 1987) (referring to "enhanced services, i.e., generally speaking, information services"), *aff'd in part & rev'd in part*, 900 F.2d 283 (D.C. Cir. 1990); CIX comments at 3-4.

mutually exclusive categories.⁸⁶ The House bill explicitly stated in the statutory text: "The term 'telecommunications service' . . . does not include an information service."⁸⁷ The Senate Report stated in unambiguous terms that its definition of telecommunications "excludes those services . . . that are defined as information services."⁸⁸ Information service providers, the Report explained, "do not 'provide' telecommunications services; they are users of telecommunications services."⁸⁹ Accordingly, the Senate Report stated, the legislation "does not require providers of information services to contribute to universal service."⁹⁰ We believe that these statements make explicit the intention of the drafters of both the House and Senate bills that the two categories be separate and distinct, and that information service providers not be subject to telecommunications regulation.

44. As noted above, however, proponents of the alternative interpretation find support in the legislative history for the position that Congress intended overlapping categories. In particular, they point out that the following sentence was deleted from the Senate bill's definition of telecommunications service: "'Telecommunications service' . . . includes the transmission, without change in the form or content, of information services and cable services, but does not include the offering of those services."⁹¹ At the February 19, 1998 *en banc* hearing, it was argued in support of the alternative interpretation that the sentence was deleted in conference so as to ensure that the "telecommunications" and "information service" definitions would not be viewed as mutually exclusive.⁹² The amendment on its face can be read to support that inference. Our review of the legislative history leads us to conclude, however, that the deletion of the language in question was not intended to expand the definition of telecommunications service so that it would overlap with information services. Rather, the sentence was deleted on the Senate floor by a manager's amendment "intended to clarify that carriers of broadcast or cable services are not intended to be classed as common carriers under the Communications Act to the extent they provide broadcast services or cable services."⁹³ That is, the managers appear to have been concerned that the original language might lead courts to interpret "telecommunications service" too *broadly*, and inappropriately classify cable systems and broadcasters as telecommunications carriers. As a result, we believe that this amendment to the definition of "telecommunications

⁸⁶ Moreover, Judge Greene's opinion accompanying the MFJ appears to treat telecommunications and information services as mutually exclusive. See, e.g., 552 F. Supp. at 179-80 (differentiating between "information services" and "transmission facilities for those services").

⁸⁷ H.R. 1555, § 501(a)(50), reprinted in *House Report* at 46-47.

⁸⁸ *Senate Report* at 18.

⁸⁹ *Id.* at 28.

⁹⁰ *Id.*

⁹¹ *Id.* at 79 (text of the bill).

⁹² See Feb. 19, 1998 *en banc* transcript at 24 (testimony of Mr. Comstock).

⁹³ 141 Cong. Rec. S7996 (June 8, 1995) (statement of Sen. Pressler).

service" does not undercut the Senate Report's earlier declaration that the bill's definition of "telecommunications" "excludes . . . information services." Rather, it underlines the legislative determination that information service providers should not be classified as telecommunications carriers.⁹⁴ Moreover, given the explicit statements in the House and Senate bills and the Senate Report, we believe it is significant that the Joint Explanatory Statement (adopting the Senate version of "telecommunications" and "telecommunications service") does not appear to contain anything inconsistent with the view that "telecommunications" and "information service" are mutually exclusive categories.

45. In addition, in considering the statutory history of the 1996 Act, we note that at the time the statute was enacted, the *Computer II* framework had been in place for sixteen years. Under that framework, a broad variety of enhanced services were free from regulatory oversight, and enhanced services saw exponential growth.⁹⁵ Accordingly, a decision by Congress to overturn *Computer II*, and subject those services to regulatory constraints by creating an expanded "telecommunications service" category incorporating enhanced services, would have effected a major change in the regulatory treatment of those services. While we would have implemented such a major change if Congress had required it, our review leads us to conclude that the legislative history does not demonstrate an intent by Congress to do so.⁹⁶ As a result, looking at the statute and the legislative history as a whole, we conclude that Congress intended the 1996 Act to maintain the *Computer II* framework.

46. We note that our interpretation of "telecommunications services" and "information services" as distinct categories is also supported by important policy considerations. An approach in which a broad range of information service providers are simultaneously classed as telecommunications carriers, and thus presumptively subject to the broad range of Title II constraints, could seriously curtail the regulatory freedom that the Commission concluded in *Computer II* was important to the healthy and competitive development of the enhanced-services industry.

⁹⁴ A colloquy between Senator Pressler and Senator Kerrey, at the time the amendment was adopted, states that the amendment was not intended to disturb the application of statutory provisions relating to "telecommunications service" to businesses engaged in the "transmission of information services." *Id.* That statement was part of the Senate bill as reported; the bill had stated, in the deleted language, that "telecommunications service" included "the transmission, without change in the form or content, of information services and cable services, but does not include the offering of those services." Thus, the colloquy presents no reason to believe that the amendment was intended to *expand* the scope of the "telecommunications" definition beyond that expounded in the Senate Report. As a result, we have no reason to question that various statements in that Report apply to the 1996 Act, as adopted by Congress: that the telecommunications definition "excludes . . . information services"; that information service providers "do not 'provide' telecommunications services"; and accordingly that the legislation "does not require providers of information services to contribute to universal service." See *supra* paragraph 40.

⁹⁵ Various commenters stress the efficacy of the *Computer II* regime. See, e.g., AOL comments at 6-8; Compuserve comments at 10-11; Coalition comments at 16; Internet Service Providers reply comments at 5.

⁹⁶ Feb. 19, 1998 *en banc* transcript at 93-94; see also Compuserve comments at 8-9, IAC comments at 17-18.

47. In response to this concern, Senators Stevens and Burns maintain that the Commission could rely on its forbearance authority under section 10 of the Act to resolve any such problems.⁹⁷ Under that provision, the Commission is required to forbear from applying any regulation or provision of the Act to a telecommunications carrier or service, or class of carriers or services, if it determines that enforcement of that regulation or provision is not necessary to ensure that relevant charges, practices, classifications or regulations are just, reasonable and nondiscriminatory; enforcement of that regulation or provision is not necessary to protect consumers; and forbearance is consistent with the public interest.⁹⁸ That forbearance authority is important, and the Commission has relied on it in the past.⁹⁹ Notwithstanding the possibility of forbearance, we are concerned that including information service providers within the "telecommunications carrier" classification would effectively impose a presumption in favor of Title II regulation of such providers. Such a presumption would be inconsistent with the deregulatory and procompetitive goals of the 1996 Act. In addition, uncertainty about whether the Commission would forbear from applying specific provisions could chill innovation.¹⁰⁰

48. The classification of information service providers as telecommunications carriers, moreover, could encourage states to impose common-carrier regulation on such providers. Although section 10(e) of the Act precludes a state from applying or enforcing provisions of *federal* law where the Commission has determined to forbear, it does not preclude a state from imposing requirements derived from state law.¹⁰¹ State requirements for telecommunications carriers vary from jurisdiction to jurisdiction, but include certification, tariff filing, and various reporting requirements and fees.¹⁰² Furthermore, although the Commission has authority to forbear from unnecessary regulation, foreign regulators may not have comparable deregulatory authority to avoid imposing the full range of telecommunications regulation on information services. If these countries were to adopt an

⁹⁷ Senators Stevens and Burns comments at 3; *see also* TDS comments at 2.

⁹⁸ 47 U.S.C. § 10(a).

⁹⁹ *See, e.g., Hyperion Telecommunications, Inc.*, 12 FCC Rcd 8596 (1997); Policy and Rules Concerning the Interstate, Interexchange Marketplace, 11 FCC Rcd 20730 (1996), *on reconsideration*, 12 FCC Rcd 15014 (1997), *stayed sub nom. MCI Telecommunications Corp. v. FCC* (Feb. 13, 1997).

¹⁰⁰ *See* Senator McCain letter at 4: "[T]he state of permanent uncertainty that this approach would unavoidably cause would chill future development of Internet-based services and thereby disserve the public interest."

¹⁰¹ The Commission has preempted certain inconsistent state regulation of jurisdictionally mixed enhanced services provided by the BOCs. *See Computer III Remand Proceedings: Bell Operating Company Safeguards and Tier I Local Exchange Company Safeguards*, 6 FCC Rcd 7571, 7631 (1991) (*BOC Safeguards Order*), *aff'd in relevant part, California v. FCC*, 39 F.3d 919, 931-33 (9th Cir. 1994) (*California III*), *cert. denied*, 115 S.Ct. 1427 (1995). That preemption decision, however, does not address state regulation of telecommunications services.

¹⁰² *See* AOL comments at 12-13, 15-16. *Cf. Computer III Phase II Order*, 2 FCC Rcd 3072, 3078 (1987) (treating protocol processing as an adjunct-to-basic service would introduce regulatory uncertainty, since "even if we were to forbear from regulation on the federal level . . . a [provider] could be subject to state regulation").

approach that classified information services as telecommunications, without the ability to craft an appropriate regulatory framework, that approach could subject information service providers to market access restrictions or above-cost accounting rates. Such a result would inhibit growth of these procompetitive services, to the detriment of consumers in the United States and abroad.

2. Protocol Processing

49. Senators Stevens and Burns urge that transmission services incorporating protocol processing should be treated as telecommunications services, and not information services. They note that, in enacting the 1996 Act, the conference committee declined to adopt the Senate version of the information services definition, derived from the Commission's definition of enhanced services, which explicitly referred to services that "employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscribers transmitted information."¹⁰³ Rather, the conference committee adopted the House version, which made no explicit reference to protocol processing. As a result, the fact that a service involves protocol processing, those parties urge, should not lead to its classification as an information service.¹⁰⁴

50. The Commission reached a different result in the *Non-Accounting Safeguards Order*, in which it concluded that the category of information services was essentially identical to the pre-existing category of enhanced services. The Commission found that those protocol processing services that had qualified as "enhanced" should be treated as "information services," in part because they satisfy the statutory requirement of offering "a capability for . . . transforming [and] processing . . . information via telecommunications."¹⁰⁵ It noted, however, that certain protocol processing services that result in no net protocol conversion to the end user are classified as basic services; those services are deemed telecommunications services.¹⁰⁶

¹⁰³ See Joint Explanatory Statement of the Committee of Conference, S. Rep. No. 104-230 (1996), at 114-16 ("Joint Explanatory Statement").

¹⁰⁴ See Senators Stevens and Burns comments at 4, 6.

¹⁰⁵ 47 U.S.C. § 153(20); *Non-Accounting Safeguards Order*, 11 FCC Rcd at 21955-58, paras. 104-07.

¹⁰⁶ In those services, while protocol conversion may take place internal to the call, there is no net conversion between or among end users. The services fall into three categories: (1) protocol processing in connection with communications between an end-user and the network itself (e.g., for initiation, routing, and termination of calls) rather than between or among users; (2) protocol processing in connection with the introduction of a new basic network technology (which requires protocol conversion to maintain compatibility with existing CPE); and (3) protocol processing in connection with internetworking (conversions taking place solely within the carrier's network to facilitate provision of a basic network service, that result in no net conversion to the end-user). See *Non-Accounting Safeguards Order*, 11 FCC Rcd at 21958, para. 107; *Independent Data Communications Manufacturers Association, Inc. Petition for Declaratory Ruling that AT&T's Interspan Frame Relay Service Is a Basic Service*, Memorandum Opinion and Order, 10 FCC Rcd 13717, 13719 (1995) (*Frame Relay Order*); *Computer III Phase II Order*, 2 FCC Rcd at 3081-82, paras. 64-71. An example of the third type of protocol conversion occurs when a carrier converts from X.25 to X.75 formatted data at the originating end within the network, transports the data in X.75 format, and then converts the data back to X.25 format at the terminating end.

51. Senators Stevens and Burns raise a substantial point. The conference committee's decision not to adopt language explicitly classifying services employing protocol processing as information services supports the inference that the conferees did not intend that classification. We note, however, that the House language, adopted by the conference committee, was derived from the MFJ, and that services employing protocol processing were treated as information services under the MFJ.¹⁰⁷ Furthermore, as noted above, services offering net protocol conversion appear to fall within the statutory language, because they offer a capability for "transforming [and] processing" information. In light of these considerations, we recognize that the issue of the regulatory treatment of protocol processing is a difficult one.

52. We find, however, little to no discussion of this issue in the record. Accordingly, we do not believe that we have an adequate basis for resolving this matter in this Report. Moreover, we believe that we need not resolve the issue in order to address the important issues raised by the Appropriations Act. The regulatory classification of protocol processing is significant to the provision of universal service only to the extent that it affects the appropriate classification of Internet access service and IP telephony. We find, however, for the reasons explained below, that Internet access services are appropriately classed as information services without regard to our treatment of protocol processing.¹⁰⁸ Similarly, our discussion of the regulatory status of phone-to-phone IP telephony is not affected by our resolution of the protocol processing issue.¹⁰⁹ The protocol processing that takes place incident to phone-to-phone IP telephony does not affect the service's classification, under the Commission's current approach, because it results in no net protocol conversion to the end user.¹¹⁰ Finally, when a facilities owner provides leased lines to an Internet access or backbone provider, it does not provide protocol processing.

3. "Telephone Exchange Service" and "Local Exchange Carrier" Definitions

53. The 1996 Act redefined "telephone exchange service" to include not only "service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers interconnecting service of the character ordinarily furnished by a single exchange," but also "comparable service provided through a system of switches, transmission equipment, or other facilities (or combination thereof) by which a subscriber can originate and terminate a telecommunications

¹⁰⁷ See *United States v. Western Electric Co.*, 673 F. Supp. 525 (D.D.C. 1987) (amending the MFJ to allow RBOCs to provide such services notwithstanding their classification as information services), 714 F. Supp. 1 (D.D.C. 1988) (same), *rev'd in part*, 900 F.2d 283 (D.C. Cir. 1990).

¹⁰⁸ See *infra* Section IV.D.2.

¹⁰⁹ See *infra* Section IV.D.3.

¹¹⁰ See *supra* note 102.

service."¹¹¹ It defined "local exchange carrier" to include "any person that is engaged in the provision of telephone exchange service or exchange access." The definition excludes persons "engaged in the provision of a commercial mobile service . . . except to the extent the Commission finds that such service should be included in the definition of such term."¹¹²

54. Our review indicates that the legislative history does not provide guidance on the meaning of these provisions. It appears from the legislative text that Congress' redefinition of "telephone exchange service" was intended to include in that term not only the provision of traditional local exchange service (via facilities ownership or resale), but also the provision of alternative local loops for telecommunications services, separate from the public switched telephone network, in a manner "comparable" to the provision of local loops by a traditional local telephone exchange carrier. The record contains very little discussion of these definitions. We do not believe, however, that the 1996 Act's modification of the "telephone exchange service" definition, or its addition of the "local exchange carrier" definition, undercuts the analysis we present in this Report.

IV. APPLICATION OF DEFINITIONS

A. Overview

55. We have been directed by Congress to describe in detail the application of the definitions considered in the previous section to "mixed or hybrid services."¹¹³ Congress has also directed that we explain "the impact of such application on universal service definitions and support, and the consistency of the Commission's application."¹¹⁴ Under the statute, all "telecommunications carriers" that provide interstate telecommunications services must contribute to federal universal service mechanisms, and any company that otherwise provides interstate telecommunications may be required to contribute. Companies that use other providers' telecommunications networks to provide the communications path underlying their own information services do not contribute directly, but they support universal service indirectly through the telecommunications services they purchase. We conclude that entities providing pure transmission capacity to Internet access or backbone providers provide interstate "telecommunications." Internet service providers themselves generally do not provide telecommunications. In those cases where an Internet service provider owns transmission facilities, and engages in data transport over those facilities in order to provide an information service, we do not currently require it to contribute to universal service mechanisms. We believe it may be appropriate to reconsider that result, as it would appear in such a case that the Internet service provider is furnishing raw transmission capacity to itself. Finally, we consider the regulatory status of various forms of "phone-to-phone IP telephony" service mentioned generally in the record. The record currently before us suggests that

¹¹¹ 47 U.S.C. § 3(47).

¹¹² *Id.* § 3(26).

¹¹³ Appropriations Act, § 623(b)(2).

¹¹⁴ *Id.*

certain of these services lack the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services." We do not believe, however, that it is appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual service offerings. Our analysis, we believe, reflects a consistent approach that will safeguard the current and future provision of universal service to all Americans, and will achieve the Congressionally-specified goals of a "pro-competitive, deregulatory communications policy."

B. Mixed or Hybrid Services

56. We note that the phrase "mixed or hybrid services," as used in the Appropriations Act, does not appear in the text of the 1996 Act. We understand this term to refer to services in which a provider offers a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information via telecommunications, *and* as an inseparable part of that service transmits information supplied or requested by the user.

57. It follows from the statutory analysis set out in Part III.C of this Report that hybrid services are information services, and are not telecommunications services.¹¹⁵ Because information services are offered "via telecommunications," they necessarily require a transmission component in order for users to access information. Accordingly, if we interpreted the statute as breaking down the distinction between information services and telecommunications services, so that some information services were classed as telecommunications services, it would be difficult to devise a sustainable rationale under which all, or essentially all, information services did not fall into the telecommunications service category. As noted in the previous section, we find strong support in the text and legislative history of the 1996 Act for the view that Congress intended "telecommunications service" and "information service" to refer to separate categories of services.

58. The Commission has considered the question of hybrid services since *Computer I*, when it first sought to distinguish "communications" from "data processing."¹¹⁶ *Computer II* provided a framework for classifying such services, under which the offering of enhanced functionality led to a service being treated as "enhanced" rather than "basic."¹¹⁷ An offering that constitutes a single service from the end user's standpoint is not subject to carrier regulation simply by virtue of the fact that it involves telecommunications components.¹¹⁸ As

¹¹⁵ See *supra* Section IV.C.

¹¹⁶ *Regulatory & Policy Problems Presented by the Interdependence of Computer and Communications Services & Facilities (Computer I)*, 7 FCC 2d 11, 13 (1966) (*Notice of Proposed Rulemaking*); 28 FCC 291 (1970) (*Tentative Decision*); 28 FCC 2d 267 (1971) (*Final Decision*), *aff'd in part sub nom. GTE Service Corp. v. FCC*, 474 F.2d 724 (2d Cir. 1973), *decision on remand*, 40 FCC 2d 293 (1973).

¹¹⁷ See *supra* Section II.B.

¹¹⁸ See *Computer II Final Decision*, 77 FCC2d at 420-28, paras. 97-114.

we have explained above, we find that Congress intended to leave this general approach intact when it adopted the 1996 Act.

59. This functional approach is consistent with Congress's direction that the classification of a provider should not depend on the type of facilities used.¹¹⁹ A telecommunications service is a telecommunications service regardless of whether it is provided using wireline, wireless, cable, satellite, or some other infrastructure. Its classification depends rather on the nature of the service being offered to customers. Stated another way, if the user can receive nothing more than pure transmission, the service is a telecommunications service. If the user can receive enhanced functionality, such as manipulation of information and interaction with stored data, the service is an information service. A functional analysis would be required even were we to adopt an overlapping definition of "telecommunications service" and "information service." If we decided that any offering that "included telecommunications" was a telecommunications service, we would need some test to determine whether the transmission component was "included" as part of the service. Based on our analysis of the statutory definitions, we conclude that an approach in which "telecommunications" and "information service" are mutually exclusive categories is most faithful to both the 1996 Act and the policy goals of competition, deregulation, and universal service.

60. We recognize that the question may not always be straightforward whether, on the one hand, an entity is providing a single information service with communications and computing components, or, on the other hand, is providing two distinct services, one of which is a telecommunications service. It is plain, for example, that an incumbent local exchange carrier cannot escape Title II regulation of its residential local exchange service simply by packaging that service with voice mail.¹²⁰ Since *Computer II*, we have made it clear that offerings by non-facilities-based providers combining communications and computing components should always be deemed enhanced.¹²¹ But the matter is more complicated when it comes to offerings by facilities-based providers. We noted recently in the *Universal Service Fourth Order on Reconsideration*, considering a related question, that "[t]he issue is whether, functionally, the consumer is receiving two separate and distinct services."¹²²

C. Background on Internet Services

¹¹⁹ See 47 U.S.C. § 3(46) (defining "telecommunications service" to include "the offering of telecommunications for a fee directly to the public . . . regardless of the facilities used").

¹²⁰ See *Frame Relay Order*, 10 FCC Rcd at 13722-23, paras. 40-46.

¹²¹ See, e.g., *Computer II Phase II Recon. Order*, 3 FCC Rcd at 1153 n. 23; *Decreased Regulation of Certain Basic Telecommunications Services*, 2 FCC Rcd 645, 648, para. 21 (1987) (Notice of Proposed Rulemaking).

¹²² *Fourth Order on Reconsideration*, at para. 282.

61. Congress explicitly directed us to consider Internet access in connection with our implementation of section 254 of the Act.¹²³ More generally, Internet-based offerings represent perhaps the most significant category of "mixed or hybrid services" discussed in the record. Therefore, we believe it appropriate to address in some detail the application of the statutory definitions considered in the previous section to the Internet. We begin with a brief description of the Internet as a backdrop for the analysis in this section.

62. The Internet is a loose interconnection of networks belonging to many owners. It is comprised of tens of thousands of networks that communicate using the Internet protocol (IP).¹²⁴ For purposes of this report, we find it useful to distinguish five types of entities: (1) end users; (2) access providers; (3) application providers; (4) content providers; and (5) backbone providers.

63. *End users* obtain access to and send information either through dial-up connections over the public switched telephone network, or through dedicated data circuits over wireline, wireless, cable, or satellite networks. *Access providers*, more commonly known as Internet service providers, combine computer processing, information storage, protocol conversion, and routing with transmission to enable users to access Internet content and services.¹²⁵ Major Internet access providers include America Online, AT&T WorldNet, Netcom, Earthlink, and the Microsoft Network. *Application providers* offer users a discrete end-to-end service rather than open-ended Internet connectivity. Examples include IP telephony service providers such as IDT and Delta 3, and free electronic mail vendor Juno. *Content providers* make information available on "servers" connected to the Internet, where it can be accessed by end users. Major content providers include Yahoo, Netscape, ESPN Sportszone, and Time-Warner's Pathfinder service. Finally, *backbone providers*, such as Worldcom, Sprint, AGIS, and PSINet, route traffic between Internet access providers, and interconnect with other backbone providers. Many companies fall into more than one of these categories. For example, America Online offers Internet access as well as content (which can be purchased separately for a lower fee), and until recently owned backbone provider ANS. In addition, many of the networks connected to the Internet are "intranets," or private data

¹²³ Appropriations Act, § 623(b)(2).

¹²⁴ IP defines the structure of data, or "packets," transmitted over the Internet.

¹²⁵ We will use the terms "Internet access providers" and "Internet service providers" interchangeably in this Report.

Access services, as we describe them here, are similar to the "conduit services" we defined in the *Universal Service Order*. We used "conduit services," which is not a statutorily-defined term, to describe those services eligible for reimbursement as forms of "access to advanced information services" for schools, libraries, and rural health care providers. As examples of such services, we cross-referenced language from section 274 of the Act concerning electronic publishing. See *Universal Service Order*, 12 FCC Rcd at 9012-13, paras. 443-44. We stated, however, that "our use of section 274 should not imply anything about the classification of services in other contexts." *Id.*, 12 FCC Rcd at 9013 n.159, para. 444. Despite this admonition, our use of language referring to services that are *not* electronic publishing under section 274 may have caused some confusion. We emphasize that our intent was only to give examples of eligible services, not to somehow shift the legal classification of Internet access.

networks, that offer better performance or security to a limited set of users, but can still communicate with the Internet using IP.

64. The Internet is a distributed packet-switched network, which means that information is split up into small chunks or "packets" that are individually routed through the most efficient path to their destination. Even two packets from the same message may travel over different physical paths through the network. Packet switching also enables users to invoke multiple Internet services simultaneously, and to access information with no knowledge of the physical location of the server where that information resides.

65. Internet usage has grown steadily and rapidly, especially since the development of the World Wide Web in 1989. According to one survey, there are currently more than 4,000 Internet service providers and 40 national Internet backbones operating in the United States.¹²⁶ According to data presented at our *en banc* hearing on February 19, 1998, Internet service provider market revenues are projected to grow from under four billion dollars in 1996 to eighteen billion dollars in the year 2000.¹²⁷

D. Discussion

1. Provision of Transmission Capacity to Internet Access and Backbone Providers

66. Internet service providers typically utilize a wide range of telecommunications inputs. Commenters have focused much attention on the fact that Internet service providers purchase analog and digital lines from local exchange carriers to connect to their dial-in subscribers, and pay rates incorporating those carriers' universal service obligations.¹²⁸ What has received less attention is that Internet service providers utilize other, extensive telecommunications inputs. While a large Internet service provider engages in extensive data transport, it may own no transmission facilities. To provide transport within its own network, it leases lines (T1s, T3s and OC-3s)¹²⁹ from telecommunications carriers.¹³⁰ To ensure transport beyond the edges of its network, it makes arrangements to interconnect with one or

¹²⁶ Boardwatch Magazine, *Winter 1998 Directory of Internet Service Providers* at 4, 25.

¹²⁷ February 19, 1998 *en banc* transcript at 15 (testimony of Mr. Hyland).

¹²⁸ See, e.g., USIPA comments at 4.

¹²⁹ A T1 is a digital transmission link with a capacity of 1.544 million bits per second. A T3 has a capacity of 44.736 million bits per second. An OC-3 is a fiberoptic link with capacity of 155.52 million bits per second.

¹³⁰ America Online reports that it expects to spend roughly \$1.2 billion for telecommunications services in fiscal 1999. The prices it pays for those services incorporate universal service contributions. See AOL comments at 17 & n.65; AOL reply comments at Attachment 7-8 (Jeffrey K. Mackie-Mason, "Layering for Equity and Efficiency: A Principled Approach to Universal Service Policy"); see also, e.g., Coalition comments at 13-15; ITI and ITAA comments at 8; Worldcom comments at 8-9 & n.15.

more Internet backbone providers.¹³¹ We explain below, in Part IV.D.2. that Internet service providers themselves provide information services, not telecommunications (and hence do not contribute to universal service mechanisms). But to the extent that any of their underlying inputs constitutes interstate telecommunications, we have authority under the 1996 Act to require that the providers of those inputs contribute to federal universal service mechanisms.

67. With regard to the lines leased by Internet service providers to provide their own internal networks, the analysis is straightforward. We explain below that the Internet service providers leasing the lines do not provide telecommunications to their subscribers, and thus do not directly contribute to universal service mechanisms. The provision of leased lines to Internet service providers, however, constitutes the provision of interstate telecommunications.¹³² Telecommunications carriers offering leased lines to Internet service providers must include the revenues derived from those lines in their universal service contribution base.¹³³ The record reveals that at least some leased-line providers are complying with that requirement, and the prices paid by Internet service providers for their leased lines reflect that universal service obligation.¹³⁴

68. Internet access, like all information services, is provided "via telecommunications." To the extent that the telecommunications inputs underlying Internet services are subject to the universal service contribution mechanism, that provides an answer to the concern, expressed by some commenters, that "[a]s more and more traffic is 'switched' to the Internet . . . there will no longer be enough money to support the infrastructure needed to make universal access to voice or Internet communications possible."¹³⁵ To the extent that IP-based services grow, Internet service providers will have greater needs for transport to accommodate that level of usage. Those needs will lead to increased universal service contributions by providers of the leased lines that make up internal Internet service provider

¹³¹ One study indicates that transport costs, including incoming phone lines, leased lines and interconnection at a network access point, currently amount to roughly 25% of an Internet service provider's total costs. Lee W. McKnight & Brett A. Leida, "Internet Telephony: Costs, Pricing and Policy" (1997), at 14.

¹³² See *Universal Service Order*, 12 FCC Rcd at 9175, para. 780; 47 U.S.C. § 54.703.

¹³³ We base universal service contributions on "end-user telecommunications revenues." 47 C.F.R. § 54.703; *Universal Service Order*, 12 FCC Rcd at 9205-9212, paras. 842-57. Telecommunications revenues are treated as end-user revenues and are included in the funding base, unless the associated telecommunications offerings are provided to an entity that incorporates them into services that should generate their own universal service contributions. See Instructions for Completing the Worksheet for Filing Contributions to the Universal Service Support Mechanism, FCC Form 457, at 12. Because an Internet service provider is not such an entity, entities providing interstate telecommunications to Internet service providers must include the associated revenues in their universal service funding base.

¹³⁴ See, e.g., Worldcom comments at 8 n. 15 ("when UUNET purchases network capacity, a basic telecommunications service, from Worldcom Technologies, Inc., Worldcom reports those revenues to the USAC as revenues earned from an end user").

¹³⁵ Senators Stevens and Burns comments at 9; see also, e.g., Airtouch comments at 30-31.

networks.¹³⁶ More generally, the Internet backbone is currently growing at an exponential rate, as Internet-based services gain popularity and new Internet-based services are developed, leading to increased overall universal service support.¹³⁷

69. In those cases where an Internet service provider owns transmission facilities, and engages in data transport over those facilities in order to provide an information service, we do not currently require it to contribute to universal service mechanisms. We believe it is appropriate to reexamine that result. One could argue that in such a case the Internet service provider is furnishing raw transmission capacity to itself.¹³⁸ To the extent this means the Internet service provider is providing telecommunications as a non-common carrier, it would not generally be subject to Title II, but it "may be required to contribute to the preservation and advancement of universal service if the public interest so requires."¹³⁹ As a theoretical matter, it may be advisable to exercise our discretion under the statute to require such providers that use their own transmission facilities to contribute to universal service. This approach would treat provision of transmission facilities to Internet service providers similarly, for purposes of universal service, without regard to how the facilities are provided. We recognize, however, that there are significant operational difficulties associated with determining the amount of such an Internet service provider's revenues to be assessed for universal service purposes and with enforcing such requirements. There also are issues

¹³⁶ McKnight & Leida indicate that movement from zero to moderate use of IP telephony will nearly triple Internet service provider costs associated with purchasing transport. McKnight & Leida, *supra* note 126, at 14 (for the modeled Internet service provider, projecting such costs at \$7.37 million in the "baseline scenario" and \$21.56 million in the "IP telephony scenario").

¹³⁷ See Jeff Sweat, "Internet Demand Is Moving Faster Than Technology, Panel Says," *Information Week* (March 16, 1998), available at <<http://www.techweb.com/wire/story/0398iwld/TWB19980316S0017>>; Kate Gerwig & Salvatore Salamone, "ISPs Mortgage the Farm for Bandwidth," *Internet Week* (Sept. 1, 1997), available at <<http://www.techweb.com/se/directlink.cgi?INW19970901S0068>>.

¹³⁸ This is not inconsistent with our conclusion, above, that the 1996 Act built on the Commission's deregulatory actions in *Computer II*, so that "telecommunications" and "information service" are mutually exclusive categories. See *supra* Section II.C.1; see also Section II.B (describing *Computer II*). *Computer II* dealt with the relationship between an information service provider and its subscribers. Under *Computer II*, and under our understanding of the 1996 Act, we do not treat an information service provider as providing a telecommunications service to its subscribers. The service it provides to its subscribers is not subject to Title II, and is categorized as an information service. The information service provider, indeed, is itself a user of telecommunications; that is, telecommunications is an input in the provision of an information service. Our analysis here rests on the reasoning that under this framework, in every case, some entity must provide telecommunications to the information service provider. When the information service provider owns the underlying facilities, it appears that it should itself be treated as providing the underlying telecommunications. That conclusion, however, speaks only to the relationship between the facilities owner and the information service provider (in some cases, the same entity); it does not affect the relationship between the information service provider and its subscribers.

¹³⁹ 47 U.S.C. § 254(e).

relating to the extent to which Internet service providers would uneconomically self-provide telecommunications because of a universal service assessment.¹⁴⁰

70. The Commission in the *Universal Service Order* expressly characterized entities that "provide telecommunications solely to meet their internal needs" as telecommunications providers subject to our permissive contribution authority. It found that those entities "should not be required to contribute to the support mechanisms at this time, because telecommunications do not comprise the core of their business."¹⁴¹ Further, "it would be administratively burdensome to assess a special non-revenues-based contribution on these providers."¹⁴² We intend to consider, in an upcoming proceeding, the status of entities that provide transmission to meet their internal needs. To the extent that we conclude that such entities provide telecommunications, we would consider, among other things, whether there are efficient, effective ways to require information service providers that provide telecommunications to meet their own internal needs to contribute to universal service support so that our regulations do not create an artificial incentive for information service providers to integrate vertically. We also would consider whether, and to what extent, our reasoning applies to entities other than information service providers that provide interstate telecommunications to meet their own internal needs.

71. With respect to the facilities that make up the Internet backbone, the record does not reveal the extent to which firms providing telecommunications facilities as part of the Internet backbone are currently contributing to federal universal service mechanisms. Yet it seems clear that, in one manner or another, firms are offering telecommunications inputs in this context that underlie the ultimate provision of Internet services to the consumer. We believe we would need to consider these offerings in order to ensure that the goals of section 254 are fully realized.

72. Our thinking relating to the Internet backbone points up some of the limitations of our current approaches to implementing the universal service provisions of the 1996 Act. The technology and market conditions relating to the Internet backbone are unusually fluid and fast-moving, and we are reluctant to impose any regulatory mandate that relies on the persistence of a particular market model or market structure in this area. It may be that the most successful approach in this context, maintaining universal service revenues while avoiding the imposition of inefficient or innovation-discouraging obligations, would look to the actual facilities owners, requiring them to contribute to universal service mechanisms on

¹⁴⁰ We express no view in this Report on the applicability of this analysis to cable operators providing Internet access service. The Act distinguishes between Title II and Title VI facilities, and we have not yet established the regulatory classification of Internet services provided over cable television facilities. In the *Pole Attachments Telecommunications Rate Order*, we expressly declined to rule on that issue, finding that cable operators providing traditional cable services and Internet access services over the same facilities were entitled to the 47 U.S.C. § 224(d)(3) pole attachment rate without regard to the regulatory classification of their Internet-based services. See *Pole Attachment Telecommunications Rate Order*, at paras. 32-34.

¹⁴¹ *Universal Service Order*, 2 FCC Rcd at 9185, para. 799.

¹⁴² *Id.* See also April 8, 1998 letter from Representative White to Chairman Kennard, *et al.*

the revenues they receive. It is facilities owners that, in a real sense, provide the crucial telecommunications inputs underlying Internet service. If universal service contribution obligations, in the context of the Internet backbone, were based on facilities ownership rather than end-user revenues, then firms purchasing capacity from the facilities owners would still contribute indirectly, through prices that recover the facilities owners' contributions. This matter deserves further consideration.

2. Internet Access Services

73. We find that Internet access services are appropriately classed as information, rather than telecommunications, services. Internet access providers do not offer a pure transmission path; they combine computer processing, information provision, and other computer-mediated offerings with data transport. Senators Stevens and Burns suggest that services provided by Internet access providers should be deemed to fall on the telecommunications side of the line. When an Internet service provider transmits an email message, they maintain, it transmits "information of the user's choosing, without change in the form or content of the information as sent or received." Changes such as the addition of message headers, they argue, are inconsequential: "If the information chosen by the user has the same form (e.g., typewritten English) and content (e.g., directions to Washington, D.C.) as sent and received, then a 'telecommunication' has occurred."¹⁴³ Senator McCain, by contrast, urges that electronic mail, voice mail and Internet access are information services, because they furnish the capabilities to store, retrieve, or generate information.¹⁴⁴

74. In determining whether Internet access providers should be classed as providing information services rather than telecommunications services, the text of the 1996 Act requires us to determine whether Internet access providers merely offer transmission "between or among points selected by the user, of information of the user's choosing, without change in the form or content of the information as sent and received,"¹⁴⁵ or whether they go beyond the provision of a transparent transmission path to offer end users the "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information."¹⁴⁶ For the reasons that follow, we conclude that the latter more accurately describes Internet access service.

75. We note that the functions and services associated with Internet access were classed as "information services" under the MFJ. Under that decree, the provision of gateways (involving address translation, protocol conversion, billing management, and the provision of introductory information content) to information services fell squarely within the

¹⁴³ Senators Stevens and Burns comments at 4; *see also, e.g.*, LTD comments at 1-2; RTC comments at 13-14.

¹⁴⁴ Senator McCain letter at 3.

¹⁴⁵ 47 U.S.C. § 153(43).

¹⁴⁶ *Id.* § 153(20).

"information services" definition.¹⁴⁷ Electronic mail, like other store-and-forward services, including voice mail, was similarly classed as an information service.¹⁴⁸ Moreover, the Commission has consistently classed such services as "enhanced services" under *Computer II*.¹⁴⁹ In this Report, we address the classification of Internet access service *de novo*, looking to the text of the 1996 Act. Various commenters have approached this question by inquiring whether specific applications, such as e-mail, available to users with Internet access, constitute "telecommunications."¹⁵⁰ As we explain below, we believe that Internet access providers do not offer subscribers separate services -- electronic mail, Web browsing, and others -- that should be deemed to have separate legal status. It is useful to examine specific Internet applications, however, in order to understand the nature of the functionality that an Internet access provider offers.

76. Internet access providers typically provide their subscribers with the ability to run a variety of applications, including World Wide Web browsers, FTP clients,¹⁵¹ Usenet newsreaders,¹⁵² electronic mail clients, Telnet applications,¹⁵³ and others. When subscribers store files on Internet service provider computers to establish "home pages" on the World Wide Web, they are, without question, utilizing the provider's "capability for . . . storing . . . or making available information" to others. The service cannot accurately be characterized from this perspective as "transmission, between or among points specified by the user"; the proprietor of a Web page does not specify the points to which its files will be transmitted, because it does not know who will seek to download its files. Nor is it "without change in the form or content," since the appearance of the files on a recipient's screen depends in part on the software that the recipient chooses to employ. When subscribers utilize their Internet

¹⁴⁷ See *United States v. Western Electric Co.*, 673 F. Supp. 525 (D.D.C. 1987) (amending the MFJ to allow RBOCs to provide such services notwithstanding their classification as information services), 714 F. Supp. 1 (D.D.C. 1988) (same), *rev'd in part*, 900 F.2d 283 (D.C. Cir. 1990).

¹⁴⁸ See *United States v. Western Electric Co.*, 714 F. Supp. 1, 11, 19 n. 73 (D.D.C. 1988), *rev'd in part*, 900 F.2d 283 (D.C. Cir. 1990); see also *id.* at 18-24 (amending the MFJ to allow the RBOCs to provide "voice storage and retrieval services, including voice messaging and electronic mail services," notwithstanding their classification as information services). The Telecommunications Resellers Association has filed a petition seeking a declaratory ruling that voice mail is a telecommunications service and thus is subject to resale under 47 U.S.C. § 251. That petition is pending.

¹⁴⁹ See, e.g., *Computer II Final Decision*, 77 FCC 2d at 420-21, paras. 97-98.

¹⁵⁰ See, e.g., Compuserve comments at 5 (e-mail); Senators Stevens and Burns comments at 4 (same); Letter from Donna N. Lampert, Mintz, Levin, to Magalie Roman Salas, FCC, dated Feb. 27, 1998 (summarizing AOL's views).

¹⁵¹ FTP, or File Transfer Protocol, is a tool for accessing file archives linked to the Internet.

¹⁵² The Usenet is a gigantic computer bulletin board system that is operated mostly (although not entirely) over the Internet. There are more than 15,000 different Usenet "newsgroups," each devoted to a single topic such as Peruvian culture, molecular physics and the television show "The X-Files."

¹⁵³ Telnet applications allow users to use other computers connected to the Internet as if they were using terminals physically connected to those machines.

service provider's facilities to retrieve files from the World Wide Web, they are similarly interacting with stored data, typically maintained on the facilities of either their own Internet service provider (via a Web page "cache") or on those of another. Subscribers can retrieve files from the World Wide Web, and browse their contents, because their service provider offers the "capability for . . . acquiring, . . . retrieving [and] utilizing . . . information."¹⁵⁴ Most of the data transport on the Internet relates to the World Wide Web and file transfer.¹⁵⁵

77. The same is true when Internet service providers offer their subscribers access to Usenet newsgroup articles.¹⁵⁶ An Internet service provider receives and stores these articles (in 1996, about 1.2 gigabytes of new material each day)¹⁵⁷ on its own computer facilities. Each Internet service provider must choose whether to carry a full newsgroup feed, or only a smaller subset of available newsgroups. Each Internet service provider must decide how long it will store articles in each newsgroup, and at what point it will delete them as outdated. A user can then select among the available articles, choosing those that the user will view or read; having read an article, the user may store or forward it; and the user can post articles of his or her own, which will in turn be stored on the facilities of his own Internet service provider and those of every other Internet service provider choosing to carry that portion of the newsgroup feed. In providing this service, the Internet service provider offers "a capability for generating, acquiring, storing, . . . retrieving . . . and making available information through telecommunications."¹⁵⁸ Its function seems indistinguishable from that of the database proprietor offering subscribers access to information it maintains on-site; such a proprietor offers the paradigmatic example of an information service.

78. As noted above, Senators Stevens and Burns state that electronic mail constitutes a telecommunications service.¹⁵⁹ They note that the provision of a transmission path for the delivery of faxes constitutes telecommunications, and characterize electronic mail as "nothing more or less than a paperless fax."¹⁶⁰ We have carefully considered this argument, but further analysis leads us to a different result. Like the World Wide Web and

¹⁵⁴ Several commenters stress these points. See, e.g., CIX comments at 7-9, Compuserve comments at 6-7; see also Worldcom comments at 5.

¹⁵⁵ As of April 1995 (the last period in which the National Science Foundation collected the relevant information), about half of all Internet data traffic, measured in bytes of traffic, related to the World Wide Web. That proportion was rising sharply, having doubled in just the previous year. The second largest category of traffic related to FTP file transfer. Electronic mail and Usenet news, combined, amounted to less than 15% of Internet data traffic, and that proportion was falling. See Merit, Inc. data files at <<http://www.merit.edu/nsfnet/statistics/history.ports>>.

¹⁵⁶ See *supra* note 138.

¹⁵⁷ See Chris Lewis, "How to Become a Usenet Site" (rev. 4/13/97), available at <<ftp://rtfm.mit.edu/pub/usenet/news.answers/usenet/site-setup>>.

¹⁵⁸ 47 U.S.C. § 153(20).

¹⁵⁹ Senators Stevens and Burns comments at 4, 7.

¹⁶⁰ *Id.* at 7.

Usenet services described above, electronic mail utilizes data storage as a key feature of the service offering.¹⁶¹ The fact that an electronic mail message is stored on an Internet service provider's computers in digital form offers the subscriber extensive capabilities for manipulation of the underlying data. The process begins when a sender uses a software interface to generate an electronic mail message (potentially including files in text, graphics, video or audio formats). The sender's Internet service provider does not send that message directly to the recipient. Rather, it conveys it to a "mail server" computer owned by the recipient's Internet service provider, which stores the message until the recipient chooses to access it. The recipient may then use the Internet service provider's facilities to continue to store all or part of the original message, to rewrite it, to forward all or part of it to third parties, or otherwise to process its contents -- for example, by retrieving World Wide Web pages that were hyperlinked in the message. The service thus provides more than a simple transmission path; it offers users the "capability for . . . acquiring, storing, transforming, processing, retrieving, utilizing, or making available information through telecommunications."¹⁶²

79. More generally, though, it would be incorrect to conclude that Internet access providers offer subscribers separate services -- electronic mail, Web browsing, and others -- that should be deemed to have separate legal status, so that, for example, we might deem electronic mail to be a "telecommunications service," and Web hosting to be an "information service." The service that Internet access providers offer to members of the public is Internet access.¹⁶³ That service gives users a variety of advanced capabilities. Users can exploit those capabilities through applications they install on their own computers. The Internet service provider often will not know which applications a user has installed or is using. Subscribers are able to run those applications, nonetheless, precisely because of the enhanced functionality that Internet access service gives them.¹⁶⁴

80. The provision of Internet access service involves data transport elements: an Internet access provider must enable the movement of information between customers' own computers and the distant computers with which those customers seek to interact. But the provision of Internet access service crucially involves information-processing elements as well; it offers end users information-service capabilities inextricably intertwined with data

¹⁶¹ Particular users may not exploit this feature of the service offering; indeed, two users with direct Internet connections can communicate via electronic mail in close to real-time. Nonetheless, it is central to the service offering that electronic mail is store-and-forward, and hence asynchronous; one can send a message to another person, via electronic mail, without any need for the other person to be available to receive it at that time.

¹⁶² See, e.g., CIX comments at 9, Compuserve comments at 5-6, NCTA comments at 5-7, AOL ex parte.

¹⁶³ In this respect, we distinguish Internet access providers from application providers such as Juno; electronic mail is the only functionality Juno offers.

¹⁶⁴ We note that large corporate users with internal computer networks and direct connections to their Internet access providers receive somewhat different functionality than do residential dial-up subscribers.

transport.¹⁶⁵ As such, we conclude that it is appropriately classed as an "information service."¹⁶⁶

81. An Internet access provider, in that respect, is not a novel entity incompatible with the classic distinction between basic and enhanced services, or the newer distinction between telecommunications and information services. In essential aspect, Internet access providers look like other enhanced -- or information -- service providers. Internet access providers, typically, own no telecommunications facilities. Rather, in order to provide those components of Internet access services that involve information transport, they lease lines, and otherwise acquire telecommunications, from telecommunications providers -- interexchange carriers, incumbent local exchange carriers, competitive local exchange carriers, and others.¹⁶⁷ In offering service to end users, however, they do more than resell those data transport services. They conjoin the data transport with data processing, information provision, and other computer-mediated offerings, thereby creating an information service. Since 1980, we have classed such entities as enhanced service providers. We conclude that, under the 1996 Act, they are appropriately classed as information service providers.

82. Our findings in this regard are reinforced by the negative policy consequences of a conclusion that Internet access services should be classed as "telecommunications." We have already described some of our concerns about the classification of information service providers generally as telecommunications carriers.¹⁶⁸ Turning specifically to the matter of Internet access, we note that classifying Internet access services as telecommunications services could have significant consequences for the global development of the Internet.¹⁶⁹ We recognize the unique qualities of the Internet, and do not presume that legacy regulatory frameworks are appropriately applied to it.¹⁷⁰

¹⁶⁵ As GTE put it, "[t]he very core of the Internet and its associated services is the ability to 'retrieve' and 'utilize' information." GTE comments at 18.

¹⁶⁶ But see Bell Atlantic reply comments at 7-9 (Internet access providers should make universal service fund contributions to the extent of the telecommunications component of their services).

¹⁶⁷ See *supra* Section IV.D.1.

¹⁶⁸ See *supra* Section II.C.1.

¹⁶⁹ On a related point, we note that the European Commission has determined that extant IP telephony services should not be regulated as "voice telephony." *Status of Voice Communications on Internet Under Community Law and, in Particular, Under Directive 90/388/EEC*, Official Journal of the European Community OJ No C 6 (January 10, 1998) at 4.

¹⁷⁰ The United States emphasized in the WTO Negotiations on Basic Telecommunications that countries should not impose new regulatory burdens on Internet and online service providers that could stifle the development of new technologies and services. See The White House, *A Framework for Global Electronic Commerce* 24 (July 1, 1997). As a general matter, the participants in those negotiations characterized as "basic" those services that involve end-to-end transmission of user-supplied information, such as voice telephony, packet-switched and circuit-switched data transmission, telex, telegraph, fax, and leased lines. Services such as the provision of online databases, electronic mail, and voice mail, by contrast, were characterized as "value-added." As part of the WTO Basic Telecom Agreement, however, WTO Members enter their own schedule of

3. IP Telephony

83. Having concluded that Internet access providers do not offer "telecommunications service" when they furnish Internet access to their customers, we next consider whether certain other Internet-based services might fall within the statutory definition of "telecommunications." We recognize that new Internet-based services are emerging, and that our application of statutory terms must take into account such technological developments. We therefore examine in this section Internet-based services, known as IP telephony, that most closely resemble traditional basic transmission offerings.¹⁷¹ The Commission to date has not formally considered the legal status of IP telephony.¹⁷² The record currently before us suggests that certain "phone-to-phone IP telephony" services lack the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services." We do not believe, however, that it is appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual service offerings.

84. "IP telephony" services enable real-time voice transmission using Internet protocols.¹⁷³ The services can be provided in two basic ways: through software and hardware at customer premises, or through "gateways" that enable applications originating and/or terminating on the PSTN.¹⁷⁴ Gateways are computers that transform the circuit-switched voice signal into IP packets, and vice versa, and perform associated signalling, control, and address translation functions. The voice communications can be transmitted along with other data on the "public" Internet, or can be routed through intranets or other private data networks for improved performance. Several companies now offer commercial IP telephony products. For example, VocalTec sells software that end users can install on their personal computers to

commitments with regard to the extent of their liberalization efforts.

¹⁷¹ Several of the commenters discuss IP telephony as a service that, for legal and policy reasons, should be treated as a "telecommunications service" under the Act. See AT&T comments at 12-13; Alaska comments at 8-9; AirTouch comments at 30-31; Senators Stevens and Burns comments at 8; RTC comments at 13.

¹⁷² A petition for rulemaking by Americas Carriers Telecommunication Association (ACTA) asking that IP telephony software and hardware providers be classified as common carriers is still pending. See *Common Carrier Bureau Clarifies and Extends Request for Comment on ACTA Petition Relating to "Internet Phone" Software and Hardware* — RM 8775, Report No. CC 96-10 (March 25, 1996). Although the analysis in this Report addresses many of the issues raised in the ACTA petition, we will be considering the petition in a separate order.

¹⁷³ While these services are often referred to as "Internet telephony," the same technology is used both over the public Internet and over separate private IP networks. This class of services includes both voice and facsimile transmission using IP.

¹⁷⁴ The two basic technical mechanisms described here can be used to create a broad range of IP telephony service offerings. For example, gateways can be deployed on either the originating or the terminating end of the call, or both. Wherever a gateway is not deployed, premises-based equipment must be available as an alternative.

make calls to other users with similar equipment, and also makes software used in gateways.¹⁷⁵ Companies such as IDT and Qwest employ gateways to offer users the ability to call from their computer to ordinary telephones connected to the public switched network, or from one telephone to another.¹⁷⁶ To use the latter category of services, a user first picks up an ordinary telephone handset connected to the public switched network, then dials the phone number of a local gateway. Upon receiving a second dialtone, the user dials the phone number of the party he or she wishes to call. The call is routed from the gateway over an IP network, then terminated through another gateway to the ordinary telephone at the receiving end.¹⁷⁷

85. Commenters that discuss IP telephony are split on the appropriate treatment of these services.¹⁷⁸ Several parties, including Senators Rockefeller, Snowe, Stevens, and Burns, urge that IP telephony providers offer interstate telecommunications services and, consequently, should contribute to universal service support mechanisms.¹⁷⁹ Other parties, including Senator McCain, Representative White and the National Telecommunications and Information Administration, oppose application of Title II regulation.¹⁸⁰ Some commenters argue that IP telephony is a nascent technology that is unlikely to generate significant revenues in the foreseeable future.¹⁸¹ Regardless of the size of the market, we must still decide as a legal matter whether any IP telephony providers meet the statutory definitions of offering "telecommunications" or "telecommunications service" in section 3 of the 1996 Act.

¹⁷⁵ To engage in a "computer-to-computer" call, a user must typically install IP telephony software on a personal computer equipped with a sound card and microphone, connect to the Internet through an ISP, locate another user who is running compatible IP telephony software and is also connected to the Internet at that moment, and then initiate a call to the other user. See Ashley Dunn, "More Phone, Less Computer, Behind New Generation of Internet Phones," *New York Times CyberTimes*, January 7, 1998; Deborah Branscum, "A Cheaper Way to Phone," *Newsweek*, March 16, 1998, at 80 (describing different forms of IP telephony).

¹⁷⁶ Significant commercial phone-to-phone services have recently been announced by IDT, AT&T, Qwest, Delta 3, and ICG. See Nicholas Denton, "Telecoms Set to Take Further Step into Cyberspace," *Financial Times*, March 13, 1998, at 6; Paul Festa, "Net Phone Market Heats Up," *CNet News.com*, March 11, 1998 (<http://www.news.com/News/Item/0,4,19977.00.html>).

¹⁷⁷ More specifically, the customer places a call over the public switched telephone network to a gateway, which returns a second dial tone, and the signalling information necessary to complete the call is conveyed to the gateway using standard in-band (i.e., DMTF) signals on an over-dial basis. The customer's voice or fax signal is sent to the gateway in unprocessed form (that is, not compressed and packetized). The service provider compresses and packetizes the signal at the gateway, transmits it via IP to a gateway in a different local exchange, reverses the processing at the terminating gateway, and sends the signal out over the public switched telephone network in analog, or uncompressed digital, unpackaged form.

¹⁷⁸ Compare AT&T comments at 12-13; Alaska comments at 8-9; Airtouch comments at 30-31; Senators Stevens and Burns comments at 8; RTC comments at 13 (arguing that IP telephony services are "telecommunications") with AOL reply comments at 8-9; Comcast reply at 4 (claiming IP telephony services should not be regulated under the Act at this time).

¹⁷⁹ See, e.g., Senators Rockefeller and Snowe letter; Senators Stevens and Burns comments at 8.

¹⁸⁰ See Senator McCain letter; Representative White letter; Assistant Secretary Irving letter.

¹⁸¹ See AOL reply comments at 8; Comcast reply comments at 4; Senator McCain letter at 4.

86. As we have observed above in our general discussion of hybrid services, the classification of a service under the 1996 Act depends on the functional nature of the end-user offering.¹⁸² Applying this test to IP telephony, we consider whether any company offers a service that provides users with pure "telecommunications." We first note that "telecommunications" is defined as a form of "transmission."¹⁸³ Companies that only provide software and hardware installed at customer premises do not fall within this category, because they do not transmit information. These providers are analogous to PBX vendors, in that they offer customer premises equipment (CPE) that enables end users to engage in telecommunications by purchasing local exchange and interexchange service from carriers. These CPE providers do not, however, transport any traffic themselves.¹⁸⁴

87. In the case of "computer-to-computer" IP telephony, individuals use software and hardware at their premises to place calls between two computers connected to the Internet. The IP telephony software is an application that the subscriber runs, using Internet access provided by its Internet service provider. The Internet service providers over whose networks the information passes may not even be aware that particular customers are using IP telephony software, because IP packets carrying voice communications are indistinguishable from other types of packets. As a general matter, Title II requirements apply only to the "provi[sion]" or "offering" of telecommunications.¹⁸⁵ Without regard to whether "telecommunications" is taking place in the transmission of computer-to-computer IP telephony,¹⁸⁶ the Internet service provider does not appear to be "provid[ing]" telecommunications to its subscribers.¹⁸⁷

88. "Phone-to-phone" IP telephony services appear to present a different case. In using the term "phone-to-phone" IP telephony, we tentatively intend to refer to services in which the provider meets the following conditions: (1) it holds itself out as providing voice telephony or facsimile transmission service; (2) it does not require the customer to use CPE

¹⁸² See *supra* Section III.D.1.

¹⁸³ 47 U.S.C. § 153(43).

¹⁸⁴ We note that this argument applies to IP telephony services provided through both dial-up residential connections to the public Internet, and to dedicated lines connected to corporate local area networks. The critical distinction is that packetizing and depacketizing takes place at the customer premises, rather than within the network.

¹⁸⁵ See 47 U.S.C. §§ 153(46), 254(d).

¹⁸⁶ It may be argued that the poor sound quality of such services when offered over the public Internet effectively constitutes a "change in the form or content" of user information. Because of our conclusion that IP telephony software companies do not "provide telecommunications," we need not resolve this question.

¹⁸⁷ As we note in Section IV.D.1, the provider of underlying transmission facilities is "providing telecommunications" to the Internet service provider. Further, if the customer uses a dial-up Internet connection, there is of course a LEC that "provides telecommunications" regardless of what information service that customer employs. This underlying telecommunications service is, however, distinguishable from the IP telephony functionality for the same reason it is distinguishable from the Internet access services offered by Internet service providers.

different from that CPE necessary to place an ordinary touch-tone call (or facsimile transmission) over the public switched telephone network; (3) it allows the customer to call telephone numbers assigned in accordance with the North American Numbering Plan, and associated international agreements; and (4) it transmits customer information without net change in form or content.

89. Specifically, when an IP telephony service provider deploys a gateway within the network to enable phone-to-phone service, it creates a virtual transmission path between points on the public switched telephone network over a packet-switched IP network. These providers typically purchase dial-up or dedicated circuits from carriers and use those circuits to originate or terminate Internet-based calls. From a functional standpoint, users of these services obtain only voice transmission, rather than information services such as access to stored files.¹⁸⁸ The provider does not offer a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information. Thus, the record currently before us suggests that this type of IP telephony lacks the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services."

90. We do not believe, however, that it is appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual service offerings. As stated above, we use in this analysis a tentative definition of "phone-to-phone" IP telephony. Because of the wide range of services that can be provided using packetized voice and innovative CPE, we will need, before making definitive pronouncements, to consider whether our tentative definition of phone-to-phone IP telephony accurately distinguishes between phone-to-phone and other forms of IP telephony, and is not likely to be quickly overcome by changes in technology. We defer a more definitive resolution of these issues pending the development of a more fully-developed record because we recognize the need, when dealing with emerging services and technologies in environments as dynamic as today's Internet and telecommunications markets, to have as complete information and input as possible.

91. In upcoming proceedings with the more focused records, we undoubtedly will be addressing the regulatory status of various specific forms of IP telephony, including the regulatory requirements to which phone-to-phone providers may be subject if we were to conclude that they are "telecommunications carriers." The Act and the Commission's rules impose various requirements on providers of telecommunications, including contributing to universal service mechanisms, paying interstate access charges, and filing interstate tariffs.¹⁸⁹ We note that, to the extent we conclude that certain forms of phone-to-phone IP telephony

¹⁸⁸ Routing and protocol conversion within the network does not change this conclusion, because from the user's standpoint there is no net change in form or content.

¹⁸⁹ Other requirements include, but are not limited to: customer proprietary network information (CPNI) rules; section 214 authorization requirements for international service; interconnection provisions of section 251(a); TRS obligations; CALEA assistance capability requirements; compliance with standards promulgated pursuant to sections 255 (access by persons with disabilities) and 256 (coordination for interconnectivity); and certain fees, reporting, and filing requirements.

service are "telecommunications services," and to the extent the providers of those services obtain the same circuit-switched access as obtained by other interexchange carriers, and therefore impose the same burdens on the local exchange as do other interexchange carriers, we may find it reasonable that they pay similar access charges. On the other hand, we likely will face difficult and contested issues relating to the assessment of access charges on these providers. For example, it may be difficult for the LECs to determine whether particular phone-to-phone IP telephony calls are interstate, and thus subject to the federal access charge scheme, or intrastate. We intend to examine these issues more closely based on the more complete records developed in future proceedings.

92. With regard to universal service contributions, to the extent we conclude that certain forms of phone-to-phone IP telephony are interstate "telecommunications," and to the extent that providers of such services are offering those services directly to the public for a fee, those providers would be "telecommunications carriers." Accordingly, those providers would fall within section 254(d)'s mandatory requirement to contribute to universal service mechanisms. Finally, under section 10 of the Act, we have authority to forbear from imposing any rule or requirement of the Act on telecommunications carriers.¹⁹⁰ We will need to consider carefully whether, pursuant to our authority under section 10 of the Act, to forbear from imposing any of the rules that would apply to phone-to-phone IP telephony providers as "telecommunications carriers."

93. We recognize that our treatment of phone-to-phone IP telephony may have implications for the international telephony market. In the international realm, the Commission has stated that IP telephony serves the public interest by placing significant downward pressure on international settlement rates and consumer prices.¹⁹¹ In some instances, moreover, IP telephony providers have introduced an alternative calling option in foreign markets that otherwise would face little or no competition. We continue to believe that alternative calling mechanisms are an important pro-competitive force in the international services market. We need to consider carefully the international regulatory requirements to which phone-to-phone providers would be subject. For example, it may not be appropriate to apply the international accounting rate regime to IP telephony.

4. Policy Implications

94. Congress directed us to explain in this Report "the impact of the Commission's interpretation . . . on the current and future provision of universal service,"¹⁹² and "the

¹⁹⁰ 47 U.S.C. 160.

¹⁹¹ See *Rules and Policies on Foreign Participation in the U.S. Telecommunications Market and Market Entry and Regulation of Foreign-Affiliated Entities*, Report and Order and Order on Reconsideration, 12 FCC Rcd 23,891 (1997), *recon. pending*.

¹⁹² Appropriations Act at §623(b)(1). We have also been directed to explain specifically how our application of the statutory definition to "mixed or hybrid services" impacts on "universal service definitions and support." *Id.* at § 623(b)(2).

consistency of the Commission's application" of statutory definitions.¹⁹³ Therefore, we address in this section the policy consequences of the legal analysis described above. We conclude that our reading of the statutory definitions reflects a consistent approach that will safeguard the current and future provision of universal service to all Americans, and will achieve the 1996 Act's goals of a "pro-competitive, deregulatory communications policy." Further, we are committed to monitoring closely developments in the telecommunications industry to ensure that such changes do not undermine our obligation to ensure universal service.

a. Generally

95. The Internet and other enhanced services have been able to grow rapidly in part because the Commission concluded that enhanced service providers were not common carriers within the meaning of the Act.¹⁹⁴ This policy of distinguishing competitive technologies from regulated services not yet subject to full competition remains viable. Communications networks function as overlapping layers, with multiple providers often leveraging a common infrastructure.¹⁹⁵ As long as the underlying market for provision of transmission facilities is competitive or is subject to sufficient pro-competitive safeguards, we see no need to regulate the enhanced functionalities that can be built on top of those facilities. We believe that Congress, by distinguishing "telecommunications service" from "information service," and by stating a policy goal of preventing the Internet from being fettered by state or federal regulation, endorsed this general approach.¹⁹⁶ Limiting carrier regulation to those companies that provide the underlying transport ensures that regulation is minimized and is targeted to markets where full competition has not emerged. As an empirical matter, the level of competition, innovation, investment, and growth in the enhanced services industry over the past two decades provides a strong endorsement for such an approach.

b. Impact on Universal Service

96. Congress has directed us to explain how our interpretation of the 1996 Act promotes "the current and future provision of universal service to consumers in all areas of

¹⁹³ *Id.* at § 623(b)(2).

¹⁹⁴ AOL comments at 7-8; USIPA comments at 3; ITI and ITAA comments at 8; AOL reply comments at Attachment 14-16.

¹⁹⁵ See AOL reply comments at Attachment 2-7.

¹⁹⁶ Several commenters observe that the 1996 Act states that it is the policy of the United States "to promote the continued development of the Internet and other interactive computer services and interactive media . . . [and] to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation." 47 U.S.C. § 230(b)(1)-(2). See CIX comments at 5; ITI and ITAA comments at 8; NCTA comments at 10; CIX reply at 1-2. See also Senator McCain letter at 2 (claiming that imposition of new burdens on Internet services would be directly contrary to the will of Congress).

the Nation, including high cost and rural areas."¹⁹⁷ With regard to the current provision of universal service, we have established programs under section 254 to fund telecommunications services in high-cost areas and for low-income consumers, as well as access to advanced services for schools, libraries, and rural health care providers.¹⁹⁸ We believe that these programs have been designed with a sufficiently broad contribution base to support current universal service needs.¹⁹⁹

97. As we have explained, our interpretation of the terms "telecommunications" and "information service" reflect continuity with pre-existing legal categories. Consequently, we do not believe that these interpretations would create significant shifts in contribution obligations based on the current configuration of the communications industry. Retail revenues of Internet service providers -- approximately five billion dollars in 1997²⁰⁰ -- are relatively small compared to the \$100 billion in long-distance revenue reported in the latest telecommunications relay service fund worksheet report.²⁰¹ The fact that Internet access is not considered a "telecommunications service" therefore does not have a significant impact on the current universal service funding base. More importantly, however, Internet access generates additional telecommunications revenue to support universal service in the form of the thousands of business lines (with their associated tariffed rates, subscriber line charges, and presubscribed interexchange carrier charges) that Internet service providers must purchase in

¹⁹⁷ Appropriations Act, § 623(b)(1).

¹⁹⁸ See *Universal Service Order*, 12 FCC Rcd at 8888-8951, paras. 199-325 (addressing high cost support); *id.* at 8952-8994, paras. 326-409 (addressing low-income support); *id.* at 9002-9092, paras. 424-607 (establishing mechanisms to support access to advanced services for schools and libraries).

¹⁹⁹ Commenters that expressed concern about the sufficiency of the current mechanisms generally did so on the basis of the split between federal and state support. Arguments about the effects of Internet-based services generally focused on potential effects in the future. See, e.g., Senators Stevens and Burns comments at 9 ("Federal and state universal service mechanisms, including access charges, currently collect enough money to support the physical infrastructure today. However, if the current Commission exemptions from universal service contributions and access charges remain unchanged, that will not be the case tomorrow.")

²⁰⁰ Coopers & Lybrand's New Media Group, Internet Service Provider Overview (presented at FCC *en banc* hearing, Feb. 19, 1998) at 18.

²⁰¹ Telecommunications Industry Revenue: TRS Fund Worksheet (FCC Common Carrier Bureau, Industry Analysis Division, November 1997) at Figure 1. See also MCI reply comments at 1-2 (observing that exclusion of Internet revenues has an insignificant effect on universal service funding). We note, however, data presented at our February 19, 1998 *en banc* hearing indicating that Internet service provider market revenues are projected to grow to eighteen billion dollars in the year 2000. See *supra* Section IV.C.

We use the disparity between long distance market revenues and Internet service provider market revenues to illustrate the relatively small size of the Internet service provision market. We note, however, that the total revenues subject to universal service mechanism substantially exceed the long distance revenues.

order to provide connectivity to their users, and the high-capacity leased lines that they use to route data across their networks.²⁰²

98. It is critical, however, to make sure that our interpretation of the statute, to the extent legally possible, will continue to sustain universal service in the future. Some parties argue that, as new communications services such as Internet access and IP telephony grow, traffic will shift away from conventional telecommunications services, thus draining the support base for universal service.²⁰³ We are mindful that, in order to promote equity and efficiency, we should avoid creating regulatory distinctions based purely on technology. Congress did not limit "telecommunications" to circuit-switched wireline transmission, but instead defined that term on the basis of the essential functionality provided to users.²⁰⁴ Thus, for example, we have previously required paging providers to contribute to universal service funding, because they are providers of "telecommunications service."²⁰⁵ We have also required private carriers to contribute to federal universal service funding, even though they are not common carriers.²⁰⁶ In this Report, we have further addressed providers of pure transmission capacity used for Internet services, and have concluded that these entities provide services that meet the legal definition of "telecommunications." We also have considered the regulatory status of various forms of "phone-to-phone IP telephony" service mentioned generally in the record. The record currently before us suggests that certain of these services lack the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services." We do not believe, however, that it is appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual service offerings. As noted, to the extent we

²⁰² AOL comments at 17 n.65 (stating that AOL spent over \$900 million on telecommunications services in its most recent fiscal year). See also CIX comments at 10-11; Compuserve comments at 11; Coalition comments at 13; ITI and ITAA comments at 8-9; USIPA comments at 4; Internet Service Providers reply comments at 4-5. But see AT&T reply comments at 12; RTC reply comments at 10 (asserting that indirect ISP contributions are insufficient to support universal service in an equitable manner); but see also GTE reply comments at 21-22 (arguing that current FCC interpretations favor self-provision of transmission by ISPs). We acknowledge that such indirect contributions are different from direct contributions by telecommunications carriers. The point is that Internet access does generate substantial support for universal service.

²⁰³ See AirTouch comments at 28-33; Alaska comments at 8-10; Ameritech comments at 2; AT&T comments at 12-13; GTE comments at 15-17; Senators Stevens and Burns comments at 8-9; RTC comments at 10-13; TDS comments at 3; WUTC comments at 5; AT&T reply comments at 11-12; Bell Atlantic reply comments at 14.

²⁰⁴ See 47 U.S.C. § 153(46) ("The term 'telecommunications service' means the offering of telecommunications for a fee directly to the public . . . regardless of the facilities used.") (emphasis added). The Commission has followed the same approach in implementing *Computer II*. See, e.g., *American Telephone and Telegraph Company, For Authority under Section 214 of the Communications Act of 1934, as amended, to Install and Operate Packet Switches at Specified Telephone Company Locations in the United States*, Memorandum Opinion, Order and Authorization, 94 FCC 2d 48 (1983) (BPSS) (classifying pure packet switching as a basic service).

²⁰⁵ *Universal Service Order*, 12 FCC Rcd. at 9179, para. 787.

²⁰⁶ *Universal Service Order*, 12 FCC Rcd. at 9182-9184, paras. 793-96.

conclude that certain forms of phone-to-phone IP telephony are "telecommunications," and to the extent that providers of such services are offering those services directly to the public for a fee, those providers would be "telecommunications carriers." Accordingly, those providers would fall within section 254(d)'s mandatory requirement to contribute to universal service mechanisms. If such providers are exempt from universal service contribution requirements, users and carriers will have an incentive to modify networks to shift traffic to Internet protocol and thereby avoid paying into the universal service fund or, in the near term, the universal service contributions embedded in interstate access charges. If that occurs, it could increase the burden on the more limited set of companies still required to contribute.²⁰⁷ Such a scenario, if allowed to manifest itself, could well undermine universal service. At this time, however, there is no evidence that there is an immediate threat to the sufficiency of universal service support.

99. Several commenters urge us to subject Internet access providers and other information service providers to universal service contribution requirements.²⁰⁸ The potential future threat to universal service funding posed by use of the Internet derives from services that are functionally substitutable for telecommunications services at the same level of the network hierarchy. An end user that shifts its local exchange service from an incumbent local exchange carrier (LEC) to a competitive LEC, or to a wireless carrier, is purchasing a functionally identical service using different providers or technologies. We have designed the universal service regime so that shifting between such services does not eliminate the contribution requirement. Substitutability in a particular case, however, is not sufficient under the statute to require universal service contributions. Instead of making a telephone call or sending a fax, an end user could send an overnight letter. It is unlikely, however, that anyone would argue that the overnight delivery service should contribute to universal service funding. The key difference is that delivery service does not provide "telecommunications" as defined in the Act. Congress limited universal service contribution obligations to providers of "telecommunications," because only those services are truly substitutable in a functional sense.

100. Some parties argue that we should reclassify Internet service providers as telecommunications carriers in order to address congestion of local exchange networks caused by Internet usage.²⁰⁹ We note that the Commission addressed this argument last year in the *Access Reform* proceeding, and decided to continue to treat Internet service providers as end users for purposes of access charges.²¹⁰ As the Commission stated in that Order, although concerns about network congestion deserve serious consideration, imposition of per-minute

²⁰⁷ We recognize that there are other factors that could influence a carrier in deciding to shift its traffic.

²⁰⁸ AirTouch comments at 30; Alaska comments at 9; AT&T comments at 12-13; SBC comments at 2; February 19, 1998 *en banc* transcript at 25 (testimony of Mr. Comstock); AT&T reply comments at 11, 14; Bell Atlantic reply comments at 2, 10-11; February 19, 1998 *en banc* transcript at 88-89 (testimony of Mr. Dix, LCI, Int'l).

²⁰⁹ See, e.g., Bell Atlantic reply comments at 10-12.

²¹⁰ *First Report and Order in the Matter of Access Charge Reform*, 12 FCC Rcd 15982, 16133-16135, paras. 344-48 ("Access Charge Reform Order").

interstate access charges on Internet service providers is not an appropriate solution. Commenters in this proceeding have raised many of the same arguments that we considered in the *Access Reform* proceeding. We make no conclusions here as to whether some alternate rate structure for Internet service providers would be more efficient. That is an issue best addressed either on reconsideration of our *Access Reform* decision, or in connection with the Notice of Inquiry on Internet and Information Services that Use the Public Switched Telephone Network that we issued in the *Access Reform* proceeding.²¹¹ For purposes of this Report, we believe that the central issue is whether our decision that Internet access is not a "telecommunications service" is likely to threaten universal service. In other words, will Internet usage place such a strain on network resources that incumbent LECs will be unable to provide adequate service? As we noted in the *Access Reform Order*, both ILECs and the Network Reliability and Interoperability Council agreed that Internet usage did not pose any threat to overall network reliability.²¹² Incumbent LECs are investing in network upgrades to handle Internet traffic, and our *Notice of Inquiry* docket provides the appropriate forum to consider steps that we could take to ensure that incumbent LECs have incentives to choose the most efficient technology.

101. We realize that, as technology evolves, new means of providing telecommunications service may emerge. Although we conclude that Internet access is not a "telecommunications service," we acknowledge that there may be telecommunications services that can be provisioned through the Internet. We have singled out IP telephony services for discussion in this Report.²¹³ As discussed above, users of certain forms of phone-to-phone IP telephony appear to pay fees for the sole purpose of obtaining transmission of information without change in form or content. Indeed, from the end-user perspective, these types of phone-to-phone IP telephony service providers seem virtually identical to traditional circuit-switched carriers. The record currently before us suggests that these services lack the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services."²¹⁴ With respect to the provision of pure transmission capacity to Internet service providers or Internet backbone providers, we have concluded that such provision is telecommunications.

102. As some parties observe, our interpretation of the 1996 Act may mean that information services such as Internet access are not eligible for subsidies outside of the limited scope of schools and libraries under section 254(h).²¹⁵ We believe Congress made a

²¹¹ Usage of the Public Switched Network by Information Service and Internet Access Providers, *Notice of Inquiry*, 11 FCC Rcd 21354 (1996).

²¹² *Access Charge Reform Order*, 12 FCC Rcd at 16134, para. 347. See also Comcast reply comments at 4 (claiming that cable-based ISPs actually reduce demand on the PSTN).

²¹³ See *supra* Section IV.D.3.

²¹⁴ As discussed above, however, we do not believe that it is appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual service offerings.

²¹⁵ Senators Stevens and Burns comments at 9; TDS comments at 10-11. On section 254(h), see *infra* Section VI.B.2.

policy decision to limit support for information services to schools and libraries. "Telecommunications services" provide the basic transmission functionality that enables customers in rural and high-cost areas to connect to the rest of America. These services also enable users to reach Internet access providers, so reductions in the cost of basic telephone service in rural areas will effectively reduce the cost of Internet access in those areas. The information services delivered over telecommunications networks are not sensitive to distance and density to the same extent as the telecommunications facilities themselves. Therefore, the rationale for establishing a subsidy mechanism for these services is far more attenuated.

103. At this early stage of Internet development, we cannot know whether market and technological forces will result in Internet access being widely available in rural and high cost areas. Already, free electronic mail services such as Juno and low-cost Internet access devices such as WebTV have made Internet-based services far more affordable. A recent study found that at least 87% of the U.S. population has access to a commercial Internet service provider through a local call, and that three-fourth of Americans live in local calling areas with at least three Internet service provider points of presence.²¹⁶ America Online reports that seventeen percent of its local access nodes are in rural counties.²¹⁷ Rural Internet service providers, especially smaller entrepreneurial companies, will be able to provide more affordable and widely-available service if they are not subject to unnecessary regulatory burdens.²¹⁸ Finally, the support mechanism that will benefit schools and libraries established pursuant to section 254(h) of the 1996 Act will enable rural libraries to provide public access Internet terminals, and rural school districts to make Internet access available to their students.

104. Congress did recognize that "telecommunications services" would evolve over time, and that universal service should adapt to reflect those change. Thus, for example, universal service today includes functionalities such as touchtone service and access to 911 that simply did not exist in previous decades.²¹⁹ Other such innovations, as well as improvements in voice transmission quality, will no doubt occur in the future, and we will update our definition of universal service to account for those changes. For example, it appears that universal service funds could be used to ensure rural and high-cost areas have affordable access to high-speed data transmission services, such as xDSL, when those services meet the criteria for support outlined in section 254(c).

c. Consistency of Commission Decisions

²¹⁶ Shane Greenstein, *Universal Service in the Digital Age: The Commercialization and Geography of US Internet Access* (available at <http://skew2.kellogg.nwu.edu/~greenstein/research/papers/ISPACCESS2.pdf>) at table 1. The author of the study notes that these numbers likely underestimate the true level of access. *Id.* at 22-23.

²¹⁷ AOL comments at 6 n.35.

²¹⁸ Carolina Connection, Inc. comments at 1; CUIISP comments at 2; City of Norfolk comments at 1-2; CIX comments at 11; Compuserve comments at 11-12.

²¹⁹ See *Universal Service Order*, 12 FCC Rcd at 8814-8817, paras. 71-74.

105. We believe that the framework described in this Report, and in the May 8th, 1997 *Universal Service Order*, is entirely consistent, both internally and with the letter and spirit of the Act. Companies that are in the business of offering basic interstate telecommunications functionality to end users are "telecommunications carriers," and therefore are covered under the relevant provisions of sections 251 and 254 of the Act. These rules apply regardless of the underlying technology those service providers employ, and regardless of the applications that ride on top of their services. Therefore, although we will need to consider further the definition of "phone-to-phone" IP telephony, the record currently before us suggests that certain of these services lack the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristics of "telecommunications services." Further, we have found that providers of pure transmission capacity to support Internet services are providers of "telecommunications." Internet service providers and other information service providers also use telecommunications networks to reach their subscribers, but they are in a very different business from carriers. Internet service providers provide their customers with value-added functionality by means of computer processing and interaction with stored data. They leverage telecommunications connectivity to provide these services, but this makes them customers of telecommunications carriers rather than their competitors.

106. Under our framework, Internet service providers are not treated as carriers for purposes of interstate access charges, interconnection rights under section 251, and universal service contribution requirements. This treatment admittedly provides some benefits to such companies, but it also imposes limitations. Internet service providers are not entitled under section 251 to purchase unbundled network elements or discounted wholesale services from incumbent LECs, they are not entitled to federal universal service support for serving high-cost and rural areas, and they are not entitled to reciprocal compensation for terminating local telecommunications traffic.²²⁰ As we discuss below, the one case in which Internet service providers and carriers enjoy similar treatment is in the provision of certain services to schools and libraries at discounted rates.²²¹ In that case, Congress expressly directed the Commission to create "competitively neutral rules" to facilitate "access to advanced telecommunications and information services."²²² There is no necessary connection between those who contribute

²²⁰ The Commission has solicited comment on whether it should use its general rulemaking authority to extend to Internet service providers and other information service providers some or all of the rights accorded by section 251 to requesting telecommunications carriers. See *Computer III Further Remand Proceeding*, at para. 96.

We make no determination here on the question of whether competitive LECs that serve Internet service providers (or Internet service providers that have voluntarily become competitive LECs) are entitled to reciprocal compensation for terminating Internet traffic. That issue, which is now before the Commission, does not turn on the status of the Internet service provider as a telecommunications carrier or information service provider. See Pleading Cycle Established for Comments on Request by ALTS for Clarification of the Commission's Rules Regarding Reciprocal Compensation for Information Service Provider Traffic, *Public Notice*, CCB/CPD 97-30 (released July 2, 1997).

²²¹ See *infra* Section V.B.2.

²²² 47 USC § 254(h)(2).

to universal service funding and those entitled to receive support.²²³ For example, contributions to the fund are primarily derived from interexchange carriers, but the companies that receive high-cost support are LECs. Paging providers are required to contribute to universal service, but have limited opportunity to receive support. We realize that Congress carefully balanced several competing concerns when it crafted the universal service provisions of the 1996 Act. After reviewing our implementation of those provisions, and considering novel issues such as the status of IP telephony, we believe that we are being faithful to the balance struck by Congress.

V. WHO CONTRIBUTES TO UNIVERSAL SERVICE MECHANISMS

A. Overview

107. In this section, we review our decision regarding which entities must contribute to universal service support mechanisms, which entities should contribute, and which entities should be exempt from contributing. We affirm that the plain language of section 254(d), which mandates contributions from "every telecommunications carrier that provides interstate telecommunications services," requires the Commission to construe broadly the class of carriers that must contribute.²²⁴ In addition, we find that the Commission properly exercised the permissive authority granted by section 254(d) to include other providers of interstate telecommunications in the pool of universal service contributors. We have also re-examined the Commission's implementation of the limited authority set forth in section 254(d) to exempt *de minimis* contributors and affirm that the Commission has not exceeded the boundaries established by the statute. We conclude that the Commission appropriately exercised the flexibility that section 254(d) grants it to exempt those entities whose contributions would be *de minimis* and to include in the pool of contributors those providers of telecommunications whose contributions are required by the public interest.

B. Background

108. The 1996 Act expands the class of entities that must contribute to federal universal service support mechanisms. Prior to the 1996 Act, only interstate interexchange carriers (IXCs) contributed to the universal service fund that subsidized the cost of local exchange service in high cost areas and for low-income consumers.²²⁵ Under this earlier

²²³ We note that while providers under the schools and libraries program receive support from the Universal Service Fund, their suppliers do not receive a subsidy. The providers provide services to schools and libraries at a price bid down, through a competitive bidding process, from the market rate. See 47 C.F.R. § 54.504(a),(b) (competitive bidding process), (d) (the Commission, or state commissions, may intervene if a carrier offers a rate higher than the "lowest corresponding price," that is, the lowest price that it charges similarly situated non-residential customers, or if the lowest corresponding price is unfairly high). The federal contribution then covers a portion of the payment that would otherwise be made by the school or library.

²²⁴ See *Universal Service Order*, 12 FCC Rcd at 9177, para. 783.

²²⁵ See 47 C.F.R. § 69.116(a). For a description of universal service as it existed prior to the 1996 Act, see Common Carrier Bureau, FCC, "Preparation for Addressing Universal Service Issues: A Review of Current Interstate Support Mechanisms," 90-97 (1996).

approach, IXCs contributed through a tariffed interstate charge that was based on the number of subscriber lines presubscribed to the IXC.²²⁶ IXCs with fewer than .05 percent of the presubscribed lines nationwide were exempt from contributing.²²⁷

109. The Commission's current rules governing universal service contributions stem from section 254(d) of the 1996 Act, which reads:

[E]very telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service. The Commission may exempt a carrier or class of carriers from this requirement if the carrier's telecommunications activities are limited to such an extent that the level of such carrier's contributions to the preservation and advancement of universal service would be *de minimis*. Any other provider of interstate telecommunications may be required to contribute to the preservation and advancement of universal service if the public interest so requires.

Section 623(b)(3) of the Appropriations Act requires us to review "who is required to contribute to universal service under section 254(d) . . . and related existing federal universal service support mechanisms, and of any exemption of providers or exclusion of any service that includes telecommunications from such requirement or support mechanisms."

110. Based on the structure of section 254(d) of the 1996 Act, the Commission identified two categories of contributors to universal service mechanisms. First, the Commission identified a group of "mandatory" contributors based on section 254(d)'s mandate that "[e]very telecommunications carrier that provides interstate telecommunications services shall contribute . . . to the . . . mechanisms established by the Commission."²²⁸ Second, the Commission exercised its "permissive" authority under section 254(d) to require "other provider[s] of interstate telecommunications to contribute" based on a finding that the public interest requires these entities to contribute "to the preservation and advancement of universal service." In addition, consistent with section 254(d), the Commission exempted contributors whose contributions would be *de minimis*.²²⁹

²²⁶ 47 C.F.R. § 69.116(a).

²²⁷ *Id.*

²²⁸ 47 U.S.C. § 254(d).

²²⁹ *Universal Service Order*, 12 FCC Rcd at 9187, para. 802.

111. Mandatory Contribution Requirement. The Commission, concurring with the recommendation of the Joint Board,²³⁰ recognized that the first sentence of section 254(d) requires that all telecommunications carriers that provide interstate telecommunications must contribute to the support mechanisms.²³¹ The Commission concluded that to be a mandatory contributor to universal service under section 254(d): (1) a telecommunications carrier must offer "interstate" "telecommunications"; (2) those interstate telecommunications must be offered "for a fee"; and (3) those interstate telecommunications must be offered "directly to the public, or to such classes of users as to be effectively available to the public."²³² The Commission sought to construe the definition of "telecommunications" so as to include a broad class of mandatory contributors.²³³

112. The Commission concluded that telecommunications are "interstate" when the communication or transmission originates in any state, territory, possession of the United States, or the District of Columbia and terminates in another state, territory, possession, or the District of Columbia.²³⁴ Further, the Commission determined that interstate telecommunications include telecommunications services among U.S. territories and possessions.²³⁵ The Commission also found that private or WATS lines will be considered entirely interstate when more than ten percent of the traffic they carry is interstate.²³⁶

113. In the Universal Service Order, the Commission further concluded that interstate telecommunications carriers that also provide international telecommunications services must contribute to universal service support mechanisms based on revenues from both their interstate and international services.²³⁷ The Commission found that the statute precludes it from assessing contributions on the revenues of purely international carriers providing service in the United States, but sought a legislative change that would allow it to reach the international revenues of all carriers providing service in the United States.²³⁸

²³⁰ Pursuant to section 254(a)(1), the Commission convened a federal-state Joint Board to make recommendations to the Commission regarding the implementation of sections 214(e) and 254 of the 1996 Act. 47 U.S.C. § 254(a)(1). The Joint Board made its recommendations to the Commission on November 8, 1996. *Recommended Decision*, 12 FCC Rcd 87 (1996).

²³¹ *Universal Service Order*, 12 FCC Rcd at 9173, para. 777 citing *Recommended Decision*, 12 FCC Rcd at 481, para. 484.

²³² *Id.*, 12 FCC Rcd at 9173, para. 777 citing 47 U.S.C. §§ 153(22), 153(43), and 153(46).

²³³ *See Id.*, 12 FCC Rcd at 9173, 9177, paras. 779, 783.

²³⁴ *Id.*, 12 FCC Rcd at 9173, para. 778.

²³⁵ *Id.*, 12 FCC Rcd at 9173, para. 778 citing 47 U.S.C. § 153(22) and *Recommended Decision*, 12 FCC Rcd at 481.

²³⁶ *Id.*, 12 FCC Rcd at 9173, para. 778 citing 47 C.F.R. § 36.154(a).

²³⁷ *Id.*, 12 FCC Rcd at 9173-9175, para. 779.

²³⁸ *Id.*, 12 FCC Rcd at 9173-9175, para. 779.

114. Based on the statutory definition of the term "telecommunications,"²³⁹ the Commission adopted the following list of services that satisfy the definition of "telecommunications" and are examples of interstate telecommunications:

cellular telephone and paging services; mobile radio services; operator services; PCS; access to interexchange service; special access; wide area telephone service (WATS); toll-free services; 900 services; MTS; private line; telex; telegraph; video services; satellite services; and resale services.²⁴⁰

The Commission also included among contributors those entities providing, on a common carrier basis, video conferencing services, channel service, or video distribution services to cable head-ends.²⁴¹ It expressly excluded entities providing services via open video systems (OVS), cable leased access, or direct broadcast satellite (DBS) from contributing on the basis of revenues derived from those services.²⁴²

115. In interpreting the phrase "for a fee" in the definition of "telecommunications service," the Commission concluded that the plain language of section 153(46) means services rendered in exchange for something of value or a monetary payment.²⁴³ The Commission did not exempt from contribution any broad class of telecommunications carriers that provides interstate telecommunications services in light of the 1996 Act's mandate that "every telecommunications carrier that provides interstate telecommunications services" contribute to the support mechanisms.²⁴⁴ Further, the Commission found that, because it contains the phrase "directly to the public," the statutory definition of "telecommunications services" is intended to encompass only telecommunications provided on a common carrier basis.²⁴⁵ Therefore, the Commission concluded that only common carriers should be considered statutorily mandated contributors to universal service support mechanisms.²⁴⁶ In addition, the Commission concluded that common carrier services include services offered to other carriers, such as exchange access service, and not just services provided to end users.²⁴⁷

²³⁹ See 47 U.S.C. § 153(43).

²⁴⁰ *Universal Service Order*, 12 FCC Rcd at 9175, para. 780.

²⁴¹ *Id.*, 12 FCC Rcd at 9176, para. 781.

²⁴² *Id.*, 12 FCC Rcd at 9176, para. 781.

²⁴³ *Id.*, 12 FCC Rcd at 9177, para. 784 citing 47 U.S.C. § 153(46).

²⁴⁴ *Id.*, 12 FCC Rcd at 9179, para. 787 citing 47 U.S.C. § 254(d). The Commission did, however, exempt Internet service providers and enhanced service providers from contributing. See *supra* II.C.1.

²⁴⁵ *Id.*, 12 FCC Rcd at 9177-9178, para. 785.

²⁴⁶ *Id.*, 12 FCC Rcd at 9178, para. 786.

²⁴⁷ *Id.*, 12 FCC Rcd at 9178, para. 786.

116. Permissive Contribution Authority. The Commission observed that section 254(d) also confers "permissive authority" to require "other providers of interstate telecommunications" to contribute if the public interest so requires.²⁴⁸ The Commission, citing the statutory definition, concluded that providers of interstate telecommunications, unlike providers of interstate telecommunications services, do not offer telecommunications on a common carrier basis.²⁴⁹ In support of this conclusion, the Commission referred to the legislative history in which Congress noted the distinction between providers of interstate telecommunications and providers of interstate telecommunications services when it stated that an entity can offer telecommunications on a private-service basis without incurring obligations as a common carrier.²⁵⁰

117. The Commission found that private network operators that lease excess capacity on a non-common carrier basis for interstate transmissions should contribute to universal service support mechanisms because they are "other providers of interstate telecommunications."²⁵¹ Similarly, the Commission concluded that payphone aggregators fall within the Commission's permissive authority and that the public interest requires that they contribute.²⁵² The Commission sought to adopt an approach under which contribution obligations neither affect business decisions nor discourage carriers from offering services on a common carrier basis.²⁵³ Accordingly, the Commission found that the public interest requires both private service providers that offer interstate telecommunications to others for a fee and payphone aggregators to contribute to the preservation and advancement of universal service in the same manner as carriers that provide "interstate telecommunications services."²⁵⁴

118. The Commission also found that "other providers of telecommunications" that furnish telecommunications solely to meet their internal needs, including governmental entities such as state networks, should not be required to contribute at this time.²⁵⁵ In addition, the Commission held that cost-sharing for the construction and operation of private networks would not render participants "other providers of telecommunications" that could be required to contribute, although the lead participant in such a venture would be required to contribute

²⁴⁸ *Id.*, 12 FCC Rcd at 9182-9183, paras. 793-794.

²⁴⁹ *Id.*, 12 FCC Rcd at 9182, para. 793 *citing* 47 U.S.C. § 153(46).

²⁵⁰ *Id.*, 12 FCC Rcd at 9182, para. 793 *citing* Joint Explanatory Statement at 115.

²⁵¹ *Id.*, 12 FCC Rcd at 9178, 9184, paras. 786, 796.

²⁵² *Id.*, 12 FCC Rcd at 9183, 9184-9185, paras. 794, 797-798.

²⁵³ *Id.*, 12 FCC Rcd at 9183-9184, para. 795.

²⁵⁴ *Id.*, 12 FCC Rcd at 9183-9184, para. 795.

²⁵⁵ *Id.*, 12 FCC Rcd at 9185-9186, paras. 799-800.

if it provided interstate telecommunications.²⁵⁶ The Commission also found that neither public safety and local governmental entities licensed under Subpart B of Part 90 of its rules nor entities that provide interstate telecommunications solely to public safety or government entities will be required to contribute.²⁵⁷

119. In its *Fourth Order on Reconsideration*, the Commission affirmed its conclusion that private service providers that provide interstate telecommunications on a non-common carrier basis must contribute to universal service pursuant to its permissive authority over "providers of interstate telecommunications."²⁵⁸ In that Order, the Commission concluded that it should not exercise its permissive authority to require systems integrators, broadcasters, and non-profit schools, universities, libraries, and rural health care providers to contribute to universal service.²⁵⁹ Specifically, the Commission found that systems integrators that do not provide services over their own facilities and are non-common carriers that obtain a *de minimis* amount of their revenues from the resale of telecommunications are not required to contribute to universal service.²⁶⁰ In addition, the Commission concluded that the public interest would not be served if it were to exercise its permissive authority to require broadcasters that engage in non-common carrier interstate telecommunications to contribute to universal service.²⁶¹ The Commission also determined that it is not in the public interest for the Commission to exercise its permissive authority to require non-profit schools, colleges, universities, libraries and health care providers to contribute to universal service.²⁶²

120. In the *Fourth Order on Reconsideration*, the Commission also affirmed its finding that satellite providers that provide interstate telecommunications services or interstate telecommunications to others for a fee must contribute to universal service.²⁶³ The Commission explained that satellite providers that provide transmission services on a common carrier basis are mandatory contributors pursuant to section 254(d), while satellite providers that provide interstate telecommunications on a non-common carrier basis must contribute based on the Commission's permissive authority.²⁶⁴ The Commission concluded, however, that satellite providers are not required to contribute to universal service on the basis of revenues derived from the lease of bare transponder capacity because the lease of bare

²⁵⁶ *Id.*, 12 FCC Rcd at 9185-9186, para. 800.

²⁵⁷ *Id.*, 12 FCC Rcd at 9185-9186, para. 800.

²⁵⁸ *Fourth Order on Reconsideration* at para. 276.

²⁵⁹ *Id.*, at para. 277.

²⁶⁰ *Id.*, at para. 278.

²⁶¹ *Id.*, at para. 283.

²⁶² *Id.*, at para. 284.

²⁶³ *Id.*, at para. 288.

²⁶⁴ *Id.*, at para. 288.

transponder capacity does not involve transmitting information and, therefore, it is not "telecommunications."²⁶⁵ The Commission rejected arguments that satellite providers that are ineligible to receive universal service support should not be required to contribute.²⁶⁶

121. *De Minimis Exemption.* Section 254(d) provides that the Commission may exempt a carrier or class of carriers from contributing to universal service mechanisms "if the carrier's telecommunications activities are limited to such an extent that the level of such carrier's contribution to the preservation and advancement of universal service would be *de minimis*."²⁶⁷ The Commission, adopting the Joint Board's recommendation, initially concluded that contributors whose contributions would be less than the administrator's administrative costs of collection should be exempt from reporting and contribution requirements.²⁶⁸ The Commission found that the legislative history indicates that the *de minimis* exemption was to be narrowly construed.²⁶⁹ As a result of its conclusion that the exemption should be based on the administrator's costs to bill and collect individual carrier contributions, the Commission, in the *Universal Service Order*, adopted the \$100.00 minimum contribution requirement used for TRS contribution²⁷⁰ purposes.²⁷¹ In its *Fourth Order on Reconsideration*, however, the Commission revised its approach to setting a threshold for the *de minimis* exemption and concluded that the *de minimis* threshold should be increased to \$10,000.00.²⁷²

122. In the *Universal Service Order*, the Commission agreed with the Joint Board that the *de minimis* exemption was the only basis upon which to exempt contributors.²⁷³ The Commission explicitly rejected arguments that paging carriers should be exempted because it found that the statutory language unambiguously requires "every telecommunications carrier that provides interstate telecommunications services" to contribute.²⁷⁴ The Commission concluded that Congress required all telecommunications carriers to contribute to universal service support mechanisms but provided that in most instances only "eligible" carriers should receive support, and gave no direction to the Commission to establish preferential treatment

²⁶⁵ *Id.*, at para. 290.

²⁶⁶ *Id.*, at para. 289.

²⁶⁷ 47 U.S.C. § 254(d).

²⁶⁸ *Universal Service Order*, 12 FCC Rcd at 9187, para. 802 citing *Recommended Decision*, 12 FCC Rcd at 439.

²⁶⁹ *Id.*, 12 FCC Rcd at 9187, para. 802.

²⁷⁰ See 47 C.F.R. § 64.604(c)(4)(iii)(B).

²⁷¹ *Universal Service Order*, 12 FCC Rcd at 9187-9188, para. 803.

²⁷² *Fourth Order on Reconsideration* at paras. 295-297.

²⁷³ *Universal Service Order*, 12 FCC Rcd at 9188, para. 804 citing *Recommended Decision*, 12 FCC Rcd at 490.

²⁷⁴ *Id.*, 12 FCC Rcd at 9188-9189, para. 805 citing 47 U.S.C. § 254(d).

for carriers that are ineligible for support.²⁷⁵ The Commission reaffirmed this conclusion in its *Fourth Order on Reconsideration*. Rejecting arguments from paging companies, the Commission reiterated that section 254(d) does not limit the class of carriers that must contribute to those that are eligible to receive universal service support.²⁷⁶

C. Discussion

1. Mandatory and Permissive Authority

123. The Commission's approach to determining who should contribute to universal service support mechanisms is guided by the plain language of section 254(d). The first clause in this section unequivocally requires that "[e]very telecommunications carrier that provides interstate *telecommunications services* shall contribute . . . to the . . . mechanisms established by the Commission" [emphasis added]. The third sentence gives the Commission the discretion to determine whether requiring "[a]ny other provider of *telecommunications*" to contribute is consistent with the public interest [emphasis added]. An analysis of the statutory definitions of the terms "telecommunications services" and "telecommunications" identifies those entities that must contribute to universal service and those entities over which the Commission may exercise its permissive authority. The statutory language offers no exceptions to these rules, aside from the *de minimis* exemption that is also found in section 254(d). The Commission has adhered to the statutory mandate that "all" providers of interstate telecommunications services contribute to universal service mechanisms, and has ensured that a broad class of telecommunications providers contribute as well.

a. Mandatory Contribution Requirement.

124. Section 153(46) defines "telecommunications service" as "the offering of telecommunications for a fee directly to the public or to such classes of users as to be effectively available directly to the public, regardless of the facilities used."²⁷⁷ The Commission has determined that inclusion of the term "directly to the public" is intended to encompass only telecommunications provided on a common carrier basis.²⁷⁸ Common carriers can be distinguished from private network operators, which serve the internal telecommunications needs of, for example, a large corporation, rather than selling telecommunications to the general public. The Commission explained that federal precedent holds that a carrier may be a common carrier if it holds itself out "to service indifferently all potential users."²⁷⁹

²⁷⁵ *Id.*, 12 FCC Rcd at 9188, para. 804.

²⁷⁶ *Fourth Order on Reconsideration* at para. 263.

²⁷⁷ 47 U.S.C. § 153(46).

²⁷⁸ *Universal Service Order*, 12 FCC Rcd at 9177-9178, para. 785.

²⁷⁹ *Id.*, 12 FCC Rcd at 9178, para. 786 citing *National Association of Regulatory Utility Commissioners v. FCC*, 553 F.2d 601 (D.C. Cir. 1976).

125. The 1996 Act does not use the term "common carrier." This term is defined in the 1934 Communications Act and encompasses the entities that are governed by that Act's Title II regulation. The statutory language in the 1996 Act refers to "telecommunications carriers." Specifically, section 153(44) states that "a telecommunications carrier shall be treated as common carrier only to the extent that it is engaged in providing telecommunications services" ²⁸⁰

126. There is some dispute as to whether the term "telecommunications carrier" means substantially the same as the pre-1996 Act term "common carrier." ²⁸¹ The Commission's conclusion that the phrase "directly to the public" means only telecommunications provided on a common carrier basis is based on the legislative history. The Joint Explanatory Statement explains that the term telecommunications service "is defined as those services and facilities offered on a 'common carrier' basis, recognizing the distinction between common carrier offerings that are provided to the public . . . and private services." ²⁸² Several commenters generally contend that the Commission's interpretation and implementation of the statutory terms were consistent with the letter and intent of the 1996 Act. ²⁸³ Senator McCain states: "The provision of telecommunications on a common carrier basis -- that is, to all users indifferently or to such segments of the public as to be effectively available to the public indifferently -- is 'telecommunications service.'" ²⁸⁴ Senators Stevens and Burns, however, argue that Congress intended the term "'telecommunications carrier' to define a class broader than the pre-Telecommunications Act 'common carrier' regime." ²⁸⁵

127. We are aware of the concerns of Senators Stevens and Burns that providers of Internet service should be among the pool of universal service contributors. ²⁸⁶ The concerns expressed by Senators Stevens and Burns go largely to the Commission's determination that telecommunications services and information services are distinct categories. ²⁸⁷ Considering universal service contributions in more general terms, we note that the Commission has repeatedly stated, ²⁸⁸ and several commenters agree, ²⁸⁹ that section 254(d) should be construed

²⁸⁰ 47 U.S.C. § 153(44).

²⁸¹ See section III.C, above.

²⁸² Joint Explanatory Statement at 115.

²⁸³ See, e.g., TCG comments at 2; State Members comments at 3; Comcast comments at 8; Colorado PUC comments at 2; Texas PUC comments at 2.

²⁸⁴ Senator McCain letter at 3.

²⁸⁵ Senators Stevens and Burns comments at 3.

²⁸⁶ See section IV.D, above.

²⁸⁷ We discuss these terms in section III.C, above.

²⁸⁸ See *Universal Service Order*, 12 FCC Rcd at 9177, 9183, paras. 783, 795; *Fourth Order on Reconsideration* at para. 263.

broadly to encompass an expansive class of contributors. Because we endorse this approach, it is clear that we concur fully with Senators Stevens and Burns when they state: "The statutory language of section 254(d) is unambiguous and clear -- all telecommunications carriers must contribute."²⁹⁰

128. The Commission's implementation of the mandatory contribution clause of section 254(d) has adhered to the tenet that the class of entities required to contribute to universal service should be broad. For example, the Commission, agreeing with the conclusion of the Joint Board, found that the international revenues generated by carriers of interstate telecommunications should be included in the base of mandatory contributors to universal service.²⁹¹ The Commission concluded that contributors that provide international telecommunications services benefit from universal service because they must either terminate or originate telecommunications on the domestic PSTN.²⁹² This rationale demonstrates the Commission's agreement with Senators Stevens and Burns, who state: "Congress intended to cast this net widely in order to ensure that all of those who make use of the network, and in particular the physical infrastructure needed to provide universal service, contribute to its upkeep."²⁹³ In fact, the Commission sought a legislative change that would allow it to reach the international revenues of all carriers providing service in the United States who benefit from universal service.²⁹⁴ The Commission found that section 254(d) does not permit us to require carriers that provide only international telecommunications services to contribute because these carriers are not providing "interstate telecommunications services."²⁹⁵ Providers of purely international telecommunications compete against carriers that provide interstate as well as international telecommunications services, and, thus, benefit competitively by incurring no universal service contribution obligation. We would prefer to include these telecommunications carriers within the class of mandatory contributors in order to treat all providers of international telecommunications similarly and to further broaden the class of contributors.

129. Some parties have urged the Commission to exempt certain entities from contributing to universal service.²⁹⁶ The plain language of section 254(d), however, affords

²⁸⁹ See, e.g., PA PUC comments at 7; RTC comments at 9; GVNW reply comments at 4.

²⁹⁰ Senators Stevens and Burns comments at 10.

²⁹¹ *Universal Service Order*, 12 FCC Rcd at 9173-9174, para. 779 citing *Recommended Decision* at 12 FCC 481. Accord AT&T reply comments at 8.

²⁹² *Id.*, 12 FCC Rcd at 9173-9175, para. 779.

²⁹³ Senators Stevens and Burns comments at 10.

²⁹⁴ *Universal Service Order*, 12 FCC Rcd at 9173-9175, para. 779.

²⁹⁵ *Id.*, 12 FCC Rcd at 9173-9175, para. 779.

²⁹⁶ See, e.g., TRA comments at 11 (non-facilities based resale carriers should be relieved of the obligation to contribute to universal service).

the Commission no discretionary authority to exempt any telecommunications carriers that provide interstate telecommunications services, and several commenters agree with this conclusion.²⁹⁷ Section 254(d) provides a limited exemption for mandatory contributors whose contributions would be *de minimis*.²⁹⁸ The Commission has consistently rejected arguments that attempt to create a broader exemption.²⁹⁹ For example, the Commission determined that paging carriers fall within the section 254(d) class of mandatory contributors and, thus, must contribute to universal service, regardless of their ability to receive universal service support.³⁰⁰ Senators Stevens and Burns concur with the Commission's conclusion that CMRS and paging service providers are telecommunications carriers and, thus, are required to contribute.³⁰¹ We agree that paging companies have failed to advance arguments that overcome the Congressional requirement that the Commission create a broad base of support for universal service mechanisms.³⁰² Similarly, we find no basis for exempting non-facilities-based resale carriers, as advocated by TRA.³⁰³ To the extent they are telecommunications carriers that provide interstate telecommunications services, resellers are mandatory contributors under section 254(d).³⁰⁴

²⁹⁷ See USTA comments at 5-6 (the Commission lacks authority to exempt any provider that otherwise meets the section 3 definition of a telecommunications provider); Bell Atlantic comments at 12-13; Bell Atlantic reply comments at 2, 6 (the Commission properly rejected claims of exemptions from contribution requirements). See also AT&T comments at 8 (objects to all claims for exemption).

²⁹⁸ See section V.C.2, *infra* for a discussion of the *de minimis* exemption.

²⁹⁹ See, e.g., *Universal Service Order*, 12 FCC Rcd at 9179, para. 787 (we "find no reason to exempt from contribution any of the broad classes of telecommunications carriers that provides interstate telecommunications services, including satellite operators, resellers, wholesalers, paging companies, utility companies, or carriers that serve rural or high cost areas. . .").

³⁰⁰ *Fourth Order on Reconsideration* at paras. 262-254. As a general matter, several wireless carriers raise concerns that the mechanisms used for determining which revenues are derived from intrastate service and which are derived from interstate service are not appropriate for allocating the revenues of wireless carriers. See, e.g., CTIA comments at n.6; Vanguard comments at 4; AMTA reply comments at 5-6; Nextel reply comments at 5-6. We will address such issues in the petitions for reconsideration pertaining to this issue that are pending before the Commission.

³⁰¹ Senators Stevens and Burns comments at 3 n.8.

³⁰² *Fourth Order on Reconsideration* at para. 263. See also PA Agencies comments at 11; PA PUC comments at 7 (the Commission must ensure that all telecommunications carriers, especially CMRS providers, contribute to universal service).

³⁰³ TRA comments at 11. To the extent a resale carrier's contribution would not exceed the *de minimis* threshold, however, it would be exempted from the requirement to contribute. See the discussion of the *de minimis* exemption, Section V.C.2, *infra*.

³⁰⁴ Both the Joint Board and the Commission have found that resellers are mandatory contributors. See *Recommended Decision* at para. 787; *Universal Service Order*, 12 FCC Rcd at 9175, para. 780. To the extent that a resale carrier is not offering telecommunications on a common carrier basis or offering interstate telecommunications services and, thus, does not fall within section 254(d)'s mandatory contribution requirement, the Commission would determine whether, pursuant to its permissive authority, it would be in the public interest for the reseller to contribute. See the discussion of permissive contributors, below.

130. We view the mandatory contribution requirement set forth in section 254(d) as absolute and find that the Commission has consistently abided by this mandate. We agree with AT&T's statement that "if the Commission exempts a class of contributors, then the obligations of all remaining contributors increase."³⁰⁵ In instances where telecommunications carriers derive revenues from certain activities that fall outside the definition of "telecommunications services," the Commission has not exempted these entities from their contribution requirements, but, instead, has simply excluded those revenues from the contribution base. For example, entities providing OVS, cable leased access, and DBS services, as well as satellite providers leasing bare transponder capacity are excluded from contributing on the basis of revenues derived from those services, but are not exempted to the extent they otherwise provide interstate telecommunications services.³⁰⁶ This approach recognizes that the statute does not permit any mandatory contributors to be exempted from the contribution requirement.

b. Permissive Contribution Authority.

131. The third sentence of section 254(d) conveys what the Commission refers to as its "permissive" contribution authority. In contrast to the mandate that "[e]very telecommunications carrier that provides interstate telecommunications services shall contribute," this sentence authorizes the Commission to determine whether the public interest requires that "other providers of interstate *telecommunications*" should contribute [emphasis added].³⁰⁷ Section 153(43) defines "telecommunications" as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received."³⁰⁸ This definition is significantly broader than that of "telecommunications services," which are provided "for a fee directly to the public."³⁰⁹ As discussed above, this distinction represents the difference between carriers that offer their services on a common carrier basis (i.e., "for a fee directly to the public") and private network operators.³¹⁰ Private network operators do not sell their services to the public. Traditionally, non-common carriers such as private network operators have not been the

³⁰⁵ AT&T comments at 8.

³⁰⁶ See *Universal Service Order*, 12 FCC Rcd at 9176, para. 781; *Fourth Order on Reconsideration* at para. 290.

³⁰⁷ 47 U.S.C. § 254(d).

³⁰⁸ 47 U.S.C. § 153(43).

³⁰⁹ See 47 U.S.C. § 153(46).

³¹⁰ The Joint Explanatory Statement explains that the term telecommunications service "is defined as those services and facilities offered on a 'common carrier' basis, recognizing the distinction between common carrier offerings that are provided to the public . . . and private services." Joint Explanatory Statement at 115. See also UTC comments at 5-6 (in light of the plain language of the Act, as well as the Joint Explanatory Statement, "[t]he FCC correctly recognized that the inclusion of this requirement that the service be provided directly to the public evidenced clear Congressional intent that telecommunications services only encompass services provided on a 'common carrier' basis.").

subject of regulation. Because these service providers do not serve the public, there is no need to ensure that they offer services based on just, reasonable and nondiscriminatory rates and conditions, as Title II regulations applicable to common carriers are designed to accomplish. The language of section 254(d), however, is unique among the other provisions of the 1996 Act because it permits the Commission to require, if a public interest standard is met, that non-common carriers should contribute to universal service mechanisms along with common carriers.

132. We conclude that the Commission's decisions concerning which telecommunications providers should contribute to universal service mechanisms, and which ones should be spared from contributing, are consistent with the intent of Congress. Section 254(d) requires the Commission to consider the public interest when determining which providers of interstate telecommunications should contribute to universal service. We reaffirm the rationales the Commission has established for weighing public interest considerations. First, the public interest requires a broad contribution base so that the burden on each contributor will be lessened.³¹¹ As discussed above with respect to mandatory contributors, Congress intended that section 254(d) would be broadly construed. Requiring certain providers of interstate telecommunications to contribute broadens the funding base, which lessens the impact of the contribution obligation imposed on mandatory contributors. We also reaffirm the conclusion that the public interest requires private service providers and payphone aggregators to contribute in order to broaden the funding base.³¹²

133. Second, the public interest requires that, to the extent possible, carriers with universal service contribution obligations should not be at a competitive disadvantage in relation to providers on the basis that they do not have such obligations.³¹³ This approach is consistent with the Commission's principle of competitive neutrality, which states in part: "universal service support mechanisms and rules [should] neither unfairly advantage nor disadvantage one provider over another . . ."³¹⁴ It may be appropriate to require certain providers of telecommunications to contribute in order to reduce the possibility that carriers with universal service obligations will compete directly with carriers without such obligations. For example, the Commission held that operators of interstate private networks that lease

³¹¹ See, e.g., *Universal Service Order*, 12 FCC Rcd at 9177, 9183, paras. 783, 795; *Fourth Order on Reconsideration* at para. 263.

³¹² *Universal Service Order*, 12 FCC Rcd at 9183, para. 795. See also Reuters comments at 7-8 (requiring private network operators that offer services to others for a fee on a non-common carrier basis is consistent with the law).

³¹³ See, e.g., *Fourth Order on Reconsideration* at para. 276.

³¹⁴ *Universal Service Order*, 12 FCC Rcd at 8801, para. 47. In addition to the principles set forth in the 1996 Act, section 254(b)(7) permits the Joint Board and the Commission to base policies for the preservation and advancement of universal service on "such other principles as the Joint Board and Commission determine are necessary and appropriate for the protection of the public interest, convenience and necessity and are consistent with this Act." 47 U.S.C. § 254(b)(7). See also *Recommended Decision*, 12 FCC Rcd at 101, paras. 22-23; *Universal Service Order*, 12 FCC Rcd at 8801-8803, paras. 46-51.

excess capacity on a non-common carrier basis should contribute to universal service.³¹⁵ These private network operators compete against telecommunications carriers in the provision of interstate telecommunications. Similarly, the Commission determined that payphone aggregators should be contributors to universal service.³¹⁶ This conclusion is also justified by competitive concerns because interstate telecommunications carriers that also provide payphone services would have an incentive to alter their business structures by divesting their payphone operations in order to reduce their universal service contribution if payphone aggregators that provide only payphone services were not required to contribute.

134. Third, in some cases, absent the exercise of the permissive contribution authority, a service provider might choose to offer service on a non-common carrier basis solely to circumvent the obligation to contribute that is imposed on all telecommunications carriers providing interstate telecommunications service. In our view, the public interest dictates that universal service contributions should not cause providers to offer services on a non-common carrier basis.³¹⁷ We are convinced that the Commission's actions promote this important public interest concern.

135. Finally, the public interest suggests that certain telecommunications providers should contribute because they utilize the PSTN, which is supported by universal service mechanisms.³¹⁸ The Commission concluded, in general, that telecommunications carriers that are mandatory contributors should not be the sole supporters of the PSTN from which other telecommunications providers benefit.³¹⁹ Although there may be situations in which competing public interest reasons compel us to conclude that certain providers of interstate telecommunications that benefit from access to the PSTN should not contribute, we are persuaded that it is generally consistent with the public interest for those who benefit from the PSTN to contribute to support the network. We note that some parties argue that the public interest does not require contributions from telecommunications providers that are not interconnected with the public switched network.³²⁰ We find, however, that the statutory goal of a broad contribution base requires that these entities contribute to ensure the preservation and advancement of universal service mechanisms.

³¹⁵ *Id.*, 12 FCC Rcd at 9178, para. 786.

³¹⁶ *Id.*, 12 FCC Rcd at 9183-9185, paras. 795-797.

³¹⁷ *See Id.*, 12 FCC Rcd at 9183, para. 795.

³¹⁸ *See, e.g., Id.*, 12 FCC Rcd at 9184, para. 796.

³¹⁹ *See, e.g., Id.*, 12 FCC Rcd at 9184, para. 796 (private service providers that sell excess capacity should contribute because they benefit from access to the PSTN); *id.* at 9184-9185, para. 797 (payphone aggregators should contribute because they are connected to the PSTN).

³²⁰ Business Networks reply comments at 2 (providers of private line services generally are not connected to the public switched network and derive no benefit from it); US Satellite Companies reply comments at 1 (the public interest does not require contributions from telecommunications that are not interconnected with the public switched network); American Mobile Telecommunications Association reply comments at 3 (there is no public policy rationale for requiring commercial dispatch systems that have little nexus to the PSTN to contribute).

136. The Commission also determined that the public interest requires that several providers of interstate telecommunications should *not* contribute to universal service mechanisms. In some instances, the Commission determined that competitive neutrality concerns warrant refraining from imposing contribution requirements on certain providers that fall within the permissive contribution authority set forth in section 254(d).³²¹ For example, the Commission found that systems integrators that do not provide services over their own facilities, are not common carriers, and obtain a *de minimis* amount of their revenues from the resale of telecommunications are not required to contribute to universal service.³²² We note that commenters are divided over this conclusion,³²³ but we agree that systems integrators that derive less than five percent of their revenues relative to systems integration from the resale of telecommunications do not significantly compete with common carriers that are required to contribute to universal service.³²⁴ The provision of interstate telecommunications is generally only one of a wide range of services that systems integrators provide for their customers.³²⁵ Requiring systems integrators that obtain less than five percent of systems integration revenues from the sale of interstate telecommunications to contribute to universal service mechanisms could dissuade these companies from offering interstate telecommunications and we do not want the Commission's decisions to distort business decisions. Accordingly, we find no compelling public interest reason for including this limited category of telecommunications providers in the pool of contributors.³²⁶

³²¹ See, e.g., *Fourth Order on Reconsideration* at para. 283 (broadcasters that engage in non-common carrier interstate telecommunications should not contribute to universal service because broadcasters generally compete with cable, OVS and DBS providers, which are not required to contribute on the basis of the revenues derived from these services, rather than with common carriers).

³²² *Fourth Order on Reconsideration* at para. 278. In this context, the term *de minimis* is used by the Commission to describe the small amount of revenue a systems integrator can derive from telecommunications without having to contribute to universal service mechanisms. This term is also used in the statutory language to refer to contributors whose contributions would be less than the administrative costs of collecting them. We discuss this provision separately in Section V.C.2.

³²³ Compare AT&T comments at 6-7 (systems integrators with resale telecommunication revenues below five percent of the firm's total revenues and non-common carrier transponders potentially compete with carriers that are required to contribute because they all sell telecommunications services and, thus, they should be required to contribute) with Ad Hoc comments at 3 (systems integrators who obtain only a *de minimis* amount of revenues from the resale of telecommunications services should be exempted from contributing).

³²⁴ *Fourth Order on Reconsideration* at para. 279. The Commission concluded that systems integrators' telecommunications revenues will be considered *de minimis* if they constitute less than five percent of revenues derived from providing systems integration services. *Id.* at 280.

³²⁵ See *Fourth Order on Reconsideration* at para. 278 ("systems integrators provide integrated telecommunications packages of services and products that may include, for example, the provision of computer capabilities, data processing, and telecommunications.").

³²⁶ In its comments, Amtrak analogizes its situation to those of both non-profit educational and health institutions and systems integrators and argues that it should not be required to contribute to universal service mechanisms because the small amount of excess capacity for interstate telecommunications that it sells on a private carrier basis is only incidental to its core transportation business. Amtrak contends that it does not significantly compete with common carriers and obtains a *de minimis* amount of its revenues from the resale of

137. We note that Bell South asserts that the Commission's approach results in disparate treatment for carriers, for which the *de minimis* threshold is \$10,000,³²⁷ and non-carrier systems integrators, which can derive telecommunications revenues that would otherwise result in a universal service contribution in excess of \$10,000 and still be exempt if their telecommunications revenues are less than five percent of their total systems integration revenues.³²⁸ Because we determine that these systems integrators do not compete significantly with common carriers, however, we find that it is appropriate to require systems integrators to contribute only to the extent their telecommunications revenues exceed five percent of their total revenues derived from systems integration, even if five percent exceeds the \$10,000 threshold established for mandatory contributors. The Commission recognized that the primary business of such systems integrators is not providing interstate telecommunications, but rather performing services such as integrating their customers' computer and other informational systems.³²⁹ The Commission also recognized that customers chose systems integrators for their systems integration expertise, not for their competitive provision of telecommunications.³³⁰ Further, as the Commission has concluded, the limited nature of this exemption will ensure that systems integrators that are significantly engaged in the provision of telecommunications do not receive an unfair competitive advantage over common carriers or other carriers that are required to contribute to universal service.³³¹ Finally, we are unpersuaded that this approach will significantly reduce the contribution base because the Commission has determined that revenues received by common carriers for the minimal amounts of telecommunications provided to systems integrators will be included in the contribution base of underlying common carriers.³³²

138. In other cases, the public interest analysis requires a more expansive examination of the goals of universal service. For example, we have concluded that it would be contrary to the public interest to require colleges, universities, schools, libraries, and health care providers to contribute to universal service even though, in some instances, these

telecommunications. Moreover, Amtrak states that it must resell its excess capacity pursuant to Congress's mandate that it take measures to be self-supporting and non-reliant on federal operating support by the year 2002. See Amtrak comments at 2-9.

³²⁷ See discussion of the *de minimis* exemption, Section V.C.2, *infra*.

³²⁸ BellSouth comments at 7-8.

³²⁹ *Fourth Order on Reconsideration* at paras. 278-279.

³³⁰ *Id.*, at paras. 278-279.

³³¹ *Id.*, at para. 280.

³³² *Id.*, at para. 281. The record in the underlying universal service proceeding, CC Docket 96-45, indicates that including this small group of systems integrators in the contribution pool would reduce the per provider contribution percentage by less than 1/100th of one percent. See Ad Hoc reply comments at 3-4 *citing* comments of International Business Machines Corporation in Support of Petition for Reconsideration, at 12-13 (Aug. 18, 1997).

institutions could be considered providers of interstate telecommunications.³³³ Unlike other recipients of universal service such as carriers serving high cost areas, schools, libraries, and health care providers that receive the benefits of universal service are prohibited from reselling the supported services they receive.³³⁴ Thus, they are effectively prohibited from competing with common carriers with respect to the connections they purchase at supported rates. Although the record demonstrates some opposition to this conclusion,³³⁵ we are convinced that this approach is in the public interest. Further, we are persuaded that it would be inconsistent with the educational goals of universal service support mechanisms to require colleges and universities to contribute to universal service.³³⁶ Nevertheless, in order to maintain the sufficiency of universal service mechanisms, we will treat non-profit schools, colleges, universities, libraries, and health care providers as telecommunications end users for contribution purposes.³³⁷

139. Further, in the *Universal Service Order*, the Commission found that entities that "provide telecommunications solely to meet their internal needs" as telecommunications providers are subject to our permissive contribution authority. The Commission concluded, however, that those entities "should not be required to contribute to the [universal service] support mechanisms at this time, because telecommunications do not comprise the core of their business."³³⁸ The Commission recognized that "it would be administratively burdensome to assess a special non-revenues-based contribution on these providers because they do not derive revenues from the provision of services to themselves."³³⁹ As discussed above,³⁴⁰ one could argue that an Internet service provider that owns transmission facilities and engages in data transport over those facilities in order to provide an information service is providing telecommunications to itself. As a theoretical matter, it may be advisable to exercise our discretion under the statute to require such providers to contribute to universal service. We recognize, however, that there are significant operational difficulties associated with determining the amount of such an Internet service provider's revenues to be assessed for

³³³ *Fourth Order on Reconsideration* at para. 284.

³³⁴ 47 U.S.C. § 254(h)(3).

³³⁵ See AT&T comments at 6-7 (educational institutions that are not K-12 schools are not recipients of support and are likely to resell telecommunications services to their students, thus competing with other providers of telecommunications; even educational institutions and health care providers potentially compete with carriers to the extent that they sell telecommunications services, and, thus, eligible schools and libraries, as recipients of support, should be not exempted from contributing).

³³⁶ See *Fourth Order on Reconsideration* at para. 284.

³³⁷ *Id.*, at para. 284.

³³⁸ *Universal Service Order*, 12 FCC Rcd at 9185, para. 799.

³³⁹ *Id.*

³⁴⁰ See section IV.D.1, *supra*.

universal service purposes and with enforcing such requirements. We intend to consider these issues in an upcoming proceeding.

2. The De Minimis Exemption

140. The second sentence of section 254(d) reads: "The Commission may exempt a carrier or class of carriers from this [contribution] requirement if the carrier's telecommunications activities are limited to such an extent that the level of such carrier's contribution to the preservation and advancement of universal service would be *de minimis*."³⁴¹ This clause provides the only statutory authority for exempting a carrier or class of carriers that would otherwise be required to contribute to universal service mechanisms.³⁴² The legislative history indicates that the *de minimis* exemption is extremely limited. Specifically, the Joint Explanatory Statement states that "this authority would only be used in cases where the administrative cost of collecting contributions from a carrier or carriers would exceed the contribution that carrier would otherwise have to make under the formula for contributions selected by the Commission."³⁴³

141. We recently set a \$10,000.00 threshold for the *de minimis* exemption.³⁴⁴ Initially, the Commission had established a \$100.00 threshold, which was based on an estimate of the administrator's costs to collect the minimum contribution requirement used for the TRS program.³⁴⁵ It is appropriate, however, as we concluded, to consider the contributor's administrative costs, as well as the costs incurred by the administrator.³⁴⁶ In addition, exempting contributors whose annual contribution would be less than \$10,000.00 will significantly reduce the administrator's collection costs.³⁴⁷ Therefore, we conclude that entities whose contributions would be less than \$10,000.00 should be exempted from the contribution requirement. We recognize that some commenters object to the Commission's implementation of the *de minimis* exemption.³⁴⁸ Although we are mindful of the need to

³⁴¹ 47 U.S.C. § 254(d). Thus, AT&T's contention that "no carrier -- regardless of its size -- should be exempt" is inconsistent with the clear language of 254(d). See AT&T comments at 8.

³⁴² See SBC comments at 2-3 (the Commission's authority to exempt contributors is limited to *de minimis* contributors).

³⁴³ Joint Explanatory Statement at 131.

³⁴⁴ *Fourth Order on Reconsideration* at para. 295.

³⁴⁵ *Universal Service Order*, 12 FCC Rcd at 9187-9188, para. 803.

³⁴⁶ *Fourth Order on Reconsideration* at para. 295.

³⁴⁷ *Id.*, at para. 297.

³⁴⁸ See, e.g., PCIA comments at 7-11 (the decision to require underlying facilities-based carriers to consider resellers that qualify for the *de minimis* exemption as end users for contribution purposes places an untenable billing burden on facilities-based carriers); BellSouth comments at 7-8 (the reclassification of revenues is not competitively neutral because the Commission is shifting the reseller's universal service obligation to the underlying carrier). We note that the Commission has several petitions for reconsideration under consideration,

establish clear and competitively neutral rules, we nevertheless conclude that our implementation of the *de minimis* exemption is consistent with Congressional intent and with the goals of universal service in general.

142. The statute and legislative history support the conclusion that the *de minimis* exemption may not be used to exempt any other class of contributors. In addition, we find no evidence that exempting contributors whose contributions would be less than \$10,000.00 will result in a shortage of monies or otherwise strain the universal service support mechanisms. Further, we disagree with AT&T's contention that the \$10,000.00 *de minimis* threshold creates a loophole for customers of small carriers and creates unfair marketing advantages for small, new entrants.³⁴⁹ We are persuaded that the Commission's conclusion does not extend beyond the very limited parameters of this statutory exemption.

3. Exclusions and Exemptions

143. Congress directed us to explain "any exemption of providers or exclusion of any service that includes telecommunications" from universal service contribution requirements under section 254, or from existing universal service support mechanisms.³⁵⁰

144. Under section 254(d), only telecommunications carriers that provide "interstate telecommunications services" are required to contribute to federal universal service funding and other providers of interstate telecommunications may be required to contribute if the Commission finds that the public interest so requires.³⁵¹ We have noted above in our discussion of "telecommunications" and "information service" that all information services by definition are provided "via telecommunications." As we interpret the statute, that fact that an information service such as Internet access rides on top of telecommunications networks does not mean that the Internet access itself is a "telecommunications service." All information services "include telecommunications" in some sense, but we have "excluded" them from universal service contribution requirements based on the plain language of section 254(d). We do not consider this determination to be an "exemption," because we find no requirement in the Act that all services that "include telecommunications" be required to contribute to universal service.

145. For example, Microsoft's Expedia site allows customers to purchase airline tickets through the World Wide Web. Because access over telecommunications networks is necessary in order to reach the Expedia site, Microsoft can be said to offer a service that "includes telecommunications." We do not believe, however, that Congress intended Microsoft to contribute a portion of the revenues it receives for airline tickets to the universal

many of which address the implementation of the *de minimis* threshold. Rather than prejudge those petitions in this Report, we will address the specific issues they raise in a future reconsideration order.

³⁴⁹ AT&T comments at 8.

³⁵⁰ *Appropriations Act*, §623(b)(3).

³⁵¹ 47 U.S.C 254(d).

service fund. End users do not access Expedia in order to obtain telecommunications service. Rather, those users obtain telecommunications service from local exchange carriers, and then use information services provided by their Internet service provider and Microsoft in order to access Expedia. Phrased another way, Microsoft arguably offers a service that "includes telecommunications," but it does not "provide" telecommunications to customers.

146. We have also been asked to address exemptions or exclusions from existing universal service support mechanisms. Contributions to existing explicit mechanisms, such as long-term support and telecommunications relay service, have always been limited to carriers. Enhanced and information service providers have never been required to contribute to these mechanisms, and therefore no "exemption" or "exclusion" exists. Not all existing universal service support, however, is explicit. Interstate access charges, for instance, have traditionally been set above the economic cost of access, which has permitted ILECs to charge lower rates for local service in high-cost areas. At the state level, rates for business lines and vertical features also have often been set above cost in order to keep residential rates lower. When it established the interstate access charge regime in the early 1980s, the Commission determined that enhanced service providers, even though they used local exchange networks to originate and terminate interstate services, would not be subject to access charges. Instead, enhanced service providers pay local business rates to LECs for their connections to the LEC network. This exemption from interstate access charges thus might be construed as an "exemption" from an "existing federal universal service support mechanism."

147. We believe that permitting enhanced service providers to purchase these services from incumbent LECs under the same intrastate tariffs available to end users, rather than requiring them to pay interstate access charges, comports with the plain language of the 1996 Act and with the public interest. The 1996 Act makes a decisive break from the existing practice of implicit universal service subsidy structures. Rather than preserve the inefficient mechanisms designed for an industry characterized by local monopolies, the 1996 Act directs the Commission to make universal service funding explicit and competitively-neutral. We have implemented this Congressional requirement in our *Universal Service and Access Reform* proceedings. In particular, since January 1, 1998, high cost support has been collected through the new federal universal service support mechanism, funded by equitable and non-discriminatory contributions from all telecommunications providers. We have also restructured interstate access charges so that, after a transition, interstate non-traffic-sensitive local loop costs will no longer be recovered through per-minute long-distance rates.³⁵² We increased caps on end-user subscriber line charges, and created presubscribed interexchange carrier charges, to recover these costs in a more efficient manner.

VI. WHO RECEIVES UNIVERSAL SERVICE SUPPORT

A. Background

148. Section 623(b)(4) of the Appropriations Act directs the Commission to review "who is eligible under sections 254(e), 254(h)(1), and 254(h)(2) . . . to receive specific federal universal service support for the provision of universal service, and the consistency with

³⁵² *Access Charge Reform Order*, 12 FCC Rcd 15982 (1997).

which the Commission has interpreted each of those provisions of section 254." With respect to these particular provisions of the 1996 Act, the Commission, after seeking public comment, issued a series of rules concerning the eligibility of telecommunications carriers and other providers of services to receive support under universal service mechanisms. As discussed in greater detail below, we believe that the Commission's interpretations of sections 254(e), 254(h)(1) and 254(h)(2) are consistent with the plain language of these provisions and with Congress's stated goals in passing the 1996 Act.

149. General Eligibility Under 254(e). Section 254(e) of the 1996 Act imposed a new set of eligibility criteria for the receipt of universal service support. Section 254(e) states in part, that "[a]fter the date on which Commission regulations regarding implementing this section take effect, only an eligible telecommunications carrier designated under section 214(e) shall be eligible to receive specific Federal universal service support."³⁵³ Section 214(e)(1) provides that

[a] common carrier designated as an eligible telecommunications carrier . . . shall be eligible to receive universal service support in accordance with section 254 and shall, throughout the service area for which the designation is received - (A) offer the services that are supported by Federal universal service mechanisms under section 254(c), either using its own facilities or a combination of its own facilities and resale of another carrier's services . . . and (B) advertise the availability of such services and the charges therefor using media of general distribution.³⁵⁴

150. The Commission adopted without expansion the criteria set forth in section 254(e) as the rules governing eligibility for universal service support in general. Those rules, the Commission concluded, allow only carriers designated as "eligible telecommunications carriers" under section 214(e) to be eligible for universal service support, and allow only common carriers to be designated as eligible telecommunications carriers for this purpose.³⁵⁵ The Commission also concluded that, under section 254(e), any telecommunications carrier using any technology is eligible to receive support as long as it meets the criteria set forth in section 214(e).³⁵⁶ The Commission also found that carriers that use unbundled network elements, in whole or in part, to provide supported services meet the "facilities" requirement of subsection 214(e)(1)(A) and, therefore, can be eligible for universal service support.³⁵⁷ The Commission concluded, however, that carriers that provide their services entirely through resale of another carrier's services are not eligible for universal service support. The

³⁵³ 47 U.S.C. § 254(e).

³⁵⁴ 47 U.S.C. § 214(e)(1).

³⁵⁵ *Universal Service Order*, 12 FCC Rcd at 8850-8851, para. 134.

³⁵⁶ *Id.* at 8858-8859, paras. 145-146.

³⁵⁷ *Id.* at 8862-8870, paras. 154-168.

Commission's rules regarding general eligibility are codified in Part 54, Subpart C of volume 47 of the Code of Federal Regulations.³⁵⁸

151. Providers of Services to Schools and Libraries. With section 254(h)(1)(B) of the 1996 Act, Congress created a new universal service support mechanism specifically for the benefit of schools and libraries. Section 254(h)(1)(B) states, in part, that a telecommunications carrier providing supported services to schools and libraries "shall - (i) have an amount equal to the amount of the discount treated as an offset to its obligation to contribute to the mechanisms to preserve and advance universal service, or (ii) notwithstanding the provisions of subsection (e) of this section, receive reimbursement utilizing the support mechanisms to preserve and advance universal service."³⁵⁹ Section 254(c)(3) of the Act provides that "[t]he Commission may designate additional services for such support mechanisms for schools, libraries, and health care providers for the purposes of subsection (h)."³⁶⁰ In addition, section 254(h)(2) states in part: "The Commission shall establish competitively neutral rules (A) to enhance, to the extent technically feasible and economically reasonable, access to advanced telecommunications and information services for all public and non-profit elementary and secondary school classrooms, health care providers, and libraries"³⁶¹

152. The Commission interpreted subsection 254(h)(1)(B) to allow any telecommunications carrier, not just eligible telecommunications carriers, to receive reimbursements from universal service mechanisms for providing telecommunications service, Internet access and the installation and maintenance of internal connections to eligible schools and libraries.³⁶² The Commission also found that firms other than telecommunications carriers can receive support under sections 254(h)(2) and 4(i) for providing Internet access and the installation and maintenance of internal connections.³⁶³ In its *Fourth Order on Reconsideration*, the Commission added that, because state telecommunications networks are not "telecommunications carriers," as defined by the statute, they are not eligible to receive direct reimbursement from universal service support mechanisms for providing telecommunications services to eligible schools and libraries.³⁶⁴ On the other hand, the Commission also found that, as firms other than telecommunications carriers, they are still eligible to receive direct reimbursement for providing Internet access and internal connections

³⁵⁸ 47 C.F.R. §§ 54.201-54.207.

³⁵⁹ 47 U.S.C. § 254(h)(1)(B).

³⁶⁰ 47 U.S.C. § 254(c)(3).

³⁶¹ 47 U.S.C. § 254(h)(2).

³⁶² *Universal Service Order*, 12 FCC Rcd at 9015, para. 449.

³⁶³ See 47 C.F.R. §§ 54.503, 54.517(b).

³⁶⁴ *Fourth Order on Reconsideration* at paras. 187-189.

to eligible schools and libraries under section 254(h)(2)(A).³⁶⁵ The Commission's rules regarding the eligibility of providers of services to schools and libraries are codified in Part 54, Subpart F of volume 47 of the Code of Federal Regulations.³⁶⁶

153. Providers of Services to Health Care Providers. With section 254(h)(1)(A), Congress also added a new universal service support mechanism for the benefit of health care providers. Section 254(h)(1)(A) provides, in part, that a telecommunications carrier providing supported services to health care providers in rural areas "shall be entitled to have an amount equal to the difference, if any, between the rates for services provided to health care providers for rural areas in a State and the rates for similar services provided to other customers in comparable rural areas in that State treated as a service obligation as a part of its obligation to participate in the mechanisms to preserve and advance universal service." As with the program for schools and libraries, however, section 254(c)(3) of the Act adds that "[t]he Commission may designate additional services for such support mechanisms for schools, libraries, and health care providers for the purposes of subsection (h)."³⁶⁷ Also, section 254(h)(2) directs the Commission to "establish competitively neutral rules (A) to enhance, to the extent technically feasible and economically reasonable, access to advanced telecommunications and information services for all public and non-profit elementary and secondary school classrooms, health care providers, and libraries"³⁶⁸

154. The Commission found that section 254(h)(1)(A) is explicitly limited to "telecommunications services."³⁶⁹ The Commission also determined that only carriers designated as "eligible telecommunications carriers" shall be eligible to receive support for providing services to health care providers under section 254(h)(1)(A).³⁷⁰ The Commission found further that these services include the telecommunications services that health care providers may purchase to gain access to an Internet service provider.³⁷¹ The Commission thus concluded that any telecommunications carrier can receive limited support for providing any health care provider, whether rural or not, with toll-free access to an Internet service.³⁷² The Commission's rules regarding eligibility of providers of services to health care providers are codified in Part 54, Subpart G of volume 47 of the Code of Federal Regulations.³⁷³

³⁶⁵ *Id.* at paras. 190-191.

³⁶⁶ 47 C.F.R. §§ 54.500-54.517.

³⁶⁷ 47 U.S.C. § 254(c)(3).

³⁶⁸ 47 U.S.C. § 254(h)(2).

³⁶⁹ *Universal Service Order*, 12 FCC Rcd at 9009, 9010, paras. 437, 439.

³⁷⁰ *Id.* at 9105, para. 627.

³⁷¹ *Id.* at 9106-9107, para. 630.

³⁷² *Id.* at 9087-9088, paras. 596; *id.* at 9157-9159, paras. 742-745.

³⁷³ 47 C.F.R. §§ 54.601-54.623.

B. Discussion**1. General Eligibility under section 254(e).**

155. As noted above, section 254(e) provides that "only an eligible telecommunications carrier designated under section 214(e) shall be eligible to receive specific Federal universal service support."³⁷⁴ Section 214(e), in turn, provides that:

[a] common carrier designated as an eligible telecommunications carrier under [subsection 214(e)(2)] or [subsection 214(e)(3)] shall be eligible to receive universal service support in accordance with section 254 and shall, throughout the service area for which the designation is received --

(A) offer the services that are supported by Federal universal service support mechanisms under section 254(c), either using its own facilities or a combination of its own facilities and resale of another carrier's services (including the services offered by another eligible telecommunications carrier); and (B) advertise the availability of such services and the charges therefor using media of general distribution.³⁷⁵

156. In the *Universal Service Order*, the Commission, consistent with the recommendation of the Joint Board, found that these sections constitute the entirety of the rules governing eligibility for universal service support generally, and that the statute does not permit the Commission or states to adopt any additional criteria. We believe that the plain language of the statute fully supports the Commission's conclusion in this regard, and that the Commission properly construed the statute with respect to each of the rules set forth in sections 254(e) and 214(e).

a. The "Eligible Telecommunications Carrier" Requirement.

157. The Commission first concluded that, under section 254(e), only a carrier that is designated an "eligible telecommunications carrier" pursuant to section 214(e) can be eligible for the receipt of universal service support.³⁷⁶ The relevant language of the statute, which states that "only an eligible telecommunications carrier designated under section 214(e) shall be eligible to receive specific Federal universal service support,"³⁷⁷ is plain on its face and fully supports the Commission's conclusion.

158. The Commission also found that only a common carrier may be designated as an "eligible telecommunications carrier" for purposes of section 254(e). We find that this,

³⁷⁴ 47 U.S.C. § 254(e).

³⁷⁵ 47 U.S.C. § 214(e)(1).

³⁷⁶ 47 C.F.R. § 54.201(a).

³⁷⁷ 47 U.S.C. § 254(e).

too, is consistent with the language of the statute. For example, section 214(e)(2) directs state commissions to designate "common carrier[s]" as eligible telecommunications carriers for receipt of support.³⁷⁸ Similarly, section 214(e)(1) refers only to "[a] common carrier" as eligible for support in accordance with section 254.³⁷⁹ These provisions, we believe, clearly indicate Congress's intention that only a common carrier may be designated as an "eligible telecommunications carrier."

b. The "Facilities" Requirement.

159. Section 214(e)(1) requires each eligible carrier, throughout its service area: (1) to offer the services that are supported by federal universal service support mechanisms under section 254(c); (2) to offer such services using its own facilities or a combination of its own facilities and resale of another carrier's services, including the services offered by another eligible telecommunications carrier; and (3) to advertise the availability of and charges for such services using media of general distribution.³⁸⁰ The 1996 Act, however, does not define the term "facilities." Accordingly, the Commission, in an effort to effectuate the intent of Congress, established a definition of "facilities" for purposes of determining the eligibility requirements of section 214(e)(1).

160. The Commission interpreted the term "facilities" in section 214(e)(1) to mean any physical components of the telecommunications network that are used in the transmission or routing of the services designated for universal service support.³⁸¹ This interpretation is mandated by the statutory language which requires that at least some portion of the supported services offered by a carrier be offered using the carrier's "own facilities."³⁸² Although the Joint Board made no recommendation regarding the type of facilities that an eligible carrier must provide, it recommended that carriers who offer universal service exclusively through the resale of another carrier's service should not be eligible for universal service support.³⁸³ Because resold services are not physical components of the network, the Commission's interpretation of the term "facilities" excludes pure resellers from eligibility for universal service support and therefore fulfills the aim of both Congress and the Joint Board.

161. We note, however, that the Commission's interpretation does not dictate the specific facilities that a carrier must provide and, therefore, does not impose entry barriers that would unduly restrict the class of carriers that may be designated as eligible for universal service support. In our view, therefore, the Commission's interpretation of "facilities" strikes

³⁷⁸ 47 U.S.C. § 254(e)(2).

³⁷⁹ 47 U.S.C. § 214(e)(1).

³⁸⁰ See 47 U.S.C. § 214(e)(1); 47 C.F.R. § 54.201(d).

³⁸¹ See 47 C.F.R. § 54.201(e).

³⁸² 47 U.S.C. § 214(e)(1)(A).

³⁸³ See *Recommended Decision*, 12 FCC Rcd at 173, para. 161.

an appropriate balance that gives the facilities requirement sufficient meaning to exclude pure resellers from eligibility, but remains competitively neutral insofar as it does not dictate the specific facilities or entry strategy that any other carrier must use.³⁸⁴

c. Unbundled Network Elements as "Own Facilities".

162. As noted above, section 214(e)(1) requires an eligible carrier to provide supported services "either using its own facilities or a combination of its own facilities and resale of another carrier's services"³⁸⁵ An issue that arises in interpreting this language is the treatment of the use of unbundled network elements; specifically, whether use of unbundled elements constitutes a carrier's "own facilities." In addressing this issue, the Commission concluded that unbundled network elements qualify as a carrier's "own facilities" for purposes of section 214(e)(1).³⁸⁶ Under this interpretation, a carrier that offers any of the services designated for universal service support, either in whole or in part, over facilities that are obtained as unbundled network elements pursuant to section 251(c)(3) satisfies the facilities requirement of section 214(e)(1)(A). Although Congress did not expressly refer to unbundled network elements in section 214(e)(1)(A), we find that the Commission's conclusion is consistent with both the language and overall purposes of the statute.³⁸⁷

163. The principal purpose of the 1996 Act was to increase competition in the local telephone markets.³⁸⁸ To this end, Congress sought to allow potential competitors to enter local telephone markets by using the incumbent carriers' own networks in three ways: (1) interconnection of the competitor's network to that of an incumbent, (2) use of unbundled

³⁸⁴ Although the Commission defined "facilities" to require physical components of the network, it did not construe section 214(e) to require that those facilities be physically located in the service area at issue. We believe that this is an appropriate construction of the statute. First, nothing in the statute mandates that the facilities be located in the service area. See 47 U.S.C. § 214(e). Second, where a carrier can offer supported services in one area through the use of facilities in another area, it is most economically efficient to afford the carrier flexibility to offer its services in this manner. To hold otherwise would require the addition of redundant facilities within the service area for no purpose related to the effective provision of universal service. Moreover, the Commission's interpretation is competitively neutral, as it accommodates various technologies and entry strategies that carriers may employ to compete in high-cost areas.

³⁸⁵ 47 U.S.C. § 214(e)(1)(A).

³⁸⁶ 47 C.F.R. § 54.201(f).

³⁸⁷ We note that, based on the text of section 271(c)(1)(A), the legislative history of that provision, and the overall statutory scheme of the 1996 Act, the Commission interpreted the phrase "own telephone exchange service facilities" in section 271(c)(1)(A) to include unbundled network elements that a competing provider has obtained from a Bell Operating Company. See *Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as amended, to Provide In-Region, InterLATA Services in Michigan*, Order, CC Docket No. 97-137, 12 FCC Rcd 20543, 20589-20598, paras. 86-101 (1997), *petitions for recon. pending*.

³⁸⁸ See, e.g., *Reno v. ACLU*, 117 S. Ct. 2329, 2337-2338 (1997) (the 1996 Act is "an unusually important legislative enactment" whose "major components . . . were designed to promote competition in the local telephone service market.").

elements of the incumbent's network, and (3) resale of the incumbent's retail services.³⁸⁹ The use of unbundled network elements, as one of only three primary paths of entry into local markets, clearly lies at the heart of the 1996 Act. Given this central role assigned to the use of unbundled network elements in the 1996 Act as a whole, it seems highly unlikely that Congress intended, in section 214(e)(1)(A), to deny universal service support to a carrier that relies on unbundled network elements, whether in whole or in part, to provide supported services, when it excluded only those carriers relying entirely on "resale" -- a separate entry strategy.

164. Indeed, Congress has made clear that all three forms of local entry must be treated in a competitively neutral manner, notwithstanding section 214(e)(1)(A), which prevents pure resellers from becoming eligible telecommunications carriers.³⁹⁰ If the "own facilities" requirement were interpreted to preclude services provided through unbundled network elements from eligibility for universal service support, carriers using unbundled network elements would be at a competitive disadvantage to carriers using other entry strategies, as only those carriers employing other entry strategies would be eligible for support, even if the carriers were all providing the same services. Such a result would be at variance with the principles of competitive neutrality underlying the Act and would serve as a significant disincentive for entry into high-cost areas through the use of unbundled elements, thus defeating Congress's intent to bring the fullest range of telecommunications services "to all regions of the Nation."³⁹¹

165. Moreover, the use of unbundled network elements falls within the definition of a carrier's "own facilities," in the ordinary sense of the term. For example, when a carrier obtains an unbundled network element from an incumbent carrier, the requesting carrier obtains exclusive use of that element for a period of time and pays the full cost of its use to the incumbent.³⁹² Because the ordinary meaning of the word "own" includes not only title holders, but those enjoying beneficial use of property,³⁹³ a user of unbundled network elements is fairly viewed under these circumstances to be using his "own facilities" to provide service. The Commission's decision to include unbundled network elements within the scope of a carrier's "own facilities," therefore, comports with this common understanding of the

³⁸⁹ See 47 U.S.C. § 251(c).

³⁹⁰ 47 U.S.C. § 214(e)(1)(A) (An eligible telecommunications carrier must "offer the services that are supported by Federal universal service support mechanisms under section 254(c), either using its own facilities or a combination of its own facilities and resale of another carrier's services . . .").

³⁹¹ 47 U.S.C. § 254(b)(3).

³⁹² See *Local Competition Order*, 11 FCC Rcd 15499, 15635 para. 268 (1996).

³⁹³ See *Universal Service Order*, 12 FCC Rcd at 8865, para. 158 n.405(citing Black's Law Dictionary, 1105 (6th ed. 1990)); *id.* at 8865 n.407, para. 158 (citing cases).

term.³⁹⁴ We note, however, that this issue is the subject of substantial disagreement and is currently before the Commission on petitions for reconsideration.³⁹⁵ Thus, while we report here that we believe the Commission's interpretation of the "own facilities" requirement to be reasonable, we do not wish to prejudge the pending petitions for reconsideration and remain open to the arguments of those who disagree.

d. Eligibility of All Technologies.

166. The Commission concluded that any telecommunications carrier using any technology, including wireless technology, is eligible to receive universal service support, provided that it meets the criteria set forth in section 214(e).³⁹⁶ We find that this conclusion, which the Joint Board recommended, is the proper reading of the statute. Neither section 254(e) nor 214(e) contains language that would favor one technology over another for purposes of eligibility for support. To the contrary, the statute mandates eligibility for any common carrier that meets the requirements of 214(e), without reference to the type of technology employed. Any wholesale exclusion of a class of carriers from eligibility for support, therefore, would be inconsistent with the plain language of the statute as well as the principle of competitive neutrality embodied in the Act. The Commission's decision to allow any technology as eligible for support is thus fully supported by the language and purpose of the statute.

e. Ineligibility of Resellers.

167. The Commission determined that a carrier that provides supported services exclusively through the resale of another carrier's services cannot be designated an eligible telecommunications provider for purposes of section 214(e).³⁹⁷ This, too, in our view, is a reasonable reading of the statute. As noted above, both Congress and the Joint Board expressed an intention to exclude pure resellers from universal service support.³⁹⁸ In

³⁹⁴ See, e.g., *Walters v. Metropolitan Educational Enterprises, Inc.*, 117 S. Ct. 660, 664 (1997) ("In the absence of an indication to the contrary, words in a statute are assumed to bear their 'ordinary, contemporary, common meaning.'") (quoting *Pioneer Investment Services Co. v. Brunswick Associates Ltd. Partnership*, 507 U.S. 380, 388 (1993)).

³⁹⁵ See, e.g., RTC comments at 7-8, 24-25 (allowing unbundled network elements to satisfy "own facilities" test guts statutory safeguard against giving high cost support to a carrier that does not incur high costs or invest in infrastructure of the high cost area); NARUC comments at 6-7 (Commission had no authority to define "owned facilities" and service area considerations, as these roles are clearly assigned to states under section 214(e)(5)); TDS comments at 10 (allowing use of unbundled network elements where underlying carrier's facilities are not high cost or located in high cost area conflicts with section 254(e)); State Members comments at 7 (states, not Commission, have authority under section 214(e) to define "own facilities" and to establish geographic areas).

³⁹⁶ 47 C.F.R. § 54.201(h).

³⁹⁷ See 47 C.F.R. § 54.201(i).

³⁹⁸ See *Recommended Decision*, 12 FCC Rcd at 173, para. 161; 47 U.S.C. § 214(e)(1)(A).

particular, section 214(e)(1)(A) requires an eligible carrier to provide supported services only "either using its own facilities or a combination of its own facilities and resale of another carrier's services" ³⁹⁹ Because pure resale is not an option under this provision, the Commission's rule denying eligibility to pure resellers comports with the plain language of the statute.

168. Moreover, pure resellers already receive the benefit of universal service support when they purchase wholesale services at a price based on the retail price, a price that already includes the universal service support received by the incumbent provider. If pure resellers were eligible for additional support payments directly to themselves, they would effectively receive a "double recovery" of support. ⁴⁰⁰ Such a result would not only be inefficient, but it would violate the principle of competitive neutrality by favoring resellers over other carriers. We believe, therefore, that the Commission's interpretation is a reasonable construction of the statute. We note, however, that this issue is also before the Commission on petitions for reconsideration. ⁴⁰¹ To avoid prejudging those petitions, we underscore that, based upon our review of the record in this proceeding, our opinion on this issue is simply that the Commission's decision to exclude pure resellers is a reasonable interpretation of the statute.

f. Exclusivity of Statutory Rules.

169. Section 214(e)(2) states that "[a] state commission *shall* . . . designate a common carrier that meets the [eligibility] requirements of [section 214(e)(1)] as an eligible telecommunications carrier" 47 U.S.C. § 214(e)(2) (emphasis added). Similarly, section 214(e)(1) provides that carriers designated as eligible telecommunications carriers pursuant to the statute "*shall* be eligible to receive universal service support" 47 U.S.C. § 214(e)(1) (emphasis added). These provisions clearly leave no room for discretion and require that carriers meeting the statutory eligibility requirements be provided with universal service support. We agree, therefore, that the statute does not permit the Commission to impose additional criteria for eligibility.

170. Furthermore, even if the statute permitted the imposition of additional conditions on eligibility, such conditions would be unnecessary. Although some commenters in the initial rulemaking proceeding argued that additional criteria are needed to prevent unreasonable practices by other carriers, the statutory rules are sufficient to protect against

³⁹⁹ 47 U.S.C. § 214(e)(1)(A).

⁴⁰⁰ AMSC contends that resellers should not be excluded from eligibility where their services were not obtained from carriers that are already receiving universal service support for the same facilities. *See* AMSC comments at 4. In such cases, AMSC contends, support for the reseller does not create a "double recovery." *Id.* Regardless, AMSC's point cannot overcome the statutory language of section 214(e)(1)(A), which does not allow universal service support for the pure resale of supported services.

⁴⁰¹ *See, e.g.,* BellSouth Petition for Reconsideration at 3-4 (filed); RTC Petition for Reconsideration at 5-6 (filed).

such practices.⁴⁰² For example, by limiting eligibility to only common carriers, section 214(e) prevents eligible carriers from cherry-picking only the most desirable customers. The requirement that eligible carriers must serve their entire service area similarly protects against such practices. Moreover, the imposition of additional criteria for eligibility would raise potential market participants' costs of entry, thereby discouraging the competition intended by the 1996 Act. In addition to the plain language of the statute, therefore, these practical concerns justify the Commission's decision to adopt the statutory criteria for eligibility without additional criteria.⁴⁰³

2. Eligibility for Support for Providing Service to Schools and Libraries under section 254(h)

171. The Commission concluded that, pursuant to section 254(h)(1)(B), all telecommunications carriers may receive support for providing eligible schools and libraries with any commercially available telecommunications service they need⁴⁰⁴ as well as for providing them with basic "conduit" Internet access and the installation and maintenance of internal connections.⁴⁰⁵ The Commission also determined that, pursuant to sections 4(i) and 254(h)(2)(A), firms other than telecommunications carriers can receive support for providing eligible schools and libraries with basic conduit Internet access and the installation and maintenance of internal connections.⁴⁰⁶

a. Telecommunications Carriers

172. The Commission concluded that section 254(h)(1)(B)(ii) allows any telecommunications carrier, not just those designated as "eligible telecommunications carriers" under section 214(e), to receive universal service support for providing supported services to schools and libraries.⁴⁰⁷ This interpretation is, in our view, well-grounded in the plain language of the statute.

173. As noted above, section 254(e) provides that only a carrier designated as an "eligible telecommunications carrier" under section 214(e) may receive universal service

⁴⁰² See *Universal Service Order*, 12 FCC Rcd at 8856, para. 143 n.347 (citing comments).

⁴⁰³ Although one commenter in the initial proceeding sought modification of section 214(e)(1)'s requirement that eligible carriers provide service to, and advertise throughout, their entire service areas, the terms of section 214(e) clearly do not allow us to alter these duties. We cannot, therefore, modify the requirements of section 214(e) to accommodate those carriers whose technology limits their ability to provide service throughout a state-wide service area. See *Universal Service Order*, 12 FCC Rcd at 8855, para. 141.

⁴⁰⁴ See 47 C.F.R. §§ 54.501(a), 54.502.

⁴⁰⁵ See 47 C.F.R. § 54.503.

⁴⁰⁶ See 47 C.F.R. §§ 54.503, 54.517(b); *Universal Service Order*, 12 FCC Rcd at 9013, para. 444.

⁴⁰⁷ See 47 C.F.R. § 54.501(a); *Universal Service Order*, 12 FCC Rcd at 9015, para. 449.

support.⁴⁰⁸ Section 254(h)(1)(B)(ii), however, contains an express exemption from this limitation, allowing telecommunications carriers to receive universal support for providing eligible services to schools and libraries, "notwithstanding the provisions of [section 254(e)] . . ."⁴⁰⁹ We find that, as Senators Stevens and Burns have observed, Congress intended section 254(h)(1)(B) to "waive the statutory limitation in section 254(e) so that any telecommunications carrier could receive support for universal service to schools and libraries."⁴¹⁰ We believe that the language of the statute thus fully supports the Commission's conclusion that any telecommunications carrier, whether or not designated as an "eligible telecommunications carrier," is eligible for support for providing telecommunications services to schools and libraries.⁴¹¹

174. Moreover, as the Commission explained in its *Fourth Order on Reconsideration*, the term "telecommunications carrier" in section 254(h)(1)(B) includes only those carriers that provide telecommunications services on a common carrier basis.⁴¹² In turn, this means that only those carriers who hold themselves out "to service indifferently all potential users" can be considered telecommunications carriers.⁴¹³ Therefore, notwithstanding the objections of some commenters,⁴¹⁴ the plain language of the statute appears to render state telecommunications networks ineligible to receive universal service support for providing telecommunications services to eligible schools and libraries.⁴¹⁵ Because the evidence in the record indicates that state telecommunications networks offer services to a specified class of users rather than directly to the public, these entities do not service all potential users indifferently and thus would not qualify as telecommunications carriers. Because, as noted above, section 254(h)(1)(B) provides that only telecommunications carriers may receive support for providing schools and libraries with telecommunications services, we believe that the Commission correctly concluded that state telecommunications networks are not eligible for universal service support under section 254(h)(1)(B). We note, however, that the Iowa

⁴⁰⁸ 47 U.S.C. § 254(e).

⁴⁰⁹ 47 U.S.C. § 254(h)(1)(B)(ii).

⁴¹⁰ Senators Stevens and Burns comments at 10.

⁴¹¹ See also NCTA comments at 14-15 (section 254(h)(1)(B) specifically authorizes support for non-common carriers).

⁴¹² *Fourth Order on Reconsideration* at paras. 187-188.

⁴¹³ *Universal Service Order*, 12 FCC Rcd at 9177-78, paras. 784-786.

⁴¹⁴ See, e.g., Washington DIS reply comments at 1-3 (ineligibility of state networks providing services to public entities to receive discounts directly precludes schools and libraries from obtaining discounts on significant administrative costs included in state-provided services and creates disincentives to use state-aggregated telecommunications services); NASTD reply comments at 1-3 (state networks should be permitted to receive support for costs "not directly attributable to readily identifiable costs" of providing local and long distance voice telecommunications to schools and libraries). See also Washington State Department of Information Services, Petition for Reconsideration, CC Docket No. 96-45 (filed Feb. 12, 1998).

⁴¹⁵ *Fourth Order on Reconsideration* at paras. 187-189.

Telecommunications and Technology Commission filed with the Commission a request for determination that the Iowa Communications Network it operates is a provider of telecommunications services to schools, libraries and rural health care providers and, thus, should be eligible to receive universal service support for serving these entities.⁴¹⁶ We will consider this request in an upcoming proceeding.

b. Firms Other Than Telecommunications Carriers Providing Internet Access and Internal Connections

175. We have attempted to interpret sections 254(h)(2) and 254(e) in a manner most consistent with the context provided by other statutory language and the Congressional intent expressed in that language.⁴¹⁷ Under such analysis below, which is similar to the analysis provided by the Commission in the *Universal Service Order*, we conclude that, despite some statutory ambiguity, the stronger position is that section 254 authorizes the Commission to provide support to firms other than telecommunications carriers under section 254(h)(2).⁴¹⁸ We recognize that some would find it incongruous that entities that do not contribute to universal service support mechanisms may draw funds from those mechanisms if those entities provide competitively priced Internet access or internal connections to eligible schools and libraries. We reach this interpretation of section 254(h)(2), however, because we find that the consequences of reading the statute to deny support to firms other than telecommunications carriers creates more apparent statutory inconsistencies than reading the statute to permit such support.

176. At the outset, we note that the Commission interpreted section 254(h)(2) to permit support not only for telecommunications services, but also for internal connections in schools and libraries, which are not telecommunications services. This conclusion was premised on the statute's specific requirement that "classrooms," as opposed to "schools," have access to advanced telecommunications and information services.⁴¹⁹ If the Commission had found that the statute did not permit support for internal connections, only wireless telecommunications service providers would have been eligible to receive support for the provision of telecommunications and information services to classrooms. Because limiting eligibility solely to wireless carriers would have been contrary to the Commission's obligations to "establish competitively neutral rules to enhance . . . access to advanced

⁴¹⁶ Iowa Communications Network Eligibility for Universal Service Payments, CC Docket 96-45 (filed Feb. 4, 1998); Iowa Telecommunications and Technology Commission Seeks Determination that the Iowa Communications Network is a Provider of Telecommunications Services to Schools, Libraries, and Rural Health Care Providers, *Public Notice*, DA 98-294 (rel. Feb. 13, 1998).

⁴¹⁷ *Bell Atlantic Telephone Companies v. FCC*, 131 F.3d 1044 (D.C. Cir. 1997).

⁴¹⁸ We note that this issue is the subject of a pending appeal. See Brief for Petitioners GTE Entities, Southwestern Bell Tel. Co. and BellSouth Corp., *Texas Office of Pub. Util. Counsel v. FCC*, No. 97-60421 (5th Cir.) at 85-88.

⁴¹⁹ See 47 U.S.C. § 254(h)(2)(A).

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telecommunications and information services for all . . . classrooms,⁴²⁰ we concluded that Congress intended to permit support for internal connections in schools and libraries.

177. Further, at least three major inconsistencies arise from interpreting section 254(e) to limit our authority under section 254(h)(2). First, reading section 254(e) to limit section 254(h)(2), when it does not apply to section 254(h)(1)(B), appears inconsistent with the relative directives of those provisions. Congress explicitly chose to permit the Commission to provide support to all telecommunications carriers -- including those that were not designated under section 214(e) -- for services eligible for support under section 254(h)(1)(B). While 254(h)(1)(B) did not emphasize competitive neutrality, the exemption from section 254(e) implicitly provided competitive neutrality among all telecommunications carriers. Reading section 254(e) to limit section 254(h)(2), however, would imply that Congress intended section 254(h)(2) to be less competitively neutral than section 254(h)(1)(B), for Congress would be prohibiting competitive neutrality between all telecommunications carriers: those designated under section 214(e) would be preferred to those that were not. That is, that while Congress explicitly required "competitive neutrality" under section 254(h)(2), it intended to prohibit even the lesser form of competitive neutrality that it adopted implicitly in section 254(h)(1)(B). This does not appear to be a tenable conclusion.

178. Second, denying support to firms other than telecommunications carriers would be inconsistent with Congress's goal, stated in section 254(h)(2)(A), to "enhance . . . access to advanced telecommunications and information services" for schools and libraries.⁴²¹ To allow support for Internet access and internal connections only when provided by a telecommunications carrier would reduce the sources from which schools and libraries could obtain these services at a discount which, in turn, would reduce competitive pressures on providers to lower their costs, potentially leaving schools and libraries to confront unduly high pre-discount prices. This would appear contrary to the statutory goal of providing schools and libraries with services in the most cost-effective manner possible, which would minimize the total cost and thus the total amount of universal service contributions that would need to be collected.⁴²²

179. Third, as the *Universal Service Order* recognized, limiting direct support to telecommunications carriers would not fully deny support to firms other than telecommunications carriers; it would only deny support to firms that did not affiliate with

⁴²⁰ 47 U.S.C. § 254(h)(2)(A).

⁴²¹ 47 U.S.C. § 254(h)(2)(A).

⁴²² See, e.g., Comcast reply comments at 5-7 (support for non-telecommunications carriers promotes competition and drives prices of Internet access down for schools and libraries); EDLINC comments at 4-5 (without competition from ISPs, ILECs will continue to charge schools and libraries high rates, thereby depleting universal service fund); NCTA comments at 13 (competitive neutrality requires support for all entities; cable is cost-effective choice for schools and libraries); CIX reply comments at 2-3 (schools and libraries should be permitted to select from a wide range of vendors); PA Agencies comments at 12-15 (support for non-telecommunications carriers promotes competition and technological neutrality).

telecommunications carriers.⁴²³ As the *Universal Service Order* noted, to take advantage of the discounts provided by section 254(h)(1), firms other than telecommunications carriers would be able to bid with telecommunications carriers through joint ventures, partnerships, or other business arrangements, and receive support indirectly. They would also have the option of establishing telecommunications carrier subsidiaries or affiliates, even if the scope of their telecommunications service activities was fairly limited. Thus, the Order found that limiting direct support to telecommunications carriers would not prevent support from going indirectly to other firms, but that it would frustrate the Commission's effort to achieve its goal of competitive neutrality,⁴²⁴ because it would treat firms other than telecommunications carriers less favorably than telecommunications carriers.

180. Therefore, the Commission concluded that firms that are not telecommunications carriers are eligible to compete to receive support under 254(h)(2) for providing Internet access and internal connections to schools and libraries, a position that a number of commenters have challenged.⁴²⁵ It bears emphasis that such firms would only receive such support if they were able to offer the requested services on more favorable terms than those offered by telecommunications carriers. Upon reexamination of this issue we observe that certain statutory provisions render the Act susceptible to more than one reasonable interpretation. Specifically, we find that there is tension between section 254(e)'s requirement that we limit support to telecommunications carriers and section 254(h)(2)'s command that we establish competitively neutral rules. Section 254(e) states that "only an eligible telecommunications carrier designated under section 214(e) shall be eligible to receive specific federal universal service support." Therefore, if we treated it as controlling, we would conclude that section 254(h)(2) can only authorize support for section 214(e) eligible telecommunications carriers. On the other hand, section 254(h)(2) states that "the Commission shall establish competitively neutral rules," under 254(h), and so if we treated it as controlling, we would read it to prohibit the Commission from establishing rules that are not competitively neutral, and thus require that we find that section 254(e)'s exclusion of broad classes of potential competitors does not apply to rules established under 254(h)(2).

181. As the *Universal Service Order* recognized, however, there is a reasonable statutory basis for concluding that section 254(e) does not apply to section 254(h)(2). Although sections 254(e) and 254(h)(1)(A) and (B) limit support only to eligible telecommunications carriers, the Commission's decision to allow support to firms other than telecommunications carriers was based on the broader provisions of section 254(h)(2)(A), in

⁴²³ *Universal Service Order*, 12 FCC Rcd at 9085, para. 590.

⁴²⁴ *Universal Service Order*, 12 FCC Rcd at 9085, para. 590. See also, e.g., CIX comments at 14-16 (limiting support only to telecommunications carriers would disserve goal of competitive pricing and would favor a small number of Internet service providers that happen to be affiliated with telecommunications carriers); NCTA comments at 11-12 (cable companies can claim eligibility by virtue of ownership or affiliation with telecommunications carrier).

⁴²⁵ See e.g., BellSouth comments at 8; Senators Stevens and Burns comments at 10 (sections 254(c) and 254(e) limit support to telecommunications carriers); TCG comments at 3, 4-5, 7-8 (support for firms other than telecommunications carriers goes beyond plain language of statute); RTC reply comments at 12-14 (same).

conjunction with section 4(i), and is therefore not subject to this same restriction. Indeed, the structure of the Act indicates that section 254(h)(2)(A) operates as a separate grant of authority that is independent of the narrower provisions of sections 254(e) and 254(h)(1)(A) and (B). For example, section 254(e) limits eligibility of universal service support only to those carriers designated as "eligible telecommunications carriers" under section 214(e). Section 214(e), in turn, requires such carriers to offer the services that are designated for support under section 254(c). With respect to schools and libraries, the only incorporation of section 254(c) (and thus sections 254(e) and 214(e) by reference) is made by section 254(h)(1)(B). Section 254(h)(2)(A), which grants additional authority to the Commission with regard to schools and libraries, makes no reference to the support mechanisms established through section 254(c) and thus operates independently of them. We conclude that because section 254(h)(2)(A) makes no reference to section 254(c)(3), which in turn incorporates section 214(e)'s eligible telecommunications carrier limitation, support under section 254(h)(2)(A) is not restricted to eligible telecommunications carriers. The independence of section 254(h)(2)(A) from these narrower provisions is further demonstrated by the difference between section 254(h)(1)(A), which applies only to health care providers that serve "persons who reside in rural areas," and section 254(h)(2)(A),⁴²⁶ which applies to "all . . . health care providers"⁴²⁷

182. In contrast to the more limited provisions of sections 254(e) and 254(h)(1)(A) and (B), section 254(h)(2)(A) employs broader language that separately grants the Commission authority to establish rules to enhance access to advanced telecommunications and information services, constrained only by the principles of competitive neutrality, technical feasibility and economic reasonableness.⁴²⁸ Unlike the narrower provisions, section 254(h)(2)(A) does not refer to "telecommunications carriers" and, therefore, does not require us to exclude other firms from competing to provide eligible services.⁴²⁹ The Commission's reading of the statute, which permits firms that are not telecommunications carriers to compete to receive support under section 254(h)(2) for providing Internet access and internal connections, therefore, is, in our view, a reasonable interpretation of section 254(h)(2)(A), notwithstanding the objections of some commenters.⁴³⁰

183. Furthermore, section 4(i) of the Act permits the Commission to "perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this Act, as may be necessary in the execution of its functions."⁴³¹ Under this section, the

⁴²⁶ 47 U.S.C. § 254(h)(1)(A).

⁴²⁷ 47 U.S.C. § 254(h)(2)(A) (emphasis added). *See also, e.g.*, Comcast reply comments at 3 (restrictions of section 214 do not apply to section 254(h)(2)(A)'s mandate to promote access to advanced services).

⁴²⁸ *See* 47 U.S.C. § 254(h)(2)(A); *Universal Service Order*, 12 FCC Rcd at 9085, para. 591.

⁴²⁹ *See* 47 U.S.C. § 254(h)(2)(A).

⁴³⁰ *See* Senators Stevens and Burns comments at 12-13 (section 4(i) does not permit the Commission to waive explicit statutory restrictions of section 254(e)).

⁴³¹ 47 U.S.C. § 4(i).

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Commission may take action that is not expressly permitted by the Communications Act, so long as the action is not expressly prohibited by the Act and is necessary to the Commission's effective performance of its statutorily specified functions.⁴³² Here, a rule that allows both telecommunications carriers and other firms to compete to receive support for providing eligible services under section 254(h)(2) is necessary to fulfill the Commission's explicit statutory obligation under that statutory provision to promulgate "competitively neutral" rules, as it allows all carriers to compete effectively in the market for providing Internet access and internal connections to schools and libraries. The Commission's decision, therefore, is authorized by section 4(i), as it is "necessary in the execution of [the Commission's] functions" under section 254(h)(2).

184. Some commenters contend that providing support to firms other than telecommunications carriers violates the competitive neutrality requirement of section 254(h)(2)(A) because firms other than telecommunications carriers can benefit from support while only telecommunications carriers are required to contribute to that support.⁴³³ According to these commenters, telecommunications carriers that contribute to the universal service fund cannot fairly compete with firms that bear no such burden.⁴³⁴ There is no requirement, however, that contributors to universal service mechanisms must also be permitted to receive support. Moreover, under the Commission's rules, contribution obligations are to be based solely on revenues from telecommunications services.⁴³⁵ Because neither Internet access nor internal connections are telecommunications services, no provider of these services -- whether a telecommunications carrier or not -- will be required to contribute to federal universal service support based on revenues they earn from providing these services. Contributions made by telecommunications carriers based on the telecommunications services they provide, therefore, will not place those carriers at a competitive disadvantage vis-a-vis the supported non-telecommunications services.⁴³⁶ On the other hand, if firms other than telecommunications carriers did not receive funding for Internet access and internal connections for schools and libraries, those service providers would be competitively disadvantaged, even if their services would be more cost-efficient. Contrary to the claim of these commenters, therefore, the principle of competitive neutrality

⁴³² See, e.g., *Mobile Communications Corp. of America v. FCC*, 77 F.3d 1399, 1404-07 (D.C. Cir.), cert. denied, 117 S. Ct. 81 (1996).

⁴³³ See, e.g., GTE comments at 9-10, 21, 23 (objecting to inconsistency between those who contribute and those eligible to receive); Bell Atlantic reply comments at 2, 10-11 (objecting to unfairness of allowing ISPs to receive support without contribution); AT&T reply comments at 10-11 (ISPs should be required to contribute to the extent that they are eligible for support); USTA comments at 6 (requiring telecommunications carriers to contribute for the benefit and support of non-contributors is not competitively neutral).

⁴³⁴ *Id.*

⁴³⁵ See 47 C.F.R. § 54.703.

⁴³⁶ See, e.g., AOL comments at 21 (contribution obligations are clearly distinct from the right to participate in the universal service program); EDLINC comments at 6 (no competitive disparity as to provision of Internet access); cf. Comcast comments at 8-9 (analogizing to property taxes funding public schools, where some pay taxes without benefit and others benefit without paying taxes).

supports the Commission's decision to allow both telecommunications carriers and other firms to compete to receive support for providing Internet access and internal connections.⁴³⁷

185. In summary, we are faced with statutory directives that apparently both command and forbid us to provide support to firms other than telecommunications carriers who seek to provide schools and libraries with support to provide Internet access and installation and maintenance of internal connections. After a careful analysis of the consequences of providing and denying such support, however, we find that providing such support produces results more consistent with the statutory framework. In light of these results, we conclude that we should affirm the decision of both the Commission and the Federal-State Joint Board to provide support to firms other than telecommunications carriers who offer schools and libraries more cost effective Internet access or installation and maintenance of internal connections.

3. Eligibility for Support for Providing Service to Health Care Providers under section 254(h)

186. The Commission concluded in its *Universal Service Order* that, under section 254(h)(1)(A) of the Act, all public and non-profit health care providers that are located in rural areas and meet the statutory definition set forth in section 254(h)(5)(B) of the Act are eligible for universal service support.⁴³⁸ Based on the recommendation of health care experts, the Commission also determined that any telecommunications service of a bandwidth up to and including 1.544 Mbps that is necessary for the provision of health care services is eligible for support.⁴³⁹ Thus, where a carrier designated under section 214(e) as an "eligible telecommunications carrier" provides such services to rural health care providers at the comparable urban rate, the carrier may recover the difference, if any, between the rate for similar services provided to other customers in comparable rural areas of the state and the rate charged to the rural health care provider for such services. In addition to ensuring that rural health care providers benefit from universal service support, the Commission determined that, pursuant to section 254(h)(2)(A), all telecommunications carriers, whether or not designated as an "eligible telecommunications carrier" under section 214(e), that provide health care

⁴³⁷ *Accord, e.g.,* State Members comments at 4 (competitively neutral rules mandated under 254(h)(2)(A) are applicable to all service providers); AOL reply comments at 3, 20 (if telecommunications carriers receive universal support for providing information services, so too must firms other than telecommunications providers of the same services; support for ISPs fosters competitive neutrality and affords schools and libraries broader choices); CIX reply comments at 14-16 (limiting support only to telecommunications carriers would not be competitively neutral); USIPA comments at 4 (it would be illogical to assume that Congress did not intend that the entities that constructed the Internet would not be permitted to participate in a program designed to bring the Internet to schools and libraries).

⁴³⁸ *Universal Service Order*, 12 FCC Rcd at 9093, para. 608.

⁴³⁹ *See Id.*, 12 FCC Rcd at 9101, para. 620 n.1605 (citing FCC Advisory Committee on Telecommunications and Health Care, Finding and Recommendations at 1-2).

providers with toll-free access to an Internet service provider can receive a limited amount of universal service support.⁴⁴⁰

a. Eligible Providers of Telecommunications Services to Rural Health Care Providers

187. Eligible Telecommunications Carriers. The Commission concluded that only telecommunications services provided by "eligible telecommunications carriers," designated as such pursuant to section 254(e), should be eligible for universal service support under section 254(h)(1)(A). We recognize that this issue is the subject of substantial disagreement among commenters⁴⁴¹ and, indeed, is currently before the Commission on petitions for reconsideration of the *Universal Service Order*.⁴⁴² We do not wish to prejudge those petitions in this Report and remain committed to taking a fresh look at this issue in the reconsideration proceedings. Without expressing any opinion on the merits of the pending petitions for reconsideration, we believe that the Commission's conclusion was a reasonable construction of the statute. As noted above, section 254(e) provides that "only an eligible telecommunications carrier designated under section 214(e)" may receive universal service support.⁴⁴³ Although section 254(h)(1)(B)(ii) provides an exception to this eligibility requirement for carriers serving schools and libraries, no such exception appears in section 254(h)(1)(A).⁴⁴⁴ It appears from the plain language of the statute, therefore, that only "eligible telecommunications carriers" as defined in section 254(e) are eligible to receive universal service support for providing eligible services to health care providers under section 254(h)(1)(A). We note, however, that this statutory constraint will limit the flexibility of rural health care providers because they are limited to purchasing supported services from designated "eligible telecommunications carriers." It also appears that this section of the Act reduces competition in rural areas because only eligible telecommunications carriers can receive support for serving eligible rural health care providers. We would prefer a more competitive result. We will be considering this issue further in ruling on the petition for reconsideration filed with the Commission in which parties allege that in Alaska only telecommunications carriers that will not be designated as eligible telecommunications carriers are able to provide the services that are

⁴⁴⁰ See *Universal Service Order*, 12 FCC Rcd at 9106, para. 628; 47 C.F.R. § 54.621(b).

⁴⁴¹ See, e.g., GCI comments at 14-16 (all carriers, whether or not designated as "eligible telecommunications carriers," should be able to receive support under section 254(h)(1)(A)); Nebraska PSC comments at 1-2 (limiting support only to "eligible telecommunications carriers" will preclude support to rural health care providers that have already contracted with ineligible carriers); State Members comments at 8 (Congress should consider a "technical correction" to the statute to exempt health care providers from eligibility requirements of section 254(e)); Arizona CC reply comments at 4 (same); ALTS reply comments at 1-3 (same).

⁴⁴² See Alaska Petition for Reconsideration at 9-12; Alaska PUC Petition for Reconsideration at 9-10; GE Americom Petition for Reconsideration at 1-2; GCI Petition for Reconsideration at 1-4.

⁴⁴³ 47 U.S.C. § 254(e).

⁴⁴⁴ Compare 47 U.S.C. § 254(h)(1)(A) with 47 U.S.C. § 254(h)(1)(B)(ii).

needed by rural health care providers.⁴⁴⁵ We note that if the requirements of section 10 of the 1996 Act are met, the Commission could exercise forbearance authority in order to broaden the category of telecommunications carriers that may receive support for serving eligible rural health care providers as appropriate.

188. Rural Health Care Providers Only. Although section 254(h)(1)(A) authorizes support for the provision of telecommunications services to "any public or non-profit health care provider that serves persons who reside in rural areas of that state,"⁴⁴⁶ the statute does not specify whether the health care provider itself -- as opposed to the persons it serves -- must be physically located in a rural area to obtain the supported services. The Commission concluded, as did the Joint Board, that a health care provider must be located in a rural area in order for its service provider to be eligible for universal service support.⁴⁴⁷ We believe that this is a reasonable interpretation of the statute.

189. Although the statute is not explicit on this point, the discount provision in 254(h)(1)(A) provides strong evidence that Congress intended to limit the provision of supported services to rural health care providers only. Specifically, section 254(h)(1)(A) calculates the amount of support due a carrier as the difference between the "rates for services provided to health care providers for rural areas and the rates for similar services provided to other customers in comparable rural areas."⁴⁴⁸ If the health care provider were in an urban area, there would be no method of calculating the amount of support under this provision, as it contemplates a comparison only of the rates charged to customers in "rural areas." The Commission's decision to limit support only to providers of services to rural health care providers, therefore, follows logically from the language of the statute.

190. The legislative history also indicates that Congress, in enacting section 254(h)(1)(A), was concerned primarily with ensuring telecommunications access to health care providers located in rural areas. For example, in the Joint Explanatory Statement, Congress explained that section 254(h) was intended "to ensure that health care providers for *rural areas* . . . have affordable access to modern telecommunications services that will enable them to provide medical . . . services to all parts of the Nation."⁴⁴⁹ Similarly, Congress expressed particular concern for the ability of "*rural health care providers* to obtain access to advanced telecommunications services"⁴⁵⁰ and that "the *rural health care provider* receive an affordable rate for the services necessary for the purposes of telemedicine and instruction relating to such

⁴⁴⁵ See, e.g., Alaska comments to Petition for Reconsideration at 9-12; GCI comments to Petition for Reconsideration at 1-3.

⁴⁴⁶ 47 U.S.C. § 254(h)(1)(A).

⁴⁴⁷ See 47 C.F.R. § 54.601(a)(4).

⁴⁴⁸ *Universal Service Order*, 12 FCC Rcd at 9111, para. 641.

⁴⁴⁹ Joint Explanatory Statement at 132 (emphasis added).

⁴⁵⁰ *Id.* (emphasis added).

services."⁴⁵¹ These statements further support the Commission's interpretation of section 254(h)(1)(A) to limit the provision of supported services only to health care providers located in rural areas.

b. Providers of Toll-Free Internet Access to
Health Care Providers Regardless of Location

191. Consistent with its authority to enhance access to advanced telecommunications and information services for health care providers pursuant to section 254(h)(2)(A), the Commission authorized support for toll charges incurred by health care providers that cannot obtain toll-free access to an Internet service provider. The Commission also concluded that any telecommunications carrier, whether or not designated as "eligible" pursuant to section 254(e), may receive universal service support for providing this service to any health care provider, regardless of location.

192. No Eligibility Restriction. We believe that the Commission properly concluded that both eligible and non-eligible telecommunications carriers under section 254(e) may receive universal service support for the provision of toll-free access to an Internet service provider to eligible health care providers. As noted above, section 254(h)(1)(A) is subject to the requirement in section 254(e) that, to receive support, a carrier must be designated as an "eligible telecommunications carrier" under section 214(e).⁴⁵² The Commission did not designate toll-free Internet access for support under section 254(h)(1)(A), however, but did so instead under section 254(h)(2)(A).⁴⁵³ As we explained above, section 254(h)(2)(A), unlike section 254(h)(1)(A), is an independent grant of authority and thus is not subject to section 254(e)'s eligibility requirement.⁴⁵⁴ In our view, therefore, the Commission's decision to allow both eligible and non-eligible telecommunications carriers to receive support for providing toll-free Internet access to eligible health care providers is consistent with the language of the statute and with the statutory requirement to develop competitively neutral rules to enhance access to advanced telecommunications and information services for health care providers.

193. Rural and Non-Rural Health Care Providers. We also find that the Commission's decision to allow support for providers of toll-free Internet access, regardless of whether the health care provider to which they provide this service is located in a rural or non-rural area, is a reasonable construction of the statute. As we discussed above, section 254(h)(1)(A) requires that a health care provider must be located in a rural area in order for its provider of telecommunications services to be eligible for universal service support.⁴⁵⁵ Again, however, the Commission did not rely on section 254(h)(1)(A) to authorize support for

⁴⁵¹ *Id.* (emphasis added).

⁴⁵² See 47 U.S.C. §§ 254(e) and (h)(1)(A).

⁴⁵³ See *Universal Service Order*, 12 FCC Rcd at 9157-9160, paras. 742-748.

⁴⁵⁴ See *supra* at section VI.B.2.b.

⁴⁵⁵ See *supra* at section VI.B.3.A.

toll-free Internet access; rather, it relied on section 254(h)(2)(A).⁴⁵⁶ Whereas section 254(h)(1)(A) is concerned with the provision of service to "persons who reside in rural areas,"⁴⁵⁷ section 254(h)(2)(A), in contrast, seeks to enhance access to advanced services for "all . . . health care providers . . ."⁴⁵⁸ Section 254(h)(2)(A) is thus independent of section 254(h)(1)(A) and its limitations and, further, provides the broader authority to promulgate rules for the benefit of "all health care providers," not just rural ones. In our view, the Commission's decision to extend support for the provision of toll-free Internet access to non-rural health care providers is entirely consistent with this language.

VII. REVENUE BASE AND PERCENTAGE OF FEDERAL FUNDING

194. In this section, we examine first certain Commission decisions regarding the revenue base on which contributors' universal service contributions are assessed. After analyzing the Commission's conclusions regarding the jurisdictional parameters placed on the Commission and on the states, we agree that the Commission has the authority to assess universal service contributions on both telecommunications providers' interstate and intrastate revenues.

195. We examine, second, the Commission's previous decisions regarding the level of interstate high cost support. At the onset, we believe it is important to make two observations to place this issue in context. First, the discussion of the issue in this Report relates only to non-rural local exchange carriers. With respect to *rural* local exchange carriers, the Commission has determined that there shall be no change in the existing high cost support mechanisms until January 1, 2001 at the earliest. We do not revisit that determination in this Report. Thus, the method of determining federal support for rural local exchange carriers will remain unchanged until at least January 1, 2001, meaning that the amount of universal service support for rural local exchange carriers will be maintained initially at existing levels and then should increase in accordance with specified factors, such as inflation, that have historically guided changes in such support. Any possible change in the support mechanism for rural local exchange carriers would require a separate rulemaking proceeding.

196. Second, we note that the pre-May 8, 1997 regulatory scheme created a *de facto* allocation of responsibility between the Commission and state commissions with respect to support for service to rural and high cost areas. That allocation of responsibility was defined by the separations rules, which placed 25 percent of booked loop costs in the interstate jurisdiction for most of the loop plant used by the non-rural LECs. In addition, the aggregate amount of LEC network investment in the interstate jurisdiction is approximately 25 percent. Through the operation of an explicit universal service support mechanism, however, greater than 25 percent of booked loop costs were placed in the interstate jurisdiction in those areas

⁴⁵⁶ See *Universal Service Order*, 12 FCC Rcd at 9157-9160, paras. 742-748; see note 434, *supra*.

⁴⁵⁷ 47 U.S.C. § 254(h)(1)(A).

⁴⁵⁸ 47 U.S.C. § 254(h)(2)(A) (emphasis added).

where loop costs were particularly high. As a result, some of the non-rural LECs did have slightly more than 25 percent of their booked loop costs in the interstate jurisdiction, and many rural LECs had substantially more than 25 percent in the federal jurisdiction.

197. As discussed below, we conclude that a strict, across-the-board rule that provides 25 percent of unseparated high cost support to the larger LECs might provide some states with less total interstate universal service support than is currently provided through aggregate implicit and explicit federal subsidies. The Commission will work to ensure that states do not receive less funding as we implement the high cost mechanisms under the 1996 Act. We find that no state should receive less federal high cost assistance than it currently receives. We are mindful that the Commission's work in this regard is not yet complete. We are committed to issuing a reconsideration order in response to the petitions filed asking the Commission to reconsider the decision to fund 25 percent of the required support amount. In the course of that reconsideration, we will take all appropriate steps, including continued consultation with the states, to ensure that federal funding is adequate to achieve statutory goals. We also recognize that Congress assigned to the Commission, after consultation with the Joint Board, the ultimate responsibility for establishing policies that ensure that: 1) quality services are available at just, reasonable and affordable rates; 2) all consumers have "access to telecommunications and information services" at rates that are reasonably comparable to the rates charged for similar services in urban areas; and 3) there are "specific, predictable, and sufficient" federal and state mechanisms to preserve and advance universal service. We are committed to implementing section 254 consistent with these objectives.

A. Revenue Base for Contributions

1. Background

198. Section 623(b)(5) of the Appropriations Act requires the Commission to review its "decisions regarding the percentage of universal service support provided by federal mechanisms and the revenue base from which such support is derived." This requirement implicates several important determinations made by the Commission, including what is referred to as the "25/75" approach to sharing responsibility for universal service support between the state and federal jurisdictions. In addition, we must address Commission decisions regarding: the scope of the Commission's jurisdiction in assessing and recovering contributions; the scope of the revenue base for, and the method of recovery of, contributions to the support mechanisms for high cost areas and low income consumers and for eligible schools, libraries, and rural health care providers; and the methodology for assessing contributions to the support mechanisms. We review each of these issues below.

199. In the *Universal Service Order*, the Commission analyzed the scope of the Commission's jurisdiction with respect to the assessment and recovery of universal service support mechanisms.⁴⁹⁹ The Commission concluded that it has jurisdiction to assess contributions for the universal service support mechanisms from intrastate as well as interstate revenues and to require carriers to seek state (and not federal) authority to recover a portion

⁴⁹⁹ *Universal Service Order*, 12 FCC Rcd at 9192, paras. 813-823.

of the contribution in intrastate rates.⁴⁶⁰ The Commission expressly declined to exercise the entirety of its jurisdiction with respect to the assessment and recovery of contributions to the universal service mechanisms for rural, insular, and high cost areas, and low income consumers.⁴⁶¹ Instead, the Commission assessed contributions to those mechanisms based solely on interstate revenues.⁴⁶² With respect to the recovery of those contributions, the Commission continued its historical approach to recovery of universal service support mechanisms, thereby permitting carriers to recover contributions to these universal service support mechanisms through rates for interstate services only.⁴⁶³

200. With respect to the universal service support mechanisms for schools and libraries and rural health care providers, the Commission adopted the Joint Board's recommendation that these mechanisms be funded by contributions based on both the intrastate and interstate revenues of providers of interstate telecommunications services.⁴⁶⁴ The Commission concluded, however, that it will permit recovery of the entirety of these contributions solely via rates for interstate services for the present time.⁴⁶⁵

201. In the *Universal Service Order*, the Commission concluded that, beginning January 1, 1999, the federal universal service mechanism for large local exchange carriers serving rural, insular, and high cost areas will support 25 percent of the difference between the forward-looking economic cost of providing the supported service and the revenue benchmark.⁴⁶⁶ After considering various methodologies for calculating contributions to the universal service mechanism, the Commission determined that carriers should calculate contributions to the universal service mechanisms using end-user telecommunications revenues.⁴⁶⁷

2. Discussion

a. Commission Authority With Respect to the Assessment and Recovery of Contributions to Universal Service Support Mechanisms

⁴⁶⁰ *Id.* at 9192, para. 813.

⁴⁶¹ *Id.* at 9192, para. 813.

⁴⁶² *Id.* at 9200, para. 831.

⁴⁶³ *Id.* at 9198, para. 825.

⁴⁶⁴ *Id.* at 9203, para. 837.

⁴⁶⁵ *Id.* at 9203, paras. 837-838.

⁴⁶⁶ *Id.* at 9201, para. 833.

⁴⁶⁷ *Id.* at 9205-06, para. 842-843.

202. In the *Universal Service Order*, the Commission determined that Section 254 provides the Commission with the jurisdiction to assess contributions for universal service support mechanisms from both interstate and intrastate revenues, as well as to require carriers to seek authority from states to recover a portion of the contribution in intrastate rates.⁴⁶⁸ Some parties argue that the Commission's decisions overstep the traditional relationship between the federal and state jurisdictions.⁴⁶⁹ Other commenters argue that the Commission should exercise its full authority to assess contributions for high cost support mechanisms on both intrastate and interstate revenues.⁴⁷⁰ Our review of the issue for purposes of this Report, however, leads us to the conclusion that the Commission's jurisdictional analysis in the *Universal Service Order* is sound.

203. As the Commission stated in the *Universal Service Order*, the Commission's authority over universal service support mechanisms stems from the plain language of section 254.⁴⁷¹ Specifically, although the statute contemplates the establishment of federal and state high cost support mechanisms that are consistent with the objectives of section 254, that section imposes on the Commission the ultimate responsibility to implement the universal service mandate of section 254.⁴⁷² Section 254(c)(1) likewise authorizes the Commission to define the parameters of universal service.⁴⁷³ Moreover, section 254(b)(5) anticipates that the Commission will establish support mechanisms that are "specific, predictable and sufficient."⁴⁷⁴ These provisions indicate that the Commission has the primary responsibility and authority to ensure that universal service mechanisms are "specific, predictable, and sufficient" to meet the statutory principle of "just, reasonable, and affordable rates." This interpretation is complementary to the states' independent obligations to ensure that support mechanisms are "specific, predictable, and sufficient" and that rates are "just, reasonable, and affordable," because the statute provides that state universal service mechanisms must be consistent with, and may not conflict with, the federal mechanisms.⁴⁷⁵

⁴⁶⁸ *Id.* at 9197, para. 823.

⁴⁶⁹ See, e.g., Iowa comments at 3; Nevada PUC comments at 3-8. This issue has also been raised on appeal. See Brief of Petitioner Cincinnati Bell Tel. Co., *Texas Office of Pub. Util. Counsel v. FCC*, No. 97-60421 (5th Cir.) at 11-25.

⁴⁷⁰ See, e.g., GTE comments at 29; JSI comments at 6; RTC comments at 5-6.

⁴⁷¹ *Universal Service Order*, 12 FCC Rcd at 9192, para. 814.

⁴⁷² Section 254(a) provides that rules "to implement" the section are to be recommended by the Joint Board and those recommendations are to be implemented by the Commission. 47 U.S.C. § 254(a).

⁴⁷³ Section 254(c)(1) directs that the concept of universal service is an "evolving level of telecommunications that the Commission shall establish periodically." 47 U.S.C. § 254(c)(1).

⁴⁷⁴ 47 U.S.C. § 254(b)(5).

⁴⁷⁵ See 47 U.S.C. §§ 254(b)(5) & (f).

204. The Commission's conclusion regarding the scope of its jurisdiction is also supported by several provisions of section 254 that indicate that Congress intended universal service support mechanisms to include both intrastate and interstate services. Specifically, section 254(b)(3) establishes that the Commission's rules and policies must ensure that "consumers in all regions of the Nation . . . have access to telecommunications and information services."⁴⁷⁶ This language supports a finding that universal service should include more than access to interstate services, which previously has generally been the focus of federal telecommunications law. Moreover, because the traditional core goal of universal service is ensuring affordable basic residential telephone service, which is primarily an intrastate service, it is clear that section 254(b)'s goal of affordable basic service indicates that Congress intended that both intrastate and interstate services should be affordable. It is significant that the Joint Board agreed with this conclusion by recommending that the services eligible for universal service support pursuant to section 254(c) include intrastate services.⁴⁷⁷

205. As the Commission concluded in the *Universal Service Order*, the ability of states to create separate support mechanisms covering intrastate carriers pursuant to section 254(f) does not suggest that the amount of a carrier's contributions to such a support mechanism should be based on the type of telecommunications service, intrastate or interstate, provided by the carrier.⁴⁷⁸ We find no support for such an inference in the legislative history. Rather, the legislative history indicates that states continue to have jurisdiction over implementing universal service mechanisms for intrastate services supplemental to the federal mechanisms as long as "the level of universal service provided by each state meets the minimum definition of universal service established [under section 254] and a State does not take any action inconsistent with the obligation for all telecommunications carriers to contribute to the preservation and advancement of universal service" established under section 254.⁴⁷⁹

206. Similarly, section 2(b), which provides that nothing in the Act should be construed to give the Commission jurisdiction with respect to "charges, classifications, practices, services, facilities, or regulations for or in connection with intrastate communications services by wire or radio," does not preclude the Commission from assessing contributions based on a percentage of a carrier's intrastate revenues.⁴⁸⁰ Determining such contributions for universal service support on intrastate, as well as interstate, revenues constitutes neither rate regulation of those services nor regulation of those services in violation of section 2(b). Rather, this method of assessment supports intrastate services, as expressly required by section 254 of the Act and as recommended by the Joint Board. Indeed, in assessing contributions in this way, the Commission is calculating a federal charge based on

⁴⁷⁶ 47 U.S.C. § 254(b)(3).

⁴⁷⁷ *Recommended Decision*, 12 FCC Rcd at 112, para. 46.

⁴⁷⁸ *Universal Service Order*, 12 FCC Rcd at 9195, para. 819.

⁴⁷⁹ Joint Explanatory Statement at 128.

⁴⁸⁰ 47 U.S.C. § 152(b).

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both interstate and intrastate revenues, but is in no way regulating the rates and conditions of intrastate service.

207. Further, section 254's express directive that universal service mechanisms be "sufficient" ameliorates any section 2(b) concerns. As a rule of statutory construction, section 2(b) only is implicated where the competing statutory provision is ambiguous.⁴⁸¹ As discussed above, section 254 unambiguously establishes that the services to be supported have intrastate as well as interstate characteristics and permits the Commission to establish regulations implementing federal support mechanisms for the supported intrastate services.

208. Moreover, various provisions of section 254, some of which are discussed above, have blurred the traditional distinction between the interstate and intrastate jurisdictional spheres. For example, although section 254 establishes a federal-state partnership, it grants the Commission primary responsibility for defining the parameters of universal service, and for ensuring that universal service mechanisms are "specific, predictable, and sufficient" to meet the statutory goal of "just, reasonable, and affordable rates." Indeed, section 254 envisions that the Commission would not be bound by the prior system of universal service mechanisms, which was based on the traditional jurisdictional spheres.⁴⁸²

209. For all of the foregoing reasons, we concur with the Commission's earlier conclusion that section 254 of the 1996 Act grants the Commission the authority to assess contributions to universal service support mechanisms from intrastate as well as interstate revenues and to refer carriers to seek state (and not federal) authorization to recover a portion of the contribution in intrastate rates, although the Commission has not exercised this authority. We note that this issue is the subject of pending petitions for reconsideration which we will address in a forthcoming order. Further, we have previously expressed willingness to work with states and we affirm that commitment.⁴⁸³

b. Revenue Base For, and Recovery of, Contributions to Support
Mechanisms for Eligible Schools, Libraries and Rural Health
Care Providers

210. Initially, we note that few parties commented on the issues of the assessment and recovery of contributions to the support mechanism for eligible schools, libraries and rural

⁴⁸¹ See *Universal Service Order*, 12 FCC Rcd at 9196, para. 822 n.2094 citing 47 U.S.C. § 601.

⁴⁸² See Joint Explanatory Statement at 131 (indicating against reliance on current methodologies by stating that support mechanisms should be "explicit, rather than implicit as many support mechanisms are today."); Senate Report on S. 652 (stating that "the bill does not presume that any particular existing mechanism for universal service support must be maintained or discontinued").

⁴⁸³ See, eg. *Universal Service Order*, 12 FCC Rcd at 9191, para. 809.

health care providers.⁴⁸⁴ After consideration of these important issues, we conclude that the Commission's decisions are consistent with the letter and spirit of the 1996 Act.

211. Assessment. With respect to the assessment of contributions, we conclude it was reasonable for the Commission to adopt the Joint Board's recommendation that "universal support mechanisms for schools and libraries and rural health care providers be funded by contributions based on both the intrastate and interstate revenues of providers of interstate telecommunications services."⁴⁸⁵ As the Commission concluded in the *Universal Service Order*, this approach is reasonable in light of the fact that the schools, libraries, and rural health care mechanisms are "new, unique support mechanisms that have not historically been supported through a universal service funding mechanism."⁴⁸⁶

212. Recovery. Similarly, we reaffirm the Commission's decision to permit carriers to recover contributions for the support mechanisms for eligible schools, libraries, and rural health care providers solely via rates for interstate services.⁴⁸⁷ Limiting recovery to the interstate jurisdiction for the support mechanism for the schools, libraries and rural health care providers will ameliorate the concern that carriers would recover the portion of their intrastate contributions attributable to intrastate services through increases in rates for basic residential dialtone service. The Commission's approach is consistent with the affordability principle contained in section 254(b)(1).⁴⁸⁸ Additionally, we are persuaded that the Commission's approach minimizes any perceived jurisdictional difficulties under section 2(b) because carriers are not required to seek state authorizations to recover contributions attributable to intrastate revenues.⁴⁸⁹ Therefore, we find that permitting recovery of contributions for the support mechanisms for eligible schools, libraries, and rural health care providers solely via rates for interstate services is consistent with section 254.⁴⁹⁰

c. Revenue Base For, and Recovery of, Contributions to-Support Mechanisms for High Cost Areas and Low Income Consumers

213. Assessment. As stated above, the Commission declined to exercise its authority to assess contributions to the high cost and low income support mechanisms on both intrastate

⁴⁸⁴ TDS comments at 10 (supporting the decision to use total, unseparated interstate and intrastate end user revenues as the basis for support contributions designed to benefit schools, libraries and rural health care providers).

⁴⁸⁵ *Universal Service Order*, 12 FCC Rcd at 9203, para. 837 citing *Recommended Decision*, 12 FCC Rcd at 499, para. 817.

⁴⁸⁶ *Id.* at 9203, para. 837.

⁴⁸⁷ *Id.* at 9203, para. 838.

⁴⁸⁸ *Id.* at 9203, para. 838.

⁴⁸⁹ *Id.* at 9204, para. 839.

⁴⁹⁰ *Id.* at 9203-9204, paras. 838-840.

and interstate revenues. Instead, the Commission elected to base those contributions solely on interstate revenues.⁴⁹¹ We find that the Commission's decision was reasonable and appropriate in light of the statutory goals.

214. In its *Recommended Decision*, the Joint Board concluded that the "decision as to whether intrastate revenues should be used to support the high cost and low income assistance programs should be coordinated with the establishment of the scope and magnitude of the proxy-based fund, as well as with state universal service support mechanisms."⁴⁹² Thus, the Joint Board did not submit a recommendation as to whether intrastate revenues should be used to support the high cost and low income mechanisms.⁴⁹³ Rather, as the Commission noted in the *Universal Service Order*, the Joint Board's analysis essentially concluded that the determination of whether contributions should be based on intrastate as well as interstate revenues should be coordinated with the implementation of an appropriate forward-looking economic cost mechanism and revenue benchmark.⁴⁹⁴ Because the mechanism and benchmark were not established, and therefore, the total amount of support requirement was unknown, it would have been premature for the Commission to assess contributions on intrastate as well as interstate revenues.

215. In addition, shortly before the *Universal Service Order* was issued, the state members of the Joint Board filed a report in which the majority recommended that the Commission assess contributions for all support mechanisms on intrastate and interstate revenues.⁴⁹⁵ The majority report also supported the Commission's approach to assessing only interstate revenues for the high cost and low income support mechanisms on an interim basis until a forward-looking economic cost methodology is developed.⁴⁹⁶ Accordingly, the Commission's decision to base contributions to the high cost and low-income support mechanisms solely on interstate revenues was consistent with the Majority State Members' report.

216. Indeed, by declining to base those contributions on intrastate revenues, the Commission promoted comity between the federal and state regulators, and allowed the state commissions to continue to work together to reach consensus on this issue. Because we are still in the process of adopting a forward-looking economic cost mechanism and a revenue benchmark, we conclude that assessing contributions on interstate revenues alone, at least until

⁴⁹¹ *Id.* at 9200, para. 831.

⁴⁹² *Recommended Decision*, 12 FCC Rcd at 499, para. 817.

⁴⁹³ *Universal Service Order*, 12 FCC Rcd at 9198, para. 824.

⁴⁹⁴ *Id.* at 9200, para. 832 citing *Recommended Decision*, 12 FCC Rcd at 501, para. 821.

⁴⁹⁵ *Majority Opinion of the State Members of the Joint Board on the Funding of Universal Service*, filed April 23, 1997 ("Majority State Members' Report").

⁴⁹⁶ Majority State Members' Report.

a unified federal-state approach is developed for the high cost and low-income support mechanisms, is consistent with the public interest.

217. We note that some commenters raise related issues on which the Commission continues to deliberate. For example, members of the wireless industry are concerned about the difficulty of distinguishing their interstate revenues from their intrastate revenues, given the mobile nature of wireless technologies, the inability to determine precisely the point of origin of calls, and the difficulty of matching phone numbers with points of origin.⁴⁹⁷ Wireless carriers have also raised issues regarding revenue reporting requirements,⁴⁹⁸ including issues perceived to be particular to their industry concerning itemizing roaming revenues, special resale issues, bundled offerings, and fraud-related uncollectibles.⁴⁹⁹ We also note that wireless providers have challenged state decisions that they should be subject to state universal service mechanisms.⁵⁰⁰ These are difficult issues, and we are committed to working with the wireless industry and the state commissions to resolve these issues.⁵⁰¹

218. Recovery. For similar reasons, we conclude that it is appropriate to allow carriers to recover contributions to the support mechanisms for high cost areas and low-income consumers through rates for interstate services only. The Joint Board concluded that the "role of complementary state and federal universal service mechanisms require[d] further reflection," but did not address the issue of the recovery of these contributions. Accordingly, we reaffirm the conclusion that this approach to recovery promotes comity between the federal and state governments because it allows the Commission and the states to develop compatible universal service mechanisms. This approach also promotes the statutory goal of affordable basic residential service because it avoids a blanket increase in charges for basic residential dialtone service. We find that it is reasonable and in the public interest to maintain, for the present time, the historical approach to recovering universal service support contributions for high cost areas and low-income consumers. We note, however, that the Commission concluded in its *Fourth Order on Reconsideration* that CMRS providers may recover their universal service contributions through rates charged for all services.⁵⁰² The Commission concluded that the reasons that generally warrant permitting contributors to

⁴⁹⁷ See, e.g., Comcast comments at 10-11; CTIA comments at 2-3; PCIA comments at 14; Vanguard comments at 6; Nextel reply comments at 5.

⁴⁹⁸ Some wireless providers are concerned that the Commission's "good faith" estimation process will result in competitive inequities. See, e.g., Comcast comments at 11-15; CTIA comments at 3; Comcast reply comments at 7. See also *Order on Reconsideration, Second Report and Order, and Further Notice of Proposed Rulemaking*, CC Docket No. 97-21 and No. 96-45 at para. 21 (rel. August 15, 1997).

⁴⁹⁹ See, e.g., CTIA comments at 2; Comcast comments at 11-12; PCIA comments at 13-16.

⁵⁰⁰ See *Cellular Telecommunications Industry Association v. FCC, et al.*, Case No. 97-160 and consolidated cases.

⁵⁰¹ We note that these issues are before the Commission on reconsideration and we do not wish to prejudge those petitions.

⁵⁰² *Fourth Order on Reconsideration* at para. 309.

recover contributions to the federal universal service mechanisms through rates on interstate services, such as ensuring the the continued affordability of residential dialtone services and promoting comity between the federal and state governments, do not apply to CMRS providers.⁵⁰³

B. Percentage of Federal Funding

219. As noted above, the Commission is responsible for ensuring that there are specific, predictable, and sufficient federal and state mechanisms to preserve and advance universal service. Upon further review, we conclude that a strict, across-the-board rule that provides 25 percent of unseparated high cost support to the larger LECs may have the result of withdrawing some federal explicit universal service support from some areas. The Commission will work to ensure that states do not receive less funding as we implement the high cost support mechanisms under the 1996 Act. We find that no state should receive less federal high cost assistance than it currently receives. We emphasize again that the following discussion concerns only non-rural local exchange carriers. High cost support for rural carriers will continue to be provided in accordance with the plan adopted in the *Universal Service Order*, which contemplates no changes earlier than January 1, 2001.

1. Background

220. Section 254(b)(5) establishes the principle that "[t]here should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service."⁵⁰⁴ Additionally, section 254(i) provides that "the Commission and the States should ensure that universal service is available at rates that are just, reasonable and affordable."⁵⁰⁵ The Commission has stated that section 254 continues the historical partnership between the federal and state jurisdictions in advancing and preserving universal service mechanisms.⁵⁰⁶ Similarly, the Joint Board stated in its *Recommended Decision* that the 1996 Act "reflects the continued partnership among the states and the Commission in preserving and advancing universal service."⁵⁰⁷

221. The Commission, in its *Universal Service Order*, decided initially to fund 25 percent of the difference between a carrier's forward-looking economic cost of providing

⁵⁰³ *Fourth Order on Reconsideration* at para. 309 ("Because section 332(c)(3) of the Act alters the 'traditional' federal-state relationship with respect to CMRS by prohibiting states from regulating rates for intrastate commercial mobile services, allowing recovery through rates on intrastate as well as interstate CMRS services would not encroach on state prerogatives. Further, allowing recovery of universal service contributions through rates on all CMRS services will avoid conferring a competitive advantage on CMRS providers that offer more interstate than intrastate services.").

⁵⁰⁴ 47 U.S.C. § 254(b)(5).

⁵⁰⁵ 47 U.S.C. § 254(i).

⁵⁰⁶ *Universal Service Order*, 12 FCC Rcd at 9194, para. 818.

⁵⁰⁷ *Id.* at 9189, para. 806 citing *Recommended Decision*, 12 FCC Rcd at 500, para. 819.

supported services and a revenue benchmark in order to approximate the portion of the cost of providing the supported network facilities that historically have been recovered by local telephone companies from their charges for interstate services.⁵⁰⁸ The current separations rules, which were developed through a Federal-State Joint Board process and have been in place since 1984, allocate 25 percent of loop costs to the federal jurisdiction and 75 percent to the states.⁵⁰⁹ Because local loop costs are likely to be the predominant cost that varies between high cost and non-high cost areas, the Commission determined, on a preliminary basis, that this factor approximated the interstate portion of universal service costs.⁵¹⁰ Consistent with the decisions to fund 25 percent of total universal service high cost support from the assessment and recovery from interstate revenue alone and to eliminate the special jurisdictional separations rules implementing the pre-1996 Act universal service mechanisms, the Commission also directed incumbent LECs in the companion *Access Reform Order* to use federal universal service support received under the new mechanisms to reduce interstate access charges. In that way, the Commission rendered explicit the universal service support formerly implicit in interstate access charges that has traditionally helped keep local rates affordable. In addition, the Commission decided to delay the transition to a universal service mechanism based on forward looking economic costs for rural LECs until no sooner than January 1, 2001.⁵¹¹ Until that time, eligible rural LECs will continue to receive support based on existing mechanisms.

222. This issue has generated extensive attention including a significant number of comments in this proceeding. Some commenters argue that the high cost universal service program should be 100 percent federally funded.⁵¹² In general, these parties contend that section 254(e) refers only to the federal responsibility for ensuring sufficient mechanisms, without imposing parallel state funding obligations.⁵¹³ Several parties argue that the discretionary language in section 254(f) permits, but does not compel, the states to choose whether or not to establish their own universal service funds.⁵¹⁴ Many commenters express concern that the proposed 25-75 split between federal and state funding will not be sufficient to ensure that rural rates are affordable or reasonably comparable with urban rates.⁵¹⁵ Most of

⁵⁰⁸ *Universal Service Order*, 12 FCC Rcd at 8925, para. 269.

⁵⁰⁹ *Id.* at 8925, para. 270.

⁵¹⁰ *Id.* at 8926, para. 271.

⁵¹¹ *Id.* at 8889, paras. 203-204.

⁵¹² Alabama, Alaska, et. al comments at 4; Alaska comments at 11-15; Colorado PUC comments at 1-4; Local and State Gov't Advisory Committee comments at 2-3; USWEST comments at 6.

⁵¹³ 47 U.S.C. § 254(e).

⁵¹⁴ 47 U.S.C. Section 254(f) ("a State may adopt . . . a universal service program.).

⁵¹⁵ See, e.g., Alabama, Alaska, et. al. comments at 3; Alaska comments at 5-6; Colorado PUC comments at 2; Iowa comments at 4-5; Kansas CC comments at 1; Mississippi comments at 2; Nebraska PSC comments at 3; New Mexico AG comments at 1, 2-4; North Dakota PSC comments at 1-2; North Dakota RRRC

these concerns are based on the assumption that the 25 percent funding level will reduce the amount of existing support.⁵¹⁶

223. In addition to the comments, the Commission heard a broad range of viewpoints from presenters at an *en banc* meeting on this issue held on March 6, 1998.⁵¹⁷ In particular, the Commission heard presentations from proponents of alternatives to the 25-75 approach. The state of Maine has proposed, and the states of Vermont and New York have expressed support for, an approach under which federal support would only be provided to states that have average costs that exceed a national average.⁵¹⁸ In addition, US West has proposed a plan that would retain the Commission's 25-75 split for providing support needed between a basic benchmark and a "super-benchmark," but would require all costs above this higher benchmark to be assigned to the federal jurisdiction.⁵¹⁹ These and other proposals are on record before the Commission and are under active review. These two proposals are the product of significant effort on the part of many state commissions and the industry to develop a modified approach to high cost funding. It is also possible that, in the coming weeks, the Commission will be presented with variations on these proposals or other possible methods of funding high cost areas. Because we will conduct a reconsideration of the high cost funding mechanism prior to its implementation, scheduled to go into effect on January 1, 1999, we do not evaluate here the merits of possible alternative high cost funding proposals. Nonetheless, we wish to commend the spirit of cooperation and compromise that has characterized the development of these proposals. Those efforts encourage us to redouble our efforts to work with states and others toward a solution to the high cost funding problem that

comments at 1; Oregon PUC comments at 1; Richland Economic Development comments at 1; South Dakota PUC comments at 2; Texas PUC comments at 3; Transportation Committee of the Nebraska Legislature comments at 1; US West comments at 4-6; Utah comments at 1-2; Washington UTC comments at 7, 11-13; Western Governors' Association at 1; Wyoming PSC comments at 2-3; Arizona CC reply comments at 5; Iowa Telecom Ass'n. reply comments at 4; Wyoming PSC reply comments at 1-4. See also Letter from Secretary Larry Irving, NTLA to Chairman Kennard (April 9, 1998) ("We are simply not convinced that this approach will provide funding sufficient to achieve the desired result.").

⁵¹⁶ See, e.g., Alaska comments at 11-13; Colorado PUC comments at 3; Local State and Gov't Advisory Committee at 2-3; New Mexico AG comments at 2; North Dakota RRRC comments at 1; Oregon PUC at 1; Richland Economic Development comments at 1; RTC comments at 3-5 (25 percent ignores the existing implicit support from averaging access costs and high cost fund, Long Term Support, and DEM Weighting); SBC comments at 5-6 (existing mechanisms often assist rural telephone companies with a larger share of universal service cost recovery).

⁵¹⁷ The first panel of government officials consisted of North Dakota Public Service Commissioner Bruce Hagen, District of Columbia Public Service Chairperson Marlene Johnson, Maine Public Utilities Commission Chairman Thomas L. Welch, and Christopher McLean, deputy administrator of the Rural Utilities Service. The second panel of industry representatives consisted of: Thomas Tauke, Senior VP-government relations at Bell Atlantic, Joan Mandeville, assistant manager at Blackfoot Telephone Cooperative in Missoula, Montana, Joel Lubin, Regulatory VP-AT&T Corp. Law and Public Policy, Jim Smiley, Regional VP-US West Communications, Inc., and Haynes Griffin, chairman of Vanguard Cellular Systems, Inc.

⁵¹⁸ See Statement of Thomas Welch, Maine Public Utilities Commission, at March 6, 1998 *en banc* Commission meeting, transcript at 24-25.

⁵¹⁹ US West submission at March 6, 1998 *en banc* Commission meeting.

serves the interests of all affected parties. We are committed to building on the ideas and proposals expressed in the comments and at the *en banc* hearing to work toward a consensus on this issue. We believe that additional dialogue among the Commission, the states, and the affected industries will lead to an approach that both fulfills the mandates of section 254 and is acceptable to the various interested parties.

224. Specifically, we are in the process of taking several important steps to further review the suitability of the 25-75 approach. First, we are committed to issuing a reconsideration order in response to the petitions filed asking the Commission to reconsider the decision to fund 25 percent of the required support amount. This reconsideration order will be issued prior to the date that the Commission begins providing high cost support to non-rural carriers based on forward-looking economic costs. In addition, we will consult with the Joint Board to address the viability of the 25-75 approach as well as the alternatives that are on record with the Commission, including the holding of an *en banc* hearing with participation by the Federal-State Joint Board commissioners. The Commission has anticipated that the Joint Board would play a continuing role in assessing the mechanisms established to ensure the preservation and advancement of universal service.⁵²⁰

2. Discussion

225. Although there appears to be no consensus among the states as to an alternative to the Commission's so-called 25-75 approach,⁵²¹ there is substantial opposition in this record to this approach.⁵²² This issue is currently pending before the Commission on reconsideration and has been appealed.⁵²³ Further, this issue, along with the related issues of the use of explicit federal universal service support to reduce implicit federal support and of the formulation and distribution of universal service support among the states, is raised in a recent petition filed by the state members of the Joint Board requesting that these issues be referred

⁵²⁰ See, e.g., Federal-State Joint Board on Universal Service, *Order on Reconsideration*, CC Docket No. 96-45, 12 FCC Rcd 10095, para. 28 (rel. July 10, 1997) (*July 10th Reconsideration Order*).

⁵²¹ See, e.g., Alaska comments at 11-15 (federal fund should at least provide support sufficient to maintain current rates and should preferably provide 100 percent funding); Colorado PUC comments at 3-5 (100 percent federal funding would be the simplest solution, 75 percent would be acceptable, but other options could be viable to address varying circumstances among states); North Dakota PSC comments at 1 (joint federal and state fund to cover at least 75 percent); PSC of Wisconsin comments at 1-4 (any level of federal support can be justified, proper amount should be based on impact).

⁵²² See, e.g., Iowa Utilities Board comments at 4; Kansas CC comments at 1-2; Mississippi PSC comments at 1-2; Nebraska PSC comments at 3; New Mexico AG comments at 2-4; PRTC comments at 8-11; RTC comments at 3-6; Senator Burns and Stevens comments at 12; State Members comments at 9; Texas PUC comments at 3-4; USTA comments at 7-9; Utah Governor's office comments at 1-2; Western Governors' Association comments at 1-3; Wyoming PSC comments 1-7; Arizona CC reply comments at 5; Wyoming PSC reply comments at 1-5.

⁵²³ *Texas Office of Public Utility Counsel et al. v. FCC*, No. 97-60421 (5th Cir.) (filed June 25, 1997).

to the Joint Board for further recommendations.⁵²⁴ Without prejudging these ongoing proceedings, we here examine, as required by section 623(b)(5) of the Appropriations Act, the Commission's initial decision to provide 25 percent of the required support amount through federal support mechanisms. Since the May 8, 1997 *Universal Service Order* was released, the Commission has repeatedly articulated its intent to continue to work with the states to ensure that support amounts are sufficient.⁵²⁵ We believe that this Commission decision is aptly characterized as a "place holder" to which we must return.

226. One of the overriding goals of section 254 is to make universal service support explicit. Section 254(b)(5) provides that: "There should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service." The Commission has attempted to make explicit the collection and distribution of existing federal universal service support provided through the interstate high cost loop fund, dial equipment minutes weighting, Long-Term Support, and Lifeline and Link Up programs. The Commission also proposed a mechanism to identify implicit universal service support currently in interstate access charges and to make that support explicit and portable among competing eligible carriers. Similarly, states should take actions to make intrastate mechanisms compatible with competitive local markets by making those support mechanisms explicit and portable.

227. A state may require greater assistance than it presently receives from interstate explicit and implicit mechanisms in order to maintain affordable rates. As states develop plans to make existing intrastate implicit mechanisms explicit, additional federal support may be required to ensure that quality services remain "available at just, reasonable, and affordable rates." For example, where a state proposes to reform its own universal service mechanisms and would collect as much of what is currently implicit intrastate universal service support as is possible consistent with maintaining affordable rates, additional federal universal service support should be provided to any high cost areas where state mechanisms, in combination with baseline federal support, are not sufficient to maintain rates at affordable levels. In the pending reconsideration proceeding, the Commission will consider any other circumstances under which additional federal support would be appropriate. This approach will permit the Commission to fulfill its responsibility to ensure support is sufficient.

228. Further, we expect to consult with the Joint Board regarding the sufficiency of universal service support mechanisms. We are confident that the state commissions will work with us to ensure that "specific, predictable and sufficient" universal service support

⁵²⁴ Formal Request for Referral of Designated Items by the State Members of the section 254 Federal-State Joint Board on Universal Service, filed March 11, 1998 (by Commissioners Johnson, Schoenfelder, and Baker and consumer advocate Hogerty).

⁵²⁵ For example, in its *sua sponte* reconsideration order, the Commission noted that the issue of shared responsibility for ensuring the sufficiency of universal service support is critical to the preservation and advancement of universal service and will be an important subject in future consultations between the Commission and the Joint Board. *July 10 Reconsideration Order* at para. 28.

mechanisms are established, consistent with Congressional intent.⁵²⁶ We recognize that the state commissions themselves are not aligned on one side of this issue. For example, the State Joint Board Members indicated that all Joint Board members "have concerns with *either* the inclusion of intrastate revenues in the proposed funding sources *or* the 75-25% split proposed" by the Commission.⁵²⁷ In addition, NARUC is involved in an ongoing effort to develop a plan for high cost and rural areas that differs from the 25-75 proposal.⁵²⁸ NARUC has not endorsed any specific proposal, but has identified six principles as a basis of future action.⁵²⁹ We encourage NARUC members in their efforts in this regard and welcome the submission of an alternative that is supported by so-called "high-cost" states and "low-cost" states alike. We remain committed to working with proponents of every viewpoint.

229. In our efforts to reform universal service, we and the state commissions must be mindful that only the minimum amount of support necessary to achieve statutory goals should be collected. Just as collecting insufficient support would threaten the availability of universal service, collecting more support than is necessary would increase rates for all subscribers, creating a similar threat to universal service principles. In addition, in order to enhance competition, both federal and state support mechanisms should collect contributions in a competitively neutral manner. Moreover, federal and state universal service support mechanisms should encourage efficient investment in new plant and technologies by all eligible telecommunications carriers and should promote service to historically underserved areas. We are convinced that following these principles will guide this Commission and the states to achieve the goals Congress has set out in the 1996 Act.

230. We note that there appears to be some confusion about the Commission's decision in the *Access Reform Order* to require incumbent local exchange carriers to reduce the revenues they receive from interstate access charges by an amount equal to the support they receive from federal high cost universal service support. As noted above, the plan adopted by the Commission in the *Universal Service Order* is designed to remove federal high cost support from implicit interstate mechanisms and recover that support from an explicit support mechanism. In that event, a carrier would no longer need to recover that support from implicit mechanisms. Since implicit interstate high cost assistance has been provided by incumbent local exchange carriers through interstate access charges, the Commission directed those carriers to remove from those charges the support received from the new universal service support mechanism. Otherwise, carriers would recover high cost assistance twice: from both implicit mechanisms, as well as the new explicit mechanisms. Thus, it is not the case that the explicit support is being used to lower access charges. Rather, the support is still being used to support high cost lines, but now the support is coming from explicit high-cost mechanisms and, accordingly, no longer needs to be obtained from implicit access charge subsidies. To the extent that, upon reexamination, we decide upon a new or different

⁵²⁶ *Universal Service Order*, 12 FCC Rcd at 9198, para. 824.

⁵²⁷ State Joint Board Members comments at 9.

⁵²⁸ NARUC comments at 8-9.

⁵²⁹ NARUC comments at 8-9.

allocation of universal service funding responsibilities between the two jurisdictions, we would plan to modify that directive accordingly.

231. The Commission's initial decision to fund 25 percent of the total requirement was tied to the shift of universal service support for high cost areas from the access charge regime to the new section 254 support mechanisms.⁵³⁰ The total support requirement will be determined by a revenue benchmark and a forward-looking economic cost methodology that have not yet been established.⁵³¹ As we and the state commissions evaluate these new mechanisms, we will be able to determine the amount of support needed to maintain affordable rates. We emphasize that the Commission's implementation of section 254 is progressing and we pledge to continue to work with the states to address this important issue.

C. Methodology for Assessing Contributions

232. Section 254(d) states that "[e]very telecommunications carrier that provides interstate telecommunications service shall contribute on an equal and non-discriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service."⁵³² The Joint Board recommended that contributions be based on gross revenues derived from telecommunications services net of payments to other carriers for telecommunications services.⁵³³ In recommending this approach, the Joint Board sought to resolve three concerns: (1) avoiding double-payment problems; (2) assessing contributions on a value-added basis, and; (3) finding a method that is familiar to the Commission and the industry.⁵³⁴ In the *Universal Service Order*, the Commission deviated from the Joint Board's recommendation and concluded that contributions should be based on end-user telecommunications revenues.⁵³⁵ Nevertheless, the Commission found that its decision addressed each of the Joint Board concerns, was based on information that had not been available to the Joint Board, and was more administratively efficient than the Joint Board's recommendation.⁵³⁶

233. Basing universal service contributions on end-user telecommunications revenues is competitively neutral because it eliminates the problem of counting revenues derived the

⁵³⁰ *Universal Service Order*, 12 FCC Rcd at 8792, para. 26.

⁵³¹ See, e.g., Ameritech comments at 4-5; BellAtlantic comments at 1, 7-8; BellAtlantic reply comments at 1-3; Vanguard reply comments at 1-3.

⁵³² 47 U.S.C. §254(d). See also 47 U.S.C. §254(b)(4).

⁵³³ *Recommended Decision*, 12 FCC Rcd at 495, para. 807.

⁵³⁴ *Universal Service Order*, 12 FCC Rcd at 9206, para. 842 citing *Recommended Decision*, 12 FCC Rcd at 495, para. 807.

⁵³⁵ *Universal Service Order*, 12 FCC Rcd at 9206, para. 843.

⁵³⁶ *Universal Service Order*, 12 FCC Rcd at 9206, para. 843.

same services twice.⁵³⁷ This approach also eliminates the double-counting problem and the market distortions created by assessing based on gross revenues because transactions are counted only once at the end user level. Moreover, the Commission's method is easy to implement. Carriers already keep track of their revenues, and, although they would have to distinguish between sales to end-users and sales to resellers, doing so shall not be complicated because resellers have an incentive -- reduced rates -- to identify themselves.⁵³⁸

234. Some commenters argue in general that universal service support should be assessed as a flat charge on all end users.⁵³⁹ This argument, however, does not consider the problem articulated by the State Joint Board members that "state commissions should have the discretion to determine if the imposition of an end-use surcharge would render local rates unaffordable."⁵⁴⁰ The Commission correctly concluded that a federally prescribed end-user surcharge would impermissibly dictate how carriers recover their contributions and would violate Congress' mandate and the wish of the state members of the Joint Board.⁵⁴¹ Carriers are not precluded from attempting to recover their contributions from end users, but may not make false, inaccurate, or misleading statements regarding their contribution obligations. Further, because carriers will know exactly how much they are contributing to the support mechanism, basing contributions on end-user telecommunications revenues satisfies the requirement in Section 254 that support mechanisms be "explicit."⁵⁴²

VIII. CONCLUSION

235. At the direction of Congress, we have reviewed many of the major decisions related to the implementation of the universal service provisions of the 1996 Act. We appreciate the enormous importance of our decisions; no less than the preservation and advancement of the nation's universal service system is at stake. We have attempted to balance competing concerns, predict how new and emerging technologies will affect universal service in the near and distant futures, and forecast universal service support requirements,

⁵³⁷ Double counting occurs when resellers buy and sell service. Assuming a 10 percent contribution rate, if X sells \$200.00 worth of telecommunications services directly to a customer its contribution would be \$20.00. If reseller buys \$180.00 of wholesale service from A, adds value, and sells the same service for \$200.00 in competition with A, then B would have to contribute \$20.00 for selling \$200.00 of service and would probably also be required to recover a portion of the \$18.00 contribution that A would most likely pass on. *See Order*, 12 FCC Rcd at 9207, para. 845.

⁵³⁸ *Universal Service Order*, 12 FCC Rcd at 9208, para. 848.

⁵³⁹ *See, e.g.*, Airtouch comments at 23-24; Sprint comments at 3; AT&T reply comments at 3.

⁵⁴⁰ *Universal Service Order*, 12 FCC Rcd at 9210, para. 853 (citing State Members of the Federal-State Joint Board on Universal Service Comments on Recovery Mechanism for Universal Service Contributions, dated April 8, 1997, at 1).

⁵⁴¹ *Id.* at 9210, para. 853.

⁵⁴² *Id.* at 9211, para. 854.

while at all times adhering strictly to the statutory language. We have delved into the complex technological structure of the Internet and the Internet industry. This examination leads us to conclude that excluding from the universal service contribution pool revenues derived from the provision of pure transmission capacity to Internet service providers does not comport with the language and goals of the 1996 Act. Similarly, should we conclude that specific "phone-to-phone" IP telephony services qualify as "telecommunications services," providers of such services would fall within section 254(d)'s requirement to contribute to universal service mechanisms.

236. This Report represents the result of deliberate consideration of the issues and extensive public feedback in the form of thousands of pages of comments and two Commission en banc meetings. We recognize, however, that additional outreach, especially consultation with state commissions, is essential. We and the states must ensure that jurisdictional issues, including the 25-75 issue, are resolved in a manner that guarantees that universal service mechanisms are specific, predictable, and sufficient. We view the issuance of this Report as a turning point in our efforts to engage states in a sustained and meaningful dialogue.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas
Secretary

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
Vonage Holdings Corporation) WC Docket No. 03-211
Petition for Declaratory Ruling Concerning an)
Order of the Minnesota Public Utilities)
Commission)

MEMORANDUM OPINION AND ORDER

Adopted: November 9, 2004

Released: November 12, 2004

By the Commission: Chairman Powell and Commissioner Abernathy issuing separate statements;
Commissioners Copps and Adelstein concurring and issuing separate statements.

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I. INTRODUCTION

1. In this Memorandum Opinion and Order (Order), we preempt an order of the Minnesota Public Utilities Commission (Minnesota Commission) applying its traditional "telephone company" regulations to Vonage's DigitalVoice service, which provides voice over Internet protocol (VoIP) service and other communications capabilities. We conclude that DigitalVoice cannot be separated into interstate and intrastate communications for compliance with Minnesota's requirements without negating valid federal policies and rules. In so doing, we add to the regulatory certainty we began building with other orders

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adopted this year regarding VoIP – the *Pulver Declaratory Ruling*¹ and the *AT&T Declaratory Ruling*² – by making clear that this Commission, not the state commissions, has the responsibility and obligation to decide whether certain regulations apply to DigitalVoice and other IP-enabled services having the same capabilities. For such services, comparable regulations of other states must likewise yield to important federal objectives. Similarly, to the extent that other VoIP services are not the same as Vonage's but share similar basic characteristics, we believe it highly unlikely that the Commission would fail to preempt state regulation of those services to the same extent.³ We express no opinion here on the applicability to Vonage of Minnesota's general laws governing entities conducting business within the state, such as laws concerning taxation; fraud; general commercial dealings; and marketing, advertising, and other business practices. We expect, however, that as we move forward in establishing policy and rules for DigitalVoice and other IP-enabled services, states will continue to play their vital role in protecting consumers from fraud, enforcing fair business practices, for example, in advertising and billing, and generally responding to consumer inquiries and complaints.

2. Our decision today will permit the industry participants and our colleagues at the state commissions to direct their resources toward helping us answer the questions that remain after today's Order – questions regarding the regulatory obligations of providers of IP-enabled services. We plan to address these questions in our *IP-Enabled Services Proceeding*⁴ in a manner that fulfills Congress's directions "to promote the continued development of the Internet"⁵ and to "encourage the deployment" of advanced telecommunications capabilities.⁶ Meanwhile, this Order clears the way for increased investment and innovation in services like Vonage's to the benefit of American consumers.

II. BACKGROUND

3. On September 22, 2003, Vonage filed a petition for declaratory ruling⁷ requesting that the Commission preempt an order of the Minnesota Commission imposing regulations applicable to providers of telephone service on Vonage's DigitalVoice.⁸

¹*Petition for Declaratory Ruling that pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service*, WC Docket No. 03-45, Memorandum Opinion and Order, 19 FCC Rcd 3307 (2004) (*Pulver Declaratory Ruling* or *Pulver*).

²*Petition for Declaratory Ruling that AT&T's Phone-to-Phone IP Telephony Services are Exempt from Access Charges*, WC Docket No. 02-361, Order, 19 FCC Rcd 7457 (2004) (*AT&T Declaratory Ruling*).

³See *infra* para. 31 and notes 93, 113 (referring to VoIP services of other providers, including facilities-based providers).

⁴*IP-Enabled Services*, WC Docket No. 04-36, Notice of Proposed Rulemaking, 19 FCC Rcd 4863 (2004) (*IP-Enabled Services Proceeding*).

⁵47 U.S.C. § 230(b)(1).

⁶47 U.S.C. § 157 nt. (incorporating section 706 of the Telecommunications Act of 1996 (1996 Act)).

⁷See Vonage Holdings Corporation Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission, WC 03-211 (filed Sept. 22, 2003) (Vonage Petition). The Commission requested and received comment on the Vonage Petition. See *Pleading Cycle Established for Comments on Vonage Petition for Declaratory Ruling*, WC Docket No. 03-211, Public Notice, 18 FCC Rcd 19325 (2003). See Appendix for a list of commenters.

A. Vonage's DigitalVoice Service

4. DigitalVoice is a service⁹ that enables subscribers to originate and receive voice communications and provides a host of other features and capabilities that allow subscribers to manage their personal communications over the Internet.¹⁰ By enabling the sending and receiving of voice communications and providing certain familiar enhancements like voicemail, DigitalVoice resembles the telephone service provided by the circuit-switched network. But as described in detail here, there are fundamental differences between the two types of service.

5. First, Vonage customers must have access to a broadband connection to the Internet to use the service.¹¹ Because Vonage does not offer Internet access services, DigitalVoice customers must obtain a broadband connection to the Internet from another provider.¹² In marked contrast to traditional circuit-switched telephony, however, it is not relevant where that broadband connection is located or even whether it is the same broadband connection every time the subscriber accesses the service. Rather, Vonage's service is fully portable; customers may use the service anywhere in the world where they can find a broadband connection to the Internet.¹³ According to Vonage, it does not know where in the world its users are when using DigitalVoice.¹⁴

⁹In the Matter of Complaint of the Minnesota Department of Commerce Against Vonage Holding Corp. Regarding Lack of Authority to Operate in Minnesota, Docket No. P-6214/C-03-108, Order Finding Jurisdiction and Requiring Compliance (issued Sept. 11, 2003) (*Minnesota Vonage Order*).

⁹DigitalVoice provides VoIP, among other capabilities. Although the Commission has adopted no formal definition of "VoIP," we use the term generally to include any IP-enabled services offering real-time, multidirectional voice functionality, including, but not limited to, services that mimic traditional telephony. See *IP-Enabled Services Proceeding*, 19 FCC at 4866, para. 3 n.7. VoIP services are available in a number of different forms. See, e.g., Minnesota Commission Reply at 3 ("[VoIP] is a technology that has many current applications and potentially many more future applications."); see also *Availability of Advanced Telecommunications Capability in the United States*, GN Docket No. 04-54, Fourth Report to Congress, FCC 04-208, at 24-26 (rel. Sept. 9, 2004) (*Fourth Section 706 Report*) (describing VoIP services generally).

¹⁰We use the term "Internet" in this Order similarly to how the Commission has used it previously, inclusive of interconnected public, private, managed, and non-managed IP networks. See, e.g., *Pulver*, 19 FCC Rcd at 3309, para. 4 (citing *GTE Telephone Operating Cos., GTE Tariff No. 1, GTOC Transmittal No. 1148*, CC Docket No. 98-79, Memorandum Opinion and Order, 13 FCC Rcd 22466, 22468, para. 5 (1998) (*GTE ADSL Order*)); see also *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities*, GN Docket No. 00-185; CS Docket No. 02-52, Declaratory Ruling and Notice of Proposed Rulemaking, 17 FCC Rcd 4798, 4799 n.1 (2002) (*Cable Modem Declaratory Ruling*), *aff'd in part, vacated in part, and remanded*, *Brand X Internet Services v. FCC*, 345 F.3d 1120 (9th Cir. 2003), *stay granted pending cert.* (April 9, 2004), *petitions for cert. filed*, Nos. 04-277 (Aug. 30, 2004), 04-281 (Aug. 27, 2004).

¹¹See Vonage Petition at 4; Letter from William B. Wilhelm, Jr., Counsel for Vonage, to Marlene H. Dorch, Secretary, FCC, WC Docket No. 03-211, at 2 (filed Oct. 1, 2004) (Vonage-Oct. 1 *Ex Parte* Letter) (suggesting a minimum upstream connection speed of 128k).

¹²See Vonage Petition at 7, 15; Vonage Reply at 8. According to Vonage, its service operates with any type of broadband connection (e.g., cable modem, digital subscriber line, or satellite), but will not work with dial-up Internet access. See Vonage Petition at 4.

¹³See Vonage Petition at 4; Vonage Oct. 1 *Ex Parte* Letter at 2.

¹⁴See Vonage Petition at 2, 5, 28-29.

6. Second, Vonage indicates that DigitalVoice requires customers to use specialized customer premises equipment (CPE).¹⁵ Customers may choose among several different types of specialized CPE: (1) a Multimedia Terminal Adapter (MTA), which contains a digital signal processing unit that performs digital-to-audio and audio-to-digital conversion and has a standard telephone jack connection; (2) a native Internet Protocol (IP) phone; or (3) a personal computer with a microphone and speakers, and software to perform the conversion (softphone).¹⁶ Although customers may in some cases attach conventional telephones to the specialized CPE that transmits and receives these IP packets, a conventional telephone alone will not work with Vonage's service.¹⁷

7. Third, DigitalVoice offers customers a suite of integrated capabilities and features that allows the user to manage personal communications dynamically, including but not limited to real-time, multidirectional voice functionality.¹⁸ In addition to voice, these features include voicemail, three-way calling, online account and voicemail management, and geographically independent "telephone" numbers.¹⁹ Vonage's Real-Time Online Account Management feature allows customers to access their accounts 24 hours a day through an Internet web page to manage their communications by configuring service features, handling voicemail, and editing user information.²⁰ At the user's discretion, the user may, among other options, play voicemails back through a computer or receive them in e-mails with the actual message attached as a sound file.²¹ Using other features, users may request that DigitalVoice ring simultaneously the user's Vonage number plus any other number in the United States or Canada regardless of who provides the service connected with that other number.²²

8. Among these features, DigitalVoice provides the capability to originate and terminate real-time voice communications. Once the CPE and software are installed and configured, the customer may place or receive calls over the Internet to or from anyone with a telephone number – including another Vonage customer, a customer of another VoIP provider, a customer of a commercial mobile radio service (CMRS) provider, or a user reachable only through the public switched telephone network (PSTN).²³ In

¹⁵See *id.* at 5.

¹⁶See *id.* at 5; Vonage Reply at 8-9; see also 8x8 Comments at 8-10. Vonage states that most of its customers use an MTA. In addition to the CPE to convert voice signals, as a practical matter, most users also require a router. See Vonage Petition at 5.

¹⁷See Vonage Petition at 5; Vonage Reply at 8 ("[A]n analog telephone device is neither necessary nor sufficient for use with Vonage's service."); see also 8x8 Comments at 9.

¹⁸See Vonage Petition at 4; see also *IP-Enabled Services Proceeding*, 19 FCC Rcd at 4866, para. 3 n.7.

¹⁹See, e.g., Vonage Oct. 1 *Ex Parte* Letter at 4-5; Vonage, *Take Your Number With You* (visited Oct. 28, 2004) <<http://www.vonage.com/features.php?feature=traveling>>.

²⁰See Vonage Oct. 1 *Ex Parte* Letter at 4; see also Vonage, *Real-Time Online Account Management* (visited Oct. 28, 2004) <http://www.vonage.com/features.php?feature=online_account_mgt>. For example, the voicemail service integrated into DigitalVoice allows the user to access voicemail and select delivery options through interaction with the customer's web account on the Internet.

²¹Vonage is currently adding functionality so that users may customize voicemail controls by scheduling recorded greetings for different hours of the day and different days of the year. See Oct. 1 *Ex Parte* Letter at 5; see also Vonage, *Voicemail Plus* (visited Oct. 28, 2004) <<http://www.vonage.com/features.php?feature=voicemail>>.

²²See, e.g., Vonage, *Call Forwarding* (visited Oct. 28, 2004) <http://www.vonage.com/features.php?feature=call_forwarding>.

²³See Vonage Petition at 6.

any case, the subscriber's outgoing calls originate on the Internet and are routed over the Internet to Vonage's servers. If the destination is another Vonage customer or a user on a peered service, the server routes the packets to the called party over the Internet and the communication also terminates via the Internet.²⁴ If the destination is a telephone attached to the PSTN, the server converts the IP packets into appropriate digital audio signals and connects them to the PSTN using the services of telecommunications carriers interconnected to the PSTN. If a PSTN user originates a call to a Vonage customer, the call is connected, using the services of telecommunications carriers interconnected to the PSTN, to the Vonage server, which then converts the audio signals into IP packets and routes them to the Vonage user over the Internet.²⁵ Together, these integrated features and capabilities allow customers to control their communications needs by determining for themselves how, when, and where communications will be sent, received, saved, stored, forwarded, and organized.

9. Fourth, although Vonage's service uses North American Numbering Plan (NANP) numbers as the identification mechanism for the user's IP address, the NANP number is not necessarily tied to the user's physical location for either assignment or use, in contrast to most wireline circuit-switched calls.²⁶ Rather, as Vonage explains, the number correlates to the user's digital signal processor to facilitate the exchange of calls between the Internet and the PSTN using a convenient mechanism with which users are familiar to identify the user's IP address.²⁷ In other words, and again in marked contrast to traditional circuit-switched telephony, a call to a Vonage customer's NANP number can reach that customer anywhere in the world and does not require the user to remain at a single location.

B. History of Vonage's Petition

10. In July 2003, the Minnesota Department of Commerce filed an administrative complaint against Vonage with the Minnesota Commission, asserting that Vonage was providing telephone exchange service in Minnesota and was thus subject to state laws and regulations governing a "telephone company." Among other things, the laws and regulations in question require such companies to obtain operating authority, file tariffs, and provide and fund 911 emergency services.²⁸ The Minnesota Department of Commerce sought an administrative order from the Minnesota Commission to compel Vonage to comply with these state regulatory requirements. In response to the administrative complaint,

²⁴Vonage-to-Vonage calls are not transmitted over the PSTN. See *id.* at 7. Calls from Vonage customers to customers of certain other IP service providers with which Vonage has a peering arrangement also are not transmitted over the PSTN, but solely over the Internet. See Vonage Oct. 1 *Ex Parte* Letter at 3-4. In this respect, the communication is similar to communications that occur over Pulver's Free World Dialup (FWD) service between FWD members. See *Pulver*, 19 FCC Rcd at 3309-10, paras. 5-6. If Vonage does not have a peering arrangement with a particular VoIP provider, calls between users of the two services are routed in part over the PSTN but originate and terminate via the Internet. See Vonage Oct. 1 *Ex Parte* Letter at 4.

²⁵See Vonage Petition at 5-8; see also 8x8 Comments at 10.

²⁶See Vonage Petition at 8.

²⁷For calls to and from other VoIP users, Vonage could choose to use other identifiers to match the IP address. NANP numbers are not necessarily required for VoIP calls that remain on the Internet and do not connect with the PSTN. See *Pulver*, 19 FCC Rcd at 3309, para. 5 (explaining that Pulver's FWD service uses five or six digit FWD identification numbers rather than NANP numbers); see also Vonage Petition at 7-8; Vonage Oct. 1 *Ex Parte* Letter at 3-5.

²⁸See Minn. Stat. §§ 237.07, 237.16, 237.49, 237.74(12); Minn. Rules §§ 7812.0200(1), 7812.0550(1).

Vonage argued that these state laws and regulations do not apply to it and that, even if they do, they are preempted by the Communications Act of 1934, as amended (Communications Act or Act).²⁹

11. In September 2003, the Minnesota Commission issued an order asserting regulatory jurisdiction over Vonage and ordering the company to comply with all state statutes and regulations relating to the offering of telephone service in Minnesota.³⁰ In so holding, the Minnesota Commission declined to decide whether Vonage's service is a telecommunications service or an information service under the Act. Instead, it found DigitalVoice to be a "telephone service" as defined by Minnesota law, thus subjecting Vonage to the state requirements for offering such a service. In response, Vonage filed suit against the Minnesota Commission in the U.S. District Court for the District of Minnesota. In October 2003, the district court entered a permanent injunction in favor of Vonage.³¹ The court determined that Vonage is providing an information service under the Act and that the Act preempts the Minnesota Commission's authority to subject such a service to common-carrier regulation.³² The court concluded that "VoIP services necessarily are information services, and state regulation over VoIP services is not permissible because of the recognizable congressional intent to leave the Internet and information services largely unregulated."³³ In January 2004, the court denied a motion by the Minnesota Commission for reconsideration, and an appeal to the U.S. Court of Appeals for the Eighth Circuit followed. The appeal remains pending.³⁴

²⁹See Vonage Oct. 1 *Ex Parte* Letter, Exh. 3 at 5-12.

³⁰See, e.g., *Minnesota Vonage Order* at 8. While the order states "the Commission will require that Vonage comply with Minnesota Statutes and Rules, including certification requirements and the provisioning of 911 service," the order does not enumerate the statutory and rule provisions to which it is referring other than those specifically listed in note 27 above. See *supra* note 28. We will refer to these requirements, collectively, throughout this Order as either "telephone company regulations" or "economic regulations." It appears, however, that many Minnesota Commission rules other than those specifically mentioned in the *Minnesota Vonage Order* would only apply to Vonage as a result of its status as a certificated entity in Minnesota. See Minn. Stat. § 237.16(a). As a result, because, as described below, we specifically preempt Minnesota's certification requirements for DigitalVoice in this Order, regulations applicable to certificated entities would not be applicable to Vonage for DigitalVoice.

³¹See *Vonage Holding Corp. v. Minnesota Pub. Utils. Comm'n*, 290 F. Supp. 2d 993 (D. Minn. 2003), *appeal pending*, *Vonage Holdings Corp. v. Minnesota Pub. Utils. Comm'n*, No. 04-1434 (8th Cir.). We reject commenters' contentions that we should dismiss the Vonage Petition as moot because the Minnesota district court granted a permanent injunction. See, e.g., Minnesota Commission Comments at 4; Qwest Comments at 2; New York State AG Reply at 3. The Minnesota district court's permanent injunction is currently subject to appeal, and other courts and state commissions have open proceedings considering these issues. Accordingly, we find that this petition continues to present a "controversy" or "uncertainty" regarding the jurisdictional nature of DigitalVoice that may be addressed in a declaratory ruling. See 47 C.F.R. § 1.2. We also disagree that these issues are not ripe because Vonage can seek waivers of the Minnesota requirements. See, e.g., MTA Comments at 8. The Minnesota order directs Vonage to comply with Minnesota Statutes and Rules within 30 days without mentioning the possibility of waiver. See *Minnesota Vonage Order* at 9. The possibility of waiver, however, does not eliminate the conflict with our rules and policies.

³²See *Vonage Holding Corp. v. Minnesota Pub. Utils. Comm'n*, 290 F. Supp. 2d at 996-1003.

³³*Id.* at 1002.

³⁴See *Vonage Holdings Corp. v. Minnesota Pub. Utils. Comm'n*, No. 04-1434 (8th Cir.). The Commission sought a primary jurisdiction referral from the Eighth Circuit on the issues presented in this case. See Brief for the United States and the Federal Communications Commission as *Amici Curiae*, *Vonage Holdings Corp. v. Minnesota Pub. Utils. Comm'n*, No. 04-1434 (8th Cir. filed Apr. 21, 2004) (requesting a primary jurisdiction referral). The Eighth Circuit has not yet ruled on the primary jurisdiction referral. Oral argument is scheduled for November 17, 2004.

12. At the same time that it filed suit in the district court in Minnesota, Vonage filed the instant petition with the Commission. Specifically, Vonage's petition for declaratory ruling requests that the Commission preempt the Minnesota Commission's order and find that (1) Vonage is a provider of "information services," and is not a "telecommunications carrier," as those terms are defined in the Act,³⁵ and (2) state regulation of this service would unavoidably conflict "with the national policy of promoting unregulated competition in the Internet and information service market."³⁶ In the alternative, Vonage seeks a determination that the Minnesota Commission's order is preempted because it is impossible to separate this service, regardless of its regulatory classification, into distinct interstate and intrastate communications.³⁷ Vonage also seeks a ruling that certain specific E911 requirements imposed by the Minnesota Commission are in conflict with federal policies.³⁸ On August 13, 2004, Vonage submitted additional information to the Commission in this matter, requesting that we act expeditiously on its pending petition insofar as it concerned the jurisdictional nature of the service, explaining that such a determination could be rendered independent of the statutory classification of the service.³⁹

13. Since Vonage filed its petition, a number of other states have opened proceedings to examine the jurisdictional nature of VoIP services offered in their states.⁴⁰ For example, in May 2004, the New York State Public Service Commission (New York Commission) adopted an order finding that Vonage, in offering and providing DigitalVoice in New York, is a "telephone corporation" as defined by New York state law, and is therefore subject to certain requirements.⁴¹ The New York Commission asserted jurisdiction over Vonage and ordered it to obtain state certification and to file a tariff, but permitted Vonage to seek waivers of New York regulations that it deemed inappropriate or with which it was not readily able to comply.⁴² Vonage sought, and in July the U.S. District Court for the Southern District of New York granted, a preliminary injunction of the *New York Vonage Order*.⁴³ The court held that "Vonage has shown that it is likely to succeed on the merits of its claim that the [*New York Vonage Order*] is preempted by federal law"; that "Vonage has demonstrated that the [*New York Vonage Order*]

³⁵See 47 U.S.C. § 153(20) (defining "information service"); 47 U.S.C. § 153(43) (defining "telecommunications"); 47 U.S.C. § 153(44) (defining "telecommunications carrier"); 47 U.S.C. § 153(46) (defining "telecommunications service").

³⁶See Vonage Petition at 1.

³⁷*Id.*

³⁸*Id.*; see also 8x8 Comments at 15-17.

³⁹See Letter from William B. Wilhelm, Jr., Counsel for Vonage, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 03-211, 04-36, at 1-2 (filed Aug. 13, 2004) (Vonage Aug. 13 *Ex Parte* Letter).

⁴⁰See, e.g., *Order Instituting Investigation on the Commission's Own Motion to Determine the Extent to Which the Public Utility Telephone Service Known as Voice over Internet Protocol Should Be Exempted from Regulatory Requirements*, Investigation 04-02-007, Order Instituting Investigation (issued Feb. 11, 2004) (initiating a proceeding by the California Public Utilities Commission to investigate VoIP services).

⁴¹See *Complaint of Frontier Telephone of Rochester, Inc. against Vonage Holdings Corporation Concerning Provision of Local Exchange and Interexchange Telephone Service in New York State in Violation of the Public Service Law*, Case 03-C-1285, Order Establishing Balanced Regulatory Framework for Vonage Holdings Corporation at 10 (issued May 21, 2004) (*New York Vonage Order*).

⁴²See *id.* at 17.

⁴³See *Vonage Holdings Corp. v. New York State Public Service Comm'n*, 04 Civ. 4306 (DFE) (S.D.N.Y. July 16, 2004) (Order of Magistrate Judge Eaton) (*New York Preliminary Injunction*) (entering a preliminary injunction against the New York Commission's order).

will interfere with interstate commerce"; and that this Commission's guidance, via orders in the *IP-Enabled Services Proceeding* or the instant proceeding, "may aid in final resolution of the matter."⁴⁴ The court has scheduled a status conference on December 13, 2004 to consider whether there is a need for further proceedings in this matter, including a determination on Vonage's request for permanent injunctive relief.⁴⁵

III. DISCUSSION

14. We grant Vonage's petition in part⁴⁶ and preempt the *Minnesota Vonage Order*.⁴⁷ We find that the characteristics of DigitalVoice preclude any practical identification of, and separation into, interstate and intrastate communications for purposes of effectuating a dual federal/state regulatory scheme, and that permitting Minnesota's regulations would thwart federal law and policy. We reach this decision irrespective of the definitional classification of DigitalVoice under the Act, *i.e.*, telecommunications or information service, a determination we do not reach in this Order. Although Congress did not explicitly prescribe the regulatory framework for Internet-based communications like DigitalVoice when it amended the Act in 1996,⁴⁸ its statements regarding the Internet and advanced telecommunications capabilities in sections 230 and 706 indicate that our actions here are consistent with its intent concerning

⁴⁴*Id.* at 2-3.

⁴⁵*See id.* at 3.

⁴⁶We do not determine the statutory classification of DigitalVoice under the Communications Act, and thus do not decide here the appropriate federal regulations, if any, that will govern this service in the future. These issues are currently the subject of our *IP-Enabled Services Proceeding* where the Commission is comprehensively examining numerous types of IP-enabled services, including services like DigitalVoice. *See generally IP-Enabled Services Proceeding*, 19 FCC Rcd 4853. That proceeding will resolve important regulatory matters with respect to IP-enabled services generally, including services such as DigitalVoice, concerning issues such as the Universal Service Fund, intercarrier compensation, 911/E911, consumer protection, disability access requirements, and the extent to which states have a role in such matters. In addition, the Commission recently initiated a rulemaking proceeding to address law enforcement's needs relative to the Communications Assistance for Law Enforcement Act (CALEA), including the scope of services that are covered, who bears responsibility for compliance, the wiretap capabilities required by law enforcement, and acceptable compliance standards. Our decision in this Order does not prejudice the outcome of our proceeding on CALEA. *See Communications Assistance for Law Enforcement Act and Broadband Access and Services*, ET Docket No. 04-295; RM-10865, Notice of Proposed Rulemaking and Declaratory Ruling, 19 FCC Rcd 15676 (2004); *see also* DOJ/FBI Comments at 10-13; DOJ/FBI Reply at 7-10. These issues are complex and critically important matters. While these matters are being comprehensively addressed, however, it is essential that we take action to bring some greater measure of certainty to the industry to permit services like DigitalVoice to evolve. By ruling on the narrow jurisdictional question here, we enable this Commission and the states to focus resources in working together along with the industry to address the numerous other unresolved issues related to this and other IP-enabled and advanced communications services that are of paramount importance to the future of the communications industry. *See, e.g.*, PacWest/RCN Reply at 5; USA DataNet Comments at 2-3 (urging the Commission to act on the Vonage Petition). *But see, e.g.*, DOJ/FBI Comments at 9; Minnesota Commission Comments at 4; Montana Independent Telecommunications Systems Comments at 5; Qwest Comments at 3-4; USTA Comments at 3-4; DOJ/FBI Reply at 5-7; Minnesota Commission Reply at 3; Verizon Reply at 6 (urging the Commission not to act on the Vonage Petition, but instead to decide these issues in a comprehensive rulemaking proceeding).

⁴⁷As we noted above, this Order does not address Minnesota's general laws governing entities conducting business within the state, such as laws concerning taxation; fraud; general commercial dealings; marketing, advertising, billing and other business practices. *See supra* para. 1.

⁴⁸Telecommunications Act of 1996, Pub. Law No. 104-104, 110 Stat. 36 (1996) (1996 Act).

these emerging technologies. In addition, we address the fact that multiple state regulatory regimes would likely violate the Commerce Clause because of the unavoidable effect that regulation on an intrastate component would have on interstate use of this service or use of the service within other states. Finally, although we preempt the *Minnesota Vonage Order*, including its 911 requirements imposed as a condition to entry, we fully expect Vonage to continue its efforts to develop a 911 capability as we work toward resolving this important public safety issue in the *IP-Enabled Services Proceeding* as discussed below.⁴⁹

A. Preemption of the *Minnesota Vonage Order*

15. We begin our analysis by briefly examining the distribution of authority over communications services between federal and state agencies under the Act. We then discuss judicial precedent that recognizes circumstances where state jurisdiction must yield to federal jurisdiction through the Commission's authority to preempt state regulations that thwart the lawful exercise of federal authority over interstate communications. Next, we explain our current federal rules and policies for services like DigitalVoice followed by our demonstration of the impossibility of separating DigitalVoice into interstate and intrastate components for purposes of complying with the Minnesota regulations without negating federal policies and directly conflicting with our own regulations. We conclude that preempting the *Minnesota Vonage Order* is compelled to avoid thwarting valid federal objectives for innovative new competitive services like DigitalVoice, finding consistency between our action here and Congress's articulated policies in sections 230 and 706 of the Act.

1. Commission Jurisdiction over DigitalVoice

16. In the absence of a specific statutory provision regarding jurisdiction over services like DigitalVoice, we begin with section 2 of the Act.⁵⁰ In 1934, Congress set up a dual regulatory regime for communications services.⁵¹ In section 2(a) of the Act, Congress has given the Commission exclusive jurisdiction over "all interstate and foreign communication" and "all persons engaged . . . in such communication."⁵² Section 2(b) of the Act reserves to the states jurisdiction "with respect to intrastate communication service . . . of any carrier."⁵³

⁴⁹Access to emergency services for VoIP services, including 911, is a critical public safety issue. This issue, and the extent to which states may have a role in such matters, will be addressed in the *IP-Enabled Services Proceeding*. We address this issue in a limited manner in this Order only because of the manner in which Minnesota ties its 911 requirements to entry authority. See *infra* paras. 42-44.

⁵⁰See *Bell Atl. Tel. Cos. v. FCC*, 131 F.3d 1044 (D.C. Cir. 1997).

⁵¹See generally 47 U.S.C. § 152.

⁵²47 U.S.C. § 152(a). Congress defined "interstate communication" as "communication or transmission . . . from any State, Territory, or possession of the United States . . . to any other State, Territory, or possession of the United States . . . but shall not . . . include wire or radio communication between points in the same State . . . through any place outside thereof, if such communication is regulated by a State commission." 47 U.S.C. § 153(22).

⁵³47 U.S.C. § 152(b). "[I]ntrastate communications" is not separately defined in the Act except to the extent it is described in the definition of "interstate communication" as a "wire or radio communication between points in the same State." 47 U.S.C. § 153(22) (emphasis added). We note that section 2(b) reserves to the states only matters connected with "carriers," which means "common carriers" or "telecommunications carriers" under sections 3(10) and 3(44) of the Act. 47 U.S.C. § 153(10), (44). Here, we do not determine whether Vonage is a "carrier";

17. In applying section 2 to specific services and facilities, the Commission has traditionally applied its so-called "end-to-end analysis" based on the physical end points of the communication.⁵⁴ Under this analysis, the Commission considers the "continuous path of communications," beginning with the end point at the inception of a communication to the end point at its completion, and has rejected attempts to divide communications at any intermediate points.⁵⁵ Using an end-to-end approach, when the end points of a carrier's service are within the boundaries of a single state the service is deemed a purely intrastate service, subject to state jurisdiction for determining appropriate regulations to govern such service.⁵⁶ When a service's end points are in different states or between a state and a point outside the United States, the service is deemed a purely interstate service subject to the Commission's exclusive jurisdiction.⁵⁷ Services that are capable of communications both between intrastate end points and between interstate end points are deemed to be "mixed-use" or "jurisdictionally mixed" services.⁵⁸ Mixed-use services are generally subject to dual federal/state jurisdiction, except where it is impossible or impractical to separate the service's intrastate from interstate components and the state regulation of the intrastate component interferes with valid federal rules or policies.⁵⁹ In such circumstances, the Commission may exercise its authority to preempt inconsistent state regulations that thwart federal objectives, treating jurisdictionally mixed services as interstate with respect to the preempted regulations.⁶⁰

18. Thus, our threshold determination must be whether DigitalVoice is purely intrastate (subject only to state jurisdiction) or jurisdictionally mixed (subject also to federal jurisdiction). The nature of DigitalVoice precludes any suggestion that the service could be characterized as a purely intrastate service.⁶¹ As Vonage has indicated, it has over 275,000 subscribers located throughout the United States,

however, our analysis with respect to section 2(b) assumes that it is. This assumption for purposes of this Order, however, in no way prejudices how the Commission may ultimately classify DigitalVoice.

⁵⁴See, e.g., *Bell Atl. Tel. Cos. v. FCC*, 206 F.3d 1, 3 (D.C. Cir. 2000); see *infra* para. 24 (addressing difficulties with an end-to-end approach for services involving the Internet).

⁵⁵See, e.g., *Pulver*, 19 FCC Rcd at 3320-21, para. 21.

⁵⁶See 47 U.S.C. § 152(b)(1).

⁵⁷See 47 U.S.C. § 153(22).

⁵⁸See, e.g., *MTS and WATS Market Structure Amendment of Part 67 of the Commission's Rules and Establishment of a Joint Board*, CC Docket Nos. 78-72, 80-286, Memorandum Opinion and Order on Reconsideration and Order Inviting Comments, 1 FCC Rcd 1287 (1987); *Petition for Emergency Relief and Declaratory Ruling Filed by the BellSouth Corporation*, Memorandum Opinion and Order, 7 FCC Rcd 1619, 1620, para. 7 (1992) (*BellSouth MemoryCall*); *Southwestern Bell Tel. Co. v. FCC*, 153 F.3d 523, 543 (8th Cir. 1998).

⁵⁹See *Louisiana Pub. Serv. Comm'n v. FCC*, 476 U.S. 355, 368 (1986) (finding a basis for Commission preemption where compliance with both federal and state law is in effect physically impossible) (citing *Florida Lime & Avocado Growers, Inc. v. Paul*, 373 U.S. 132 (1963)); *BellSouth MemoryCall*, 7 FCC Rcd at 1622-23, paras. 18-19.

⁶⁰Indeed, the Eighth Circuit has recently noted the Commission's authority to preempt in the area of jurisdictionally mixed special access services. See *Qwest Corp. v. Minnesota Pub. Utils. Comm'n*, 380 F.3d 367, 374 (8th Cir. 2004) (finding that, with respect to special access services, the Commission "certainly has the wherewithal to preempt state regulation in this area if it so desires") (emphasis added).

⁶¹We need not address in this Order the case of purely intrastate service, which is not the service we have before us in this petition.

each with the ability to communicate with anyone in the world from anywhere in the world.⁶² While DigitalVoice clearly enables intrastate communications, it also enables interstate communications. It is therefore a jurisdictionally mixed service,⁶³ and this Commission has exclusive jurisdiction under the Act to determine the policies and rules, if any, that govern the interstate aspect of DigitalVoice service.⁶⁴

2. Commission Authority To Preempt State Regulations

19. Although the Communications Act establishes dual federal-state authority to regulate certain communications services, courts routinely recognize that there may be circumstances where state regulation would necessarily conflict with the Commission's valid exercise of authority.⁶⁵ Where separating a service into interstate and intrastate communications is impossible or impractical, the Supreme Court has recognized the Commission's authority to preempt state regulation that would thwart or impede the lawful exercise of federal authority over the interstate component of the communications.⁶⁶

⁶²See Vonage Oct. 1 *Ex Parte* Letter at 2 (explaining that its subscribers have billing addresses in each of the 50 states, the District of Columbia and throughout Canada, that its subscribers regularly use the service from countries outside North America, including "Argentina, Australia . . . and the United Kingdom," and that customers have used the service "from virtually every inhabitable continent in the world").

⁶³We analyze DigitalVoice for purposes of preemption as a jurisdictionally mixed service due to its recognized capability to enable communications to occur not only between different states but within a particular state. This notwithstanding, it is possible that the Commission may find, in the context of the *IP-Enabled Services Proceeding*, that this type of service simply has no intrastate component.

⁶⁴See *Louisiana Pub. Serv. Comm'n*, 476 U.S. at 360 (explaining how the Act would seem to divide the world of domestic telephone service into two hemispheres – one comprised of interstate service, over which the Commission has "plenary authority"); see also *Ivy Broad. Co. v. American Tel. & Tel. Co.*, 391 F.2d 486, 490 (2d Cir. 1968) ("The Supreme Court has held that the establishment of this broad scheme for the regulation of interstate service by communications carriers indicates an intent on the part of Congress to occupy the field to the exclusion of state law.").

⁶⁵See *Louisiana Pub. Serv. Comm'n*, 476 U.S. at 375 n.4 (citing *North Carolina Utils. Comm'n v. FCC*, 537 F.2d 787 (4th Cir. 1976), cert. denied, 429 U.S. 1027 (1976); *North Carolina Utils. Comm'n v. FCC*, 552 F.2d 1036 (4th Cir. 1977) cert. denied, 434 U.S. 874 (1977) (upholding Commission preemption of state regulation because it was not possible to separate the interstate and intrastate components of the asserted Commission regulation)); see also *New York State Comm'n on Cable Television v. FCC*, 749 F.2d 804 (D.C. Cir. 1984) (affirming Commission order preempting state and local entry regulation of satellite master antenna television); *Promotion of Competitive Networks in Local Telecommunications Markets*; *Wireless Communications Association International, Inc. Petition for Rulemaking to Amend Section 1.4000 of the Commission's Rules to Preempt Restrictions on Subscriber Premises Reception or Transmission Antennas Designed to Provide Fixed Wireless Services*; *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*; *Review of Sections 68.104, and 68.213 of the Commission's Rules Concerning Connection of Simple Inside Wiring to the Telephone Network*, WT Docket No. 99-217; CC Docket Nos. 96-98, 88-57, First Report and Order and Further Notice of Proposed Rulemaking; Fifth Report and Order and Memorandum Opinion and Order; Fourth Report and Order and Memorandum Opinion and Order, 15 FCC Rcd 22983, 23031-32, para. 107 (2000) (preempting state regulation of fixed wireless antennas as an impediment to the full achievement of important federal objectives).

⁶⁶See *Louisiana Pub. Serv. Comm'n*, 476 U.S. at 368-69. The Court also said that the "critical question in any preemption analysis is always whether Congress intended that federal regulation supersede state law." *Id.* at 369. As summarized by the Supreme Court, federal law and policy preempt state action in several circumstances: (1) where compliance with both federal and state law is in effect physically impossible (citing *Florida Lime & Avocado Growers, Inc. v. Paul*, 373 U.S. 132); (2) when there is outright or actual conflict between federal and state law (citing *Free v. Bland*, 369 U.S. 663 (1962)); (3) where the state law stands as an obstacle to the accomplishment and execution of the full objectives of Congress (citing *Hines v. Davidowitz*, 312 U.S. 52 (1941)); (4) when Congress

The D.C. Circuit, for example, applied this impossibility exception in affirming a Commission order preempting state regulation of the rate a local exchange carrier (LEC) charged an interexchange carrier for a disconnection service.⁶⁷ The court explained that Commission preemption of state regulation is permissible when the matter to be regulated has both interstate and intrastate aspects; preemption is necessary to protect a valid federal regulatory objective; and "state regulation would 'negate[] the exercise by the FCC of its own lawful authority' because regulation of the interstate aspects of the matter cannot be 'unbundled' from regulation of the intrastate aspects."⁶⁸ Such is the case with DigitalVoice service as discussed in detail below.

3. Conflict With Commission Rules and Policies

20. Regardless of the definitional classification of DigitalVoice under the Communications Act, the *Minnesota Vonage Order* directly conflicts with our pro-competitive deregulatory rules and policies governing entry regulations, tariffing, and other requirements arising from these regulations for services such as DigitalVoice.⁶⁹ Were DigitalVoice to be classified a telecommunications service, Vonage would be considered a nondominant, competitive telecommunications provider for which the Commission has eliminated entry and tariff filing requirements with respect to services like DigitalVoice.⁷⁰ In particular,

expresses a clear intent to preempt state law; (5) where there is implicit in federal law a barrier to state regulation; and (6) where Congress has legislated comprehensively, thus occupying an entire field of regulation. Additionally, the Supreme Court has held that preemption may result not only from action taken by Congress but also from a federal agency action that is within the scope of the agency's congressionally delegated authority. *Louisiana Pub. Serv. Comm'n*, 476 U.S. at 369 (citing *Fidelity Federal Savings & Loan Ass'n v. De la Cuesta*, 458 U.S. 141 (1982); *Capital Cities Cable, Inc. v. Crisp*, 467 U.S. 691 (1984)).

⁶⁷See *Pub. Serv. Comm'n of Maryland v. FCC*, 909 F.2d 1510 (D.C. Cir. 1990).

⁶⁸*Id.* at 1515 (citing *National Ass'n of Regulatory Util. Comm'rs v. FCC*, 880 F.2d 422, 429-31 (D.C. Cir. 1989); *Illinois Bell Tel. Co. v. FCC*, 883 F.2d 104, 113 (D.C. Cir. 1989); *Public Util. Comm'n of Texas v. FCC*, 886 F.2d 1325, 1329, 1331-33 (D.C. Cir. 1989)).

⁶⁹While we do not rely on it as a basis for our action in this Order, we also note that section 253 of the Act provides the Commission additional preemption authority over state regulations that "prohibit or have the effect of prohibiting the ability of an entity to provide any interstate or intrastate telecommunications service." 47 U.S.C. § 253. See Vonage Petition at 28 n.55 (indicating it does not submit its petition under section 253). Were DigitalVoice to be classified as a telecommunications service, however, it is possible that we could find state economic regulation such as that imposed by Minnesota to be a prohibition on the provision of an interstate and intrastate telecommunications services under section 253. See Vonage Petition at 11, 28 (describing that it is technically and practically impossible to comply with Minnesota's "telephone company" rules).

⁷⁰See, e.g., *Implementation of Section 402(b)(2)(A) of the Telecommunications Act of 1996; Petition for Forbearance of the Independent Telephone & Telecommunications Alliance*, CC Docket No. 97-11; AAD File No. 98-43, Report and Order and Second Memorandum Opinion and Order, 14 FCC Rcd 11364, 11372-75, paras. 12-16 (1999) (*Section 214 Order*) (granting blanket section 214 authority for new lines of all domestic carriers including dominant carriers like the Bell operating companies (BOCs)); *Policy and Rules Concerning the Interstate, Interexchange Marketplace; Implementation of Section 245(g) of the Communications Act of 1934*, CC Docket No. 96-61, Second Report and Order, 11 FCC Rcd 20730 (1996) (*Interexchange Detariffing Order*) (adopting mandatory detariffing of most domestic interstate, interexchange services); Order on Reconsideration, 12 FCC 15014 (1997); Second Order on Reconsideration and Erratum, 14 FCC Rcd 6004 (1999), *aff'd*, *MC1 WorldCom, Inc. v. FCC*, 209 F.3d 760 (D.C. Cir. 2000); *Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor*, First Report and Order, 85 FCC 2d 1 (1980) (subsequent history omitted) (*Competitive Carrier Proceeding*) (adopting regulatory framework based on dominant or nondominant status of carriers).

in completely eliminating interstate market entry requirements, the Commission reasoned that retaining entry requirements could stifle new and innovative services whereas blanket entry authority, *i.e.*, unconditional entry, would promote competition.⁷¹ State entry and certification requirements, such as the Minnesota Commission's, require the filing of an application which must contain detailed information regarding all aspects of the qualifications of the would-be service provider, including public disclosure of detailed financial information, operational and business plans, and proposed service offerings.⁷² The application process can take months and result in denial of a certificate, thus preventing entry altogether.⁷³ Similarly, when the Commission ordered the mandatory detariffing of most interstate, domestic, interexchange services (including services like DigitalVoice), the Commission found that prohibiting such tariffs would promote competition and the public interest, and that tariffs for these services *may actually harm consumers* by impeding the development of vigorous competition.⁷⁴ Tariffs and "price lists," such as those required by Minnesota's statutes and rules, are lengthy documents subject to specific filing and notice requirements that must contain every rate, term, and condition of service offered by the provider, including terms and conditions to which the provider may be subject in its certificate of authority.⁷⁵ The Minnesota Commission may also require the filing of cost-justification information or order a change in a rate, term or condition set forth in the tariff.⁷⁶ The administrative process involved in entry certification and tariff filing requirements, alone, introduces substantial delay in time-to-market and ability to respond to changing consumer demands, not to mention the impact these processes have on how an entity subject to such requirements provides its service.

21. On the other hand, if DigitalVoice were to be classified as an information service, it would be subject to the Commission's long-standing national policy of nonregulation of information services,⁷⁷

⁷¹See *Section 214 Order*, 14 FCC Rcd at 11373, para. 14 ("By its very terms, blanket authority removes regulatory hurdles to market entry, thereby promoting competition."); *id.* at 11373, para. 13 ("Rather than maintaining [entry requirements] that may stifle new and innovative services[,] ... we believe it is more consistent with the goals of the 1996 Act to remove this hurdle.").

⁷²See Minn. Rule § 7812.0200.

⁷³See Minn. Stat. § 237.16(c).

⁷⁴See *Interexchange Detariffing Order*, 11 FCC Rcd at 20760, para. 52 (emphasis added) ("[W]e find that not permitting nondominant interexchange carriers to file tariffs with respect to interstate, domestic, interexchange services will enhance competition among providers of such services, promote competitive market conditions, and achieve other objectives that are in the public interest, including eliminating the possible invocation of the filed rate doctrine by nondominant interexchange carriers, and establishing market conditions that more closely resemble an unregulated environment."); *id.* at 20750, para. 37 ("We also adopt the tentative conclusion that in the interstate, domestic, interexchange market, requiring nondominant interexchange carriers to file tariffs for interstate, domestic, interexchange services may harm consumers by impeding the development of vigorous competition, which could lead to higher rates."). We note that certain exceptions to the Commission's mandatory detariffing rules exist; however, these exceptions would not apply to services like DigitalVoice were it to be classified a telecommunications service.

⁷⁵See Minn. Stat. § 237.07; see also, *e.g.*, Minn. Rules §§ 7812.0300(6), 7812.0350(6), 7812.2210(2).

⁷⁶See, *e.g.*, Minn. Rule §§ 7812.2210(4),(8).

⁷⁷See *Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities*, Docket No. 16979, Notice of Inquiry, 7 FCC 2d 11 (1966) (*Computer I NOI*); *Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities*, Docket No. 16979, Final Decision and Order, 28 FCC 2d 267 (1971) (*Computer I Final Decision*); *Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)*, Docket No. 20828, Tentative Decision and Further Notice of Inquiry and Rulemaking, 72 FCC 2d 358 (1979) (*Computer II Tentative Decision*);

particularly regarding economic regulation such as the type imposed on Vonage in the *Minnesota Vonage Order*.⁷⁸ In a series of proceedings beginning in the 1960's, the Commission issued orders finding that economic regulation of information services would disserve the public interest because these services lacked the monopoly characteristics that led to such regulation of common carrier services historically. The Commission found the market for these services to be competitive and best able to "burgeon and flourish" in an environment of "free give-and-take of the market place without the need for and possible burden of rules, regulations and licensing requirements."⁷⁹

22. Thus, under existing Commission precedent, regardless of its definitional classification, and unless it is possible to separate a Minnesota-only component of DigitalVoice from the interstate component, Minnesota's order produces a direct conflict with our federal law and policies, and impermissibly encroaches on our exclusive jurisdiction over interstate services such as DigitalVoice. This notwithstanding, some commenters argue that the traditional dual regulatory scheme must nevertheless apply to DigitalVoice *because it is functionally similar* to traditional local exchange and long distance voice service.⁸⁰ Were it appropriate to base our decision today on the applicability of

Computer II Final Decision, 77 FCC 2d 384 (1980); *Amendment of Section 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry)*, CC Docket No. 85-229, Report and Order, 104 FCC 2d 958 (1986) (*Computer III*) (subsequent history omitted) (collectively the *Computer Inquiry Proceeding*). In its *Second Computer Inquiry* proceeding, the Commission "adopted a regulatory scheme that distinguished between the common carriage offering of basic transmission services and the offering of enhanced services." *Computer II Final Decision*, 77 FCC 2d at 387; see also *Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review - Review of Computer III and ONA Safeguards and Requirements*, 13 FCC Rcd 6040, 6064, para. 38 (1998). The former services are regulated under Title II and the latter services are not. See *Computer II Final Decision*, 77 FCC 2d at 428-30, 432-43, paras. 113-18, 124-49 (indicating it would not serve the public interest to subject enhanced service providers to traditional common carrier regulation under Title II because, among other things, the enhanced services market was "truly competitive"). The 1996 Act uses different terminology (i.e., "telecommunications services" and "information services") than used by the Commission in its *Computer Inquiry* proceeding, but the Commission has determined that "enhanced services" and "information services" should be interpreted to extend to the same functions, although the definition in the 1996 Act is even broader. See *Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended*, CC Docket No. 96-149, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 21905, 21955-56, para. 102 (1996) (*Non-Accounting Safeguards Order*) (subsequent history omitted) (explaining that all enhanced services are information services, but information services are broader and may not be enhanced services).

⁷⁸See, e.g., *Pulver*, 19 FCC Rcd at 3317-20, paras. 17-20 (explaining the Commission's policy of nonregulation for information services and how the 1996 Act reinforces this policy). This policy of nonregulation refers primarily to economic, public-utility type regulation, as opposed to generally applicable commercial consumer protection statutes, or similar generally applicable state laws. Indeed, the preeminence of federal authority over information services has prevailed unless a carrier-provided information service could be characterized as "purely intrastate," see *California v. FCC*, 905 F.2d 1217, 1239-42 (9th Cir. 1990), or it is possible to separate out the interstate and intrastate components and state regulation of the intrastate component would not negate valid Commission regulatory goals. See *California v. FCC*, 39 F.3d 919 (9th Cir. 1994) (*California III*), cert. denied, 514 U.S. 1050 (1995) (affirming Commission preemption of certain state requirements for separation of facilities and personnel in the BOC provision of jurisdictionally mixed enhanced services as state regulations would negate national policy).

⁷⁹See *Computer II Final Decision*, 77 FCC 2d at 425-33, paras. 109-27 (citing *Computer I, Tentative Decision*, 27 FCC 2d at 297-298).

⁸⁰See, e.g., ITTA Comments at 10-12; Minnesota Commission Comments at 3; MTA Comments at 13-14; RIITA Comments at 2; Surewest Comments at 4-5; GVNW Reply at 2-3; Minnesota Commission Reply at 4-5, 7; NASUCA Reply at 9, 11-12; Sprint Reply at 2-3. But see Verizon Reply at 2-6.

Minnesota's "telephone company" regulations to DigitalVoice solely on the functional similarities between DigitalVoice and other existing voice services (as the Minnesota Commission appears to have done),⁸¹ we would find DigitalVoice *far more similar* to CMRS, which provides mobility, is often offered as an all-distance service, and needs uniform national treatment on many issues.⁸² Indeed, in view of these differences, CMRS, including IP-enabled CMRS, is expressly exempt from the type of state economic regulation Minnesota seeks to impose on DigitalVoice.⁸³ Commenters that argue that the Act requires the Commission to recognize state jurisdiction over DigitalVoice to the extent it enables "intrastate" communications to occur completely ignore the considerations that dictate preemption here.⁸⁴ Indeed, the fact that a particular service enables communication within a state does not necessarily subject it to state economic regulation. We have acknowledged similar "intrastate" communications capabilities in other services involving the Internet, where for regulatory purposes, treatment as an interstate service prevailed despite this "intrastate" capability.⁸⁵

4. Preemption Based on "Impossibility"

23. In this section, we examine whether there is any plausible approach to separating DigitalVoice into interstate and intrastate components for purposes of enabling dual federal and state regulations to coexist without "negating" federal policy and rules.⁸⁶ We find none. Without a practical means to separate the service, the *Minnesota Vonage Order* unavoidably reaches the interstate components of the DigitalVoice service that are subject to exclusive federal jurisdiction. Vonage has no means of directly or indirectly identifying the geographic location of a DigitalVoice subscriber. Even, however, if this

⁸¹See *Minnesota Vonage Order* at 8 (finding Vonage's service to be "functionally no different than any other telephone service").

⁸²Indeed, other commenters note how DigitalVoice is like CMRS. See, e.g., California Commission Comments at 20-22; HTBC Comments at 9.

⁸³See 47 U.S.C. § 332(c)(3)(A). Pursuant to section 332 of the Act, state and local governments are specifically preempted from regulating the "entry of or the rates charged by any commercial mobile service or any private mobile service." *Id.* (emphasis added).

⁸⁴See, e.g., New York Commission Comments at 3; California Commission Comments at 4, 19; NASUCA Reply at 15; OTA/WIT Reply Comment at 8; Sprint Reply at 6-7.

⁸⁵For example, the Commission concluded that some traffic over GTE's asymmetrical digital subscriber line (ADSL) service would, in fact, be terminated in the state where it originated, or even locally, but the service is "an interstate service and is properly tariffed at the federal level." See *GTE ADSL Order*, 13 FCC Rcd at 22466, 22478-79, paras. 1, 22. The Commission left open the possibility that a purely intrastate xDSL service may be offered which would be tariffed at the state level. See *id.* at 22481, para. 27. The Commission similarly determined that cable modem service is an interstate service because the points among which cable modem communications travel are often in different states and countries. See *Cable Modem Declaratory Ruling*, 17 FCC Rcd at 4832, para. 59. The jurisdictionally interstate finding of cable modem service was not an issue on appeal. See *Brand X Internet Services v. FCC*, 345 F.3d 1120. Finally, in *Pulver*, the Commission held that Pulver's "intrastate capabilities" should not remove the service from our jurisdiction. See *Pulver*, 19 FCC Rcd at 3320-22, paras. 20-22.

⁸⁶See *Louisiana Pub. Serv. Comm'n v. FCC*, 476 U.S. at 368 (holding that the Supremacy Clause of Article VI of the Constitution provides Congress with the power to preempt state law and explaining the numerous bases for preemption); see also *Pub. Serv. Comm'n of Maryland v. FCC*, 909 F.2d at 1515 (citing *Nat'l Ass'n of Regulatory Util. Comm'rs v. FCC*, 880 F.2d at 429-31); *Nat'l Ass'n of Regulatory Util. Comm'rs*, 880 F.2d at 425 ("We conclude that the Commission may only preempt state regulation over intrastate wire communication to the degree necessary to keep such regulation from negating the Commission's exercise of its lawful authority over interstate communication service.").

information were reliably obtainable, Vonage's service is far too multifaceted for simple identification of the user's location to indicate jurisdiction. Moreover, the significant costs and operational complexities associated with modifying or procuring systems to track, record and process geographic location information as a necessary aspect of the service would substantially reduce the benefits of using the Internet to provide the service, and potentially inhibit its deployment and continued availability to consumers.⁸⁷

24. DigitalVoice harnesses the power of the Internet to enable its users to establish a virtual presence in multiple locations simultaneously, to be reachable anywhere they may find a broadband connection, and to manage their communications needs from any broadband connection. The Internet's inherently global and open architecture obviates the need for any correlation between Vonage's DigitalVoice service and its end users' geographic locations. As we noted above, however, the Commission has historically applied the geographic "end-to-end" analysis to distinguish interstate from intrastate communications.⁸⁸ As networks have changed and the services provided over them have evolved, the Commission has increasingly acknowledged the difficulty of using an end-to-end analysis when the services at issue involve the Internet.⁸⁹ DigitalVoice shares many of the same characteristics as these other services involving the Internet, thus making jurisdictional determinations about particular DigitalVoice communications based on an end-point approach difficult, if not impossible.⁹⁰

25. In fact, the geographic location of the end user at any particular time is only one clue to a jurisdictional finding under the end-to-end analysis. The geographic location of the "termination" of the communication is the other clue; yet this is similarly difficult or impossible to pinpoint. This "impossibility" results from the inherent capability of IP-based services to enable subscribers to utilize multiple service features that access different websites or IP addresses during the same communication session and to perform different types of communications simultaneously, none of which the provider has

⁸⁷See Letter from William B. Wilhelm, Jr. and Ronald W. Del Sesto, Jr., Counsel for Vonage, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 03-211, at 5 (filed Oct. 19, 2004) (Vonage Oct. 19 *Ex Parte* Letter).

⁸⁸See *supra* para. 17.

⁸⁹For example, in attempting to apply an end-to-end analysis to an incumbent LEC's digital subscriber line (DSL) telecommunications service to determine whether federal or state tariffing requirements should attach, the Commission noted that "an Internet communication does not necessarily have a point of 'termination' in the traditional sense." *GTE ADSL Order*, 13 FCC Rcd at 22478-79, para. 22. In a later proceeding involving the provision of Telecommunications Relay Service over the Internet, the Commission similarly noted the difficulty in pinpointing the origination of an IP-Relay call arising over the Internet because Internet addresses do not have geographic correlates equivalent to the PSTN's automatic number identifiers, which are tied to geographic locations, and thus, there is no automatic way to determine whether any call is intrastate or interstate. See *Provision of Improved Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CC Docket No. 98-67, Declaratory Ruling and Second Further Notice of Proposed Rulemaking, 17 FCC 7779, 7784, para. 15 (2002) (*IP-Relay Second FNPRM*). Significantly, as recently as June, the Commission issued yet another Further Notice of Proposed Rulemaking in this proceeding, recognizing the continued technological inability to identify the location of an IP-Relay user. See *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CC Docket Nos. 90-571, 98-67; CG Docket No. 03-123, Report and Order; Order on Reconsideration; Further Notice of Proposed Rulemaking, 19 FCC Rcd 12475, 12561, para. 221 (2004) (*2004 IP-Relay FNPRM*). In *Pulver*, the Commission concluded that the concept of "end points" and an end-to-end analysis were not relevant to Pulver's Internet-based VoIP information service. See *Pulver*, 19 FCC Rcd at 3316-23, paras. 15-25.

⁹⁰See Vonage Petition at 5, 28.

a means to separately track or record.⁹¹ For example, a DigitalVoice user checking voicemail or reconfiguring service options would be communicating with a Vonage server. A user forwarding a voicemail via e-mail to a colleague using an Internet-based e-mail service would be “communicating” with a different Internet server or user. An incoming call to a user invoking forwarding features could “terminate” anywhere the DigitalVoice user has programmed. A communication from a DigitalVoice user to a similar IP-enabled provider’s user would “terminate” to a geographic location unknown either to Vonage or to the other provider.⁹² These functionalities in all their combinations form an integrated communications service designed to overcome geography, not track it. Indeed, it is the total lack of dependence on *any* geographically defined location that most distinguishes DigitalVoice from other services whose federal or state jurisdiction is determined based on the geographic end points of the communications.⁹³ Consequently, Vonage has no service-driven reason to know users’ locations,⁹⁴ and Vonage asserts it presently has no way to know.⁹⁵ Furthermore, to require Vonage to attempt to

⁹¹See, e.g., Vonage Oct. 19 *Ex Parte* Letter at 4-5 (explaining that in addition to having no way to determine a geographic origination point, determining a geographic destination is not possible either); see also Letter from Glenn T. Reynolds, BellSouth Corp., to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 04-36; 03-211, Attach. at 6-12 (filed Oct. 26, 2004) (BellSouth Oct. 26 *Ex Parte* Letter) (explaining the multitude of simultaneous capabilities during a single communication that makes a point of destination unknown); Letter from Howard Symons, Counsel for NTCA, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 03-211, 04-36 Attach. at 2-3 (filed Oct. 28, 2004) (NCTA Oct. 28 *Ex Parte* Letter) (describing the core integrated features that “cable VoIP” provides to subscribers); Letter from Adam D. Krinsky, Counsel for CTIA, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 04-36; 03-211, (filed Oct. 25, 2004) (CTIA Oct. 25 *Ex Parte* Letter) (explaining that IP-enabled services do not have definable termination points).

⁹²See Vonage Oct. 19 *Ex Parte* Letter at 4-5.

⁹³We note that these integrated capabilities and features are not unique to DigitalVoice, but are inherent features of most, if not all, IP-based services having basic characteristics found in DigitalVoice, including those offered or planned by facilities-based providers. See *infra* note 113 for a brief summary of these basic characteristics; see also, e.g., Letter from Kathleen Grillo, Verizon, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 03-211 at 1-3 (filed Nov. 1, 2004) (Verizon Nov. 1 *Ex Parte* Letter) (describing Verizon’s VoiceWing service); Letter from Cronan O’Connell, Qwest, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 03-211 (filed Sept. 27, 2004) (Qwest Sept. 27 *Ex Parte* Letter) (describing Qwest’s VoIP architecture and service); Letter from Judy Sello, AT&T, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 03-211 at 1-4, (filed Oct. 21, 2004) (AT&T Oct. 21 *Ex Parte* Letter) (describing AT&T’s CallVantage service); Letter from James K. Smith, Executive Director – Federal Regulatory, SBC, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 03-211, 04-29, 04-36, Attach. at 4-11 (filed Oct. 8, 2004) (SBC Oct. 8 *Ex Parte* Letter) (describing SBC’s VoIP architecture and service); Letter from Glenn T. Reynolds, Vice President – Federal Regulatory, BellSouth, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 03-211, 04-36, Attach. at 6-12 (filed Oct. 26, 2004) (BellSouth Oct. 26 *Ex Parte* Letter) (describing BellSouth’s VoIP architecture and service); Letter from Glenn T. Reynolds, Vice President – Federal Regulatory, BellSouth, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 03-211, 04-36, Attach. at 4 (filed Oct. 7, 2004) (BellSouth Oct. 7 *Ex Parte* Letter) (describing BellSouth’s VoIP architecture and service); Letter from Howard J. Symons, Counsel for National Cable & Telecommunications Association (NCTA), to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 03-211, 04-36, Attach. at 3-5 (filed Oct. 28, 2004) (NCTA Oct. 28 *Ex Parte* Letter) (describing cable VoIP architecture).

⁹⁴See *American Libraries Ass’n v. Pataki*, 969 F. Supp. 160, 170 (S.D.N.Y. 1997) (“Internet protocols were designed to ignore rather than document geographic location.”).

⁹⁵We acknowledge that certain geolocation products may be capable of identifying, to some degree, the geographic location of a Vonage user in the future, see, e.g., Sprint Reply at 7, but the record does not reflect that such information is readily obtainable at this time. See, e.g., 8x8 Comments at 14-15. Should Vonage decide in the future to incorporate geolocation capabilities into its service to facilitate additional features that may be dependent on

incorporate geographic "end-point" identification capabilities into its service solely to facilitate the use of an end-to-end approach would serve no legitimate policy purpose.⁹⁶ Rather than encouraging and promoting the development of innovative, competitive advanced service offerings,⁹⁷ we would be taking the opposite course, molding this new service into the same old familiar shape.

26. In the absence of a capability to identify *directly* DigitalVoice communications that originate and terminate within the boundaries of Minnesota, we still consider whether some method exists to identify such communications *indirectly*, such that Minnesota's regulations could nonetheless apply to only that "intrastate" usage such as voice calls between persons located in the same state.⁹⁸ For example, assume Minnesota were to use DigitalVoice subscribers' NPA/NXXs as a proxy for those subscribers' geographic locations when making or receiving calls. If a subscriber's NPA/NXX were associated with Minnesota under the NANP, Minnesota's telephone company regulations would attach to every DigitalVoice communication that occurred between that subscriber and any other party having a Minnesota NPA/NXX. But because subscribers residing anywhere could obtain a Minnesota NPA/NXX, a subscriber may never be present in Minnesota when communicating with another party that is, yet Minnesota would treat those calls as subject to its jurisdiction.⁹⁹

27. Similarly, if a Minnesota NPA/NXX subscriber residing in Minnesota used its service outside the state to call someone in Minnesota, that call would appear to be an intrastate call when it is actually interstate. Some commenters suggest that because Vonage markets DigitalVoice to provide "local" and "long distance" calls it surely has an ability to distinguish between intrastate and interstate calls.¹⁰⁰

reliable location determining capabilities, e.g., E911-type features or law enforcement surveillance capabilities, this would not alter the fact that the service enables the user's location to change continually. See Vonage Oct. 19 *Ex Parte* Letter at 3-6 (explaining how user location information for emergency services purposes would have no relevance to an end to end jurisdictional analysis for DigitalVoice).

⁹⁶See *Pulver*, 19 FCC Rcd at 3320-21, para. 21 ("Attempting to require Pulver to locate its members for the purpose of adhering to a regulatory analysis that served another network would be forcing changes on this service for the sake of regulation itself, rather than for any particular policy purpose.").

⁹⁷See, e.g., Letter from Staci L. Pies, The VON Coalition, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-92; WC Docket Nos. 02-361, 03-211, 03-266, 04-36, Attach. at 1 (filed Aug. 19, 2004) (VON Coalition Aug. 19 *Ex Parte* Letter).

⁹⁸Where the Commission has found it difficult to apply an end-to-end approach for jurisdictional purposes, it has proposed or adopted proxy or allocation mechanisms to approximate an end-to-end result. See, e.g., *GTE ADSL Order*, 13 FCC Rcd at 22479, para. 23 (applying the 10% rule for determining interstate jurisdiction for federal tariffing purposes); *IP-Relay Second FNPRM*, 17 FCC Rcd at 7784, para. 15 (proposing either an allocator to approximate the mix of interstate/intrastate traffic or a user self-identification mechanism to identify its end-point location); *2004 IP-Relay FNPRM*, 19 FCC Rcd at 12561-64, paras. 221-30 (proposing either user-registration or allocation mechanisms to determine interstate or intrastate use; asking whether, in the alternative, all IP-Relay calls should simply be deemed interstate). We find a 'percentage' proxy to be unhelpful in addressing the conflict between the federal and state regulatory regimes (in particular, the tariffing and certification requirements) at issue in this proceeding, because using such a proxy would not avoid frustration of the Commission's policy objectives discussed above. See *supra* section III.A.3. But see, e.g., MTA Comments at 10.

⁹⁹In this example, if we further assume Minnesota requires entry certification for Vonage, but has an entry condition that Vonage cannot meet, Vonage could be subject to state sanctions for "operating" in the state without authority to the extent any of its customers nationwide obtain Minnesota NPA/NXXs and use the service to communicate with someone in Minnesota even though that subscriber never had a physical presence in Minnesota.

¹⁰⁰See, e.g., NASUCA Reply at 15.

These commenters fail to recognize that these calls are not "local" and "long distance" in the sense that they are for traditional wireline telephone services. Rather, like we have seen with the proxy example above, Vonage describes these calling capabilities for convenience in terms that its subscribers understand. A DigitalVoice call that would be deemed "local," for example, is actually a call between two NPA/NXXs associated with particular rate centers in a particular state, yet when the actual communication occurs one or both parties can be located outside those rate centers, outside the state, or even on opposite ends of the world.

28. We further consider whether Minnesota could assert jurisdiction over DigitalVoice communications based on whether the subscriber's billing address or address of residence are in Minnesota. This too fails. When a subscriber with a Minnesota billing address or address of residence uses DigitalVoice from any location outside the state to call a party located in Minnesota, Minnesota would treat that communication as "intrastate" based on the address proxy for that subscriber's location, yet in actuality it would be an interstate call.¹⁰¹

29. These proxies are very poor fits, yet even their implementation would impose substantial costs retrofitting DigitalVoice into a traditional voice service model for the sole purpose of making it easier to apply traditional voice regulations to only a small aspect of Vonage's integrated service.¹⁰² Forcing such changes to this service would greatly diminish the advantages of the Internet's ubiquitous and open nature that inspire the offering of services such as DigitalVoice in the first instance.¹⁰³ Indeed, Vonage would have to change multiple aspects of its service operations that are not nor were ever designed to incorporate geographic considerations, including modifications to systems that track and identify subscribers' communications activity and facilitate billing; the development of new rate and service structures; and sales and marketing efforts,¹⁰⁴ just for regulatory purposes.¹⁰⁵ The Commission has previously recognized the significant efforts and inefficiency to attempt to separate out an intrastate component of other services for certain regulatory purposes where the provider, like Vonage here, *had no service-driven reason to incorporate such capability into its operations*.¹⁰⁶ We have declined to require

¹⁰¹In this example, if we further assume Minnesota has imposed a specific rate requirement on DigitalVoice's intrastate communications, this rate requirement would apply to all DigitalVoice communications made by that subscriber to someone in Minnesota even though many of those communications are interstate under the Act.

¹⁰²See *Pulver*, 19 FCC Rcd at 3321-23, paras. 22, 24 (finding it similarly impossible to separate *Pulver's* VoIP service).

¹⁰³See, e.g., Vonage Oct. 19 *Ex Parte* Letter at 6.

¹⁰⁴In reviewing a challenge to a Commission requirement for BOC joint CPE/service marketing because it would "surely 'affect' charges for" and regulate "intrastate communications services," and preemption of inconsistent state regulation, the D.C. Circuit affirmed the Commission stating that "[e]ven if [it] were a purely intrastate service, the FCC might well have authority to preemptive regulate its marketing if - as would appear here - it was typically sold in a package with interstate services. Marketing realities might themselves create inseparability." *Illinois Bell Tel. Co. v. FCC*, 883 F.2d 104, 112-13 & n.7 (D.C. Cir. 1989) (referencing *Louisiana Pub. Serv. Comm'n*, 476 U.S. 355).

¹⁰⁵See generally Vonage Oct. 19 *Ex Parte* Letter.

¹⁰⁶See *MTS and WATS Market Structure, Amendment of Part 36 of the Commission's Rules and Establishment of a Joint Board*, CC Docket Nos. 78-72, 80-286, Decision and Order, 4 FCC Rcd 5660, n.7 (1989) (*MTS/WATS Market Structure Separations Order*) (finding that "mixed use" special access lines carrying more than a *de minimis* amount of interstate traffic to private line systems are subject to the Commission's jurisdiction for jurisdictional separations purposes because separating interstate from intrastate traffic on many such lines could not be measured without "significant additional administrative efforts"); see also *Qwest Corp. v. Minnesota Pub. Utils. Comm'n*, 380 F.3d

such separation in those circumstances, treating the services at issue as jurisdictionally interstate for the particular regulatory purpose at issue and preempting state regulation where necessary.¹⁰⁷ For example, in preempting a state regulation specifying default per line blocking of a customer's "Caller ID" for intrastate calls based on "impossibility," the Commission found that "we need not demonstrate absolute future impossibility to justify federal preemption here. We need only show that interstate and intrastate aspects of a regulated service or facility are inseverable as a practical matter in light of prevailing technological and economic conditions."¹⁰⁸

30. In the case of DigitalVoice, Vonage could not even avoid violating Minnesota's order by trying not to provide intrastate communications in that state.¹⁰⁹ For the same reasons that Vonage cannot identify a communication that occurs within the boundaries of a single state, it cannot prevent its users from making such calls by attempting to block any calls between people in Minnesota.¹¹⁰ Indeed, Vonage could not avoid similar "intrastate" regulations if imposed by any of the other more than 50 separate jurisdictions. Due to the intrinsic ubiquity of the Internet, *nothing short of Vonage ceasing to offer its service entirely* could guarantee that any subscriber would not engage in some communications where a state may deem that communication to be "intrastate" thereby subjecting Vonage to its economic regulations absent preemption.

31. There is, quite simply, no practical way to sever DigitalVoice into interstate and intrastate communications that enables the *Minnesota Vonage Order* to apply only to intrastate calling functionalities without also reaching the interstate aspects of DigitalVoice, nor is there any way for Vonage to choose to avoid violating that order if it continues to offer DigitalVoice anywhere in the

367, 374 (finding that the Commission's preemptive intent concerning the *de minimis* rule relates to cost allocation for ratemaking purposes rather than plenary regulatory authority but stating that the Commission "*certainly has the wherewithal to preempt state regulation in this area if it so desires*") (emphasis added); *BellSouth MemoryCall*, 7 FCC Rcd at 1620, para. 7 (preempting order of a state commission imposing regulatory conditions on the offering of the intrastate portion of a jurisdictionally mixed service because of the expense, operational, and technical difficulties associated with identifying the intrastate portion and the effect it would likely have on the provider's continued offering of the interstate portion).

¹⁰⁷See, e.g., *MTS/WATS Market Structure Separations Order*, 4 FCC Rcd 5660, n.7; *BellSouth MemoryCall*, 7 FCC Rcd at 1620, para. 7.

¹⁰⁸See *Rules and Policies Regarding Calling Number Identification Service – Caller ID*, Memorandum Opinion and Order on Reconsideration, Second Report and Order and Third Notice of Proposed Rulemaking, 10 FCC Rcd 11700, 11727-28, para. 77 (1995) (citing *California v. FCC*, 39 F.3d 919 (9th Cir. 1994)), *aff'd*, *California v. FCC*, 75 F.3d 1350 (9th Cir. 1996). The Ninth Circuit affirmed the Commission's preemption in this case, finding it to fit within the impossibility exception. See *California v. FCC*, 75 F.3d at 1360. Indeed, when possible, this Commission prefers that economic and market considerations drive the development of technology, rather than regulatory requirements. See, e.g., *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Order on Reconsideration, CC Docket Nos. 01-338, 96-98, 98-147, FCC 04-248, para. 19 (rel. Oct. 18, 2004) (concluding that decision regarding "which broadband technologies to deploy is best left to . . . the market We decline to second-guess or skew those technology choices").

¹⁰⁹See Vonage Petition at v. 31; see also *American Libraries Ass'n v. Pataki*, 969 F. Supp. at 171 (explaining that no aspect of the Internet can fairly be closed off to users from any state).

¹¹⁰See Vonage Petition at v. 31.

world.¹¹¹ Thus, to whatever extent, if any, DigitalVoice includes an intrastate component, because of the impossibility of separating out such a component, we must preempt the *Minnesota Vonage Order* because it outright conflicts with federal rules and policies governing interstate DigitalVoice communications.

32. Indeed, the practical inseverability of other types of IP-enabled services having basic characteristics similar to DigitalVoice would likewise preclude state regulation to the same extent as described herein. Specifically, these basic characteristics include: a requirement for a broadband connection from the user's location; a need for IP-compatible CPE; and a service offering that includes a suite of integrated capabilities and features, able to be invoked sequentially or simultaneously, that allows customers to manage personal communications dynamically, including enabling them to originate and receive voice communications and access other features and capabilities, even video.¹¹² In particular, the provision of tightly integrated communications capabilities greatly complicates the isolation of intrastate communication and counsels against patchwork regulation. Accordingly, to the extent other entities, such as cable companies, provide VoIP services,¹¹³ we would preempt state regulation to an extent comparable to what we have done in this Order.

¹¹¹See *Public Util. Comm'n of Texas v. FCC*, 886 F.2d 1325 (citing *Louisiana Pub. Serv. Comm'n v. FCC*, 476 U.S. 355, 375, the court upheld preemption of a Texas Public Utility Commission order prohibiting an incumbent LEC from providing interconnection to the PSTN to a customer where the FCC cannot "separate the interstate and the intrastate components of [its] asserted regulation."); *Public Serv. Comm'n of Maryland v. FCC*, 909 F.2d at 1515 (citing *Louisiana Pub. Serv. Comm'n v. FCC*, 476 U.S. 355, 375, to uphold Commission's preemption of a state commission's prescribed rates for LEC charges to interexchange carriers for customer disconnections based on the impossibility exception).

¹¹²See, e.g., SBC Oct. 8 *Ex Parte* Letter, Attach. at 4-11; BellSouth Oct. 26 *Ex Parte* Letter, Attach. at 6-12; BellSouth Oct. 7 *Ex Parte* Letter, Attach. at 4.

¹¹³See, e.g., Letter from J.G. Harrington, Counsel for Cox Communications, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 03-211, 04-36, at 1-2 (filed Oct. 27, 2004) ("This network design also permits providers to offer a single, integrated service that includes both local and long distance calling and a host of other features that can be supported from national or regional data centers and accessed by users across state lines. . . . In addition to call setup, these functions include generation of call announcements, record-keeping, CALEA, voice mail and other features such as *67, conferencing and call waiting. . . . [T]here are no facilities at the local level of a managed voice over IP network that can perform these functions."); Letter from Henk Brands, Counsel for Time Warner Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 03-211, 04-36, at 2, 9 (filed Oct. 29, 2004) (Time Warner Oct. 29 *Ex Parte* Letter) ("[T]he Commission should take a broader approach by recognizing additional characteristics of IP-based voice services and extend the benefits of preemption to all VoIP providers. . . . [B]y its nature, VoIP is provided on a multistate basis, making different state regulatory requirements particularly debilitating."); NCTA Oct. 28 *Ex Parte* Letter, Attach. at 1 ("Cable VoIP offers consumers an integrated package of voice and enhanced features that are unavailable from traditional circuit-switched service. . . . A cable company may have no idea whether a customer is accessing these features from home or from a remote location. The integral nature of these features and functions renders cable VoIP service an interstate offering subject to exclusive FCC jurisdiction. . . . Not every cable VoIP service has the same mix of features and functionalities . . . , but all cable VoIP offers the types of enhancements that render it an interstate service. Similarly, while the network architecture of each cable VoIP system will not be identical, they share the same centralized network design that impart an interstate nature."); Letter from Daniel L. Brenner, Senior Vice President, Law & Regulatory Policy, NCTA, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 03-211, 04-36, Attach. at 1 (filed Oct. 27, 2004) ("Functions integral to every call, such as CALEA compliance, voicemail recording, storage, and retrieval, call record-keeping, 3-way calling and other functions are provided from these central facilities. These facilities are often located in a state different from the origin of the call.").

5. Policies and Goals of the 1996 Act Consistent With Preemption of Minnesota's Regulations

33. We find that Congress's directives in sections 230 and 706 of the 1996 Act are consistent with our decision to preempt Minnesota's order. As we have noted, Congress has included a number of provisions in the 1996 Act that counsel a single national policy for services like DigitalVoice.¹¹⁴

34. Congress's definition of the Internet in the Act recognizes its global nature.¹¹⁵ In addition to defining the Internet in section 230 of the Act, Congress used section 230 to articulate its national Internet policy. There, Congress stated that "[i]t is the policy of the United States - to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation."¹¹⁶ We have already determined in a prior order that section 230(b)(2) expresses Congress's clear preference for a national policy to accomplish this objective.¹¹⁷ In *Pulver*, we found this policy to provide support for preventing state attempts to promulgate regulations that would apply to Pulver's service.¹¹⁸ While we found Pulver's FWD service to

¹¹⁴ See *supra* para. 14; see also, e.g., BellSouth Comments at 3; SBC Comments at 2; VON Coalition Comments at 13; MCI/CompTel Reply at 11; VON Coalition Aug. 19 *Ex Parte* Letter, Attach at 12-13; Time Warner Oct. 29 *Ex Parte* Letter at 8-9; Letter from Carolyn W. Brandon, Vice President, Policy, CTIA, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 03-211, 04-36, at 2 (filed Nov. 2, 2004).

¹¹⁵ In section 230(f) of the Act, Congress describes the Internet as "an international network of federal and non-federal interoperable packet switched data networks." See 47 U.S.C. § 230(f)(1) (emphasis added). Similarly, in section 231, the Internet is defined in terms of computer facilities, transmission media, equipment and software "comprising the interconnected worldwide network of computer networks." 47 U.S.C. § 231(e)(3) (emphasis added). Courts have similarly described it. See, e.g., *Reno v. ACLU*, 521 U.S. 844, 849 (1997) ("The Internet is an international network of interconnected computers."); see also *Zeran v. America Online, Inc.*, 129 F.3d 327, 334 (4th Cir. 1997) (stating that section 230 represents Congress's approach to a problem of national and international dimension "whose international character is apparent"). DigitalVoice is a service that falls squarely within the phrase "Internet and other interactive computer services" as defined in sections 230(f)(1) & 230(f)(2), contrary to the claims of some commenters. See Minnesota Independent Coalition Comments at 5 (claiming 230(f) definitions pertain to content services which DigitalVoice does not meet). While we do not decide the classification of DigitalVoice today so as to specify what type of "interactive computer service" it is under section 230(f)(2), that determination is unnecessary for purposes of demonstrating its nexus to section 230. DigitalVoice is unquestionably an "Internet" service as defined in section 230(f)(1), a definition which is not limited to any particular content as we discuss in more detail below.

¹¹⁶ 47 U.S.C. § 230(b)(2).

¹¹⁷ See *Pulver*, 19 FCC Rcd at 3319, para. 18 n.66.

¹¹⁸ See *id.* We found Pulver's FWD service to be an information service - a determination which further supported a national federal regulatory regime for that service. Indeed, were we to reach a similar statutory "information service" classification determination for DigitalVoice in this Order, there would be no question that Congress intended it to remain free from state-imposed economic, public-utility type regulation, consistent with the Commission's long-standing policy of non-regulation for information services. See *id.* at 3317-22, paras. 17-22. In *Pulver*, we explained that through codifying the Commission's decades old distinction between "basic services" and "enhanced services" as "telecommunications services" and "information services," respectively, in the 1996 Act, and by specifically excluding information services from the ambit of Title II, Congress indicated, consistent with the Commission's long-standing policy of nonregulation, that information services not be regulated. See *id.* at 3318-19, para. 18; see also *Non-Accounting Safeguards Order*, 11 FCC Rcd at 21955-56, para. 102; *IP-Enabled Services Proceeding*, 19 FCC Rcd at 4879-81, 4890-91, paras. 25-27, 39. While Congress has indicated that information services are not subject to the type of regulation inherent in Title II, Congress has provided the Commission with

be an information service, the Internet policy Congress included in section 230 is indifferent to the statutory classification of services that may "promote its continued development."¹¹⁹ Rather, it speaks generally to the "Internet and other interactive computer services," a phrase that plainly embraces DigitalVoice service.¹²⁰ Thus, irrespective of the statutory classification of DigitalVoice, it is embraced by Congress's policy to "promote the continued development" and "preserve the vibrant and competitive free market" for these types of services.¹²¹

35. While the majority of those commenting on the applicability of section 230 in this proceeding share this view,¹²² others claim that section 230 relates only to content-based services and DigitalVoice is not the type of content-based service Congress intended to reach.¹²³ We are cognizant, as we must be, of context as we review the statute, but we look primarily to the words Congress chose to use.¹²⁴ While we acknowledge that the title of section 230 refers to "offensive material," the general policy statements regarding the Internet and interactive computer services contained in the section are not similarly confined to offensive material. In the case of section 230, Congress articulated a very broad policy regarding the "Internet and other interactive computer services" without limitation to content-based services. Through codifying its Internet policy in the Commission's organic statute, Congress charges the Commission with the ongoing responsibility to advance that policy consistent with our other statutory obligations. Accordingly, in interpreting section 230's phrase "unfettered by Federal or State regulation," we cannot permit more than 50 different jurisdictions to impose traditional common carrier economic regulations such as Minnesota's on DigitalVoice and still meet our responsibility to realize Congress's objective.

36. We are also guided by section 706 of the 1996 Act, which directs the Commission (and state commissions with jurisdiction over telecommunications services) to encourage the deployment of advanced telecommunications capability to all Americans by using measures that "promote competition

ancillary authority under Title I to impose such regulations as may be necessary to carry out its mandates under the Act. Although the Commission has clear authority to do so, it has only rarely sought to regulate information services using its Title I ancillary authority. See *Implementation of Section 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996; Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities*, WT Docket No. 96-198, Report and Order and Further Notice of Inquiry, 16 FCC Rcd 6417 (1999).

¹¹⁹ 47 U.S.C. § 230(b)(1).

¹²⁰ 47 U.S.C. § 230(b)(1), (2) (emphasis added). Indeed, the communications that occur when a subscriber uses the DigitalVoice service are Internet communications, no less than e-mail, instant messaging, or chat rooms. See, e.g., VON Coalition Aug. 19 *Ex Parte* Letter, Attach. at 2. Although DigitalVoice may be functionally similar in some respects to voice communications that are not dependent upon the Internet, this does not change the fact that DigitalVoice is an Internet-based communications service. See also *supra* note 115.

¹²¹ 47 U.S.C. § 230(b)(1), (2) (emphasis added).

¹²² See, e.g., MCI/CompTel Comments at 11; Motorola Comments at 12; SBC Comments at 2-4; VON Coalition Comments at 13; AT&T Reply at 2; Vonage Aug. 13 *Ex Parte* Letter, Attach. at 3; VON Coalition Aug. 19 *Ex Parte* Letter, Attach. at 13.

¹²³ See, e.g., California Commission Comments at 15-17; Minnesota Independent Coalition Comments at 4-6; MTA Comments at 6.

¹²⁴ See 47 U.S.C. § 230.

in the local telecommunications market” and removing “barriers to infrastructure investment.”¹²⁵ Internet-based services such as DigitalVoice are capable of being accessed only via broadband facilities, i.e., advanced telecommunications capabilities under the 1996 Act,¹²⁶ thus driving consumer demand for broadband connections, and consequently encouraging more broadband investment and deployment consistent with the goals of section 706.¹²⁷ Indeed, the Commission’s most recent *Fourth Section 706 Report* to Congress recognizes the nexus between VoIP services and accomplishing the goals of section 706.¹²⁸ Thus, precluding multiple disparate attempts to impose economic regulations on DigitalVoice that would thwart its development and potentially result in it exiting the market will advance the goals and objectives of section 706.

37. Allowing Minnesota’s order to stand would invite similar imposition of 50 or more additional sets of different economic regulations on DigitalVoice, which could severely inhibit the development of this and similar VoIP services.¹²⁹ We cannot, and will not, risk eliminating or hampering this innovative advanced service that facilitates additional consumer choice, spurs technological development and growth of broadband infrastructure, and promotes continued development and use of the Internet. To do so would ignore the Act’s express mandates and directives with which we must comply, in contravention of the pro-competitive deregulatory policies the Commission is striving to further.

B. Commerce Clause

38. We note that our decision today is fully consistent with the Commerce Clause of the United States Constitution. The Commerce Clause provides that “[t]he Congress shall have Power ... [t]o regulate Commerce ... among the several States.”¹³⁰ As explained by the Supreme Court, “[t]hough phrased as a grant of regulatory power to Congress, the Clause has long been understood to have a ‘negative’ aspect that denies the States the power unjustifiably to discriminate against or burden the

¹²⁵ 47 U.S.C. § 157 nt. Section 706 of the 1996 Act is located in the notes of section 7 of the Communication Act. To implement section 706’s mandate, the Commission has considered, among other things, whether its rules promote the delivery of innovative advanced services offerings. See *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978 (2003) (FNPRM), corrected by Errata, 18 FCC Rcd 19020 (2003), *aff’d in part, remanded in part, vacated in part, United States Telecom Ass’n v. FCC*, 359 F.3d 554 (D.C. Cir. 2004), cert. denied sub nom. *Nat’l Ass’n Regulatory Util. Comm’rs v. United States Telecom Ass’n*, 73 USLW 3234 (U.S. Oct. 12, 2004) (Nos. 04-12, 04-15, 04-18). We find that our actions in this ruling are also consistent with this provision of the Act.

¹²⁶ See 47 U.S.C. § 157 nt. (c)(1) (defining “advanced telecommunications capability”).

¹²⁷ See 8x8 Comments at 5; VON Coalition Aug. 19 *Ex Parte* Letter, Attach at 7-8.

¹²⁸ See *Fourth Section 706 Report* at 38 (“[S]ubscribership to broadband services will increase in the future as new applications that require broadband access, such as VoIP, are introduced into the marketplace, and consumers become more aware of such applications.”) (emphasis added); see also *id.* at 3 (Statement of Chairman Powell) (“Disruptive VoIP services are acting as a demand-driver for broadband connections, lighting the industry’s fuse, and exciting a moribund market.”); APT Comments at 2; Motorola Comments at 12.

¹²⁹ See *Pulver*, 19 FCC Rcd at 3319-20, para. 19; see also *American Libraries Ass’n v. Pataki*, 969 F. Supp. at 183 (“Haphazard and uncoordinated state regulation [of the Internet] can only frustrate the growth of cyberspace.”).

¹³⁰ U.S. Const. art. 1, § 8, cl. 3.

interstate flow of articles of commerce.”¹³¹ Under the Commerce Clause jurisprudence, a state law that “has the ‘practical effect’ of regulating commerce occurring wholly outside that [s]tate’s borders” is a violation of the Commerce Clause.¹³² In addition, state regulation violates the Commerce Clause if the burdens imposed on interstate commerce by state regulation would be “clearly excessive in relation to the putative local benefits.”¹³³ Finally, courts have held that “state regulation of those aspects of commerce that by their unique nature demand cohesive national treatment is offensive to the Commerce Clause.”¹³⁴

39. Minnesota’s regulation likely has “the ‘practical effect’ of regulating commerce occurring wholly outside that [s]tate’s borders.”¹³⁵ Because the location of Vonage’s users cannot practically be determined,¹³⁶ Vonage would likely be required to comply with Minnesota’s regulation for all use of DigitalVoice – including communications that do not originate or terminate in Minnesota, or even involve facilities or equipment in Minnesota – in order to ensure that it could fully comply with the regulations for services in Minnesota. And, as we have explained above, this would likely be the result even if Vonage elected to discontinue seeking subscribers in Minnesota, given that end users could use the service from any broadband connection in Minnesota.¹³⁷ While states can and should serve as laboratories for different regulatory approaches, we have here a very different situation because of the nature of the service – our federal system does not allow the strictest regulatory predilections of a single state to crowd out the policies of all others for a service that unavoidably reaches all of them. For these reasons, Minnesota’s regulation would likely have the “practical effect” of regulating beyond its borders and therefore would likely violate the Commerce Clause.¹³⁸

¹³¹ *Oregon Waste Sys. v. Dep’t of Envtl. Quality*, 511 U.S. 93, 98 (1994) (citations omitted); see also *PSINet, Inc. v. Chapman*, 362 F.3d 227, 239 (4th Cir. 2004) (quoting *General Motors Corp. v. Tracey*, 519 U.S. 278, 287 (1997)); *American Libraries Ass’n v. Pataki*, 969 F. Supp. at 173 (holding that the Internet is an instrument of “interstate commerce” under the Commerce Clause).

¹³² *Healy v. Beer Institute*, 491 U.S. 324, 332 (1989); see also *Cotto Waxo Co. v. Williams*, 46 F.3d 790, 793 (8th Cir. 1995) (“Under the Commerce Clause, a state regulation is *per se* invalid when it has an ‘extraterritorial reach,’ that is, when the statute has the practical effect of controlling conduct beyond the boundaries of the state. The Commerce Clause precludes application of a state statute to commerce that takes place wholly outside of the state’s borders.”) (emphasis added) (citation omitted).

¹³³ See *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970); see also *Cotto Waxo Co. v. Williams*, 46 F.3d at 793 (“[I]f the challenged statute regulates evenhandedly, then it burdens interstate commerce indirectly and is subject to a balancing test. Under the balancing test, a state statute violates the Commerce Clause only if the burdens it imposes on interstate commerce are ‘clearly excessive in relation to the putative local benefits.’”) (citation omitted).

¹³⁴ *American Libraries Ass’n v. Pataki*, 969 F. Supp. at 169 (citing *Wabash, St. Louis & Pac. Ry. Co. v. Illinois*, 118 U.S. 557 (1886)); see *id.* at 181 (“The courts have long recognized that certain types of commerce demand consistent treatment and are therefore susceptible to regulation only on a national level.”); *American Civil Liberties Union v. Johnson*, 194 F.3d 1149, 1162 (10th Cir. 1999).

¹³⁵ *Healy v. Beer Institute*, 491 U.S. at 332; see also *American Libraries Ass’n v. Pataki*, 969 F. Supp. at 173-74, 177; *American Booksellers Found. v. Dean*, 342 F.3d 96, 103 (2d Cir. 2003) (acknowledging that because of “the Internet’s boundary-less nature,” regulations of Internet communications may not be “wholly outside” a state’s borders, but nonetheless may impose extraterritorial regulation in violation of the Commerce Clause).

¹³⁶ See *supra* para. 5.

¹³⁷ See *supra* para. 30.

¹³⁸ See Vonage Petition at 29 (“Vonage has no way of assuring that it is in compliance with the [Minnesota Vonage Order] unless it blocks a substantial amount of interstate traffic as well.”); *id.* at 31 (“[S]ince any Vonage customer

40. In addition, we believe the burdens imposed on interstate commerce by the Minnesota Commission's regulation would likely be "clearly excessive in relation to the putative local benefits."¹³⁹ The Minnesota regulation would impose significant burdens on interstate commerce.¹⁴⁰ As discussed above, even if it were relevant and possible to track the geographic location of packets and isolate traffic for the purpose of ascertaining jurisdiction over a theoretical intrastate component of an otherwise integrated bit stream, such efforts would be impractical and costly.¹⁴¹ At the same time, we believe that the local benefits of state economic regulation would be limited. In a dynamic market such as the market for Internet-based services, we believe that imposing this substantial burden on Vonage would serve no useful purpose and would almost certainly be significant and negative for the development of new and innovative interstate Internet-based services.

41. Finally, DigitalVoice, like other Internet services, is likely the type of commerce that is of such a "unique nature" that it "demand[s] cohesive national treatment" under the Commerce Clause.¹⁴² Because DigitalVoice is not constrained by geographic boundaries and cannot be excluded from any particular state, inconsistent state economic regulation could cripple development of DigitalVoice and services like it. If Vonage's DigitalVoice service were subject to state regulation, it would have to satisfy the requirements of more than 50 jurisdictions with more than 50 different sets of regulatory obligations.¹⁴³ As discussed above, because of the unbounded characteristics of the Internet, Vonage would likely be required in practical effect to subject its service to all customers across the country to the regulations imposed by Minnesota. Moreover, state regulation of Internet-based services, such as DigitalVoice, would make them unique among Internet services as the only Internet service to be subject to such state obligations. Indeed, allowing the imposition of state regulation on Vonage would likely eliminate any benefit of using the Internet to provide the service. The Internet enables individuals and small providers

could, in theory, travel to Minnesota at any time and connect their MTA computer to a broadband Internet connection, Vonage could never prevent *all* intrastate Minnesota use of its service unless it blocked *all* interstate 'calls' as well.") (emphasis in original); *id.* at 25, 27; see also *American Libraries Ass'n v. Pataki*, 969 F. Supp. at 171 ("[N]o aspect of the Internet can feasibly be closed off to users from another state.").

¹³⁹ See *Pike v. Bruce Church, Inc.*, 397 U.S. at 142; see also *Cono Waxo Co. v. Williams*, 46 F.3d at 793. See generally Michael A. Bamberger, *The Clash Between the Commerce Clause and State Regulation of the Internet*, Internet Newsletter, Apr. 2002 (explaining that "[f]or the most part, courts have analyzed the constitutionality of state Internet regulation under the test employed by the *Pike* court") (emphasis added).

¹⁴⁰ Indeed, one federal court has already determined, in the specific context of Vonage, that state entry regulation of DigitalVoice would interfere with interstate commerce. See *New York Preliminary Injunction* at 2; see also *American Booksellers Found. v. Dean*, 342 F.3d at 104 ("We think it likely that the [I]nternet will soon be seen as falling within the class of subjects that are protected from State regulation because they 'imperatively demand [] a single uniform rule.'" (citing *Cooley v. Bd. of Wardens*, 53 U.S. 299 (1851))).

¹⁴¹ See *supra* para. 29; see also *American Libraries Ass'n v. Pataki*, 969 F. Supp. at 170 ("The Internet is wholly insensitive to geographic distances. . . . Internet protocols were designed to ignore rather than document geographic location . . .").

¹⁴² *American Libraries Ass'n v. Pataki*, 969 F. Supp. at 69 (citing *Wabash, St. Louis & Pac. Ry. Co. v. Illinois*, 118 U.S. 557); see also *American Civil Liberties Union v. Johnson*, 194 F.3d at 1162 ("As we observed, . . . certain types of commerce have been recognized as requiring national regulation. . . . The Internet is surely such a medium.").

¹⁴³ See also *American Libraries Ass'n v. Pataki*, 969 F. Supp. at 169 ("The menace of inconsistent state regulation invites analysis under the Commerce Clause of the Constitution, because that clause represented the framers' reaction to overreaching by the individual states that might jeopardize the growth of the nation - and in particular, the national infrastructure of communications and trade - as a whole.") (citing *Quill Corp. v. North Dakota*, 504 U.S. 298, 312 (1992)).

to reach a global market simply by attaching a server to the Internet; requiring Vonage to submit to more than 50 different regulatory regimes as soon as it did so would eliminate this fundamental advantage of Internet-based communication. Thus, services, such as DigitalVoice, are likely of a "unique nature" that "demand[s] cohesive national treatment," and therefore, inconsistent state regulations would likely violate the Commerce Clause.¹⁴⁴

C. Public Safety Issues

42. As discussed above, we preempt the *Minnesota Vonage Order* because it imposes entry and other requirements on Vonage that impermissibly interfere with this Commission's valid exercise of authority. As Vonage indicates in its Petition, Minnesota includes as one of its entry conditions the approval of a 911 service plan "comparable to the provision of 911 service by the [incumbent] local exchange carrier."¹⁴⁵ In the *Minnesota Vonage Order*, the Minnesota Commission specifically subjected Vonage to this requirement.¹⁴⁶ Because Minnesota inextricably links pre-approval of a 911 plan to becoming certificated to offer service in the state, the application of its 911 requirements operates as an entry regulation. Vonage explains that there is no practicable way for it to comply with this requirement: it cannot today identify with sufficient accuracy the geographic location of a caller, and it has not obtained access in all cases to incumbent LEC E911 trunks that carry calls to specialized operators at public safety answering points (PSAPs).¹⁴⁷ Under the Minnesota "telephone company" rules, therefore, this requirement bars Vonage from entry in Minnesota. To that extent, this requirement is preempted along with all other entry requirements contained in Minnesota's "telephone company" regulations as applied

¹⁴⁴Federal court decisions applying the Commerce Clause to state regulation of Internet services have come to similar conclusions. In *American Libraries Ass'n v. Pataki*, a leading case on this issue, a federal district court struck down a New York state statute making it a crime to disseminate indecent material to minors over the Internet. The court held that the New York law violated the Commerce Clause because it (1) overreached by seeking to regulate conduct occurring outside its borders; (2) imposed burdens on interstate commerce that exceeded any local benefit; and (3) subjected interstate use of the Internet to inconsistent regulations. See *American Libraries Ass'n v. Pataki*, 969 F. Supp. at 183-84. In several subsequent cases, federal courts of appeal expressly adopted these holdings. See *PSINet, Inc. v. Chapman*, 362 F.3d 227; *American Booksellers Found. v. Dean*, 342 F.3d 96; *American Civil Liberties Union v. Johnson*, 194 F.3d 1149; see also *American Libraries Ass'n v. Pataki*, 969 F. Supp. at 182 ("The Internet . . . requires a cohesive national scheme of regulation so that users are reasonably able to determine their obligations.").

We also note examples from other network-based industries where, although an intrastate component may exist, state authority must nonetheless yield to exclusive federal jurisdiction in the area of economic or other-state regulations affecting interstate commerce. For example, in the case of railroads, the Supreme Court struck down a state regulation regarding the length of trains, holding that "examination of all the relevant factors makes it plain that the state interest is outweighed by the interest of the nation in an adequate, economical and efficient railway transportation service, which must prevail." *Southern Pac. Co. v. Arizona*, 325 U.S. 761, 783-84 (1945). Similarly, in trucking cases, the Supreme Court has invalidated state laws regulating the length of trucks under the Commerce Clause when the regulation imposes a burden on interstate trucking that is not outweighed by the local interest. See *Raymond Motor Transportation, Inc. v. Rice*, 434 U.S. 429 (1978); *Kassel v. Consolidated Freightways Corp.*, 450 U.S. 662 (1981). In another transportation case, the Court struck down an Illinois law mandating a particular type of mudguards on trucks operating in the state, concluding that the regulation imposed significant burdens on interstate trucking with no countervailing benefits. See *Bibb v. Navajo Freight Lines, Inc.*, 359 U.S. 520 (1959).

¹⁴⁵See Vonage Petition at 25 (citing Minn. Rule § 7812.0550 subp. 1).

¹⁴⁶See *Minnesota Vonage Order* at 8.

¹⁴⁷See Vonage Petition at 8-9, 24-25.

to DigitalVoice.¹⁴⁸ Although we preempt Minnesota from imposing its 911 requirements on Vonage as a condition of entry, this does not mean that Vonage should cease the efforts it has undertaken to date and we understand is continuing to take both to develop a workable public safety solution for its DigitalVoice service and to offer its customers equivalent access to emergency services.

43. There is no question that innovative services like DigitalVoice are having a profound and beneficial impact on American consumers.¹⁴⁹ While we do not agree with unnecessary economic regulation of DigitalVoice designed for different services, we do believe that important social policy issues surrounding services like DigitalVoice should be considered and resolved.¹⁵⁰ Access to emergency services, a critically important public safety matter, is one of these important social policy issues. In this proceeding, Vonage has indicated that it is devoting substantial resources toward the development of standards and technology necessary to facilitate some type of 911 service, working cooperatively with Minnesota agencies and other state commissions, public safety officials and PSAPs, the National Emergency Number Association (NENA), and the Association of Public-Safety Communications Officials (APCO).¹⁵¹ Moreover, it has demonstrated that it is offering its version of 911 capability to all its customers, including those in Minnesota, and has provided us information indicating what actions its customers must take to activate this 911 capability.¹⁵² We are also aware that Vonage recently announced the successful completion of an E911 trial in Rhode Island, a state that has not, to our knowledge, attempted to regulate DigitalVoice. In collaboration with the State of Rhode Island, Vonage has developed a technical solution to deliver a caller's location and call back number to emergency service personnel for 911 calls placed in that state by DigitalVoice users.¹⁵³ We fully expect Vonage to continue its 911 development efforts and to continue to offer some type of public safety capability during the pendency of our *IP-Enabled Services Proceeding*.¹⁵⁴

¹⁴⁸ See *supra* paras. 20-22 (explaining preemption of entry requirements). Indeed, Vonage notes in its petition that "[I]f the Commission preempts Minnesota's certificate requirement . . . this issue [911 comparability to an incumbent LEC] will be moot." See Vonage Petition at 25. Similarly, to the extent the Minnesota Commission demands payment of 911 fees as a condition of entry, that requirement is preempted.

¹⁴⁹ See VON Coalition Aug. 19 *Ex Parte* Letter at 4.

¹⁵⁰ As explained above, these issues are currently being considered in pending proceedings before this Commission. See *supra* note 46. See also, e.g., Minnesota Commission Comments at 4; Surewest Comments at 12; Texas 911 Agencies Comments at 2-3 (urging the Commission to consider public safety issues related to VoIP services).

¹⁵¹ See NENA Reply at 1-2; Vonage Aug. 13 *Ex Parte* Letter at 1-2; Minnesota Statewide 911 Program Comments at 4.

¹⁵² In offering its "911" capability to its customers, Vonage has provided the Commission information regarding how and what it tells its customers about its limited 911 capabilities such that its customers are fully aware of those limitations when they subscribe to the service and clearly understand that it is not a comparable emergency service to the 911 capability they obtain with local exchange service. We fully expect Vonage to continue providing customers information such as this about its "911" capability. See Vonage Oct. 1 *Ex Parte* Letter at 3-4 & Exhibit 10.

¹⁵³ See Letter from William B. Wilhelm, Jr. and Ronald W. Del Sesto, Jr., Counsel for Vonage, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 03-211, 04-36, at 1 (filed Oct. 14, 2004).

¹⁵⁴ We look beyond Vonage's efforts of today, however, toward work that remains to be done in the area of 911 and the opportunities that this new technology presents for public safety. To that end, we are aware of the six principles NENA has advanced: (1) establish a national E911 VoIP policy; (2) encourage vendor and technology neutral solutions and innovation; (3) retain consumer service quality expectations; (4) support dynamic, flexible, open architecture system design process for 911; (5) develop policies for 911 compatible with the commercial environment for IP communications; and (6) promote a fully funded 911 system. See National Emergency Number

44. We emphasize that while we have decided the jurisdictional question for Vonage's DigitalVoice here, we have yet to determine final rules for the variety of issues discussed in the *IP-Enabled Services Proceeding*. While we intend to address the 911 issue as soon as possible, perhaps even separately, we anticipate addressing other critical issues such as universal service, intercarrier compensation, section 251 rights and obligations,¹⁵⁵ numbering, disability access, and consumer protection in that proceeding.¹⁵⁶

45. Furthermore, we acknowledge that a U.S. District Court in New York has recently ordered Vonage "to continue to provide the same emergency 911 calling services currently available to Vonage customers" within that state¹⁵⁷ and to "make reasonable good faith efforts to participate on a voluntary basis" in workshops pertaining to the development of VoIP 911 calling capabilities.¹⁵⁸ Because DigitalVoice is a national service for which Vonage cannot single out New York "intrastate" calls (any more than it can Minnesota "intrastate" calls), as a practical matter, the District Court's order reaches DigitalVoice wherever it is used.¹⁵⁹ Thus, we need not be concerned that as a result of our action today, Vonage will cease its efforts to continue developing and offering a public safety capability in Minnesota. The District Court order ensures that these efforts must continue while we work cooperatively with our state colleagues and industry to determine how best to address 911/E911-type capabilities for IP-enabled services in a comprehensive manner in the context of our *IP-Enabled Services Proceeding*.¹⁶⁰

IV. CONCLUSION

46. For the reasons set forth above, we preempt the *Minnesota Vonage Order*. As a result, the Minnesota Commission may not require Vonage to comply with its certification, tariffing or other related requirements as conditions to offering DigitalVoice in that state. Moreover, for services having the same capabilities as DigitalVoice, the regulations of other states must likewise yield to important federal objectives. To the extent other entities, such as cable companies, provide VoIP services, we would preempt state regulation to an extent comparable to what we have done in this Order.

Association, *E9-1-1, Internet Protocol & Emergency Communications*, Press Release (Mar. 22, 2004). We applaud NENA's vision in establishing these principles to support a process to "promote a fully functional 9-1-1 system that responds any time, anywhere from every device." See *id.* We endorse these principles because they provide a sound blueprint for the development of a national 911 solution for VoIP services and we encourage all VoIP providers and industry participants to work toward their realization.

¹⁵⁵We note that nothing in this Order addressing the Commission's jurisdictional determination of or regulatory treatment of particular retail IP-enabled services impacts competitive LEC access to the underlying facilities on which such retail services ride. See Letter from Jason D. Oxman, General Counsel, Association for Local Telecommunications Services, to Marlene Dortch, Secretary, FCC, WC Docket Nos. 04-29, 04-36 (filed Nov. 2, 2004).

¹⁵⁶See *supra* note 46.

¹⁵⁷See *New York Preliminary Injunction* at 3. We note that Vonage's "emergency 911 calling service" is not a service that is provided pursuant to the New York Commission's rules or any other state commission's rules. This is a service Vonage has voluntarily undertaken in response to consumer demand.

¹⁵⁸See *New York Preliminary Injunction* at 4.

¹⁵⁹We recognize that Vonage's 911 capability relies on the cooperation of its customers in accurately registering and re-registering their user location when they move about with the service.

¹⁶⁰See *IP-Enabled Services Proceeding*, 19 FCC Rcd at 4897-901, paras. 51-57.

V. ORDERING CLAUSES

47. Accordingly, IT IS ORDERED, pursuant to sections 1, 2, 3, 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-53, 154(i), 303(r), and section 1.2 of the Commission's rules, 47 C.F.R. § 1.2, that Vonage's Petition for Declaratory Ruling IS GRANTED in part and the *Minnesota Vonage Order* IS PREEMPTED.

48. IT IS HEREBY FURTHER ORDERED, pursuant to section 1.103(a) of the Commission's rules, 47 C.F.R. § 1.103(a), that this Memorandum Opinion and Order SHALL BE EFFECTIVE upon release.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

22433

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)	
)	
Telephone Number Requirements for IP-Enabled Services Providers	)	WC Docket No. 07-243
)	
Local Number Portability Porting Interval and Validation Requirements	)	WC Docket No. 07-244
)	
IP-Enabled Services	)	WC Docket No. 04-36
)	
Telephone Number Portability	)	CC Docket No. 95-116
)	
CTIA Petitions for Declaratory Ruling on Wireline-Wireless Porting Issues)	
)	
Final Regulatory Flexibility Analysis)	
)	
Numbering Resource Optimization	)	CC Docket No. 99-200

**REPORT AND ORDER, DECLARATORY RULING,
ORDER ON REMAND, AND NOTICE OF PROPOSED RULEMAKING**

Adopted: October 31, 2007

Released: November 8, 2007

Comment Date: (30 days after Federal Register publication)

Reply Comment Date: (60 days after Federal Register publication)

By the Commission: Chairman Martin and Commissioners Copps, Tate and McDowell issuing separate statements; Commissioner Adelstein approving in part, concurring in part and issuing a statement.

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I. INTRODUCTION

1. In this Order, we take a series of steps designed to ensure that consumers benefit from local number portability (LNP). First, we extend LNP obligations to interconnected voice over Internet Protocol (VoIP) providers to ensure that customers of such VoIP providers may port their North American Numbering Plan (NANP) telephone numbers when changing telephone providers.¹ Consumers will now be able to take advantage of new telephone services without losing their telephone numbers, which should in turn facilitate greater competition among telephony providers by allowing customers to respond to price and service changes. Additionally, we extend to interconnected VoIP providers the obligation to contribute to shared numbering administration costs. We believe that these steps we take to ensure regulatory parity among providers of similar services will minimize marketplace distortions arising from regulatory advantage.

2. Second, we address the petition for declaratory ruling filed jointly by T-Mobile USA, Inc. and Sprint Nextel Corporation (collectively, Petitioners) seeking clarification regarding certain LNP obligations.² Specifically, we clarify that no entities obligated to provide LNP may obstruct or delay the porting process by demanding from the porting-in entity information in excess of the minimum information needed to validate the customer's request. In particular, we conclude that LNP validation should be based on no more than four fields for simple ports, and that those fields should be: (1) 10-digit telephone number; (2) customer account number; (3) 5-digit zip code; and (4) pass code (if applicable).

¹ 47 U.S.C. § 251(b)(2); 47 C.F.R. §§ 52.20 *et seq.* The NANP is the basic numbering scheme that permits interoperable telecommunications service within the United States, Canada, Bermuda, and most of the Caribbean. See *Administration of the North American Numbering Plan*, CC Docket No. 92-237, Report and Order, 11 FCC Red 2588, 2590, para. 3 (1995) (*NANP Order*).

² Petition for Declaratory Rulemaking filed by T-Mobile USA, Inc. and Sprint Nextel Corporation, CC Docket No. 95-116 (filed Dec. 20, 2006) (T-Mobile/Sprint Nextel Petition).

3. Third, we respond to the United States Court of Appeals for the District of Columbia Circuit (D.C. Circuit) stay of the Commission's 2003 *Intermodal Number Portability Order*³ as applied to carriers that qualify as small entities under the Regulatory Flexibility Act (RFA) by preparing a Final Regulatory Flexibility Analysis (FRFA) on the impact of the wireline-to-wireless intermodal LNP rules on wireline carriers qualifying as small entities under the RFA.⁴ After considering information received from commenters in response to an Initial Regulatory Flexibility Analysis (IRFA), we find, consistent with the Commission's 2003 *Intermodal Number Portability Order*, that wireline carriers qualifying as small entities under the RFA should be required to port to wireless carriers where the requesting wireless carrier's "coverage area" overlaps the geographic location in which the customer's wireline number is provisioned, provided that the porting-in carrier maintains the number's original rate center designation following the port. We find that this approach best balances the impact of the costs that may be associated with the wireline-to-wireless intermodal porting rules for small carriers and the public interest benefits of those requirements.

4. Fourth, we seek comment in a Notice of Proposed Rulemaking (Notice) on whether the Commission should address other LNP and numbering obligations. Specifically, we seek comment on whether the Commission should extend other LNP requirements and numbering-related rules, including compliance with N11 code assignments, to interconnected VoIP providers. We also seek comment on whether the Commission should adopt rules specifying the length of the porting intervals or other details of the porting process. We also tentatively conclude that the Commission should adopt rules reducing the porting interval for wireline-to-wireline and intermodal simple port requests, specifically, to a 48-hour porting interval.

II. BACKGROUND

A. Local Number Portability and Numbering Administration

5. *Statutory Authority.* Section 251(e) of the Communications Act of 1934, as amended (Act), gives the Commission plenary jurisdiction over the NANP and related telephone numbering issues in the United States.⁵ Further, section 251(e)(2) states that "[t]he cost of establishing . . . number portability shall be borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission."⁶ Section 251(b)(2) of the Act requires local exchange carriers (LECs) to "provide, to the extent technically feasible, number portability in accordance with requirements prescribed by the Commission."⁷ The Act and the Commission's rules define number portability as "the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another."⁸ As discussed below, the Commission adopted LNP rules and cost recovery mechanisms to implement these congressional mandates.

³ See *Telephone Number Portability; CTIA Petitions for Declaratory Ruling on Wireline-Wireless Porting Issues*, CC Docket No. 96-116, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, 18 FCC Rcd 23697 (2003) (*Intermodal Number Portability Order* or *Intermodal Number Portability FNPRM*).

⁴ *United States Telecom Ass'n v. FCC*, 400 F.3d 29, 43 (D.C. Cir. 2005); see 5 U.S.C. §§ 601 *et seq.* (Regulatory Flexibility Act).

⁵ 47 U.S.C. § 251(e).

⁶ 47 U.S.C. § 251(e)(2).

⁷ 47 U.S.C. § 251(b)(2).

⁸ 47 U.S.C. § 153(30); 47 C.F.R. § 52.21(l). The Commission has interpreted this language to mean that consumers must be able to change carriers while keeping their telephone number as easily as they may change carriers without taking their telephone number with them. See *Telephone Number Portability; Carrier Requests for Clarification of* (continued....)

6. *LNP Orders.* In 1996, the Commission required all carriers, including wireline carriers and covered commercial mobile radio service (CMRS) providers, operating in the 100 largest Metropolitan Statistical Areas (MSAs) to provide service provider portability according to a phased deployment schedule.⁹ The Commission found that LNP provided end users options when choosing among telecommunications service providers without having to change their telephone numbers.¹⁰ In that order, the Commission established obligations for porting between wireline carriers, porting between wireless providers, and intermodal porting (*i.e.*, the porting of numbers from wireline carriers to wireless providers, and *vice versa*), and directed the North American Numbering Council (NANC) to make recommendations regarding specific LNP implementation issues.¹¹

7. On August 14, 1997, the Commission adopted the NANC's recommendations for the implementation of wireline-to-wireline LNP.¹² Among other things, the NANC guidelines limited wireline-to-wireline number porting to carriers with facilities or numbering resources in the same rate center.¹³ On October 7, 2003, the Commission released the *Wireless Number Portability Order*, offering

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Wireless-Wireless Porting Issues, CC Docket No. 95-116, Memorandum Opinion and Order, 18 FCC Rcd 20971, 20975, para. 11 (2003) (*Wireless Number Portability Order*), *aff'd*, *Cent. Tex. Tel. Coop. v. FCC*, 402 F.3d 205 (D.C. Cir. 2005).

⁹ See *Telephone Number Portability*, CC Docket No. 95-116, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 8352, 8393, para. 77 (1996) (*First Number Portability Order*); see also *Telephone Number Portability*, CC Docket No. 95-116, First Memorandum Opinion and Order on Reconsideration, 12 FCC Rcd 7236, 7272, para. 59 (1997) (*First Number Portability Order on Reconsideration*) (concluding that LECs and covered CMRS providers were required only to deploy LNP to switches for which another carrier has made a specific request for the provision of LNP). "Service provider portability" is synonymous with the definition in section 3(30) of the Act for number portability, that is "the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another." *First Number Portability Order*, 11 FCC Rcd at 8366-67, para. 27 (citing 47 U.S.C. § 153(30)). The Commission also defined two other forms of portability in the *First Number Portability Order*: (1) service portability; and (2) location portability. See *id.* at 8443-44, paras. 173-74. "Service portability" is the switching of telephone numbers because a particular service may be only available through a particular switch. See *id.* at 8443, para. 173. "Location portability" is "the ability of users of telecommunications services to retain existing telecommunications numbers . . . when moving from one physical location to another." *Id.* at 8443, para. 174. The Commission determined that it was not in the public interest at that time to require LECs to offer service or location portability. See *id.* at 8447-49, paras. 181-87.

¹⁰ See *First Number Portability Order*, 11 FCC Rcd at 8368, para. 30.

¹¹ See *id.* at 8401, 8431, 8433, 8440, paras. 93, 152, 155, 166. Although the Act excludes CMRS providers from the statutory definition of "local exchange carrier," the Commission extended the LNP obligations to CMRS providers under its independent authority in sections 1, 2, 4(i) and 332 of the Act. See *id.* at 8431, para. 153. The Commission found that sections 2 and 332(c)(1) of the Act allow the Commission to regulate CMRS providers as common carriers. Further, section 1 of the Act requires the Commission to "make available . . . to all people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service," and thus the Commission has an interest in a uniform number portability framework. See *id.* Additionally, section 4(i) of the Act grants the Commission authority to "perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with [the Act] as may be necessary in the execution of its functions." *Id.* Thus, the Commission concluded that requiring covered CMRS providers to adhere to LNP obligations was in the public interest because it promoted competition between providers of local telephone services, and thereby promoted competition between providers of interstate access services. See *id.* at 8432, 8434-37, paras. 153, 157-60.

¹² See *Telephone Number Portability*, CC Docket No. 95-116, RM-8535, Second Report and Order, 12 FCC Rcd 12281 (1997) (*Second Number Portability Order*).

¹³ See *Second Number Portability Order*, 12 FCC Rcd at 12283, para. 3; North American Numbering Council Local Number Portability Selection Working Group Final Report and Recommendation to the FCC, App. D at 6 (rel. Apr. 25, 1997). A "rate center" is a geographic area that is used to determine whether a call is local or toll. See FCC

(continued....)

further guidance on wireless LNP. In particular, the Commission prohibited provisions in consumer contracts that purport to limit porting between carriers.¹⁴ It also found that in terms of the validation process for wireless-to-wireless number porting, absent an agreement setting additional terms, carriers only had to share basic contract and technical information with each other sufficient to perform the port.¹⁵ The Commission also declined to limit wireless-to-wireless porting based on wireline rate centers because it would limit a consumer's ability to port numbers among wireless carriers.¹⁶

8. In its 2003 *Intermodal Number Portability Order*, the Commission provided guidance on porting between wireline and wireless carriers.¹⁷ Specifically, the Commission decided that wireline carriers must port numbers to wireless carriers where the requesting wireless carrier's coverage area overlaps with the geographic location of the customer's wireline rate center so long as the porting-in wireless carrier maintained the number's original rate center designation following the port.¹⁸ Additionally, the Commission reaffirmed that wireless carriers must port numbers to wireline carriers within a number's originating rate center.¹⁹ Further, the Commission clarified that wireline carriers may not require wireless carriers to enter into interconnection agreements as a precondition to porting because the porting process "can be discharged with a minimal exchange of information."²⁰ On appeal, the D.C.

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Clears Way for Local Number Portability Between Wireline and Wireless Carriers, CC Docket No. 95-116, News Release (rel. Nov. 10, 2003).

¹⁴ See *Wireless Number Portability Order*, 18 FCC Rcd at 20976, para. 15.

¹⁵ See *id.* at 20978, para. 24.

¹⁶ See *id.* at 20978, para. 22. The Commission declined to address rating and routing issues raised by rural wireless carriers, finding that they were outside the scope of the order because the requirements of the Commission's wireless LNP rules on wireless carriers do not vary depending on how calls to the number will be rated and routed after the port occurs. See *id.* at 20978, para. 23.

¹⁷ See *Intermodal Number Portability Order*, 18 FCC Rcd at 23706, para. 22, *remanded*, *U.S. Telecom Ass'n v. FCC*, 400 F.3d 29 (D.C. Cir. 2005) (finding that the *Intermodal Number Portability Order* was a legislative rule, remanding the order to prepare a FRFA, and staying future enforcement of the order against small entities until the Commission published a FRFA). On April 22, 2005, the Commission issued a Public Notice seeking comment on an IRFA of the *Intermodal Number Portability Order*. See *Federal Communications Commission Seeks Comment on Initial Regulatory Flexibility Analysis in Telephone Number Portability Proceeding*, CC Docket No. 95-116, Public Notice, 20 FCC Rcd 8616 (2005) (*IRFA Public Notice*); 70 Fed. Reg. 41655 (July 20, 2005). In the *IRFA Public Notice*, the Commission described and sought comment on the potential compliance burdens associated with the wireline-to-wireless intermodal LNP rules and discussed the significant alternatives it had considered before adopting the *Intermodal Number Portability Order*. See *IRFA Public Notice*, 20 FCC Rcd 8616.

¹⁸ See *Intermodal Number Portability Order*, 18 FCC Rcd at 23706, para. 22. A wireless carrier's coverage area is the "area in which wireless service can be received from the wireless carrier." *Id.* at 23698, para. 1. The Commission rejected the argument that it imposed a location portability duty on carriers because the number must retain its original rate center designation, *i.e.*, the number remains at the same location despite the fact that a wireless subscriber may travel outside a rate center and make calls without incurring toll charges. See *id.* at 23708-09, para. 28; *Cent. Tex. Tel. Coop. v. FCC*, 402 F.3d at 207. The Commission also found that nothing in its rules requires a wireless carrier to have a physical point of interconnection or numbering resources in the rate center where the number is assigned. See *Intermodal Number Portability Order*, 18 FCC Rcd at 23698, para. 1.

¹⁹ See *Intermodal Number Portability Order*, 18 FCC Rcd at 23706, para. 22.

²⁰ *Id.* at 23711-12, paras. 34-37. The Commission also sought comment on how to facilitate wireless-to-wireline porting where there is a mismatch between the rate center associated with the wireless number and the rate center in which the wireline carrier seeks to serve the customer. *Id.* at 23714, para. 42.

Circuit remanded the *Intermodal Number Portability Order* and stayed its enforcement against small entities until the Commission published a FRFA.²¹

9. In a parallel set of orders, the Commission adopted rules governing LNP cost recovery under section 251(e)(2). Such costs include the industry-wide costs that make it possible to route calls to customers who have switched carriers as well as the costs individual providers incur to make it possible to transfer a telephone number to another carrier. In the *Cost Recovery Order*, the Commission determined that all telecommunications carriers should bear certain costs of creating and supporting LNP on a competitively neutral basis under the mandate of section 251(e)(2).²² The Commission found that because all carriers – including interexchange carriers and CMRS providers – incur LNP costs, it was reasonable to interpret section 251(e)(2) as requiring that LNP costs should be borne on a competitively neutral basis by all carriers, rather than just a subset of the industry.²³

10. To allocate shared costs, the Commission directed the LNP regional database administrator (LNPA) to distribute the shared costs of each LNP regional database among all telecommunications carriers in proportion to each carrier's intrastate, interstate, and international end-user telecommunications revenues attributable to that region.²⁴ In the *Cost Recovery Reconsideration Order*, the Commission recognized that national and multi-regional carriers may face some inherent difficulties in determining end-user revenue by regional database area and thus adopted a proxy mechanism by which such carriers may allocate their revenues among the seven LNPA regions.²⁵ For carrier-specific costs, the Commission regulated the specific manner in which incumbent LECs could recover certain LNP costs and permitted other telecommunications carriers to recover such costs in any lawful manner.²⁶

²¹ See *U.S. Telecom Ass'n v. FCC*, 400 F.3d at 43.

²² See *Telephone Number Portability Order*, CC Docket No. 95-116, Third Report and Order, 13 FCC Rcd 11701, 11706, para. 8 (1998) (*Cost Recovery Order*), *aff'd*, *Telephone Number Portability*, CC Docket No. 95-116, Memorandum Opinion and Order on Reconsideration and Order on Application for Review, 17 FCC Rcd 2578 (2002) (*Cost Recovery Reconsideration Order*). The Commission divided the costs produced by number portability into three categories: (1) shared costs; (2) carrier-specific costs directly related to providing number portability; and (3) carrier-specific costs not directly related to providing number portability. See *Cost Recovery Order*, 13 FCC Rcd at 11738-41, paras. 68-77. Carriers are permitted to recover costs for shared costs and carrier-specific costs directly related to providing number portability through federal LNP charges, but are not so permitted to recover carrier-specific costs not directly related to providing number portability. See *Cost Recovery Order*, 13 FCC Rcd at 11740, para. 74; see also *Telephone Number Portability Cost Classification Proceeding*, CC Docket No. 95-116, RM 8535, 13 FCC Rcd 24495, 24499, para. 6 (WCB 1998) (stating that the *Cost Recovery Order* expressly specified that some of the costs LECs incur as a consequence of number portability are not "eligible" for recovery through the federal LNP charges established in that order, as the ordinary cost recovery mechanisms already generally provide LECs with the opportunity to recover costs incurred in modernizing their networks to keep pace with technological and market developments).

²³ See *Cost Recovery Order*, 13 FCC Rcd at 11723-24, para. 36.

²⁴ 47 C.F.R. § 52.32. The Commission applied its two-part competitive neutrality test to determine that shared costs should be spread among the carriers based on each carrier's intrastate, interstate, and international end-user telecommunications revenues for the different regional database regions. See *Cost Recovery Order*, 13 FCC Rcd at 11745-46, 11754-57, 11759, 11761, 11763, paras. 87-92, 105-10, 113-14, 116-17, 119. The Commission adopted its competitive neutrality test in the *First Number Portability Order*, determining that the way the carriers bear the costs of number portability: (1) must not give one service provider an appreciable, incremental cost advantage over another service provider when competing for a specific subscriber; and (2) must not disparately affect the ability of competing service providers to earn a normal return. See *First Number Portability Order*, 11 FCC Rcd at 8419-21, paras. 131-35.

²⁵ See *Cost Recovery Reconsideration Order*, 17 FCC Rcd at 2597-98, paras. 37-38.

²⁶ See *Cost Recovery Order*, 13 FCC Rcd at 11725-26, 11773-80, paras. 39, 135-49; 47 C.F.R. § 52.33.

11. *Numbering Administration Orders.* Similar to the LNP cost recovery mechanisms established under section 251(e)(2), the Commission also established a cost recovery mechanism for the NANP administration.²⁷ The Commission determined that the NANP administration costs should be borne by those that benefit from numbering resources.²⁸ This cost recovery system is also based on end-user telecommunications revenues because the Commission determined that doing so satisfied section 251's directive that cost recovery should be competitively neutral.²⁹ For thousands block number pooling costs, a subset of numbering administration costs, the Commission divided costs into three different types, similar to the LNP cost recovery mechanism, finding that shared costs should be allocated to all telecommunications carriers in proportion to each carrier's interstate, intrastate, and international telecommunication end-user revenues, and that related carrier-specific costs of carriers not subject to rate regulation could be recovered in any lawful manner.³⁰

B. Interconnected VoIP Services

12. Interconnected VoIP service enables users, over their broadband connections, to receive calls that originate on the public switched telephone network (PSTN) and to terminate calls to the PSTN.³¹ In order to have this capability, an interconnected VoIP service must offer consumers NANP telephone numbers.³² Interconnected VoIP providers generally obtain NANP telephone numbers for their customers by partnering with a local exchange carrier (LEC) through a commercial arrangement rather than obtaining them directly from the numbering administrator, which provides numbers only to entities that are licensed or certificated as carriers under the Act.³³ Consumers and telecommunications carriers

²⁷ See *Administration of the North American Numbering Plan*, CC Docket No. 92-237, Report and Order, 11 FCC Rcd 2588, 2627-28, para. 94 (1995) (*NANP Order*); see also *Numbering Resource Optimization*, CC Docket No. 99-200, Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 7574, 7662, para. 192 (2000) (finding that thousands-block number pooling is a numbering administration function that is subject to the Commission's authority under section 251(e)(2)) (*First Numbering Order*).

²⁸ See *NANP Order*, 11 FCC Rcd at 2628, para. 95.

²⁹ See 1998 Biennial Regulatory Review – Streamlined Contributor Reporting Requirements Associated with Administration of Telecommunications Relay Services, *North American Numbering Plan, Local Number Portability, and Universal Service Support Mechanisms*, CC Docket No. 98-171, Report and Order, 14 FCC Rcd 16602, 16630-31, paras. 59, 61 (1999).

³⁰ See *First Numbering Order*, 15 FCC Rcd at 7665-70, paras. 201-11; *Numbering Resource Optimization; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Telephone Number Portability*, CC Docket Nos. 99-200, 96-98, 95-116, Third Report and Order and Second Order on Reconsideration, CC Docket Nos. 96-98 and 99-200, 17 FCC Rcd 252, 264-65, 268, paras. 24-25, 32 (2001) (*Third Numbering Order*). The Commission found that carrier-specific costs not directly related to thousands-block pooling implementation, the third category of costs, are not subject to the competitive neutrality requirements in section 251(e)(2). As such, carriers are not allowed to recover carrier-specific costs not directly related to thousands-block number pooling implementation and administration through the cost recovery mechanism established by the Commission. See *First Numbering Order*, 15 FCC Rcd at 7670, para. 211.

³¹ See 47 C.F.R. § 9.3 (defining "interconnected VoIP service" as "a service that: (1) enables real-time, two-way voice communications; (2) requires a broadband connection from the user's location; (3) requires Internet protocol-compatible customer premises equipment (CPE); and (4) permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network"); see also *IP-Enabled Services; E911 Requirements for IP-Enabled Service Providers*, WC Docket Nos. 04-36, 05-196, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245, 10257-58, para. 24 (2005) (*VoIP 911 Order*), *aff'd*, *Nuvio Corp. v. FCC*, 473 F.3d 302 (D.C. Cir. 2006); 47 C.F.R. § 54.5 (defining "interconnected VoIP provider").

³² See, e.g., Comcast Comments, WC Docket No. 04-36, at 7; SBC Comments, WC Docket No. 04-36, at 84.

³³ See 47 C.F.R. § 52.15(g)(2)(i); see also *Numbering Resource Optimization*, CC Docket No. 99-200, Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 7574, 7615, para. 97 (2000) (*NRO First Report and*
(continued....)

have complained to the Commission on numerous occasions regarding an inability to port in or port out a NANP telephone number to or from an interconnected VoIP provider.³⁴

13. On March 10, 2004, the Commission initiated a proceeding to examine issues relating to Internet Protocol (IP)-enabled services – services and applications making use of IP, including, but not limited to, VoIP services.³⁵ In the *IP-Enabled Services Notice*, the Commission sought comment on, among other things, whether to extend the obligation to provide LNP to any class of IP-enabled service provider.³⁶ The Commission also sought comment on whether the Commission should take any action to facilitate the growth of IP-enabled services, while at the same time maximizing the use and life of the NANP numbering resources.³⁷

14. On four occasions, the Commission has extended certain Title II obligations to interconnected VoIP providers.³⁸ On May 19, 2005, the Commission asserted its ancillary jurisdiction under Title I of the Act and its authority under section 251(e) to require interconnected VoIP providers to

(...continued from previous page)

Order) (requiring carriers seeking direct access to numbering resources to provide evidence that they are authorized to provide service, such as by submitting a state certification as a carrier).

³⁴ See, e.g., Marvin Nicholson Comments, WC Docket No. 04-36, at 1; Minnesota Commission Comments, WC Docket No. 04-36, at 3; Brief Comment of Syed Faisal Afzaal, WC Docket No. 04-36 (filed Mar. 27, 2006); Brief Comment of Rich Robins, WC Docket No. 04-36 (filed Mar. 14, 2006); Brief Comment of Bryan Miller, WC Docket No. 04-36 (filed Nov. 11, 2005); Letter from John T. Nakahata, Counsel for Level 3 Communications, LLC, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 95-116, 96-98, WC Docket No. 04-36, at 1 (filed Feb. 23, 2007) (Level 3 Feb. 23, 2007 *Ex Parte* Letter); *Time Warner Cable Request for Declaratory Ruling that Competitive Local Exchange Carriers May Obtain Interconnection under Section 251 of the Communications Act of 1934, as amended, to Provide Wholesale Telecommunications Services to VoIP Providers*, WC Docket No. 06-55, Memorandum Opinion and Order, 22 FCC Rcd 3513, 3521-22, para. 16 (WCB 2007) (*Time Warner Cable Order*) (finding that it is consistent with Commission policy that when a LEC wins back a customer from a VoIP provider, the number should be ported to the LEC that wins the customer). But see Vonage Reply, WC Docket No. 04-36, at 24 (disputing the Minnesota Commission's contention that Vonage will not port numbers out).

³⁵ See *IP-Enabled Services*, WC Docket No. 04-36, Notice of Proposed Rulemaking, 19 FCC Rcd 4863 (2004) (*IP-Enabled Services Notice*). Comments were filed by May 28, 2004 and reply comments were filed by July 14, 2004. See *Pleading Cycle Established for Comments in IP-Enabled Services Rulemaking Proceeding*, WC Docket No. 04-36, Public Notice, 19 FCC Rcd 5589 (2004); *Wireline Competition Bureau Extends Reply Comment Deadlines for IP-Enabled Services Rulemaking and SBC's "IP Platform Services" Forbearance Petition*, WC Docket Nos. 04-29, 04-36, Public Notice, 19 FCC Rcd 10474 (2004); see also Appendix A (List of Commenters).

³⁶ *IP-Enabled Services Notice*, 19 FCC Rcd at 4911-12, para. 73.

³⁷ See *id.* at 4914, para. 76. As the Commission observed in seeking comment on the numbering implications of IP-enabled services, those issues had been raised and discussed before the NANC through industry meetings and white papers. See *id.* at 4914, para. 76 n.226 (citing, among other things, BellSouth *et al.*, *VoIP Numbering Issues*, http://www.nanc-chair.org/docs/Nov/Nov02_VoIP_White_Paper.doc (visited Feb. 7, 2004) (discussing numbering issues related to VoIP, including LNP)).

³⁸ Additionally, on August 5, 2005, the Commission determined that providers of interconnected VoIP services are subject to the Communications Assistance for Law Enforcement Act (CALEA). See *Communications Assistance for Law Enforcement Act and Broadband Access and Services*, ET Docket No. 04-295, RM-10865, First Report and Order and Further Notice of Proposed Rulemaking, 20 FCC Rcd 14989, 14991-92, para. 8 (2005) (*CALEA First Report and Order*), *aff'd*, *Am. Council on Educ. v. FCC*, 451 F.3d 226 (D.C. Cir. 2006). Under its Title I ancillary jurisdiction, the Commission has also required interconnected VoIP providers to pay Fiscal Year 2007 regulatory fees based on revenues reported on the FCC Form 499-A at the same rate as interstate telecommunications service providers. See *Assessment and Collection of Regulatory Fees for Fiscal Year 2007*, MD Docket No. 07-81, Report and Order and Further Notice of Proposed Rulemaking, FCC 07-140, paras. 11-13 (rel. Aug. 6, 2007).

supply 911 emergency calling capabilities to their customers.³⁹ On June 21, 2006, the Commission in the *2006 Interim Contribution Methodology Order*, among other things, established universal service contribution obligations for interconnected VoIP providers based on its permissive authority under section 254(d) and its ancillary jurisdiction under Title I of the Act.⁴⁰ On March 13, 2007, the Commission extended section 222's customer proprietary network information obligations to interconnected VoIP providers using its Title I authority.⁴¹ Most recently, on June 15, 2007, the Commission, using its Title I authority, extended the disability access requirements under section 255 to providers of interconnected VoIP services and to manufacturers of specially designed equipment used to provide these services.⁴² The Commission also extended the Telecommunications Relay Services (TRS) requirements to providers of interconnected VoIP services, pursuant to section 225(b)(1) of the Act and its Title I jurisdiction, including requiring interconnected VoIP providers to contribute to the Interstate TRS Fund under the Commission's existing contribution rules and offer 711 abbreviated dialing for access to relay services.⁴³

C. T-Mobile USA, Inc. and Sprint Nextel Petition

15. On December 20, 2006, the Petitioners filed a petition for declaratory ruling, pursuant to section 1.2 of the Commission's rules, requesting that the Commission make clear that carriers obligated to provide LNP may not obstruct or delay the porting process by demanding information from requesting carriers beyond that required to validate the customer request.⁴⁴ Petitioners maintain that some carriers request excessive amounts of information as part of the porting process, creating significantly longer times for ports and a correspondingly higher number of intermodal port request cancellations.⁴⁵ To improve the validation process, the Petitioners recommend validating port requests using just four data

³⁹ See *VoIP 911 Order*, 20 FCC Rcd at 10246, para. 1.

⁴⁰ See *Universal Service Contribution Methodology*, WC Docket No. 06-122; CC Docket Nos. 96-45, 98-171, 90-571, 92-237; NSD File No. L-00-72; CC Docket Nos. 99-200, 95-116, 98-170; WC Docket No. 04-36, Report and Order and Notice of Proposed Rulemaking, 21 FCC Rcd 7518, 7538-43, paras. 38-49 (2006) (*2006 Interim Contribution Methodology Order*), *aff'd in part, vacated in part, Vonage Holdings Corp. v. FCC*, 489 F.3d 1232, 1244 (D.C. Cir. 2007).

⁴¹ See *Implementation of the Telecommunications Act of 1996: Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information; IP-Enabled Services*, CC Docket No. 96-115, WC Docket No. 04-36, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 6927, 6954-57, paras. 54-59 (2007) (*CPNI Order*).

⁴² See *IP-Enabled Services*, WC Docket No. 04-36, WT Docket No. 96-198, CG Docket No. 03-123, CC Docket No. 92-105, Report and Order, 22 FCC Rcd 11275, 11283-291, paras. 17-31 (2007) (*TRS Order*).

⁴³ See *id.* at paras. 32-43. TRS, created by Title IV of the Americans with Disabilities Act of 1990 (ADA), enables a person with a hearing or speech disability to access the nation's telephone system to communicate with voice telephone users through a relay provider and a Communications Assistant. See 47 U.S.C. § 225(a)(3); see also 47 C.F.R. § 64.601(14) (defining TRS).

⁴⁴ See *T-Mobile/Sprint Nextel Petition* at 1.

⁴⁵ See *id.* at 3-6; see also, e.g., CTIA Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007) (stating that customers frequently cancel port requests after needless delays); Iowa Utilities Board Comments, CC Docket No. 95-116, at 2-3 (filed Feb. 8, 2007) (arguing that LEC validation procedures may be contributing to number exhaust because customers are forced to request new telephone numbers rather than be able to port); MetroPCS Comments, CC Docket No. 95-116, at 5 (filed Feb. 8, 2007) (stating that many customers are abandoning their landline numbers rather than porting to avoid porting process delays); PCIA Comments, CC Docket No. 95-116, at 1 (filed Feb. 7, 2007) (stating that the efficiency of the process is critical to its success).

fields: (1) 10-digit telephone number; (2) customer account number; (3) 5-digit zip code; and (4) pass code (if applicable).⁴⁶ The Commission issued a public notice seeking comment on the petition.⁴⁷

III. DISCUSSION

16. In this Order, we undertake several steps to help ensure that consumers and competition benefit from LNP as intended by the Act and Commission precedent. First, we extend LNP obligations and numbering administration support obligations to encompass interconnected VoIP services. Second, we clarify that no entities obligated to provide LNP may obstruct or delay the porting process by demanding from the porting-in entity information in excess of the minimum information needed to validate the customer's request. In particular, we conclude that LNP validation should be based on no more than four fields for simple ports, and that those fields should be: (1) 10-digit telephone number; (2) customer account number; (3) 5-digit zip code; and (4) pass code (if applicable). Third, we issue a FRFA in response to the D.C. Circuit's stay of the Commission's *Intermodal Number Portability Order* and find that wireline carriers qualifying as small entities under the RFA should be required to port to wireless carriers where the requesting wireless carrier's "coverage area" overlaps the geographic location in which the customer's wireline number is provisioned, provided that the porting-in carrier maintains the number's original rate center designation following the port. Fourth, as discussed below, we seek comment in the Notice on the need for Commission action regarding other LNP and numbering obligations.

A. Interconnected VoIP Services

17. We find that the customers of interconnected VoIP services should receive the benefits of LNP. Such action is fundamentally important for the protection of consumers and is consistent with the authority granted to the Commission under section 251(e) and sections 1 and 2 of the Act. Moreover, as described below, by requiring interconnected VoIP providers and their numbering partners to ensure that users of interconnected VoIP services have the ability to port their telephone numbers when changing service providers to or from an interconnected VoIP provider, we benefit not only customers but the interconnected VoIP providers themselves.⁴⁸ Specifically, the ability of end users to retain their NANP telephone numbers when changing service providers gives customers flexibility in the quality, price, and variety of services they can choose to purchase. Allowing customers to respond to price and service changes without changing their telephone numbers will enhance competition, a fundamental goal of section 251 of the Act, while helping to fulfill the Act's goal of facilitating "a rapid, efficient, Nation-wide, and world-wide wire and radio communication service."⁴⁹ Additionally, we extend to interconnected VoIP providers the obligation to contribute to shared numbering administration costs. We believe that the steps we take today to ensure regulatory parity among providers of similar services will minimize marketplace distortions arising from regulatory advantage.

1. Scope

18. Consistent with our previous decisions in the *IP-Enabled Services* proceeding, we limit our decision to interconnected VoIP providers, in part because, unlike certain other IP-enabled services, we

⁴⁶ See T-Mobile/Sprint Nextel Petition at 7.

⁴⁷ See *Pleading Cycle Established for Comments on T-Mobile USA, Inc. and Sprint Nextel Corporation's Petition for Declaratory Ruling Regarding Number Portability*, WC [sic] Docket No. 95-116, Public Notice, 22 FCC Rcd 190 (2007). A list of the commenters to the Public Notice is attached as Appendix A to this Order.

⁴⁸ By "numbering partner," we mean the carrier from which an interconnected VoIP provider obtains numbering resources. See generally *infra* at para. 20.

⁴⁹ 47 U.S.C. § 151.

continue to believe that interconnected VoIP service “is increasingly used to replace analog voice service,” including, in some cases, local exchange service.⁵⁰ Indeed, as interconnected VoIP service improves and proliferates, consumers’ expectations for these services trend toward their expectations for other telephone services. Thus, consumers reasonably expect interconnected VoIP services to include regulatory protections such as emergency 911 service and LNP.⁵¹

19. These characteristics of interconnected VoIP service support a finding that it is appropriate to extend LNP obligations to include such services, in light of the statute and Commission precedent. Congress expressly directed the Commission to prescribe requirements that all LECs must meet to satisfy their statutory LNP obligations.⁵² In doing so, the Commission has required service providers that have not been found to be LECs but that are expected to compete against LECs to comply with the LNP obligations set forth in section 251(b)(2).⁵³ In extending LNP rules to such providers, the Commission concluded, among other things, that imposing such obligations would “promote competition between providers of local telephone services and thereby promote competition between providers of interstate access services.”⁵⁴ Specifically, the Commission found that the availability of LNP would “eliminat[e] one major disincentive to switch carriers,” and thus would facilitate “the successful entrance of new service providers” covered by the LNP rules.⁵⁵ Indeed, the Commission determined that LNP not only would facilitate competition between such new service providers and wireline telecommunications carriers, but also would facilitate competition among the new service providers themselves.⁵⁶ The Commission anticipated that the enhanced competition resulting from LNP would “stimulate the development of new services and technologies, and create incentives for carriers to lower prices and costs.”⁵⁷ The Commission further concluded that implementation of long-term LNP by these providers would help ensure “efficient use and uniform administration” of numbering resources.⁵⁸ For these same policy reasons, we extend the LNP obligations to interconnected VoIP providers.

⁵⁰ See *CPNI Order*, 22 FCC Rcd at 6956, para. 56; *2006 Interim Contribution Methodology Order*, 21 FCC Rcd at 7541, para. 44; see also *VoIP 911 Order*, 20 FCC Rcd at 10256, para. 23. As noted above, in the *IP-Enabled Services Notice*, the Commission sought comment on whether to extend the LNP obligations to any class of IP-enabled service providers. See *IP-Enabled Services Notice*, 19 FCC Rcd at 4911-12, para. 73. We continue to consider whether interconnected VoIP services are telecommunications services or information services as those terms are defined in the Act, and we do not make that determination today. See 47 U.S.C. § 153(20), (46) (defining “information service” and “telecommunications service”).

⁵¹ See, e.g., *VoIP 911 Order*, 20 FCC Rcd at 10246, para. 1 (extending 911 obligations to interconnected VoIP providers); *CPNI Order*, 22 FCC Rcd at 6956, para. 56 (finding it is “reasonable for American consumers to expect that their telephone calls are private irrespective of whether the call is made using the services of a wireline carrier, a wireless carrier, or an interconnected VoIP provider”). A service offering is an “interconnected VoIP service” if, among other things, it offers the *capability* for users to receive calls from and terminate calls to the PSTN, regardless of whether access to the PSTN is directly by the interconnected VoIP provider itself or through arrangements with a third party. See *2006 Interim Contribution Methodology Order*, 21 FCC Rcd at 7537, para. 36.

⁵² 47 U.S.C. § 251(b)(2).

⁵³ See *First Number Portability Order*, 11 FCC Rcd at 8431-32, para. 153 (extending LNP obligations to CMRS providers under sections 1, 2, 4(i), and 332 of the Act); *First Number Portability Order on Reconsideration*, 12 FCC Rcd at 7315-17, paras. 140-42 (affirming the Commission’s decision to impose number portability obligations on CMRS providers).

⁵⁴ *First Number Portability Order*, 11 FCC Rcd at 8431-32, para. 153.

⁵⁵ *Id.* at 8434, para. 157.

⁵⁶ *Id.*

⁵⁷ *Id.* at 8435, para. 158.

⁵⁸ *Id.* at 8431-32, para. 153.

20. To effectuate this policy, we must address both the obligations of interconnected VoIP providers as well as the obligations of telecommunications carriers that serve interconnected VoIP providers as their numbering partners. Thus, we take this opportunity to reaffirm that only carriers, absent a Commission waiver,⁵⁹ may access numbering resources directly from the North American Numbering Plan Administrator (NANPA) or the Pooling Administrator (PA). Section 52.15(g)(2) of the Commission's rules limits access to the NANP numbering resources to those applicants that are (1) "authorized to provide service in the area for which the numbering resources are being requested"; and (2) "[are] or will be capable of providing service within sixty (60) days of the numbering resources activation date."⁶⁰ It is well established that our rules allow only carriers direct access to NANP numbering resources to ensure that the numbers are used efficiently and to avoid number exhaust.⁶¹ Thus, many interconnected VoIP providers may not obtain numbering resources directly from the NANPA because they will not have obtained a license or a certificate of public convenience and necessity from the relevant states.⁶² Interconnected VoIP providers that have not obtained a license or certificate of public convenience and necessity from the relevant states or otherwise are not eligible to receive numbers directly from the administrators may make numbers available to their customers through commercial arrangements with carriers (*i.e.*, numbering partners).⁶³ We emphasize that ensuring compliance with the Commission's numbering rules, including LNP requirements, in such cases remains the responsibility of

⁵⁹ See *Administration of the North American Numbering Plan*, CC Docket No. 99-200, Order, 20 FCC Rcd 2957, 2959, 2961-62, paras. 4, 9 (2005) (*SBCIS Waiver Order*). In this Order, we reiterate the Commission's existing rule of general applicability regarding eligibility for direct access to numbering resources. We note that petitions seeking waivers similar to the relief granted in the *SBCIS Waiver Order* are pending. See, *e.g.*, *Wireline Competition Bureau Seeks Comment on Qwest Communications Corporation Petition for Limited Waiver of Section 52.15(g)(2)(i) of the Commission's Rules Regarding Access to Numbering Resources*, CC Docket No. 99-200, Public Notice, 20 FCC Rcd 8765 (2005). This Order does not in any way prejudice the outcome of the Commission's consideration of those petitions.

⁶⁰ 47 C.F.R. § 52.15(g)(2).

⁶¹ See *NRO First Report and Order*, 15 FCC Rcd at 7615, para. 97 (stating that carriers must provide evidence demonstrating that they are licensed and/or certified to provide service prior to accessing numbering resources); see also, *e.g.*, BellSouth Comments, WC Docket No. 04-36, at 53 (stating that an increase in the use of telephone numbers could accelerate number exhaust); Citizens Utility Board Comments, WC Docket No. 04-36, at 29-30 (arguing that IP-POTS service provider access to numbering resources will increase the demand on a strained numbering system); New Jersey Commission Comments, WC Docket No. 04-36, at 11-12 (arguing that the Commission should consider sufficient limits against self-selection of area codes, and should monitor efficient use of numbering resources); Ohio Commission Comments, WC Docket No. 04-36, at 41-42 (believing that if IP-enabled companies gained access to numbering resources it might frustrate the ability of the commission to enforce numbering conservation requirements); Letter from Carole J. Washburn, Secretary, Washington Utilities and Transportation Commission, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 04-36 (filed Oct. 2, 2006) (raising concern about the conservation of numbering resources).

⁶² As noted *supra* note 50, we continue to consider the appropriate regulatory classification of interconnected VoIP services in the *IP-Enabled Services* proceeding. Pending a classification decision by the Commission, many interconnected VoIP providers maintain that they are information service providers and not telecommunications carriers under the Act. See, *e.g.*, Vonage Reply Comments, WC Docket No. 04-36, at 19-20. To the extent that an interconnected VoIP provider is licensed or certificated as a carrier, that carrier is eligible to obtain numbering resources directly from NANPA, subject to all relevant rules and procedures applicable to carriers, including LNP requirements. Under these circumstances, the interconnected VoIP provider would not have a numbering partner, and would thus be solely responsible for compliance with the Commission's rules at issue here.

⁶³ See, *e.g.*, AT&T Comments, WC Docket No. 04-36, at 25 (arguing that interconnected VoIP providers are not having any trouble obtaining numbers through partnerships with LECs). We note that these commercial arrangements may not include selling numbers. See, *e.g.*, *Toll Free Service Access Codes*, CC Docket No. 95-155, Order, 22 FCC Rcd 651, 653, para. 7 (2007) ("Telephone numbers are a public resource and neither carriers nor subscribers 'own' their telephone numbers."); *StarNet, Inc.*, 355 F.3d 634, 637 (7th Cir. 2004).

the carrier that obtains the numbering resource from the numbering administrator as well as the responsibility of the interconnected VoIP provider.⁶⁴

2. Authority

21. In this Order, we conclude that the Commission has ample authority to extend LNP obligations and numbering administration support obligations to interconnected VoIP providers. Specifically, we conclude that we have authority to extend LNP obligations and numbering administration support obligations to interconnected VoIP providers and their numbering partners under the Commission's plenary numbering authority pursuant to section 251(e) of the Act.⁶⁵ We further find Commission authority in section 251(b)(2) of the Act for the obligations we extend to numbering partners that serve interconnected VoIP providers. Separately, we analyze the extension of our rules to interconnected VoIP providers under our Title I ancillary jurisdiction.⁶⁶

22. *Plenary Numbering Authority.* Consistent with Commission precedent, we find that the plenary numbering authority that Congress granted this Commission under section 251(e)(1) provides ample authority to extend the LNP requirements set out in this Order to interconnected VoIP providers and their numbering partners.⁶⁷ Specifically, in section 251(e)(1) of the Act, Congress expressly assigned to the Commission exclusive jurisdiction over that portion of the NANP that pertains to the United States.⁶⁸ The Commission retained its "authority to set policy with respect to all facets of numbering administration in the United States."⁶⁹ To the extent that an interconnected VoIP provider provides services that offer its customers NANP telephone numbers, both the interconnected VoIP provider and the telecommunications carrier that secures the numbering resource from the numbering administrator subject themselves to the Commission's plenary authority under section 251(e)(1) with respect to those numbers.

23. *Section 251(b)(2) Authority over Telecommunications Carriers.* We find that section 251(b)(2) provides an additional source of authority to impose LNP obligations on the LEC numbering partners of interconnected VoIP providers.⁷⁰ Section 251(b)(2) states that all LECs have a "duty to provide, to the extent technically feasible, number portability in accordance with the requirements prescribed by the Commission."⁷¹ The Commission has long held that it has "authority to require that

⁶⁴ Additionally, with this Order, we clarify that LECs and CMRS providers have an obligation to port numbers to interconnected VoIP providers and their numbering partners subject to a valid port request.

⁶⁵ 47 U.S.C. § 251(e).

⁶⁶ See, e.g., *VoIP 911 Order*, 20 FCC Rcd at 10261-65, paras. 26-32.

⁶⁷ See *VoIP 911 Order*, 20 FCC Rcd at 10265, para. 33 (relying on the Commission's plenary authority over U.S. NANP numbers, particularly Congress's direction to use that authority regarding 911, to impose 911 obligations on interconnected VoIP providers, given interconnected VoIP providers' use of NANP numbers to provide service).

⁶⁸ See 47 U.S.C. § 251(e)(1) (providing that "[t]he Commission shall have exclusive jurisdiction over those portions of the North American Numbering Plan that pertain to the United States").

⁶⁹ *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers, Area Code Relief Plan for Dallas and Houston, Ordered by the Public Utility Commission of Texas, Administration of the North American Numbering Plan, Proposed 708 Relief Plan and 630 Numbering Plan Area Code by Ameritech-Illinois*, CC Docket No. 96-98, CC Docket No. 95-185, NSD File No. 96-8, CC Docket No. 92-237, IAD File No. 94-102, Second Report and Order and Memorandum Opinion and Order, 11 FCC Rcd 19392, 19512, para. 271 (1996) (explaining that by retaining exclusive jurisdiction over numbering policy the Commission preserves its ability to act flexibly and expeditiously).

⁷⁰ See 47 U.S.C. § 251(b)(2).

⁷¹ *Id.*

number portability be implemented 'to the extent technically feasible' and that our authority under section 251(b)(2) encompasses all forms of number portability."⁷² Our application of this authority is informed by the Act's focus on protecting consumers through number portability. Section 3 of the Act defines "number portability" as "the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another."⁷³ In this Order, we prescribe requirements that expand number portability to include ports to and from interconnected VoIP providers, and therefore find that section 251(b)(2) grants us authority to impose obligations on the interconnected VoIP providers' LEC numbering partners to effectuate those requirements. By holding the LEC numbering partner responsible for ensuring a porting request is honored to the extent technically feasible, we thus abide by this statutory mandate. We interpret section 251(b)(2) to include a number porting obligation even when the switching of "carriers" occurs at the wholesale rather than retail level. Given Congress's imposition of the number portability obligations on all such carriers and the broad terms of the obligation itself, we believe that ours is a reasonable interpretation of the statute. To find otherwise would permit carriers to avoid numbering obligations simply by creating an interconnected VoIP provider affiliate and assigning the number to such affiliate. Further, to ensure that consumers retain this benefit as technology evolves, we continue to believe that Congress's intent is that number portability be a "dynamic concept" that accommodates such changes.⁷⁴ The Commission previously has found that it has the authority to alter the scope of porting obligations due to technological changes in how numbers are ported.⁷⁵ Similarly, the Act provides ample authority for the logical extension of porting obligations due to technological changes in how telephone service is provided to end-user customers. We exercise our authority under the Act to ensure that consumers' interests in their existing telephone numbers are adequately protected whether the customer is using a telephone number obtained from a LEC directly or indirectly via an interconnected VoIP provider. In either case, the LEC or LEC numbering partner must comply with the Commission's LNP rules.

24. *Ancillary Jurisdiction over Interconnected VoIP Services.* We further conclude that we have a separate additional source of authority under Title I of the Act to impose LNP obligations and numbering administration support obligations on interconnected VoIP providers. Ancillary jurisdiction may be employed, in the Commission's discretion, when Title I of the Act gives the Commission subject matter jurisdiction over the service to be regulated⁷⁶ and the assertion of jurisdiction is "reasonably

⁷² *Telephone Number Portability*, CC Docket No. 95-116, Fourth Memorandum Opinion and Order on Reconsideration, 14 FCC Rcd 16459, 16466-67, para. 12 (1999).

⁷³ 47 U.S.C. § 153(30) (emphasis added).

⁷⁴ See, e.g., *Intermodal Number Portability Order*, 18 FCC Rcd at 23708, para. 27 (discussing the reasonableness of differences in porting obligations due to differences in the technological feasibility of different types of porting).

⁷⁵ See *id.*

⁷⁶ See *United States v. Southwestern Cable Co.*, 392 U.S. 157, 177-78 (1968) (*Southwestern Cable*). *Southwestern Cable*, the lead case on the ancillary jurisdiction doctrine, upheld certain regulations applied to cable television systems at a time before the Commission had an express congressional grant of regulatory authority over that medium. See *id.* at 170-71. In *Midwest Video I*, the Supreme Court expanded upon its holding in *Southwestern Cable*. The plurality stated that "the critical question in this case is whether the Commission has reasonably determined that its origination rule will 'further the achievement of long-established regulatory goals in the field of television broadcasting by increasing the number of outlets for community self-expression and augmenting the public's choice of programs and types of services.'" *United States v. Midwest Video Corp.*, 406 U.S. 649, 667-68 (1972) (*Midwest Video I*) (quoting *Amendment of Part 74, Subpart K, of the Commission's Rules and Regulations Relative to Community Antenna Television Systems; and Inquiry into the Development of Communications Technology and Services to Formulate Regulatory Policy and Rulemaking and/or Legislative Proposals*, Docket No. 18397, First Report and Order, 20 FCC 2d 201, 202 (1969) (*CATV First Report and Order*)). The Court later restricted the scope of *Midwest Video I* by finding that if the basis for jurisdiction over cable is that the authority is

(continued....)

ancillary to the effective performance of [its] various responsibilities.”⁷⁷ Both predicates for ancillary jurisdiction are satisfied here.

25. First, as we concluded in previous orders, interconnected VoIP services fall within the subject matter jurisdiction granted to us in the Act.⁷⁸ Section 1 of the Act, moreover, charges the Commission with responsibility for making available “a rapid, efficient, Nation-wide, and world-wide wire and radio communication service.”⁷⁹ Thus, section 1, in conjunction with section 251, creates a significant federal interest in the efficient use of numbering resources.⁸⁰ Second, we find that requiring interconnected VoIP providers to comply with LNP rules and cost recovery mechanisms is reasonably ancillary to the effective performance of the Commission’s fundamental responsibilities. As noted above, section 251(b)(2) of the Act requires LECs to provide number portability in accordance with the requirements prescribed by the Commission to the extent technically feasible.⁸¹ Further, section 251(e)(2) requires all carriers to bear the costs of numbering administration and number portability on a competitively neutral basis as defined by the Commission, and thereby seeks to prevent those costs from undermining competition.⁸² The Commission has interpreted section 251(e)(2) broadly to extend to all carriers that utilize NANP telephone numbers and benefit from number portability.⁸³ In addition, as discussed above, section 1 of the Act charges the Commission with responsibility for making available “a rapid, efficient, Nation-wide, and world-wide wire and radio communication service.”⁸⁴ Because interconnected VoIP service operates through the use of NANP telephone numbers and benefits from NANP administration and because this service is “increasingly used to replace analog voice service”⁸⁵ – a trend that we expect to continue – it is important that we take steps to ensure that interconnected VoIP service use of NANP numbers does not disrupt national policies adopted pursuant to section 251. As the Commission previously has stated, we “believe it is important that [the Commission] adopt uniform national rules regarding number portability implementation and deployment to ensure efficient and consistent use of number portability methods and numbering resources on a nationwide basis. Implementation of number portability, and its effect on numbering resources, will have an impact on

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ancillary to the regulation of broadcasting, the cable regulation cannot be antithetical to a basic regulatory parameter established for broadcast. See *FCC v. Midwest Video Corp.*, 440 U.S. 689, 700 (1979) (*Midwest Video II*).

⁷⁷ *Southwestern Cable*, 392 U.S. at 178.

⁷⁸ See, e.g., *CPNI Order*, 22 FCC Rcd at 6955-56, para. 55; *2006 Interim Contribution Methodology Order*, 21 FCC Rcd at 7542, para. 47; *VoIP 911 Order*, 20 FCC Rcd at 10261-62, para. 28 (“[I]nterconnected VoIP services are covered by the statutory definitions of ‘wire communication’ and/or ‘radio communication’ because they involve ‘transmission of [voice] by aid of wire, cable, or other like connection . . .’ and/or ‘transmission by radio . . .’ of voice. Therefore, these services come within the scope of the Commission’s subject matter jurisdiction granted in section 2(a) of the Act.”).

⁷⁹ 47 U.S.C. § 151.

⁸⁰ See, e.g., *First Number Portability Order on Reconsideration*, 12 FCC Rcd at 7315-16, para. 141.

⁸¹ 47 U.S.C. § 251(b)(2).

⁸² See 47 U.S.C. § 251(e)(2); see also *Telephone Number Portability*, CC Docket No. 96-116, RM-8535, Third Report and Order, 13 FCC Rcd 11701, 11723, para. 35 (1998) (*Third Portability Order*).

⁸³ See *NANP Order*, 11 FCC Rcd at 2628, para. 95 (finding that the costs of NANP administration should be borne by those that benefit from number resources); *Cost Recovery Order*, 13 FCC Rcd at 11723-24, paras. 35-36 (concluding that the costs of establishing number portability include the LECs’ costs, as well as the costs of other telecommunications carriers, such as interexchange carriers and CMRS providers).

⁸⁴ 47 U.S.C. § 151.

⁸⁵ See *2006 Interim Contribution Methodology Order*, 21 FCC Rcd at 7542-43, para. 48 (citing *CALEA First Report and Order*, 20 FCC Rcd at 15009-10, para. 42).

interstate, as well as local, telecommunications services.”⁸⁶ Additionally, the Commission has found that those providers that benefit from number resources should also bear the costs.⁸⁷

26. Extending LNP obligations to interconnected VoIP providers is “reasonably ancillary” to the performance of the Commission’s obligations under section 251 and section 1 of the Act. If we failed to do so, American consumers might not benefit from new technologies because they would be unable to transfer their NANP telephone numbers between service providers and thus would be less likely to want to use a new provider.⁸⁸ As a result, the purposes and effectiveness of section 251, as well as section 1, would be greatly undermined. The ability of end users to retain their NANP telephone numbers when changing service providers gives customers flexibility in the quality, price, and variety of services they can choose to purchase.⁸⁹ Allowing customers to respond to price and service changes without changing their telephone numbers will enhance competition, a fundamental goal of section 251 of the Act, while helping to fulfill the Act’s goal of facilitating “a rapid, efficient, Nation-wide, and world-wide wire and radio communication service.”⁹⁰

27. Further, if we failed to exercise our ancillary jurisdiction, interconnected VoIP providers would sustain a competitive advantage against telecommunications carriers through the use and porting of NANP telephone numbers without bearing their share of the costs of LNP and NANP administration, thus defeating the critical requirement under section 251(e) that carriers bear such costs on a competitively neutral basis. Additionally, we extend the LNP obligations to interconnected VoIP providers because doing so will have a positive impact on the efficient use of our limited numbering resources.⁹¹ The Commission avoids number waste by preventing an interconnected VoIP provider from porting-in a number from a carrier (often through its numbering partner) and then later refusing to port-out at the customer’s request by arguing that no such porting obligation exists.⁹² Failure to extend LNP obligations

⁸⁶ *First Number Portability Order*, 11 FCC Rcd at 8371, para. 37.

⁸⁷ *See NANP Order*, 11 FCC Rcd at 2628, para. 95.

⁸⁸ *See, e.g.*, AARP Comments, WC Docket No. 04-36, at 2 (stating that consumers have come to expect LNP and that LNP promotes local competition); NASUCA Comments, WC Docket No. 04-36, at 33-34 (arguing that if consumers are unable to port their telephone numbers between providers then consumers are much less likely to change providers); SBC Comments, WC Docket No. 04-36, at 83 (asserting that it can warp competition if interconnected VoIP providers are not subject to LNP obligations); Letter from William B. Wilhelm, Jr. and Ronald W. Del Sesto, Jr., Counsel for Vonage Holdings Corp., to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 95-116, 99-200, WC Docket Nos. 04-36, 03-251 (filed Mar. 28, 2005) (stating that porting benefits consumers); Comment from Gerrit Weining, WC Docket No. 04-36 (filed Apr. 3, 2006) (arguing that competition is restricted without porting); Letter from Adam Kupetsky, Regulatory Counsel, Level 3 Communications, LLC, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 95-116, 96-98, WC Docket No. 04-36 (filed May 1, 2006) (stating that LNP is a fundamental tenet of the Act’s goal of promoting competition); Letter from Amy Wolverton, Senior Corporate Counsel, T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 95-116, 96-45, WC Docket No. 04-36, at 1 (filed Oct. 5, 2006) (discussing how porting fosters industry competition).

⁸⁹ *First Number Portability Order*, 11 FCC Rcd at 8368, para. 30. We note that some interconnected VoIP providers currently offer number porting but we find it appropriate to ensure this capability for all customers using NANP-based telephone numbers by explicitly extending our LNP obligations to interconnected VoIP providers. *See, e.g.*, Vonage Reply, WC Docket No. 04-36, at 24.

⁹⁰ 47 U.S.C. § 151.

⁹¹ *See, e.g.*, Level 3 Feb. 23, 2007 *Ex Parte* Letter at 1 (arguing that porting fosters a competitive marketplace while encouraging conservation of a scarce resource).

⁹² *See Time Warner Cable Order*, 22 FCC Rcd at 3521-22, para. 16 (finding that it is consistent with Commission policy that when a LEC wins back a customer from a VoIP provider that the number should be ported to the LEC that wins the customer, and thus such a requirement is an explicit condition to the section 251 rights provided for in that order).

to interconnected VoIP providers and their numbering partners would thwart the effective and efficient administration of our numbering administration responsibilities under section 251 of the Act. Therefore, extending the LNP and numbering administration support obligations to interconnected VoIP providers is “reasonably ancillary to the effective performance of [our] responsibilities”⁹³ under sections 251 and 1 of the Act and “will ‘further the achievement of long-established regulatory goals’”⁹⁴ to make available an efficient and competitive communication service.⁹⁵

28. We believe that the language in section 251(e)(2), which phrases the obligation to contribute to the costs of numbering administration as applicable to “all telecommunications carriers,” reflects Congress’s intent to ensure that no telecommunications carriers were omitted from the contribution obligation, and does not preclude the Commission from exercising its ancillary authority to require other providers of comparable services to make such contributions. Thus, the language does not circumscribe the class of carriers that may be required to support numbering administration. The legislative history of the Telecommunications Act of 1996 (1996 Act) supports this view and indicates that Congress desired that such costs be borne by “all providers.”⁹⁶ Because interconnected VoIP services are increasingly being used as a substitute for traditional telephone service, we find that our exercise of ancillary authority to require contributions from interconnected VoIP providers is consistent with this statutory language and Congressional intent. The statutory construction maxim of *expressio unius est exclusio alterius* – the mention of one thing implies the exclusion of another – does not require a different result. This maxim is non-binding and “is often misused.”⁹⁷ “The maxim’s force in particular situations depends entirely on context, whether or not the draftsmen’s mention of one thing, like a grant of authority, does really necessarily, or at least reasonably, imply the preclusion of alternatives.”⁹⁸ Here, we believe that the relevant language in section 251(e)(2) was designed to ensure that no telecommunications carriers were omitted from the contribution obligation, and not to preclude the Commission from exercising its ancillary authority to require others to make such contributions.⁹⁹ Absent any affirmative evidence that Congress intended to limit the Commission’s judicially recognized ancillary jurisdiction in this area, we find that the *expressio unius* maxim “is simply too thin a reed to support the conclusion that Congress has clearly resolved [the] issue.”¹⁰⁰

29. We also note that our actions here are consistent with other provisions of the Act. For example, we are guided by section 706 of the 1996 Act, which, among other things, directs the

⁹³ *Southwestern Cable*, 392 U.S. at 178.

⁹⁴ *Midwest Video I*, 406 U.S. at 667-68 (quoting *CATV First Report and Order*, 20 FCC 2d at 202).

⁹⁵ 47 U.S.C. § 151; see also, e.g., Ohio Commission Comments, WC Docket No. 04-36, at 39 (stating that LNP is important for customer choice in a competitive market). Further, the Commission relied on its ancillary jurisdiction when it first sought comment on LNP prior to the enactment of section 251. See *Telephone Number Portability*, CC Docket No. 95-116, RM-8535, Notice of Proposed Rulemaking, 10 FCC Rcd 12350, 12361, para. 29 (1995).

⁹⁶ S. Conf. Rep. No. 104-230 at 122 (1996) (“The costs for numbering administration and number portability shall be borne by all providers on a competitively neutral basis.”).

⁹⁷ *Shook v. District of Columbia Fin. Responsibility & Mgmt. Assistance Auth.*, 132 F.3d 775, 782 (D.C. Cir. 1998) (*Shook*).

⁹⁸ *Id.*

⁹⁹ See, e.g., *Shook*, 132 F.3d at 782 (noting that Congress sometimes “drafts statutory provisions that appear preclusive of other unmentioned possibilities—just as it sometimes drafts provisions that appear duplicative of others—simply, in Macbeth’s words, ‘to make assurance double sure’”).

¹⁰⁰ *Mobile Communications Corp. v. FCC*, 77 F.3d 1399, 1405 (D.C. Cir. 1996); see also *Martini v. Federal Nat’l Mortgage Ass’n*, 178 F.3d 1336, 1342-43 (D.C. Cir. 1999) (noting that the *expressio unius* principle is particularly unhelpful in addressing issues of administrative law).

Commission to encourage the deployment of advanced telecommunications capability to all Americans by using measures that “promote competition in the local telecommunications market.”¹⁰¹ The extension of the LNP obligations to interconnected VoIP providers may spur consumer demand for their service, in turn driving demand for broadband connections, and consequently encouraging more broadband investment and deployment consistent with the goals of section 706.¹⁰²

3. Local Number Portability Obligations

30. As we discuss in detail above, imposing LNP and numbering administration support requirements on interconnected VoIP providers and their numbering partners is consistent with both the language of the Act and the Commission’s policies implementing the LNP obligations. To ensure that consumers enjoy the full benefits of LNP and to maintain competitively neutral funding of numbering administration, we impose specific requirements to effectuate this policy.

31. *Porting Obligations of an Interconnected VoIP Provider and its Numbering Partner.* As discussed above, section 3 of the Act defines local “number portability” as “the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another.”¹⁰³ We find that the “user” in this context is the end-user customer that subscribes to the interconnected VoIP service and not the interconnected VoIP provider.¹⁰⁴ To find otherwise would contravene the LNP goals of “allowing customers to respond to price and service changes without changing their telephone numbers.”¹⁰⁵ Thus, it is the end-user customer that retains the right to port-in the number to an interconnected VoIP service or to port-out the number from an interconnected VoIP service.¹⁰⁶

32. As discussed above, both an interconnected VoIP provider and its numbering partner must facilitate a customer’s porting request to or from an interconnected VoIP provider. By “facilitate,” we mean that the interconnected VoIP provider has an affirmative legal obligation to take all steps necessary to initiate or allow a port-in or port-out itself or through its numbering partner on behalf of the

¹⁰¹ 47 U.S.C. § 157 nt. The Act necessarily has many goals. One is the development of the Internet, set forth in section 230 of the Act, which provides that “[i]t is the policy of the United States – to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation.” 47 U.S.C. § 230(b)(2). But the Act specifies other important goals, discussed *supra*, including the preservation of an efficient numbering administration system that fosters competition among all communications services in a competitively neutral and fair manner. Especially here, where extending LNP obligations is likely to encourage consumers to use interconnected VoIP services as a result of our facilitation of porting, we find no conflict between our actions and the underlying goals expressed in the Act.

¹⁰² See *Availability of Advanced Telecommunications Capability in the United States*, Fourth Report to Congress, GN Docket No. 04-54, 19 FCC Rcd 20540, 20578 (2004) (“[S]ubscribership to broadband services will increase in the future as new applications that require broadband access, *such as VoIP*, are introduced into the marketplace, and consumers become more aware of such applications.”) (emphasis added).

¹⁰³ 47 U.S.C. § 153(30) (emphasis added).

¹⁰⁴ See, e.g., ALTS Reply, WC Docket No. 04-36, at 10 (claiming that an interconnected VoIP provider may attempt to prevent porting by claiming that it is the end user associated with the number); see also *Time Warner Cable Order*, 22 FCC Rcd at 3517-20, paras. 9-14 (affirming that wholesale providers of telecommunications services are telecommunications carriers for purposes of sections 251(a) and (b) of the Act); *id.* at para. 16 (agreeing that a number should be ported to the LEC that wins the customer at the customer’s request).

¹⁰⁵ *First Number Portability Order*, 11 FCC Rcd at 8368, para. 30.

¹⁰⁶ See, e.g., *NANP Order*, 11 FCC Rcd at 2591, para. 4 (finding that numbers are a public resource and not the property of carriers).

interconnected VoIP customer (*i.e.*, the “user”), subject to a valid port request, without unreasonable delay or unreasonable procedures that have the effect of delaying or denying porting of the number. We recognize that when an interconnected VoIP provider obtains NANP telephone numbers and LNP capability through a numbering partner, the interconnected VoIP provider does not itself execute the port of the number from a technical perspective. In such situations, the interconnected VoIP provider must take any steps necessary to facilitate its numbering partner’s technical execution of the port.¹⁰⁷

33. We also find that interconnected VoIP providers and their numbering partners may not enter into agreements that would prohibit or unreasonably delay an interconnected VoIP service end user from porting between interconnected VoIP providers, or to or from a wireline carrier or a covered CMRS provider.¹⁰⁸ Because LNP promotes competition and consumer choice, we find that any agreement by interconnected VoIP providers or their numbering partners that prohibits or unreasonably delays porting could undermine the benefits of LNP to consumers. Additionally, because we determine that the carrier that obtains the number from the NANPA is also responsible for ensuring compliance with these obligations, such porting-related restrictions would contravene that carrier’s section 251(b)(2) obligation.¹⁰⁹ If an interconnected VoIP provider or its numbering partner attempts to thwart an end user’s valid porting request, that provider or carrier will be subject to Commission enforcement action for a violation of the Act and the Commission’s LNP rules.¹¹⁰ Further, no interconnected VoIP provider may contract with its customer to prevent or hinder the rights of that customer to port its number because doing so would violate the LNP obligations placed on interconnected VoIP providers in this Order.¹¹¹ To the extent that interconnected VoIP providers have existing contractual provisions that have the effect of unreasonably delaying or denying porting, such provisions do not supersede or otherwise affect the porting obligations established in this Order.¹¹²

34. *Scope of Porting Obligations.* The Commission’s porting obligations vary depending on whether a service is provided by a wireline carrier or a covered CMRS provider.¹¹³ As described above, interconnected VoIP providers generally obtain NANP telephone numbers through commercial arrangements with one or more traditional telecommunications carriers. As a result, the porting

¹⁰⁷ See, e.g., Letter from Ann D. Berkowitz, Associate Director – Federal Regulatory Advocacy, Verizon, to Marlene Dortch, Secretary, FCC, CC Docket No. 95-116, WC Docket No. 04-36, at 2 (filed Oct. 23, 2007) (Verizon Oct. 23, 2007 *Ex Parte* Letter) (stating that a VoIP provider’s refusal to unlock a ported number from the 911 database until 90 days after the customer cancelled the VoIP service effectively obstructed the number port because the winning carrier could not provide service to its customer using the former VoIP provider’s number unless the 911 database was updated to reflect the service provider change).

¹⁰⁸ Cf. *Intermodal Number Portability Order*, 18 FCC Rcd at 23711-12, para. 36 (finding that requiring interconnection agreements between wireless and wireline carriers solely for the purposes of porting numbers could undermine the benefits of LNP).

¹⁰⁹ To the extent that carriers with direct access to numbers do not have an LNP obligation, that exemption from LNP only extends to the exempt service and not to that carrier’s activities as a numbering partner for an interconnected VoIP provider.

¹¹⁰ See, e.g., *Wireless Number Portability Order*, 18 FCC Rcd at 20975, para. 11 (interpreting the Act’s number portability definition to mean that “customers must be able to change carriers while keeping their telephone number as easily as they may change carriers without taking their telephone number with them”).

¹¹¹ See, e.g., *id.* at 20975-76, paras. 13-17 (finding that any contract provisions that consumers may not port their numbers are to be without effect on the carrier’s porting obligation).

¹¹² See, e.g., *id.*; see also Letter from Lawrence E. Strickling, Level 3 Communications, LLC, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 95-116, at 2 (filed Mar. 13, 2006) (observing that the Commission has expressly stated that contract disputes are not a basis for refusing to port a number).

¹¹³ See *supra* Part II.A (discussing the LNP obligations for wireline carriers and covered CMRS providers).

obligations to or from an interconnected VoIP service stem from the status of the interconnected VoIP provider's numbering partner and the status of the provider to or from which the NANP telephone number is ported.¹¹⁴ For example, subject to a valid port request on behalf of the user, an interconnected VoIP provider that partners with a wireline carrier for numbering resources must, in conjunction with its numbering partner, port-out a NANP telephone number to: (1) a wireless carrier whose coverage area overlaps with the geographic location of the porting-out numbering partner's rate center; (2) a wireline carrier with facilities or numbering resources in the same rate center; or (3) another interconnected VoIP provider whose numbering partner meets the requirements of (1) or (2).¹¹⁵ Similarly, subject to a valid port request on behalf of the user, an interconnected VoIP provider that partners with a covered CMRS provider for numbering resources must, in conjunction with its numbering partner, port-out a NANP telephone number to: (1) another wireless carrier; (2) a wireline carrier within the telephone number's originating rate center; or (3) another interconnected VoIP provider whose numbering partner meets the requirements of (1) or (2).¹¹⁶

35. We also clarify that carriers have an obligation under our rules to port-out NANP telephone numbers, upon valid request, for a user that is porting that number for use with an interconnected VoIP service.¹¹⁷ For example, subject to a valid port request on behalf of the user, a wireline carrier must port-out a NANP telephone number to: (1) an interconnected VoIP provider that partners with a wireless carrier for numbering resources, where the partnering wireless carrier's coverage area overlaps with the geographic location of the porting-out wireline carrier's rate center; or (2) an interconnected VoIP provider that partners with a wireline carrier for numbering resources, where the partnering wireline carrier has facilities or numbering resources in the same rate center as the porting-out wireline carrier.¹¹⁸ Similarly, subject to a valid port request on behalf of the user, a wireless carrier must port-out a NANP telephone number to: (1) an interconnected VoIP provider that partners with a wireless carrier; or (2) an interconnected VoIP provider that partners with a wireline carrier for numbering resources, where the partnering wireline carrier is within the number's originating rate center.¹¹⁹

36. We decline to adopt new porting intervals that apply specifically to ports between interconnected VoIP providers and other providers through a numbering partner.¹²⁰ The intervals that

¹¹⁴ We note that because interconnected VoIP providers offer telephone numbers not necessarily based on the geographic location of their customers – many times at their customers' requests – there may be limits to number porting between providers. The Act only provides for service provider portability and does not address service or location portability. See *First Number Portability Order*, 11 FCC Rcd at 8447, para. 181. Thus, for example, if an interconnected VoIP service customer selects a number outside his current rate center, or if the interconnected VoIP service customer selects a number within his geographic rate center and moves out of that rate center, and then requests porting to a wireline carrier in his new rate center, the customer would not be able to port the number. See 47 C.F.R. § 52.26(a). We expect interconnected VoIP providers to fully inform their customers about these limitations, particularly limitations that result from the portable nature of, and use of non-geographic numbers by, certain interconnected VoIP services.

¹¹⁵ See *supra* Part II.A (providing a summary of the various porting obligations).

¹¹⁶ See *id.*

¹¹⁷ To the extent that an interconnected VoIP provider is certificated or licensed as a carrier, then the Title II LNP obligations to port-in or port-out to the carrier are already determined by existing law. See, e.g., 47 C.F.R. § 52.26(a).

¹¹⁸ See *id.*

¹¹⁹ See *id.* We clarify that carriers must port-out NANP telephone numbers upon valid requests from an interconnected VoIP provider (or from its associated numbering partner).

¹²⁰ We seek comment, however, on whether the Commission should adopt rules regarding porting intervals in the Notice adopted with this Order. See *infra* para. 59.

would be applicable to ports between the numbering partner and the other provider, if the port were not related to an interconnected VoIP service, will apply to the port of the NANP telephone number between the numbering partner and the other provider (or the other provider's numbering partner) when the end user with porting rights is a customer of the interconnected VoIP provider.¹²¹

37. We take seriously our responsibilities to safeguard our scarce numbering resources and to implement LNP obligations for the benefit of consumers. Consumers, carriers, or interconnected VoIP providers may file complaints with the Commission if they experience unreasonable delay or denial of number porting to or from an interconnected VoIP provider in violation of our LNP rules.¹²² We will not hesitate to enforce our LNP rules to ensure that consumers are free to choose among service providers, subject to our LNP rules, without fear of losing their telephone numbers.

38. *Allocation of LNP Costs.* Section 251(e)(2) provides that "[t]he cost of establishing telecommunications numbering administration arrangements and number portability shall be borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission."¹²³ Because interconnected VoIP providers benefit from LNP, we find that they should contribute to meet the shared LNP costs.¹²⁴ Further, similar to the Commission's finding in its *Cost Recovery Reconsideration Order*, we also believe that interconnected VoIP providers may find it costly and administratively burdensome to develop region-specific attribution systems for all of their end-user services, and thus we allow these providers to use a proxy based on the percentage of subscribers a provider serves in a particular region for reaching an estimate for allocating their end-user revenues to the appropriate regional LNPA.¹²⁵

4. Numbering Administration Cost Requirements

39. Although interconnected VoIP providers do not have any specific numbering administration requirements (e.g., pooling requirements),¹²⁶ they do require the use of NANP numbering resources to provide an interconnected VoIP service, and thereby benefit from and impose costs related to

¹²¹ For example, if the interconnected VoIP provider's numbering partner is a wireline carrier and the porting-in provider is a wireline carrier, the wireline-to-wireline porting interval would apply to the port between the two carriers.

¹²² See 47 U.S.C. § 208; see also 47 U.S.C. § 503(b)(5) (granting the Commission authority to assess a forfeiture penalty against any person who is not a common carrier).

¹²³ 47 U.S.C. § 251(e)(2).

¹²⁴ In the Commission's *Cost Recovery Order*, the Commission determined that carriers not subject to rate regulation (e.g., competitive LECs and CMRS providers) may recover their carrier-specific costs directly related to providing number portability in any lawful manner consistent with obligations under the Act. See *Cost Recovery Order*, 13 FCC Rcd at 11774, para. 36; *Cost Recovery Reconsideration Order*, 17 FCC Rcd at 2609-10, para. 64. We find that this same recovery method is appropriate for interconnected VoIP providers. Further, the numbering partner may exclude revenues derived from providing numbering resources to interconnected VoIP providers (regardless of whether they hold themselves out as telecommunications carriers) in the numbering partner's revenue calculation on FCC Form 499-A pursuant to the carrier's carrier rule. Cf. *2006 Interim Contribution Methodology Order*, 21 FCC Rcd at 7547-48, paras. 58-59. In any case, we do not expect both the interconnected VoIP provider and its numbering partner to contribute on the same revenues.

¹²⁵ See *Cost Recovery Reconsideration Order*, 17 FCC Rcd at 2598, para. 37. Providers that submit an attestation certifying that they are unable to divide their traffic and resulting end-user revenue among the seven LNPA regions precisely will be allowed to divide their end-user revenue among these regions based on the percentage of subscribers served in each region. Providers may use their billing databases to identify subscriber location.

¹²⁶ See *supra* Part II.A.

numbering administration. Thus, we require interconnected VoIP providers to contribute to meet the shared numbering administration costs on a competitively neutral basis.¹²⁷

5. Implementation

40. The LNP obligations adopted in this Order for interconnected VoIP providers and their numbering partners become effective 30 days after Federal Register publication. The reporting requirements for determining interconnected VoIP providers' contribution to the shared costs of numbering administration and LNP require interconnected VoIP providers to file an annual FCC Form 499-A.¹²⁸ To ensure that interconnected VoIP providers' contributions for numbering administration and LNP are allocated properly, interconnected VoIP providers should include in their annual FCC Form 499-A filing historical revenue information for the relevant year, including all information necessary to allocate revenues across the seven LNPA regions (e.g., January 2007 through December 2007 revenue information for the April 2008 filing). The Commission will revise FCC Form 499-A at a later date, consistent with the rules and policies outlined in this Order.¹²⁹ Interconnected VoIP providers, however, should familiarize themselves with the FCC Form 499-A and the accompanying instructions in preparation for this filing.¹³⁰ Based on these filings, the appropriate administrators will calculate the funding base and individual contributions for each support mechanism, and provide an invoice to each interconnected VoIP provider for its contribution to the shared costs of the respective support mechanism. We find that USAC should be prepared to collect this information with the next annual filing, and that the LNPA and the NANP billing and collection agent should be prepared to include interconnected VoIP provider revenues in their calculations for the 2008 funding year based on the next annual FCC Form 499-A filings.

¹²⁷ Further, as the Commission determined for carrier-specific costs directly related to thousands block number pooling of carriers not subject to rate regulation, interconnected VoIP providers may, to the extent that any costs exist, recover them in any lawful manner. See *Third Numbering Order*, 17 FCC Rcd at 264, para. 25. Additionally, as explained above in note 124, numbering partners may exclude revenues derived from providing wholesale inputs to interconnected VoIP providers that do not hold themselves out as telecommunications carriers on FCC Form 499-A pursuant to the carrier's carrier rule. Cf. *2006 Interim Contribution Methodology Order*, 21 FCC Rcd at 7547-48, paras. 58-59.

¹²⁸ Interconnected VoIP providers not meeting the *de minimis* standard for contributing to the federal Universal Service Fund (USF) already are required to file FCC Form 499-A on an annual basis. See *2006 Interim Contribution Methodology Order*, 21 FCC Rcd at 7548, para. 60.

¹²⁹ See *Federal-State Joint Board on Universal Service; 1998 Biennial Regulatory Review – Streamlined Contributor Reporting Requirements Associated with Administration of Telephone Relay Service, North American Numbering Plan, Local Number Portability, and Universal Service Support Mechanisms; Telecommunications Services for Individuals with Hearing and Speech Disabilities, and the Americans with Disabilities Act of 1990; Administration of the North American Numbering Plan and North American Numbering Plan Cost Recovery Contribution Factor and Fund Size; Number Resource Optimization; Telephone Number Portability; Truth-in-Billing and Billing Format*, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, 98-170, NSD File No. L-00-72, Report and Order and Second Further Notice of Proposed Rulemaking, 17 FCC Rcd 24952, 24972 n.103 (2002).

¹³⁰ Form 499-A and its instructions are located on the Commission's form page at <http://www.fcc.gov/formpage.html> and on the Universal Service Administrative Company's (USAC) form page at <http://www.usac.org/fund-administration/forms/default.aspx>.

B. Intermodal Local Number Portability

41. We next adopt measures to facilitate intermodal number portability.¹³¹ As discussed above, the Commission adopted requirements for porting numbers from wireline carriers to wireless carriers and *vice versa*. However, we find that additional steps are appropriate to ensure that consumers more fully benefit from these requirements as intended by the Commission. First, we seek to clarify existing intermodal LNP requirements in response to concerns that certain carriers are unduly hindering the number porting validation process. Second, we respond to the D.C. Circuit's stay of the Commission's *Intermodal Number Portability Order* to ensure that customers of carriers qualifying as small entities under the RFA likewise receive the benefits of LNP.

1. Validating Local Number Portability Requests

42. We grant the request of T-Mobile and Sprint Nextel (Petitioners) to clarify that the porting-out provider may not require more information than is a minimal but reasonable amount from the porting-in provider to validate the port request and accomplish the port. As noted above,¹³² the Petitioners filed a petition for declaratory ruling requesting that the Commission make clear that carriers obligated to provide LNP may not obstruct or delay the porting process by demanding information from requesting carriers beyond that required to validate the customer request.¹³³ Generally speaking, the porting interval comprises two elements: the Confirmation Interval and the Activation Interval.¹³⁴ In order to begin the porting interval and trigger the Confirmation Interval during which a port request is validated, a new service provider first must provide certain information to the old service provider.¹³⁵ The record in this proceeding indicates that many requesting porting-in providers experience difficulties with this process, which in turn ultimately delays the port itself.¹³⁶ While the record reveals a variety of potential

¹³¹ In addition, as discussed below, we find it more appropriate to seek comment on other issues in the accompanying Notice.

¹³² See *supra* para. 15.

¹³³ See T-Mobile/Sprint Nextel Petition at 1.

¹³⁴ See *Telephone Number Portability*, CC Docket No. 95-116, Second Further Notice of Proposed Rulemaking, 19 FCC Rcd 18515, 18516-17, para. 4 (2004) (*Intermodal Number Porting Interval Second Further Notice*).

¹³⁵ See *id.* This Order does not address the intermodal porting intervals themselves, but rather clarifies the information necessary for the validation process as a prelude to the Confirmation Interval. See, e.g., T-Mobile/Sprint Nextel Reply, CC Docket No. 95-116, at 8 (filed Feb. 23, 2007) (stating that their petition is not about the porting intervals). In the accompanying Notice, we seek comment on the porting intervals. See *infra* paras. 59-65 (seeking comment on the porting intervals themselves).

¹³⁶ See, e.g., Charter Comments, CC Docket No. 95-116, at 5, 9 (filed Feb. 8, 2007); Comcast Comments, CC Docket No. 95-116, at 4, 7 (filed Feb. 8, 2007); CTIA Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007); Leap Wireless Comments, CC Docket No. 95-116, at 6-7 (filed Feb. 8, 2007); Integra Reply, CC Docket No. 95-116, at 2-5 (filed Feb. 23, 2007). In particular, the Petitioners and other commenters point out that in many instances there is a much higher cancellation rate for customers undergoing intermodal ports than for wireless-to-wireless ports. See, e.g., T-Mobile/Sprint Nextel Petition at 5; CTIA Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007). But see Embarq Comments, CC Docket No. 95-116, at 5 (filed Feb. 8, 2007) (stating that the cancellation rate for wireless carrier porting requests in 2006 was only 5.5%); Qwest Comments, CC Docket No. 95-116, at 4 n.12 (filed Feb. 8, 2007) (stating that porting cancellations might be influenced by such factors as a realization by a customer that some incidental service associated with the wireline loop might be "lost" if the number is ported, or a customer intent on porting might change position after reviewing the contractual restrictions of the wireless carrier); Verizon Comments, CC Docket No. 95-116, at 5-6 (filed Feb. 8, 2007) (arguing that the fact that Petitioners are experiencing higher cancellation rates than other carriers indicates that Petitioners are responsible for their higher cancellation rates).

contributing causes,¹³⁷ we are persuaded by the record that burdensome porting-related procedures play a role in the difficulties providers experience when seeking to fulfill customers' desire to port their numbers, particularly given the incentives that providers have to obstruct the porting process.¹³⁸ Moreover, as discussed below, onerous port validation procedures are inconsistent with the Act and Commission precedent. To address these concerns regarding obstruction and delay in the porting process, we clarify that entities subject to our LNP obligations may not demand information beyond what is required to validate the port request and accomplish the port.¹³⁹

43. We disagree with commenters who suggest, based on the Petitioners' reliance on the *Wireless Local Number Portability Order*, that boundaries on the range of acceptable port validation processes are limited to the context of wireless-to-wireless ports.¹⁴⁰ For one, we observe that the relevant analysis in the *Wireless Local Number Portability Order* does not depend on any unique factual or legal factors arising in the wireless context. For example, in holding in that order that carriers may not impose non-porting related restrictions on the porting-out process, the Commission based its decision on the definition of number portability under the Act and Commission rules "to mean that consumers must be able to change carriers while keeping their telephone number as easily as they may change carriers without taking their number with them."¹⁴¹ Indeed, both the Act and Commission rules define number portability as "the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another."¹⁴² We find that limiting carriers to requiring a minimum but reasonable amount of information to validate a customer request and perform a port will ensure that customers can port their numbers without impairment of the convenience of switching providers due to delays in the process that can result when additional information is required. We also find support for our clarification in other Commission precedent. For example, in the *Intermodal Local Number Portability Order*, the Commission held that "carriers need only share basic contact and technical information sufficient to allow porting functionality and customer verification to be established."¹⁴³ Thus,

¹³⁷ See, e.g., AT&T Comments, CC Docket No. 95-116, at 4 (filed Feb. 8, 2007) (stating that AT&T wireline requires 27 or fewer data fields); Embarq Comments, CC Docket No. 95-116, at 3-4 (filed Feb. 8, 2007) (stating that Embarq requires 20 fields); Verizon Comments, CC Docket No. 95-115, at 7 (stating that 26 fields on the LSR need to be completed for an intermodal number portability request under the industry guidelines for number portability).

¹³⁸ See, e.g., Charter Comments, CC Docket No. 95-116, at 2, 7, 9-10 (filed Feb. 8, 2007); Comcast Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007); CTIA Comments, CC Docket No. 95-116, at 3 (filed Feb. 8, 2007); MetroPCS Comments, CC Docket No. 95-116, at 5-6 (filed Feb. 8, 2007).

¹³⁹ See, e.g., Charter Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007); Comcast Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007); CTIA Comments, CC Docket No. 95-116, at 3 (filed Feb. 8, 2007); Iowa Utilities Board Comments, CC Docket No. 95-116, at 2 (filed Feb. 7, 2007). We disagree with commenters that suggest that the Commission may not act on this petition because no controversy or uncertainty exists. See, e.g., AT&T Comments, CC Docket No. 95-116, at 1 (filed Feb. 8, 2007); Qwest Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007); TWTC *et al.* Comments, CC Docket No. 95-116, at 1-2 (filed Feb. 8, 2007). Section 1.2 of the Commission's rules states that "[t]he Commission may . . . on its own motion issue a declaratory ruling terminating a controversy or removing uncertainty." 47 C.F.R. § 1.2; see also 5 U.S.C. § 554(e) (stating that an agency, "in its sound discretion, may issue a declaratory order to . . . remove uncertainty"); USCC Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007) (stating that a controversy exists as to whether the wireline practices are consistent with the FCC's number portability mandate). We find that there is uncertainty regarding the validation process under an entity's LNP obligations, and thus we adopt this Order to clarify those obligations.

¹⁴⁰ See, e.g., TWTC *et al.* Comments, CC Docket No. 95-116, at 2-3 (filed Feb. 8, 2007).

¹⁴¹ *Wireless Local Number Portability Order*, 18 FCC Rcd at 20975, para. 11.

¹⁴² 47 U.S.C. § 153(30); 47 C.F.R. § 52.21(l).

¹⁴³ *Intermodal Local Number Portability Order*, 18 FCC Rcd at 23711, para. 34.

we clarify that for all ports – whether intermodal, wireline-to-wireline, or wireless-to-wireless ports – the porting-out provider may not require more information from the porting-in provider than is actually reasonable to validate the port request and accomplish the port. However, we note that when we clarify that carriers may require information necessary to accomplish a port, that does not encompass information necessary to settle the customer's account or otherwise enforce any other provisions of the customer's contract.¹⁴⁴ Of course, as in the wireless-to-wireless LNP context, carriers are free to notify customers of the consequences of terminating service, but may not hold a customer's number while attempting to do so.¹⁴⁵

44. We find that the Commission should adopt rules governing the LNP validation process. As stated above, to begin a port, a porting-in provider must first provide certain requested information to the porting-out provider as part of the port validation process.¹⁴⁶ Thus, even where the Commission has adopted specific porting intervals for ports, problems associated with LNP validation have the potential to lengthen significantly the overall porting process beyond the time period specified in those intervals. Commenters contend that this is responsible for the high cancellation rate for intermodal ports, at least in part.¹⁴⁷

45. The record reveals that some difficulties in the validation process can arise due to the volume of information requested by providers. For example, incumbent LECs typically require port requests to be submitted using Local Service Request (LSR) forms.¹⁴⁸ However, the number of fields and specific information required can vary greatly from carrier to carrier.¹⁴⁹ In particular, commenters contend that delays are caused by the efforts they must undertake to complete the numerous fields in the

¹⁴⁴ While the Commission's determination to "prevent carriers from imposing restrictions on porting beyond necessary customer validation procedures" was based in part on the analysis of specific language from the Commission rule mandating LNP for CMRS providers, we observe that substantially the same language appears in the Commission's rules regarding wireline LNP. Compare *Wireless Local Number Portability Order*, 18 FCC Rcd at 20975-76, paras. 14-15 (quoting section 52.31 of the Commission's rules that "CMRS providers must provide a long term database method for number portability, including the ability to support roaming . . . in switches for which another carrier has made a specific request for the provision of number portability . . ."), with 47 C.F.R. § 52.23(b)(1) ("LECs must provide a long-term database method for number portability . . . in switches for which another carrier has made a specific request for the provision of number portability . . .").

¹⁴⁵ *Wireless Local Number Portability Order*, 18 FCC Rcd at 20975-76, paras. 14-16.

¹⁴⁶ See, e.g., T-Mobile/Sprint Reply at 8-9 ("The clock does not even start ticking on the porting interval until the porting-in carrier submits an error-free port request."); CTIA Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007) (stating that carriers often prevent the clock from even starting on the intercarrier porting process by requiring unnecessary information such as "account category" and "line activity," and by rejecting Local Service Requests with incorrect or incomplete information).

¹⁴⁷ See, e.g., T-Mobile/Sprint Nextel Petition at 5; Charter Comments, CC Docket No. 95-116, at 5, 9 (filed Feb. 8, 2007); Comcast Comments, CC Docket No. 95-116, at 4, 7 (filed Feb. 8, 2007); CTIA Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007); Leap Wireless Comments, CC Docket No. 95-116, at 6-7 (filed Feb. 8, 2007); Integra Reply, CC Docket No. 95-116, at 2-5 (filed Feb. 23, 2007).

¹⁴⁸ See, e.g., Verizon Comments, CC Docket No. 95-116, at 6-7 (filed Feb. 8, 2007); Leap Wireless Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007).

¹⁴⁹ See, e.g., AT&T Comments, CC Docket No. 95-116, at 4 (filed Feb. 8, 2007) (stating that AT&T wireline requires 27 or fewer data fields); Embarq Comments, CC Docket No. 95-116, at 3-4 (filed Feb. 8, 2007) (stating that Embarq requires 20 fields); Verizon Comments, CC Docket No. 95-115, at 7 (stating that only 26 fields on the LSR need to be completed for an intermodal number portability request under the industry guidelines for number portability).

LSRs, and that errors are more likely the greater the number of fields that are required.¹⁵⁰ While some of these variations may arise due to differences in the legacy systems of different incumbent LECs,¹⁵¹ commenters also indicate that some of the information requested appears designed to address issues unrelated to validation and completion of the port, such as information designed to facilitate the porting-out carrier's own process of disconnecting the customer's service.¹⁵²

46. In response to these concerns, we find that it is appropriate for the Commission to adopt specific criteria governing the information required for port validation for simple ports.¹⁵³ As stated above, we clarify that, carriers may not require the submission of information for purposes of the LNP process other than a reasonable amount to validate and complete the port.¹⁵⁴ Nonetheless, we believe that the adoption of specific requirements will facilitate the enforcement of that general obligation and minimize disputes among carriers. Furthermore, while certain carriers' legacy systems might be designed to validate port requests on a range of different information, we agree with commenters who suggest that customers' porting experience would be improved with the standardization of the LNP validation criteria for simple ports.¹⁵⁵ Commenters point out that it is not uncommon today for incumbent LECs to make ongoing changes to their port validation process,¹⁵⁶ and that wireless carriers were able to readily implement a reduction in the number of data fields required to validate wireless-to-wireless port requests.¹⁵⁷ Moreover, many competitors point out that they have invested money to implement their own systems and processes in an effort to reduce the difficulties customers experience with intermodal porting.¹⁵⁸

47. Based on the record before us, we conclude that the Commission should require LNP validation based on no more than four fields for simple ports, and should specify by rule those specific fields. The wireless industry has reached an agreement to require only three fields of information to

¹⁵⁰ See, e.g., Charter Comments, CC Docket No. 95-116, at 5-6 (filed Feb. 8, 2007); MetroPCS Comments, CC Docket No. 95-116, at 6 (filed Feb. 8, 2007); USCC Comments, CC Docket No. 95-116, at 2-3 (filed Feb. 8, 2007).

¹⁵¹ See, e.g., Level 3 Reply, CC Docket No. 95-116, at 3-4 (filed Feb. 23, 2007); TWTC *et al.* Comments, CC Docket No. 95-116, at 2, 5 (filed Feb. 8, 2007).

¹⁵² See, e.g., Integra Reply, CC Docket No. 95-116, at 3-4 (filed Feb. 23, 2007); Embarq Comments, CC Docket No. 95-116, at 3 n.6 (filed Feb. 8, 2007).

¹⁵³ As the Commission previously has explained, simple ports are those ports that: (1) do not involve unbundled network elements; (2) involve an account only for a single line; (3) do not include complex switch translations (e.g., Centrex, ISDN, AIN services, remote call forwarding, or multiple services on the loop); and (4) do not include a reseller. See, e.g., *Intermodal Number Portability FNPRM*, 18 FCC Rcd at 23715, para. 45 n.112 (citing North American Numbering Council Local Number Portability Administration Working Group Third Report on Wireless Wireline Integration, Sept. 30, 2000, CC Docket No. 95-116 (filed Nov. 29, 2000)).

¹⁵⁴ See *supra* paras. 42-43.

¹⁵⁵ See, e.g., NARUC Reply, CC Docket No. 95-116, at 5 (filed Feb. 23, 2007); Charter Comments, CC Docket No. 95-116, at 4-6 (filed Feb. 8, 2007); Comcast Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007); CTIA Comments, CC Docket No. 95-116, at 1 (filed Feb. 8, 2007); MetroPCS Comments, CC Docket No. 95-116, at 8-9 (filed Feb. 8, 2007); Integra Reply, CC Docket No. 95-116, at 2 (filed Feb. 23, 2007).

¹⁵⁶ See, e.g., Verizon Comments, CC Docket No. 95-116, at 9 (filed Feb. 8, 2007).

¹⁵⁷ See, e.g., Leap Wireless Comments, CC Docket No. 95-116, at 3 (filed Feb. 8, 2007); T-Mobile/Sprint Nextel Petition at 4; California Commission Comments, CC Docket No. 95-116, at 4 (filed Feb. 8, 2007); CTIA Comments, CC Docket No. 95-116, at 2-3 (filed Feb. 8, 2007); MetroPCS Comments, CC Docket No. 95-116, at 5 (filed Feb. 8, 2007).

¹⁵⁸ See, e.g., Letter from Mary McManus, Comcast Corporation, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 95-116, Attach. at 3 (filed Apr. 16, 2007).

validate a port request.¹⁵⁹ However, with respect to other categories of simple ports, we note that industry deliberations have not led to consensus on this issue, suggesting that Commission action could be appropriate.¹⁶⁰ For example, T-Mobile and Sprint suggest that the Commission should adopt four data fields: (1) 10-digit telephone number; (2) customer account number; (3) 5-digit zip code; and (4) pass code (if applicable).¹⁶¹ We find Petitioners' proposal to be reasonable given that the wireless industry has reached agreement to require only three fields to validate port requests, and note that their proposal falls within the range of the required number of fields proposed by commenters.¹⁶²

48. Thus, we conclude that LNP validation should be based on no more than four fields for simple ports (*i.e.*, wireline-to-wireline, wireless-to-wireless, and intermodal ports), and that those fields should be: (1) 10-digit telephone number; (2) customer account number; (3) 5-digit zip code; and (4) pass code (if applicable). We find that, despite disagreement within the industry on which specific data are necessary to effectuate a port,¹⁶³ there is sufficient basis in the record to support our conclusion that LNP validation for simple ports should be based on no more than four fields. We further conclude that 90 days is sufficient time for affected entities to comply with these LNP validation requirements. We find this implementation period is reasonable, particularly in light of the evidence discussed above that it is common for incumbent LECs to make ongoing changes to their port validation process and that wireless carriers were readily able to implement a reduction in the number of data fields required to validate wireless-to-wireless port requests. Therefore, affected entities must be in compliance with these validation requirements within 90 days of the date of release of this Declaratory Ruling.

49. Some commenters caution the Commission to ensure that the data fields used for validation adequately protect customers from slamming.¹⁶⁴ We conclude that the fields proposed by the Petitioners

¹⁵⁹ See T-Mobile/Sprint Nextel Petition at 4 (wireless providers validating port requests require only the use of customer telephone number, account number, and password (if applicable)).

¹⁶⁰ See, *e.g.*, T-Mobile/Sprint Nextel Reply, CC Docket No. 95-116, at 10 (filed Feb. 23, 2007) (noting that the validation issue has been before the NANC for almost three years and the industry remains deadlocked); Nebraska Commission Comments, CC Docket No. 95-116, at 3 (filed Feb. 8, 2007) (stating that a failure by the Ordering and Billing Forum (OBF) to arrive at a consensus should be the trigger for the Commission to step in and set a standard).

¹⁶¹ See T-Mobile/Sprint Nextel Petition at 7; *see also* T-Mobile/Sprint Nextel Reply at 15 (clarifying that their validation field recommendation solely applies to simple port requests).

¹⁶² For example, Charter argues that the provision of name, address, and phone number are sufficient data fields to validate ports between carriers. See Charter Comments, CC Docket No. 95-116, at 6 (filed Feb. 8, 2007); *see also* Verizon July 27, 2007 *Ex Parte* Letter at 2 (stating that Verizon is currently validating the customer on only five fields of information on the number portability request: account number, ported telephone number, state, type of service, and, in some jurisdictions, customer name).

¹⁶³ See, *e.g.*, T-Mobile/Sprint Nextel Petition at 7; Comcast Comments, CC Docket No. 95-116, at 6 (filed Feb. 8, 2007); Embarq Comments, CC Docket No. 95-116, at 2-4, 6 (filed Feb. 8, 2007); MetroPCS Comments, CC Docket No. 95-116, at 8 (filed Feb. 8, 2007); TWTC *et al.* Comments, CC Docket No. 95-116, at 5-7 (filed Feb. 8, 2007); Verizon Comments, CC Docket No. 95-116, at 7-8 (filed Feb. 8, 2007); T-Mobile/Sprint Nextel Reply, CC Docket No. 95-116, at 6 (filed Feb. 23, 2007); Letter from Ann D. Berkowitz, Associate Director, Verizon, to Marlene Dortch, Secretary, FCC, CC Docket No. 95-116, at 2 (dated July 27, 2007) (Verizon July 27, 2007 *Ex Parte* Letter).

¹⁶⁴ See, *e.g.*, NASUCA Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007); Embarq Comments, CC Docket No. 95-116, at 6 (filed Feb. 8, 2007). *But see* Verizon Oct. 23, 2007 *Ex Parte* Letter at 3 (arguing that concerns about slamming do not apply equally in the context of service provider changes to and from VoIP service providers). We note that because wireline telephone numbers are generally more centralized, telephone numbers with only slight variations may exist in the same zip code, particularly in rural areas, and thus an inadvertent error in exchanging the customer's telephone number may result in a non-properly validated port. See Embarq Comments at 6 (fearing that a porting-in carrier could transpose the digits of a telephone number and that the incorrect telephone number will also be within the zip code area, resulting in an incorrect port).

will sufficiently protect consumers from slamming, and note that data in the record suggest that complaints about unauthorized ports occur much less frequently for wireless-to-wireless ports, where only three validation fields are used, than for intermodal ports.¹⁶⁵ The record reveals other considerations when defining those specific validation fields. In particular, competitors note that many LNP requests are rejected due to typographical errors or even different conventions in how words are entered in an LSR – such as abbreviating Avenue as “Av.” rather than “Ave.”¹⁶⁶ Based on the record before us, we conclude that there are efficiencies in using numeric or alphanumeric information rather than alphabetic information alone in the validation process to decrease the validation error rate.¹⁶⁷ Thus, we find that the specific validation fields we adopt herein, which rely not on words, but rather rely only on numbers or alphanumeric codes, are appropriate. We are persuaded that the approach we adopt here reasonably balances consumer concerns about slamming with competitors’ interest in ensuring that LNP may not be used in an anticompetitive manner to inhibit consumer choice.

2. Final Regulatory Flexibility Analysis for the *Intermodal Number Portability Order*

50. As discussed above,¹⁶⁸ in its 2003 *Intermodal Number Portability Order*, the Commission clarified that porting from a wireline carrier to a wireless carrier is required where the requesting wireless carrier’s coverage area overlaps the geographic location in which the wireline number is provisioned, provided that the porting-in carrier maintains the number’s original rate center designation following the port.¹⁶⁹ On March 11, 2005, the United States Court of Appeals for the District of Columbia Circuit remanded the *Intermodal Number Portability Order* to the Commission.¹⁷⁰ The court determined that the *Intermodal Number Portability Order* resulted in a legislative rule, and that the Commission had failed to prepare a FRFA regarding the impact of that rule on small entities, as required by the RFA.¹⁷¹ The court accordingly directed the Commission to prepare the required FRFA, and stayed future enforcement of the *Intermodal Number Portability Order* “as applied to carriers that qualify as small entities under the RFA” until the agency prepared and published that analysis.¹⁷² On April 22, 2005, the Commission issued a Public Notice seeking comment on an IRFA of the *Intermodal Number Portability Order*.¹⁷³

¹⁶⁵ See, e.g., T-Mobile/Sprint Nextel Reply, CC Docket No. 95-116, at 13-15 (filed Feb. 23, 2007); Comcast Comments, CC Docket No. 95-116, at 6 (filed Feb. 8, 2007).

¹⁶⁶ See, e.g., Leap Wireless Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007) (stating that LECs will reject any abbreviation that does not precisely match the data in the customer’s account, causing delay); MetroPCS Comments, CC Docket No. 95-116, at 6 (filed Feb. 8, 2007) (stating that some incumbent LECs reject porting requests for placing a comma in an incorrect place on the LSR); Integra Reply, CC Docket No. 95-116, at 4 (filed Feb. 23, 2007).

¹⁶⁷ We note that the Petitioners propose relying on a customer’s password as a possible validation field. Theoretically, customers could choose a word for use as their password. We do not believe that this would present the same problem as street names, for example, because it would not raise abbreviation concerns.

¹⁶⁸ See *supra* para. 8.

¹⁶⁹ See *Intermodal Number Portability Order*, 18 FCC Rcd at 23706, para. 22.

¹⁷⁰ See *United States Telecom. Ass’n v. FCC*, 400 F.3d 29 (D.C. Cir. 2005).

¹⁷¹ See *id.* at 42-43; see also 5 U.S.C. § 604 (Regulatory Flexibility Act).

¹⁷² *United States Telecom. Ass’n v. FCC*, 400 F.3d at 43.

¹⁷³ See *Federal Communications Commission Seeks Comment on Initial Regulatory Flexibility Analysis in Telephone Number Portability Proceeding*, CC Docket No. 95-116, Public Notice, 20 FCC Rcd 8616 (2005). A full list of comments to the Public Notice is included as Appendix A.

51. In accordance with the requirements of the RFA, we have considered the potential economic impact of the intermodal porting rules on small entities and conclude that wireline carriers qualifying as small entities under the RFA will be required to provide wireline-to-wireless intermodal porting where the requesting wireless carrier's "coverage area" overlaps the geographic location in which the customer's wireline number is provisioned, provided that the porting-in carrier maintains the number's original rate center designation following the port.¹⁷⁴ The Commission has prepared a FRFA as directed by the court, which we attach as Appendix D.¹⁷⁵

IV. NOTICE OF PROPOSED RULEMAKING

52. Through this Notice of Proposed Rulemaking (Notice), we consider whether there are additional numbering requirements that we should adopt to benefit customers of telecommunications and interconnected VoIP services. First, we seek comment on whether the Commission should act to extend other numbering-related obligations to interconnected VoIP providers. Second, we seek comment on whether we should adopt specific rules regarding the LNP validation process and porting interval lengths.

A. Interconnected VoIP Provider Numbering Obligations

53. As discussed above, we take steps in this Order to ensure that customers of interconnected VoIP services receive the benefits of LNP, and to minimize marketplace distortions arising from regulatory advantage. We seek comment on any other issues associated with the implementation of LNP for users of interconnected VoIP services. We also seek comment on whether any of our numbering requirements, in addition to LNP, should be extended to interconnected VoIP providers. For example, we seek comment on whether the Commission should require interconnected VoIP providers to comply with N11 code assignments.¹⁷⁶ As described in the Order above, the Commission already requires

¹⁷⁴ See *Intermodal Number Portability Order*, 18 FCC Rcd at 23698, para. 1. We note that a carrier may petition the Commission for additional time or waiver of the intermodal porting requirements if it can provide substantial, credible evidence that there are special circumstances that warrant departure from existing rules. See 47 C.F.R. §§ 1.3, 52.25(e). In addition, under section 251(f)(2) of the Act, a LEC with fewer than two percent of the nation's subscriber lines installed in the aggregate nationwide may petition the appropriate state commission for suspension or modification of the requirements of section 251(b). See 47 U.S.C. § 251(f)(2).

¹⁷⁵ Further, in light of the court's determination that the *Intermodal Number Portability Order* resulted in a legislative rule, we elect to amend our rules to expressly incorporate the Commission's holding. To this end, a new subsection (h) is added to section 52.23 of the Commission's rules. The text of the new subsection is provided in Appendix B of this Order. We note that this addition to our rules is non-substantive, in that it merely incorporates in the Code of Federal Regulations the requirements previously adopted in the *Intermodal Number Portability Order*.

¹⁷⁶ See, e.g., Arizona Commission Comments, WC Docket No. 04-36, at 17. N11 codes are abbreviated dialing arrangements that enable callers to access special services by dialing only three digits. The network must be pre-programmed to translate the three-digit code into the appropriate seven- or ten-digit sequence and route the call accordingly. Because there are only eight available N11 codes, N11 codes are among the scarcest of numbering resources under the Commission's jurisdiction. N11 codes 211, 311, 411, 511, 611, 711, 811, and 911 are available for assignment by the Commission. N11 codes "011" and "111" are unavailable because "0" and "1" are used for switching and routing purposes. To date, the Commission has assigned six N11 codes – 211, 311, 511, 711, 811, and 911. See *The Use of N11 Codes and Other Abbreviated Dialing Arrangements*, CC Docket No. 92-105, First Report and Order and Further Notice of Proposed Rulemaking, 12 FCC Rcd 5572 (1997) (assigning 311 for non-emergency police and other governmental services); *The Use of N11 Codes and Other Abbreviated Dialing Arrangements*, CC Docket No. 92-105, Second Report and Order, 15 FCC Rcd 15188 (2000) (assigning 711 for telephone relay services for the hearing impaired); *The Use of N11 Codes and Other Abbreviated Dialing Arrangements*, CC Docket No. 92-105, Third Report and Order and Order on Reconsideration, 15 FCC Rcd 16753 (2000) (assigning 211 for information and referral services and 511 for travel and information services); *The Use of N11 Codes and Other Abbreviated Dialing Arrangements*, CC Docket No. 92-105, Fourth Report and Order and Third Notice of Proposed Rulemaking, 15 FCC Rcd 17079 (2000) (assigning 911 as the national emergency number); *The Use of N11 Codes and Other Abbreviated Dialing Arrangements*, CC Docket No. 92-105, Sixth

(continued....)

interconnected VoIP providers to supply 911 emergency calling capabilities to their customers whose service connects with the PSTN and to offer 711 abbreviated dialing for access to telephone relay services.¹⁷⁷ Commenters should provide information on the technical feasibility of a requirement to comply with the other N11 code assignments. We also seek comment on the benefits and burdens, including the burdens on small entities, of requiring interconnected VoIP providers to comply with N11 code assignments or other numbering requirements.

B. LNP Process Requirements

54. As the Commission has found, it is critical that customers be able to port their telephone numbers in an efficient manner in order for LNP to fulfill its promise of giving “customers flexibility in the quality, price, and variety of telecommunications services.”¹⁷⁸ Although customers have had the option to port numbers between their telephone service providers for a number of years, the length of time for ports to occur and other difficulties with the porting process may hinder such options. Therefore, we seek comment on whether the Commission should take steps to mandate or modify certain elements of the porting process to ensure the efficiency and effectiveness of LNP for U.S. telephone consumers.

55. We find this to be a significant concern both due to the Commission’s efforts as a general matter to ensure “the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another,”¹⁷⁹ as well as due to the important role intermodal providers play in telecommunications competition. Indeed, incumbent LECs have sought to rely on the presence of telephone competition from wireless providers and cable operators when seeking relief from regulatory obligations.¹⁸⁰ To help enable such intermodal competition, and the deregulation that can result from such competition, it thus is important for the Commission to ensure the efficiency and effectiveness of LNP, which “eliminates one major disincentive to switch carriers” and thus facilitates “the successful entrance of new service providers.”¹⁸¹ However, we do not limit our inquiry below specifically to intermodal LNP but seek comment on the need for Commission requirements on LNP processes in other contexts as well.

56. Our conclusion, above, that carriers can require no more than four fields for validation of a simple port, and what information those fields should contain, addresses the consideration of the appropriate amount and type of information necessary to effectuate a port. We are also interested in comments about how the information required for the validation fields we adopt herein affects the validation process, including any other ways that those validation fields could minimize the error rates or

(...continued from previous page)

Report and Order, 20 FCC Rcd 5539 (2005) (designating 811 for state “One Call” notification systems for providing advanced notice of excavation activities to underground facility operators in compliance with the Pipeline Safety Improvement Act of 2002). The remaining N11 codes – 411 and 611 – are widely used by carriers, but have not been assigned by the Commission for nationwide use. N11 codes that have not been assigned nationally can continue to be assigned for local uses, provided that such use can be discontinued on short notice. See North American Numbering Plan Administrator website, available at <http://www.nanpa.com>.

¹⁷⁷ See *VoIP 911 Order*, 20 FCC Rcd at 10246, para. 1; *TRS Order*, 22 FCC Rcd at 11296-97, paras. 42-43 (2007).

¹⁷⁸ *First Local Number Portability Order*, 11 FCC Rcd at 8368, para. 30.

¹⁷⁹ 47 U.S.C. § 153(30); 47 C.F.R. § 52.21(l).

¹⁸⁰ See, e.g., *Petition of Qwest Communications International Inc. for Forbearance from Enforcement of the Commission’s Dominant Carrier Rules As They Apply After Section 272 Sunsets*, WC Docket No. 05-333, Memorandum Opinion and Order, 22 FCC Rcd 5207, 5231, para. 47 (2007).

¹⁸¹ *First Local Number Portability Order*, 11 FCC Rcd at 8434, para. 157.

further reduce the amount of information that a porting-in entity must request from the porting-out entity prior to submitting the simple port request.¹⁸² Further, we seek comment on any other considerations that the Commission should evaluate in the simple port validation process.

57. The evidence in the record also shows that delays in the porting process can arise when the porting-out carrier fails to identify all errors in an LSR at once.¹⁸³ If a provider identifies errors one at a time, this necessitates multiple resubmissions of the LSR, and delays the porting process. We agree with commenters such as AT&T that it may not be possible for providers to identify all errors at once, although the porting process will proceed most efficiently if providers identify as many errors as possible at a given time.¹⁸⁴ We seek comment on whether the Commission should adopt a requirement that carriers identify all errors possible in a given LSR and describe the basis for rejection when rejecting a port request. Is such a Commission requirement still necessary since the Commission has mandated four specific data fields to be used for simple port validation?

58. Finally, we seek comment on the benefits and burdens, including the burdens on small entities, of the specific requirements on the validation process proposed above, and any other such requirements.

59. *Porting Intervals.* We tentatively conclude that the Commission should adopt rules reducing the porting interval for simple port requests.¹⁸⁵ We seek comment on that tentative conclusion, and on whether the Commission should establish time limits on the porting process for all types of simple port requests (*i.e.*, wireline-to-wireline ports, wireless-to-wireless ports, and intermodal ports) or just certain types of ports. As noted above, for example, the wireless industry has established a voluntary standard of two and one-half hours for wireless-to-wireless ports.¹⁸⁶ We seek comment on whether the Commission should adopt a rule codifying this standard.

60. We also tentatively conclude that the Commission should adopt rules reducing the porting interval for wireline-to-wireline and intermodal simple port requests, specifically, to a 48-hour porting interval. As we note below, the wireless industry has been successful in streamlining the validation process for wireless-to-wireless porting, and we encourage the industry to evaluate whether similar streamlining measures would work for intermodal or wireline-to-wireline porting.¹⁸⁷ We note, moreover, that pending resolution of this rulemaking proceeding, providers remain free to seek enforcement action

¹⁸² See, e.g., T-Mobile/Sprint Nextel Petition at 4 (raising concerns about carriers rejecting port requests based on incorrect abbreviations); Leap Wireless Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007) (same); MetroPCS Comments, CC Docket No. 95-116, at 6 (filed Feb. 8, 2007) (arguing that some incumbent LECs reject porting requests based on misplaced commas); T-Mobile/Sprint Nextel Reply, CC Docket No. 95-116, at 5-7 (filed Feb. 23, 2007) (stating that some porting-out carriers require the porting-in carrier to request a customer service record (CSR) prior to submitting an LSR or even require an additional "address validation step" before a porting-in carrier can order the CSR).

¹⁸³ See, e.g., Charter Comments, CC Docket No. 95-116, at 5-6 (filed Feb. 8, 2007).

¹⁸⁴ See, e.g., Verizon July 27, 2007 *Ex Parte* Letter at 2 (arguing that it is not reasonable to expect carriers to port a telephone number where there are errors in the fields on the number portability request form).

¹⁸⁵ See *supra* note 153 (defining simple ports).

¹⁸⁶ See *Intermodal Number Porting Interval Second Further Notice*, 19 FCC Rcd at 18515-16, para. 2.

¹⁸⁷ See T-Mobile/Sprint Nextel Petition at 4 (wireless providers validating port requests require only the use of customer telephone number, account number, and password (if applicable)); see also *Intermodal Number Porting Interval Second Further Notice*, 19 FCC Rcd at 18515-16, para. 2 (noting that the wireless industry has established a voluntary standard of two and one half hours for wireless-to-wireless ports).

against a porting-out carrier that requests validation information that appears to obstruct or delay the porting process.¹⁸⁸

61. For wireline-to-wireline simple ports, the Commission adopted the NANC's 1997 recommendation of a four business day porting interval.¹⁸⁹ This four day interval also applies to wireline-to-wireless intermodal simple ports.¹⁹⁰ It has been over ten years since the Commission reassessed the porting interval for wireline-to-wireline ports, and commenters suggest that advances in technology allow for the four day porting interval to be reduced.¹⁹¹ For intermodal porting intervals, the Commission has twice sought comment on whether the porting interval could be reduced.¹⁹² Most recently, the Commission specifically sought comment on detailed NANC proposals for shortening the intermodal porting interval, which included specific timelines for the porting process.¹⁹³

62. While some commenters advocate retaining the current porting intervals, other providers assert that shorter intervals are possible. For example, Comcast asserts that a "next day" standard for wireline ports that, in most cases, would not exceed 36 hours is more appropriate in light of technological advancements and recent competitive developments.¹⁹⁴ Other commenters recommend refreshing the record in the *Intermodal Number Portability FNPRM* and considering the NANC's proposal that would effectively reduce the porting interval to 53 hours.¹⁹⁵ Commenters seeking shorter intervals point out the benefits to consumers and competition arising when ports can occur more quickly.¹⁹⁶

63. Given that the industry has been unable to reach consensus on an updated industry standard for wireline-to-wireline and intermodal simple ports,¹⁹⁷ we tentatively conclude that the Commission should adopt rules regarding a reduced porting interval and allow the industry to work through the actual implications of such a timeline. In particular, we tentatively conclude that we should adopt a 48-hour porting interval, as it falls between the range of proposed shorter intervals. In setting this interval, we hope to encourage industry discussion and consensus. We seek comment on our tentative conclusions, and whether there are any technical impediments or advances that affect the overall length of the porting interval such that we should adopt different porting intervals for particular types of simple ports (e.g.,

¹⁸⁸ See, e.g., Qwest Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007). See generally 47 U.S.C. § 208; 47 U.S.C. § 503(b)(5) (granting the Commission authority to assess a forfeiture penalty against any person who is not a common carrier).

¹⁸⁹ See *Intermodal Number Porting Interval Second Further Notice*, 19 FCC Rcd at 18515, para. 2.

¹⁹⁰ See *Intermodal Number Portability Order*, 18 FCC Rcd at 23712-13, para. 38; see also *Intermodal Number Porting Interval Second Further Notice*, 19 FCC Rcd at 18519, para. 10.

¹⁹¹ See, e.g., Comcast Comments, CC Docket No. 95-116, at 3 (filed Feb. 8, 2007).

¹⁹² See *Intermodal Number Portability FNPRM*, 18 FCC Rcd at 23715-17, paras. 45-51; *Intermodal Number Porting Interval Second Further Notice*, 19 FCC Rcd at 18519-21, paras. 10-14.

¹⁹³ See *Intermodal Number Porting Interval Second Further Notice*, 19 FCC Rcd at 18518, para. 7 (identifying the NANC proposals).

¹⁹⁴ In particular, Comcast proposes the following: (i) A port request received between 7 a.m. and 2 p.m. on Day 1 would be activated on Day 2 at 12:01 a.m.; and (ii) A port request received after 2 p.m. on Day 1 could be activated on Day 3 no later than 12:01 a.m. Comcast Comments, CC Docket No. 95-116, at 9 (filed Feb. 8, 2007). Comcast notes that this interval is similar to one proposed by Sprint in 2004 in response to the *Intermodal Number Portability FNPRM*. See *id.*

¹⁹⁵ See, e.g., Qwest Comments, CC Docket No. 95-116, at 5 (filed Feb. 8, 2007); Verizon Comments, CC Docket No. 95-116, at 2 (filed Feb. 8, 2007); Comcast Comments, CC Docket No. 95-116, at 3, 8-9 (filed Feb. 8, 2007).

¹⁹⁶ See, e.g., Comcast Comments, CC Docket No. 95-116, at 2-3 (filed Feb. 8, 2007).

¹⁹⁷ See, e.g., T-Mobile/Sprint Nextel Reply, CC Docket No. 95-116, at 2 (filed Feb. 23, 2007).

wireline-to-wireline, wireline-to-wireless, wireless-to-wireline). Further, we seek comment on how the Commission should define the various porting interval timelines in terms of operating hours.¹⁹⁸

64. Finally, we seek comment on the benefits and burdens, including the burdens on small entities, of adopting rules regarding porting intervals for all types of simple port requests.

65. We would encourage interested parties to take into account the fact that as technologies and business practices evolve we would expect that the porting interval would decrease in order to provide consumers as quick and efficient a porting process as possible. We look forward to a complete record on the appropriate porting interval consistent with the shortest reasonable time period.

66. *Other LNP Process Issues.* We note that commenters identify a number of other concerns regarding the LNP process that they assert are hindering the ability of consumers to take advantage of LNP. For example, Charter comments that certain carriers' processes result in cancellation of a subscriber dial tone for port requests that are delayed for operational reasons.¹⁹⁹ Charter also argues that carriers should be (1) required to provide the basis for rejecting a port request at the time of that rejection; (2) required to provide affirmative notice of all changes to their porting requirements and process; and (3) prohibited from making *ad hoc* changes to their procedures.²⁰⁰ Charter also argues that the Commission should declare that interconnection agreements are not a necessary precondition to effectuating wireline-to-wireline ports.²⁰¹ We seek comment on these and any other concerns regarding the LNP process more generally, including the port validation process and porting intervals for non-simple ports.

C. New Dockets

67. In this Notice, we open two new dockets – WC Docket No. 07-243 and WC Docket No. 07-244. All filings made in response to the Notice section on interconnected VoIP provider numbering obligations should be filed in WC Docket No. 07-243. All filings made in response to the Notice sections on port request validation and porting intervals should be filed in WC Docket No. 07-244.

V. PROCEDURAL MATTERS

A. *Ex Parte* Presentations

68. The rulemaking this Notice initiates shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.²⁰² Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence

¹⁹⁸ See, e.g., Letter from John R. Hoffman, Chairman, NANC, to Lawrence C. Strickling, Chief, Common Carrier Bureau, FCC, CC Docket No. 95-116, Attach. at 20-21 (filed Nov. 4, 1999) (detailing agreed upon operating hours and holiday schedule for time-dependent operations for the Numbering Portability Administration Center).

¹⁹⁹ Charter Comments, CC Docket No. 95-116, at 7-8 (filed Feb. 8, 2007); see also Integra Reply, CC Docket No. 95-116, at 5 (filed Feb. 23, 2007).

²⁰⁰ Charter Comments, CC Docket No. 95-116, at 9-10 (filed Feb. 8, 2007).

²⁰¹ *Id.* at 14-15; see also *Intermodal Number Portability Order*, 18 FCC Rcd at 23711, para. 34 (finding that interconnection agreements are not necessary for the intermodal porting process).

²⁰² 47 C.F.R. §§ 1.200 *et seq.*

description of the views and arguments presented generally is required.²⁰³ Other requirements pertaining to oral and written presentations are set forth in section 1.1206(b) of the Commission's rules.²⁰⁴

B. Comment Filing Procedures

69. Pursuant to sections 1.415 and 1.419 of the Commission's rules,²⁰⁵ interested parties may file comments and reply comments regarding the Notice on or before the dates indicated on the first page of this document. **All filings related to this Notice of Proposed Rulemaking should refer to WC Docket No. 07-243 or WC Docket No. 07-244. All filings made in response to the Notice section on interconnected VoIP provider numbering obligations should be filed in WC Docket No. 07-243. All filings made in response to the Notice sections on port request validation and porting intervals should be filed in WC Docket No. 07-244.** Comments may be filed using: (1) the Commission's Electronic Comment Filing System (ECFS), (2) the Federal Government's eRulemaking Portal, or (3) by filing paper copies. See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24121 (1998).

- **Electronic Filers:** Comments may be filed electronically using the Internet by accessing the ECFS: <http://www.fcc.gov/cgb/ecfs/> or the Federal eRulemaking Portal: <http://www.regulations.gov>. Filers should follow the instructions provided on the website for submitting comments.
- **ECFS filers** must transmit one electronic copy of the comments for CC Docket No. 95-116. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the applicable docket number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions, filers should send an e-mail to ecfs@fcc.gov, and include the following words in the body of the message, "get form." A sample form and directions will be sent in response.
- **Paper Filers:** Parties who choose to file by paper must file an original and four copies of each filing. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission's Secretary, Marlene H. Dortch, Office of the Secretary, Federal Communications Commission, 445 12th Street, S.W., Washington, D.C. 20554.
- The Commission's contractor will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, N.E., Suite 110, Washington, D.C. 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail should be addressed to 445 12th Street, S.W., Washington, D.C. 20554.

²⁰³ See 47 C.F.R. § 1.1206(b)(2).

²⁰⁴ 47 C.F.R. § 1.1206(b).

²⁰⁵ 47 C.F.R. §§ 1.415, 1.419.

70. Parties should send a copy of their filings to the Competition Policy Division, Wireline Competition Bureau, Federal Communications Commission, Room 5-C140, 445 12th Street, S.W., Washington, D.C. 20554, or by e-mail to cpdcopies@fcc.gov. Parties shall also serve one copy with the Commission's copy contractor, Best Copy and Printing, Inc. (BCPI), Portals II, 445 12th Street, S.W., Room CY-B402, Washington, D.C. 20554, (202) 488-5300, or via e-mail to fcc@bcpiweb.com.

71. Documents in WC Docket Nos. 07-243, 07-244, and 04-36, and CC Docket Nos. 95-116 and 99-200 will be available for public inspection and copying during business hours at the FCC Reference Information Center, Portals II, 445 12th Street S.W., Room CY-A257, Washington, D.C. 20554. The documents may also be purchased from BCPI, telephone (202) 488-5300, facsimile (202) 488-5563, TTY (202) 488-5562, e-mail fcc@bcpiweb.com.

C. Final Regulatory Flexibility Analysis

72. As required by the Regulatory Flexibility Act of 1980, *see* 5 U.S.C. § 604, the Commission has prepared Final Regulatory Flexibility Analyses (FRFA) of the possible significant economic impact on small entities of the policies and rules, as proposed, addressed in this document. The FRFA related to Part III.A is set forth in Appendix C, and the FRFA related to Part III.B.2 is set forth in Appendix D.

D. Initial Regulatory Flexibility Analysis

73. As required by the Regulatory Flexibility Act of 1980, *see* 5 U.S.C. § 603, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules addressed in this document. The IRFA is set forth in Appendix E. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice provided below in Appendix E.

E. Paperwork Reduction Act

74. This Order contains new or modified information collection requirements subject the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collection requirements contained in this proceeding.

75. In this Order, the Commission has assessed the effects of imposing LNP and numbering administration contribution requirements on interconnected VoIP providers, and finds that to the extent that interconnected VoIP providers are not already filing FCC Form 499-A annually for other purposes, the information collection burden of doing so in regards to small business concerns will be minimal. Thus, we do not adopt a varied implementation schedule for these requirements.

76. This Notice does not contain proposed information collection(s) subject to the PRA. In addition, therefore, it does not contain any new or modified "information collection burden for small business concerns with fewer than 25 employees," pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198. *See* 44 U.S.C. § 3506(c)(4).

F. Congressional Review Act

77. The Commission will send a copy of this Report and Order, Order on Remand, and Notice of Proposed Rulemaking in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act (CRA). *See* 5 U.S.C. § 801(a)(1)(A).

G. Accessible Formats

78. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice) or 202-418-0432 (TTY). Contact the FCC to request reasonable accommodations for filing comments (accessible format documents, sign language interpreters, CART, etc.) by e-mail: FCC504@fcc.gov; phone: 202-418-0530 or TTY: 202-418-0432.

VI. ORDERING CLAUSES

79. Accordingly, IT IS ORDERED that pursuant to sections 1, 4(i), 4(j), 251, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i)-(j), 251, 303(r), the Report and Order in WC Docket No. 04-36 and CC Docket Nos. 95-116 and 99-200 IS ADOPTED, and that Part 52 of the Commission's Rules, 47 C.F.R. Parts 52, is amended as set forth in Appendix B. The Report and Order shall become effective 30 days after publication in the Federal Register. The information collection requirements contained in the Report and Order will become effective following OMB approval.

80. IT IS FURTHER ORDERED that pursuant to section 1, 4(i), 4(j), 251, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i)-(j), 251, 303(r), the Order on Remand in CC Docket No. 95-116 IS ADOPTED. The Order on Remand shall become effective 30 days after publication in the Federal Register.

81. IT IS FURTHER ORDERED that pursuant to the authority contained in sections 1, 4(i), 4(j), 251, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i)-(j), 251, 303(r), the Notice of Proposed Rulemaking in WC Docket Nos. 07-243 and 07-244 IS ADOPTED.

82. IT IS FURTHER ORDERED that pursuant to sections 1, 4(i), 4(j), 251, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i)-(j), 251, 303(r), and section 1.2 of the Commission's rules, 47 C.F.R. § 1.2, the Petition for Declaratory Rulemaking filed by T-Mobile USA, Inc. and Sprint Nextel Corporation on December 20, 2006 IS GRANTED to the extent described herein and otherwise IS DENIED.

83. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Report and Order, Declaratory Ruling, Order on Remand, and Notice of Proposed Rulemaking, including the two Final Regulatory Flexibility Analyses and the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Comments in WC Docket No. 04-36

Comments	Abbreviation
8X8, Inc.	8X8
AARP	AARP
ACN Communications Services, Inc.	ACN
Ad Hoc Telecommunications Users Committee	Ad Hoc
Alcatel North America	Alcatel
Alliance for Public Technology	APT
America's Rural Consortium	ARC
American Foundation for the Blind	AFB
American Public Communications Council	APCC
Amherst, Massachusetts Cable Advisory Committee	Amherst CAC
Arizona Corporation Commission	Arizona Commission
Arctic Slope Telephone Association Cooperative, Inc. Cellular Mobile Systems of St. Cloud, LLC d/b/a Cellular 2000 Comanche County Telephone, Inc. DeKalb Telephone Cooperative, Inc. d/b/a DTC Communications Grand River Mutual Telephone Corporation Interstate 35 Telephone Company KanOkla Telephone Association, Inc. Siskiyou Telephone Company Uintah Basin Telecommunications Association, Inc. Vermont Telephone Company, Inc. Wheat State Telephone, Inc.	Arctic Slope <i>et al.</i>
Association for Communications Technology Professionals in Higher Education	ACUTA
Association for Local Telecommunications Services	ALTS
Association of Public-Safety Communications Officials- International, Inc.	APCO
AT&T Corporation	AT&T
Attorney General of the State of New York	New York Attorney General
Avaya, Inc.	Avaya
BellSouth Corporation	BellSouth
Bend Broadband Cebridge Connections, Inc. Insight Communications Company, Inc. Susquehanna Communication	Bend Broadband <i>et al.</i>
Boulder Regional Emergency Telephone Service Authority	BRETSA
BT Americas Inc.	BTA
Cablevision Systems Corp.	Cablevision
Callipso Corporation	Callipso
Cbeyond Communications, LLC GlobalCom, Inc. MPower Communications, Corp.	Cbeyond <i>et al.</i>
CenturyTel, Inc.	CenturyTel

Charter Communications	Charter
Cheyenne River Sioux Tribe Telephone Authority	Cheyenne Telephone Authority
Cisco Systems, Inc.	Cisco
Citizens Utility Board	CUB
City and County of San Francisco	San Francisco
City of New York	New York City
Comcast Corporation	Comcast
Communication Service for the Deaf, Inc.	CSD
Communications Workers of America	CWA
CompTel/ASCENT	CompTel
Computer & Communications Industry Association	CCIA
Computing Technology Industry Association	CompTIA
Consumer Electronics Association	CEA
Covad Communications	Covad
Cox Communications, Inc.	Cox
CTIA-The Wireless Association	CTIA
Department of Homeland Security	DHS
DialPad Communication, Inc. ICG Communications, Inc. Qovia, Inc. VoicePulse, Inc.	Dialpad <i>et al.</i>
DJE Teleconsulting, LLC	DJE
Donald Clark Jackson	Jackson
EarthLink, Inc.	EarthLink
EDUCAUSE	EDUCAUSE
Electronic Frontier Foundation	EFF
Enterprise Communications Association	ECA
Federation for Economically Rational Utility Policy	FERUP
Francois D. Menard	Menard
Frontier and Citizens Telephone Companies	Frontier/Citizens
General Communications, Inc.	GCI
Global Crossing North America, Inc.	Global Crossing
GVNW Consulting, Inc.	GVNW
ICORE, Inc.	ICORE
IEEE-USA	IEEE-USA
Illinois Commerce Commission	Illinois Commerce Commission
Inclusive Technologies	Inclusive Technologies
Independent Telephone & Telecommunications Alliance	ITTA
Information Technology Association of America	ITAA
Information Technology Industry Council	ITIC
Interstate Telcom Consulting, Inc.	ITCI
Ionary Consulting	Ionary
Iowa Utilities Board	Iowa Commission
King County E911 Program	King County
Level 3 Communications LLC	Level 3
Lucent Technologies Inc.	Lucent Technologies
Maine Public Utilities Commissioners	Maine Commissioners
MCI	MCI
Microsoft Corporation	Microsoft
Minnesota Public Utilities Commission	Minnesota Commission

Montana Public Service Commission	Montana Commission
Motorola, Inc.	Motorola
National Association of Regulatory Utility Commission	NARUC
National Association of State Utility Consumer Advocates	NASUCA
National Association of Telecommunications Officers and Advisors National League of Cities National Association of Counties U.S. Conference of Mayors National Association of Towns and Townships Texas Coalition of Cities for Utility Issues Washington Association of Telecommunications Officers and Advisors Greater Metro Telecommunications Consortium Mr. Hood Cable Regulatory Commission Metropolitan Washington Council of Governments Rainier Communications Commission City of Philadelphia City of Tacoma, Washington Montgomery County, Maryland	NATOA <i>et al.</i>
National Cable & Telecommunications Association	NCTA
National Consumers League	NCL
National Emergency Number Association	NENA
National Exchange Carrier Association, Inc.	NECA
National Governors Association	NGA
National Grange	National Grange
National Telecommunications Cooperative Association	NTCA
Nebraska Public Service Commission	Nebraska Commission
Nebraska Rural Independent Companies	Nebraska Rural Independent Companies
Net2Phone, Inc.	Net2Phone
New Jersey Board of Public Utilities	New Jersey Commission
New Jersey Division of the Ratepayer Advocate	New Jersey Ratepayer Advocate
New York State Department of Public Service	New York Commission
NexVortex, Inc.	nexVortex
Nortel Networks	Nortel
Nuvio Corporation	Nuvio
Office of Advocacy, U.S. Small Business Administration	SBA
Office of the Attorney General of Texas	Texas Attorney General
Office of the People's Counsel for the District of Columbia	D.C. Counsel
Ohio Public Utilities Commission	Ohio PUC
Omnitor	Omnitor
Organization for the Promotion and Advancement of Small Telecommunications Companies	OPASTCO
Pac-West Telecomm, Inc.	Pac-West
People of the State of California and the California Public Utilities Commission	California Commission
Public Service Commission of the State of Missouri	Missouri Commission
Pulver.com	pulver.com

Qwest Communications International Inc.	Qwest
Rehabilitation Engineering Research Center on Telecommunications Access	RERCTA
Rural Independent Competitive Alliance	RICA
SBC Communications, Inc.	SBC
Self Help for Hard of Hearing People	SHHHP
Skype, Inc.	Skype
Sonic.net, Inc.	Sonic.net
SPI Solutions, Inc.	SPI Solutions
Spokane County 911 Communications	Spokane County 911
Sprint Corporation	Sprint
TCA, Inc. – Telecom Consulting Associates	TCA
Telecommunications for the Deaf, Inc	TDI
Telecommunications Industry Association	TIA
Tellme Networks, Inc	Tellme Networks
Tennessee Regulatory Authority	TRA
Texas Coalition of Cities for Utility Issues	TCCFUI
Texas Commission on State Emergency Communications.	TCSEC
Texas Department of Information Resources	Texas DIR
Time Warner Inc.	Time Warner
Time Warner Telecom	TWTC
TracFone Wireless, Inc.	TracFone
UniPoint Enhanced Services Inc. d/b/a PointOne	PointOne
United States Conference of Catholic Bishops Alliance for Community Media Appalachian People's Actions Coalition Center for Digital Democracy Consumer Action Edgemont Neighborhood Coalition Migrant Legal Action Program	USCCB <i>et al.</i>
United States Department of Justice	DOJ
United States Telecom Association	USTA
United Telecom Council The United Power Line Council	UTC <i>et al.</i>
USA Datanet Corporation	USAD Datanet
Utah Division of Public Utilities	Utah Commission
Valor Telecommunications of Texas, L.P. and Iowa Telecommunications Services, Inc.	Valor <i>et al.</i>
VeriSign, Inc.	VeriSign
Verizon Telephone Company	Verizon
Vermont Public Service Board	Vermont
Virgin Mobile USA, LLC	Virgin Mobile
Virginia State Corporation Commission	Virginia Commission
Voice on the Net Coalition	VON Coalition
Vonage Holdings Corp	Vonage
Western Telecommunications Alliance	WTA
WilTel Communications, LLC	WilTel
Wisconsin Electric Power Company Wisconsin Gas	Wisconsin Electric <i>et al.</i>

Yellow Pages Integrated Media Association	YPIMA
Z-Tel Communications, Inc.	Z-Tel

Reply Comments in WC Docket No. 04-36

Reply Comments	Abbreviation
8X8, Inc.	8X8
Ad Hoc Telecom Manufacturer Coalition	Ad Hoc Telecom Manufacturers Coalition
Ad Hoc Telecommunications Users Committee	Ad Hoc
Adam D. Thierer, Director of Telecommunications Studies, Cato Institute	Thierer
Alcatel North America	Alcatel
Alliance for Public Technology et al.	APT <i>et al.</i>
American Cable Association	ACA
American Electric Power Service Corporation Duke Energy Corporation Xcel Energy Inc.	American Electric Power <i>et al.</i>
Association for Local Telecommunications Services	ALTS
AT&T Corp.	AT&T
Avaya Inc.	Avaya
BellSouth Corporation	BellSouth
Broadband Service Providers Association	BSPA
Cablevision Systems Corp.	Cablevision
Callipso Corporation	Callipso
Central Station Alarm Association	CSAA
Cingular Wireless LLC	Cingular
Cisco Systems, Inc.	Cisco
City and County of San Francisco	San Francisco
Comcast Corporation	Comcast
CompTel/Ascent	CompTel
Consumer Electronics Association	CEA
Consumer Federation of America Consumers Union	CFA <i>et al.</i>
Covad Communications	Covad
CTC Communications Corp.	CTS
CTIA-The Wireless Association	CTIA
Department of Defense	DoD
Donald Clark Jackson	Jackson
EarthLink, Inc.	EarthLink
Educause	Educause
Enterprise Communications Association	ECA
Ericsson Inc.	Ericsson
Florida Public Service Commission	Florida Commission
Francois D. Menard	Menard
General Communication (GCI)	GCI
Global Crossing North America, Inc.	Global Crossing
Independent Telephone & Telecommunications Alliance	ITTA
Information Technology Association of America	Information Technology Association of America
Intergovernmental Advisory Committee	IAC
Intrado Inc.	Intrado

Knology, Inc.	Knology
Level 3 Communications LLC	Level 3
Massachusetts Office of the Attorney General	Massachusetts Attorney General
MCI	MCI
Montana Public Service Commission	Montana Commission
Motorola, Inc.	Motorola
National Association of State Utility Consumer Advocates	NASUCA
National Association of Telecommunications Officers and Advisors National League of Cities National Association of Counties U.S. Conference of Mayors National Association of Towns and Townships Texas Coalition of Cities for Utility Issues Washington Association of Telecommunications Officers and Advisors Greater Metro Telecommunications Consortium Mr. Hood Cable Regulatory Commission Metropolitan Washington Council of Governments Rainier Communications Commission City of Philadelphia City of Tacoma, Washington Montgomery County, Maryland	NATOA <i>et al.</i>
National Cable & Telecommunications Association	NCTA
National Emergency Number Association	NENA
National Exchange Carrier Association, Inc.	NECA
Nebraska Public Service Commission	Nebraska Commission
Nebraska Rural Independent Companies	Nebraska Rural Independent Companies
Net2Phone, Inc.	Net2Phone
New Jersey Division of the Ratepayer Advocate	New Jersey Ratepayer Advocate
New York State Department of Public Service	New York Commission
Nextel Communications, Inc.	Nextel
Nuvio Corporation	Nuvio
Office of the People's Counsel for the District of Columbia	D.C. Counsel
Organization for the Promotion and Advancement of Small Telecommunications Companies	OPASTCO
Pac-West Telecomm, Inc.	Pac-West
Pennsylvania Public Utility Commission	Pennsylvania Commission
Public Service Commission of Wisconsin	Wisconsin Commission
Qwest Communications International Inc.	Qwest
Regulatory Studies Program (RSP) of the Mercatus Center at George Mason University	Mercatus Center
Rehabilitation Engineering Research Center on Telecommunications Access	RERCTA
RNKL, Inc. d/b/a RNK Telecom	RNK
Rural Independent Competitive Alliance	RICA
SBC Communications Inc.	SBC
Skype, Inc.	Skype
Southern Communications Services, Inc. d/b/a Southern	Southern LINC

LINC	
Sprint Corporation	Sprint
Telecommunications Industry Association	TIA
Tellme Networks, Inc.	Tellme Networks
Texas Statewide Telephone Cooperative, Inc.	Texas Statewide Telephone Cooperative
Time Warner Telecom, Inc.	TWTC
T-Mobile USA, Inc.	T-Mobile
TracFone Wireless, Inc.	TracFone
United States Conference of Catholic Bishops Alliance for Community Media Appalachian Peoples' Action Coalition Center for Digital Democracy Consumer Action Edgemont Neighborhood Coalition Migrant Legal Action Program	USCCB <i>et al.</i>
United States Department of Justice	DOJ
United States Telecom Association	USTA
USA Datanet Corporation	USA Datanet
Utah Division of Public Utilities	Utah Commission
VeriSign, Inc.	VeriSign
Verizon Telephone Companies	Verizon
Voice on the Net Coalition	VON Coalition
Wisconsin Department of Public Instruction	Wisconsin Department of Public Instruction

**Comments in Response to the T-Mobile/Sprint Nextel Petition
CC Docket No. 95-116**

Comments	Abbreviation
AT&T Inc.	AT&T
California Public Utilities Commission and the People of the State of California	California Commission
Charter Communications, Inc.	Charter
Comcast Corporation and its affiliates	Comcast
CTIA – The Wireless Association®	CTIA
The Embarq Local Operation Companies	Embarq
Iowa Utilities Board	Iowa Utilities Board
Leap Wireless International, Inc. and its Cricket subsidiaries	Leap Wireless
MetroPCS Communications, Inc.	MetroPCS
National Association of State Utility Consumer Advocates	NASUCA
Nebraska Public Service Commission	Nebraska Commission
PCIA – The Wireless Infrastructure Association	PCIA
Qwest Corporation and Qwest Communications Corporation	Qwest
Time Warner Telecom Inc., Cbeyond, Inc. and One Communications Corp.	TWTC <i>et al.</i>
United States Cellular Corporation	USCC
The regulated, wholly owned subsidiaries of Verizon Communications, Inc.	Verizon

**Reply Comments in Response to the T-Mobile/Sprint Nextel Petition
CC Docket No. 95-116**

Reply Comments	Abbreviation
Integra Telecom, Inc.	Integra
Level 3 Communications, LLC	Level 3
National Association of Regulatory Utility Commissioners	NARUC
National Association of State Utility Consumer Advocates	NASUCA
T-Mobile USA, Inc. and Sprint Nextel Corporation	T-Mobile/Sprint Nextel
United States Telecom Association	USTA

**Comments in Response to *Intermodal Number Portability Order IRFA*
CC Docket No. 95-116**

Comments	Abbreviation
Alexicon Telecommunications Consulting	Alexicon
Central Texas Telephone Cooperative, Inc., Chariton Valley Telephone Corporation, Comanche County Telephone Company, Inc., Kaplan Telephone Company, Inc., Leaco Rural Telephone Cooperative, Inc., Valley Telephone Cooperative, Inc.	Central Texas Telephone Cooperative <i>et al.</i>
CTIA – The Wireless Association®	CTIA
Iowa Utilities Board	Iowa Utilities Board
John Staurulakis, Inc.	John Staurulakis
Missouri Small Telephone Company Group	Missouri Small Telephone Company Group
Montana Small Rural Independents	Montana Small Rural Independents
Montana Independent Telecommunications Systems	Montana Independent Telecommunications Systems
National Telecommunications Cooperative Association & Organization for the Promotion and Advancement of Small Telecommunications Companies	NTCA/OPASTCO
The Nebraska Rural Independent Companies	Nebraska Rural Independent Companies
NTC Communications, L.L.C.	NTC Communications
Rural Iowa Independent Telephone Association	Rural Iowa Independent Telephone Association
Office of Advocacy, U.S. Small Business Administration	Office of Advocacy, U.S. Small Business Administration
South Dakota Telecommunications Association	South Dakota Telecommunications Association
Sprint Nextel Corporation	Sprint Nextel
United States Telecom Association	USTA
Verizon Wireless	Verizon Wireless

**Reply Comments in Response to *Intermodal Number Portability Order IRFA*
CC Docket No. 95-116**

Reply Comments	Abbreviation
Central Texas Telephone Cooperative, Inc., Chariton Valley Telephone Corporation, Comanche County	Central Texas Telephone Cooperative <i>et al.</i>

Telephone Company, Inc., Kaplan Telephone Company, Inc., Leaco Rural Telephone Cooperative, Inc., Valley Telephone Cooperative, Inc.	
CTIA – The Wireless Association®	CTIA
Dobson Cellular Systems, Inc.	Dobson Cellular
Missouri Small Telephone Company Group	Missouri Small Telephone Company Group
Montana Independent Telecommunications Systems	Montana Independent Telecommunications System
National Telecommunications Cooperative Association & Organization for the Promotion and Advancement of Small Telecommunications Companies	NTCA/OPASTCO
The Nebraska Rural Independent Companies	Nebraska Rural Independent Companies
South Dakota Telecommunications Association	South Dakota Telecommunications Association
Sprint Nextel Corporation	Sprint Nextel
TCA, Inc.	TCA
T-Mobile USA, Inc.	T-Mobile
United States Telecom Association	USTA
Verizon Wireless	Verizon Wireless

APPENDIX B

Final Rules

Part 52 of Title 47 of the Code of Federal Regulations is amended to read as follows:

PART 52 – NUMBERING

1. The authority citation for part 52 is amended as follows:

Authority: Secs. 1, 2, 4, 5, 48 Stat. 1066, as amended; 47 U.S.C. 151, 152, 154 and 155 unless otherwise noted. Interpret or apply secs. 3, 4, 201-05, 207-09, 218, 225-27, 251-52, 271 and 332, 48 Stat. 1070, as amended, 1077; 47 U.S.C. 153, 154, 201-05, 207-09, 218, 225-27, 251-52, 271 and 332 unless otherwise noted.

2. Section 52.12(a)(1)(i) is amended to read as follows:

* * * * *

(a)(1) * * *

(i) The NANPA and B&C Agent may not be an affiliate of any telecommunications service provider(s) as defined in the Telecommunications Act of 1996, or an affiliate of any interconnected VoIP provider as that term is defined in § 52.21(h). “Affiliate” is a person who controls, is controlled by, or is under the direct or indirect common control with another person. A person shall be deemed to control another if such person possesses, directly or indirectly—

* * * * *

3. Section 52.16 is amended by adding the following paragraph:

* * * * *

(g) For the purposes of this rule, the term “carrier(s)” shall include interconnected VoIP providers as that term is defined in § 52.21(h).

4. Section 52.17 is amended by adding the following paragraph:

* * * * *

(c) For the purposes of this rule, the term “telecommunications carrier” or “carrier” shall include interconnected VoIP providers as that term is defined in § 52.21(h).

5. Section 52.21 is amended by redesignating paragraphs (h) through (r) as paragraphs (i) through (s), and by adding new paragraph (h) to read as follows:

* * * * *

(h) The term “interconnected VoIP provider” is an entity that provides interconnected VoIP service as that term is defined in section 9.3 of these rules.

* * * * *

6. Section 52.23 is amended by adding the following paragraph:

* * * * *

(h)(1) Porting from a wireline carrier to a wireless carrier is required where the requesting wireless carrier's "coverage area," as defined in paragraph (h)(2), overlaps the geographic location in which the customer's wireline number is provisioned, provided that the porting-in carrier maintains the number's original rate center designation following the port.

(2) The wireless "coverage area" is defined as the area in which wireless service can be received from the wireless carrier.

7. Section 52.32 is amended by adding the following paragraph:

* * * * *

(e) For the purposes of this rule, the term "telecommunications carrier" shall include interconnected VoIP providers as that term is defined in § 52.21(h); and "telecommunications service" shall include "interconnected VoIP service" as that term is defined in section 9.3 of these rules.

8. Section 52.33(b) is amended to read as follows:

* * * * *

(b) All interconnected VoIP providers and telecommunications carriers other than incumbent local exchange carriers may recover their number portability costs in any manner consistent with applicable state and federal laws and regulations.

9. Section 52.34 is added to read as follows:

§ 52.34 Obligations regarding local number porting to and from interconnected VoIP providers.

(a) An interconnected VoIP provider must facilitate an end-user customer's valid number portability request, as it is defined in this subpart, either to or from a telecommunications carrier or another interconnected VoIP provider. "Facilitate" is defined as the interconnected VoIP providers' affirmative legal obligation to take all steps necessary to initiate or allow a port-in or port-out itself or through the telecommunications carriers, if any, that it relies on to obtain numbering resources, subject to a valid port request, without unreasonable delay or unreasonable procedures that have the effect of delaying or denying porting of the NANP-based telephone number.

(b) An interconnected VoIP provider may not enter into any agreement that would prohibit an end-user customer from porting between interconnected VoIP providers, or to or from a telecommunications carrier.

APPENDIX C

Final Regulatory Flexibility Analysis
(Interconnected VoIP Services)

WC Docket No. 04-36

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *IP-Enabled Services Notice* in WC Docket 04-36.² The Commission sought written public comment on the proposals in the notice, including comment on the IRFA.³ We received comments specifically directed toward the IRFA from three commenters in WC Docket No. 04-36. These comments are discussed below. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.⁴

A. Need for, and Objectives of, the Rules

2. This Report and Order extends LNP obligations to interconnected voice over Internet Protocol (VoIP) providers to ensure that customers of such VoIP providers may port their North American Numbering Plan (NANP) telephone numbers when changing providers. Consumers will now be able to take advantage of new telephone services without losing their telephone numbers, which should in turn facilitate greater competition among telephony providers by allowing customers to respond to price and service changes. Additionally, this Report and Order extends to interconnected VoIP providers the obligation to contribute to shared numbering administration and number portability costs. We believe these steps we take to ensure regulatory parity among providers of similar services will minimize marketplace distortions arising from regulatory advantage.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

3. In this section, we respond to comments filed in response to the IRFA.⁵ To the extent we received comments raising general small business concerns during this proceeding, those comments are discussed throughout the Report and Order.

4. The Small Business Administration (SBA) comments that the Commission's Notice does not contain concrete proposals and is more akin to an advance notice of proposed rulemaking or a notice of inquiry.⁶ We disagree with the SBA and Menard that the Commission should postpone acting in this proceeding – thereby postponing extending the application of the LNP and numbering administration support obligations to interconnected VoIP services – and instead should reevaluate the economic impact and the compliance burdens on small entities and issue a further notice of proposed rulemaking in conjunction with a supplemental IRFA identifying and analyzing the economic impacts on small entities

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-12, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² See *IP-Enabled Services*, WC Docket No. 04-36, Notice of Proposed Rulemaking, 19 FCC Rcd 4863, 4917, para. 91 & Appendix A (2004) (*IP-Enabled Services Notice*).

³ See *IP-Enabled Services Notice*, 19 FCC Rcd at 4917, para. 91 & Appendix A.

⁴ See 5 U.S.C. § 604.

⁵ See SBA Comments, WC Docket No. 04-36 (filed May 28, 2004); Menard Comments, WC Docket No. 04-36 (filed May 28, 2004); Menard Reply, WC Docket No. 04-36 (filed July 15, 2004).

⁶ See SBA Comments, WC Docket No. 04-36, at 1.

and less burdensome alternatives.⁷ We believe these additional steps suggested by SBA and Menard are unnecessary because small entities already have received sufficient notice of the issues addressed in today's Report and Order,⁸ and because the Commission has considered the economic impact on small entities and what ways are feasible to minimize the burdens imposed on those entities, and, to the extent feasible, has implemented those less burdensome alternatives.

C. Description and Estimate of the Number of Small Entities to Which Rules Will Apply

5. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.⁹ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."¹⁰ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.¹¹ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.¹²

6. *Small Businesses.* Nationwide, there are a total of approximately 22.4 million small businesses according to SBA data.¹³

7. *Small Organizations.* Nationwide, there are approximately 1.6 million small organizations.¹⁴

8. *Small Governmental Jurisdictions.* The term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."¹⁵ Census Bureau data for 2002 indicate that there were 87,525 local governmental jurisdictions in the United States.¹⁶ We estimate that, of this total, 84,377 entities

⁷ See SBA Comments, WC Docket No. 04-36, at 2, 4, 6; Menard Comments, WC Docket No. 04-36; Menard Reply, WC Docket No. 04-36, at 4.

⁸ The *IP-Enabled Services Notice* specifically sought comment on whether numbering obligations are appropriate in the context of IP-enabled services and whether action relating to numbering resources is desirable to facilitate the growth of IP-enabled services, while at the same time continuing to maximize the use and life of numbering resources in the North American Numbering Plan. The Commission published a summary of that notice in the Federal Register. See *IP-Enabled Services Notice*, 19 FCC Rcd at 4911-14, paras. 73-76; *Regulatory Requirements for IP-Enabled Services*, WC Docket No. 04-36, Notice of Proposed Rulemaking, 69 FR 16193 (Mar. 29, 2004). We note that a number of small entities submitted comments in this proceeding. See *supra* Appendix A.

⁹ 5 U.S.C. §§ 603(b)(3), 604(a)(3).

¹⁰ 5 U.S.C. § 601(6).

¹¹ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such terms which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

¹² 15 U.S.C. § 632.

¹³ See SBA, Programs and Services, SBA Pamphlet No. CO-0028, at page 40 (July 2002).

¹⁴ Independent Sector, *The New Nonprofit Almanac & Desk Reference* (2002).

¹⁵ 5 U.S.C. § 601(5).

¹⁶ U.S. Census Bureau, *Statistical Abstract of the United States: 2006*, Section 8, page 272, Table 415.

were "small governmental jurisdictions."¹⁷ Thus, we estimate that most governmental jurisdictions are small.

1. Telecommunications Service Entities

a. Wireline Carriers and Service Providers

9. We have included small incumbent local exchange carriers (LECs) in this present RFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees) and "is not dominant in its field of operation."¹⁸ The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope.¹⁹ We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

10. *Incumbent LECs.* Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent LECs. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁰ According to Commission data,²¹ 1,303 carriers have reported that they are engaged in the provision of incumbent local exchange services. Of these 1,303 carriers, an estimated 1,020 have 1,500 or fewer employees and 283 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our action.

11. *Competitive LECs, Competitive Access Providers (CAPs), "Shared-Tenant Service Providers," and "Other Local Service Providers."* Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²² According to Commission data,²³ 859 carriers have reported that they are engaged in the provision of either competitive access provider services or competitive LEC services. Of these 859 carriers, an estimated 741 have 1,500 or fewer employees and 118 have more than 1,500 employees. In addition, 16 carriers have reported that they are "Shared-Tenant

¹⁷ We assume that the villages, school districts, and special districts are small, and total 48,558. See U.S. Census Bureau, Statistical Abstract of the United States: 2006, section 8, page 273, Table 417. For 2002, Census Bureau data indicate that the total number of county, municipal, and township governments nationwide was 38,967, of which 35,819 were small. *Id.*

¹⁸ 15 U.S.C. § 632.

¹⁹ Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of "small-business concern," which the RFA incorporates into its own definition of "small business." See 15 U.S.C. § 632(a) (Small Business Act); 5 U.S.C. § 601(3) (RFA). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. See 13 C.F.R. § 121.102(b).

²⁰ 13 C.F.R. § 121.201, NAICS code 517110.

²¹ FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, *Trends in Telephone Service* at Table 5.3, page 5-5 (Feb. 2007) (*Trends in Telephone Service*). This source uses data that are current as of October 20, 2005.

²² 13 C.F.R. § 121.201, NAICS code 517110.

²³ *Trends in Telephone Service* at Table 5.3.

Service Providers,” and all 16 are estimated to have 1,500 or fewer employees. In addition, 44 carriers have reported that they are “Other Local Service Providers.” Of the 44, an estimated 43 have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, “Shared-Tenant Service Providers,” and “Other Local Service Providers” are small entities.

12. *Local Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁴ According to Commission data,²⁵ 184 carriers have reported that they are engaged in the provision of local resale services. Of these, an estimated 181 have 1,500 or fewer employees and three have more than 1,500 employees. Consequently, the Commission estimates that the majority of local resellers are small entities that may be affected by our action.

13. *Toll Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁶ According to Commission data,²⁷ 881 carriers have reported that they are engaged in the provision of toll resale services. Of these, an estimated 853 have 1,500 or fewer employees and 28 have more than 1,500 employees. Consequently, the Commission estimates that the majority of toll resellers are small entities that may be affected by our action.

14. *Payphone Service Providers (PSPs).* Neither the Commission nor the SBA has developed a small business size standard specifically for payphone services providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁸ According to Commission data,²⁹ 657 carriers have reported that they are engaged in the provision of payphone services. Of these, an estimated 653 have 1,500 or fewer employees and four have more than 1,500 employees. Consequently, the Commission estimates that the majority of payphone service providers are small entities that may be affected by our action.

15. *Interexchange Carriers (IXCs).* Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³⁰ According to Commission data,³¹ 330 carriers have reported that they are engaged in the provision of interexchange service. Of these, an estimated 309 have 1,500 or fewer employees and 21 have more than 1,500 employees. Consequently, the Commission estimates that the majority of IXC are small entities that may be affected by our action.

16. *Operator Service Providers (OSPs).* Neither the Commission nor the SBA has developed a small business size standard specifically for operator service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a

²⁴ 13 C.F.R. § 121.201, NAICS code 517310.

²⁵ *Trends in Telephone Service* at Table 5.3.

²⁶ 13 C.F.R. § 121.201, NAICS code 517310.

²⁷ *Trends in Telephone Service* at Table 5.3.

²⁸ 13 C.F.R. § 121.201, NAICS code 517110.

²⁹ *Trends in Telephone Service* at Table 5.3.

³⁰ 13 C.F.R. § 121.201, NAICS code 517110.

³¹ *Trends in Telephone Service* at Table 5.3.

business is small if it has 1,500 or fewer employees.³² According to Commission data,³³ 23 carriers have reported that they are engaged in the provision of operator services. Of these, an estimated 22 have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the Commission estimates that the majority of OSPs are small entities that may be affected by our action.

17. *Prepaid Calling Card Providers.* Neither the Commission nor the SBA has developed a small business size standard specifically for prepaid calling card providers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³⁴ According to Commission data,³⁵ 104 carriers have reported that they are engaged in the provision of prepaid calling cards. Of these, 102 are estimated to have 1,500 or fewer employees and two have more than 1,500 employees. Consequently, the Commission estimates that all of the majority of prepaid calling card providers are small entities that may be affected by our action.

18. *800 and 800-Like Service Subscribers.*³⁶ These toll-free services fall within the broad economic census category of Telecommunications Resellers. This category "comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure."³⁷ The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.³⁸ Census Bureau data for 2002 show that there were 1,646 firms in this category that operated for the entire year.³⁹ Of this total, 1,642 firms had employment of 999 or fewer employees, and four firms had employment of 1,000 employees or more.⁴⁰ Thus, the majority of these firms can be considered small. Additionally, it may be helpful to know the total numbers of telephone numbers assigned in these services. Commission data show that, as of June 2006, the total number of 800 numbers assigned was 7,647,941, the total number of 888 numbers assigned was 5,318,667, the total number of 877 numbers assigned was 4,431,162, and the total number of 866 numbers assigned was 6,008,976.⁴¹

b. International Service Providers

19. The Commission has not developed a small business size standard specifically for providers of international service. The appropriate size standards under SBA rules are for the two broad

³² 13 C.F.R. § 121.201, NAICS code 517110.

³³ *Trends in Telephone Service* at Table 5.3.

³⁴ 13 C.F.R. § 121.201, NAICS code 517310.

³⁵ *Trends in Telephone Service* at Table 5.3.

³⁶ We include all toll-free number subscribers in this category, including those for 888 numbers.

³⁷ U.S. Census Bureau, 2007 NAICS Definitions, "517911 Telecommunications Resellers" (partial definition); <http://www.census.gov/naics/2007/def/ND517911.HTM#N517911>.

³⁸ 13 C.F.R. § 121.201, NAICS code 517911.

³⁹ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization," Table 5, NAICS code 517310 (issued Nov. 2005). Prior to 2007, the subject category was numbered 517310.

⁴⁰ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

⁴¹ *Trends in Telephone Service* at Tables 18.4-18.8.

census categories of "Satellite Telecommunications" and "Other Telecommunications." Under both categories, such a business is small if it has \$13.5 million or less in average annual receipts.⁴²

20. The first category of Satellite Telecommunications "comprises establishments primarily engaged in providing point-to-point telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications."⁴³ For this category, Census Bureau data for 2002 show that there were a total of 371 firms that operated for the entire year.⁴⁴ Of this total, 307 firms had annual receipts of under \$10 million, and 26 firms had receipts of \$10 million to \$24,999,999.⁴⁵ Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

21. The second category of Other Telecommunications "comprises establishments primarily engaged in (1) providing specialized telecommunications applications, such as satellite tracking, communications telemetry, and radar station operations; or (2) providing satellite terminal stations and associated facilities operationally connected with one or more terrestrial communications systems and capable of transmitting telecommunications to or receiving telecommunications from satellite systems."⁴⁶ For this category, Census Bureau data for 2002 show that there were a total of 332 firms that operated for the entire year.⁴⁷ Of this total, 259 firms had annual receipts of under \$10 million and 15 firms had annual receipts of \$10 million to \$24,999,999.⁴⁸ Consequently, we estimate that the majority of Other Telecommunications firms are small entities that might be affected by our action.

c. Wireless Telecommunications Service Providers

22. Below, for those services subject to auctions, we note that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated.

23. *Wireless Service Providers.* The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of "Paging"⁴⁹ and "Cellular and Other Wireless Telecommunications."⁵⁰ Under both SBA categories, a wireless business is small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 2002 show that there

⁴² 13 C.F.R. § 121.201, NAICS codes 517410 and 517910.

⁴³ U.S. Census Bureau, "2002 NAICS Definitions: 517410 Satellite Telecommunications," available at <http://www.census.gov/epcd/naics02/def/ND517410.HTM> (visited Oct. 16, 2007).

⁴⁴ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 517410 (issued Nov. 2005).

⁴⁵ *Id.* An additional 38 firms had annual receipts of \$25 million or more.

⁴⁶ U.S. Census Bureau, "2002 NAICS Definitions: 517910 Other Telecommunications," available at <http://www.census.gov/epcd/naics02/def/ND517910.HTM> (visited Oct. 16, 2007).

⁴⁷ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 517910 (issued Nov. 2005).

⁴⁸ *Id.* An additional 14 firms had annual receipts of \$25 million or more.

⁴⁹ 13 C.F.R. § 121.201, NAICS code 517211 (changed from 513321 in Oct. 2002).

⁵⁰ 13 C.F.R. § 121.201, NAICS code 517212 (changed from 513322 in Oct. 2002).

were 807 firms in this category that operated for the entire year.⁵¹ Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.⁵² Thus, under this category and associated small business size standard, the majority of firms can be considered small. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.⁵³ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.⁵⁴ Thus, under this second category and size standard, the majority of firms can, again, be considered small.

24. *Cellular Licensees.* The SBA has developed a small business size standard for wireless firms within the broad economic census category "Cellular and Other Wireless Telecommunications."⁵⁵ Under this SBA category, a wireless business is small if it has 1,500 or fewer employees. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.⁵⁶ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.⁵⁷ Thus, under this category and size standard, the majority of firms can be considered small. Also, according to Commission data, 437 carriers reported that they were engaged in the provision of cellular service, Personal Communications Service (PCS), or Specialized Mobile Radio (SMR) Telephony services, which are placed together in the data.⁵⁸ We have estimated that 260 of these are small under the SBA small business size standard.⁵⁹

25. *Paging.* The SBA has developed a small business size standard for the broad economic census category of "Paging."⁶⁰ Under this category, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.⁶¹ Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.⁶² In addition, according to

⁵¹ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517211 (issued Nov. 2005).

⁵² *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is firms with "1000 employees or more."

⁵³ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517212 (issued Nov. 2005).

⁵⁴ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is firms with "1000 employees or more."

⁵⁵ 13 C.F.R. § 121.201, NAICS code 517212.

⁵⁶ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517212 (issued Nov. 2005).

⁵⁷ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is firms with "1000 employees or more."

⁵⁸ *Trends in Telephone Service* at Table 5.3.

⁵⁹ *Id.*

⁶⁰ 13 C.F.R. § 121.201, NAICS code 517211.

⁶¹ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517211 (issued Nov. 2005).

⁶² *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

Commission data,⁶³ 365 carriers have reported that they are engaged in the provision of "Paging and Messaging Service." Of this total, we estimate that 360 have 1,500 or fewer employees, and five have more than 1,500 employees. Thus, in this category the majority of firms can be considered small.

26. We also note that, in the *Paging Second Report and Order*, the Commission adopted a size standard for "small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁶⁴ In this context, a small business is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.⁶⁵ The SBA has approved this definition.⁶⁶ An auction of Metropolitan Economic Area (MEA) licenses commenced on February 24, 2000, and closed on March 2, 2000. Of the 2,499 licenses auctioned, 985 were sold.⁶⁷ Fifty-seven companies claiming small business status won 440 licenses.⁶⁸ An auction of MEA and Economic Area (EA) licenses commenced on October 30, 2001, and closed on December 5, 2001. Of the 15,514 licenses auctioned, 5,323 were sold.⁶⁹ One hundred thirty-two companies claiming small business status purchased 3,724 licenses. A third auction, consisting of 8,874 licenses in each of 175 EAs and 1,328 licenses in all but three of the 51 MEAs commenced on May 13, 2003, and closed on May 28, 2003. Seventy-seven bidders claiming small or very small business status won 2,093 licenses.⁷⁰ We also note that, currently, there are approximately 74,000 Common Carrier Paging licenses.

27. *Wireless Communications Services.* This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission established small business size standards for the wireless communications services (WCS) auction. A "small business" is an entity with average gross revenues of \$40 million or less for each of the three preceding years, and a "very small business" is an entity with average gross revenues of \$15 million or less for each of the three preceding years. The SBA has approved these small business size standards.⁷¹ The Commission auctioned geographic area licenses in the WCS service. In the auction, there were seven winning bidders that qualified as "very small business" entities, and one that qualified as a "small business" entity.

28. *Wireless Telephony.* Wireless telephony includes cellular, personal communications services (PCS), and specialized mobile radio (SMR) telephony carriers. As noted earlier, the SBA has developed a small business size standard for "Cellular and Other Wireless Telecommunications" services.⁷² Under that SBA small business size standard, a business is small if it has 1,500 or fewer

⁶³ *Trends in Telephone Service*, Table 5.3.

⁶⁴ *Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems*, WT Docket No. 96-18, PP Docket No. 93-235, Second Report and Order, 12 FCC Rcd 2732, 2811-2812, paras. 178-181 (*Paging Second Report and Order*); see also *Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems*, WT Docket No. 96-18, PP Docket No. 93-235, Memorandum Opinion and Order on Reconsideration, 14 FCC Rcd 10030, 10085-10088, paras. 98-107 (1999).

⁶⁵ *Paging Second Report and Order*, 12 FCC Rcd at 2811, para. 179.

⁶⁶ See Letter from Aida Alvarez, Administrator, Small Business Administration, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau (dated Dec. 2, 1998) (SBA Dec. 2, 1998 Letter).

⁶⁷ See *929 and 931 MHz Paging Auction Closes*, Public Notice, 15 FCC Rcd 4858 (WTB 2000).

⁶⁸ *Id.*

⁶⁹ See *Lower and Upper Paging Band Auction Closes*, Public Notice, 16 FCC Rcd 21821 (WTB 2002).

⁷⁰ See *Lower and Upper Paging Bands Auction Closes*, Public Notice, 18 FCC Rcd 11154 (WTB 2003).

⁷¹ SBA Dec. 2, 1998 Letter.

⁷² 13 C.F.R. § 121.201, NAICS code 517212.

employees.⁷³ According to Commission data, 432 carriers reported that they were engaged in the provision of wireless telephony.⁷⁴ We have estimated that 221 of these are small under the SBA small business size standard.

29. *Broadband Personal Communications Service.* The broadband Personal Communications Service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission defined "small entity" for Blocks C and F as an entity that has average gross revenues of \$40 million or less in the three previous calendar years.⁷⁵ For Block F, an additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁷⁶ These standards defining "small entity" in the context of broadband PCS auctions have been approved by the SBA.⁷⁷ No small businesses, within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.⁷⁸ On March 23, 1999, the Commission re-auctioned 347 C, D, E, and F Block licenses. There were 48 small business winning bidders. On January 26, 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in this auction, 29 qualified as "small" or "very small" businesses. Subsequent events, concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant.

30. *Narrowband Personal Communications Services.* The Commission held an auction for Narrowband PCS licenses that commenced on July 25, 1994, and closed on July 29, 1994. A second auction commenced on October 26, 1994 and closed on November 8, 1994. For purposes of the first two Narrowband PCS auctions, "small businesses" were entities with average gross revenues for the prior three calendar years of \$40 million or less.⁷⁹ Through these auctions, the Commission awarded a total of 41 licenses, 11 of which were obtained by four small businesses.⁸⁰ To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size

⁷³ *Id.*

⁷⁴ *Trends in Telephone Service* at Table 5.3.

⁷⁵ See *Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*, WT Docket No. 96-59, Report and Order, 11 FCC Rcd 7824, 61 FR 33859 (July 1, 1996) (*PCS Order*); see also 47 C.F.R. § 24.720(b).

⁷⁶ See *PCS Order*, 11 FCC Rcd 7824.

⁷⁷ See, e.g., *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5332, 59 FR 37566 (July 22, 1994).

⁷⁸ FCC News, *Broadband PCS, D, E and F Block Auction Closes*, No. 71744 (rel. Jan. 14, 1997); see also *Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licenses*, WT Docket No. 97-82, Second Report and Order, 12 FCC Rcd 16436, 62 FR 55348 (Oct. 24, 1997).

⁷⁹ *Implementation of Section 309(j) of the Communications Act – Competitive Bidding Narrowband PCS*, Third Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, 10 FCC Rcd 175, 196, para. 46 (1994).

⁸⁰ See *Announcing the High Bidders in the Auction of ten Nationwide Narrowband PCS Licenses, Winning Bids Total \$617,006,674*, Public Notice, PNWL 94-004 (rel. Aug. 2, 1994); *Announcing the High Bidders in the Auction of 30 Regional Narrowband PCS Licenses; Winning Bids Total \$490,901,787*, Public Notice, PNWL 94-27 (rel. Nov. 9, 1994).

standard in the Narrowband PCS Second Report and Order.⁸¹ A “small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million.⁸² A “very small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million.⁸³ The SBA has approved these small business size standards.⁸⁴ A third auction commenced on October 3, 2001 and closed on October 16, 2001. Here, five bidders won 317 (Metropolitan Trading Areas and nationwide) licenses.⁸⁵ Three of these claimed status as a small or very small entity and won 311 licenses.

31. *220 MHz Radio Service – Phase I Licensees.* The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a small business size standard for small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to “Cellular and Other Wireless Telecommunications” companies. This category provides that a small business is a wireless company employing no more than 1,500 persons.⁸⁶ For the census category Cellular and Other Wireless Telecommunications, Census Bureau data for 1997 show that there were 977 firms in this category, total, that operated for the entire year.⁸⁷ Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.⁸⁸ Thus, under this second category and size standard, the majority of firms can, again, be considered small. Assuming this general ratio continues in the context of Phase I 220 MHz licensees, the Commission estimates that nearly all such licensees are small businesses under the SBA’s small business size standard. In addition, limited preliminary census data for 2002 indicate that the total number of cellular and other wireless telecommunications carriers increased approximately 321 percent from 1997 to 2002.⁸⁹

⁸¹ *Amendment of the Commission’s Rules to Establish New Personal Communications Services, Narrowband PCS*, ET Docket No. 92-100, PP Docket No. 93-253, Second Report and Order and Second Further Notice of Proposed Rule Making, 15 FCC Rcd 10456, 10476, para. 40 (2000).

⁸² *Id.*

⁸³ *Id.*

⁸⁴ See Letter from Aida Alvarez, Administrator, Small Business Administration, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission (dated Dec. 2, 1998).

⁸⁵ See *Narrowband PCS Auction Closes*, Public Notice, 16 FCC Rcd 18663 (WTB 2001).

⁸⁶ 13 C.F.R. § 121.201, NAICS code 517212.

⁸⁷ U.S. Census Bureau, 1997 Economic Census, Subject Series: “Information,” Table 5, Employment Size of Firms Subject to Federal Income Tax: 1997, NAICS code 513322 (issued Oct. 2000).

⁸⁸ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is “Firms with 1000 employees or more.”

⁸⁹ See U.S. Census Bureau, 2002 Economic Census, Industry Series: “Information,” Table 2, Comparative Statistics for the United States (1997 NAICS Basis): 2002 and 1997, NAICS code 513322 (issued Nov. 2004). The preliminary data indicate that the total number of “establishments” increased from 2,959 to 9,511. In this context, the number of establishments is a less helpful indicator of small business prevalence than is the number of “firms,” because the latter number takes into account the concept of common ownership or control. The more helpful 2002 census data on firms, including employment and receipts numbers, will be issued in late 2005.

32. *220 MHz Radio Service – Phase II Licensees.* The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is a new service and is subject to spectrum auctions. In the *220 MHz Third Report and Order*, we adopted a small business size standard for “small” and “very small” businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁹⁰ This small business size standard indicates that a “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.⁹¹ A “very small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years. The SBA has approved these small business size standards.⁹² Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.⁹³ In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold.⁹⁴ Thirty-nine small businesses won licenses in the first 220 MHz auction. The second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.⁹⁵

33. *800 MHz and 900 MHz Specialized Mobile Radio Licenses.* The Commission awards “small entity” and “very small entity” bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years, or that had revenues of no more than \$3 million in each of the previous calendar years, respectively.⁹⁶ These bidding credits apply to SMR providers in the 800 MHz and 900 MHz bands that either hold geographic area licenses or have obtained extended implementation authorizations. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. The Commission assumes, for purposes here, that all of the remaining existing extended implementation authorizations are held by small entities, as that term is defined by the SBA. The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz SMR bands. There were 60 winning bidders that qualified as small or very small entities in the 900 MHz SMR auctions. Of the 1,020 licenses won in the 900 MHz auction, bidders qualifying as small or very small entities won 263 licenses. In the 800 MHz auction, 38 of the 524 licenses won were won by small and very small entities.

34. *700 MHz Guard Band Licensees.* In the *700 MHz Guard Band Order*, we adopted a small business size standard for “small businesses” and “very small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁹⁷ A “small business” as an entity that, together with its affiliates and controlling principals, has average gross

⁹⁰ *220 MHz Third Report and Order*, 12 FCC Rcd 10943, 11068-70, paras. 291-95 (1997).

⁹¹ *Id.* at 11068, para. 291.

⁹² See Letter from A. Alvarez, Administrator, SBA, to D. Phythyon, Chief, Wireless Telecommunications Bureau, FCC (Jan. 6, 1998).

⁹³ See generally *220 MHz Service Auction Closes*, Public Notice, 14 FCC Rcd 605 (1998).

⁹⁴ See, e.g., *FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made*, Public Notice, 14 FCC Rcd 1085 (1999).

⁹⁵ *Phase II 220 MHz Service Spectrum Auction Closes*, Public Notice, 14 FCC Rcd 11218 (1999).

⁹⁶ 47 C.F.R. § 90.814(b)(1).

⁹⁷ See *Service Rules for the 746-764 MHz Bands, and Revisions to part 27 of the Commission's Rules*, WT Docket No. 99-168, Second Report and Order, 15 FCC Rcd 5299, 65 FR 17594 (2000).

revenues not exceeding \$15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years. An auction of 52 Major Economic Area (MEA) licenses commenced on September 6, 2000, and closed on September 21, 2000.⁹⁸ Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001 and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.⁹⁹

35. *Rural Radiotelephone Service.* The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.¹⁰⁰ A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (BETRS).¹⁰¹ The Commission uses the SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," *i.e.*, an entity employing no more than 1,500 persons.¹⁰² There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

36. *Air-Ground Radiotelephone Service.* The Commission has not adopted a small business size standard specific to the Air-Ground Radiotelephone Service.¹⁰³ We will use SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," *i.e.*, an entity employing no more than 1,500 persons.¹⁰⁴ There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small under the SBA small business size standard.

37. *Aviation and Marine Radio Services.* Small businesses in the aviation and marine radio services use a very high frequency (VHF) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category "Cellular and Other Telecommunications," which is 1,500 or fewer employees.¹⁰⁵ Most applicants for recreational licenses are individuals. Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any statute or treaty. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 712,000 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a "small" business as an entity that, together with controlling interests and affiliates, had average gross revenues for the preceding three years not to exceed \$15 million dollars. In addition, a "very small" business is one that, together with controlling

⁹⁸ See generally *220 MHz Service Auction Closes*, Public Notice, Report No. WT 98-36 (rel. Oct. 23, 1998).

⁹⁹ *700 MHz Guard Band Auction Closes*, Public Notice, 16 FCC Rcd 4590 (rel. Feb. 22, 2001).

¹⁰⁰ The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

¹⁰¹ BETRS is defined in sections 22.757 and 22.759 of the Commission's Rules, 47 C.F.R. §§ 22.757, 22.759.

¹⁰² 13 C.F.R. § 121.201, NAICS code 517212.

¹⁰³ The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

¹⁰⁴ 13 C.F.R. § 121.201, NAICS code 517212.

¹⁰⁵ *Id.*

interests and affiliates, had average gross revenues for the preceding three years not to exceed \$3 million dollars.¹⁰⁶ There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as "small" businesses under the above special small business size standards.

38. *Offshore Radiotelephone Service.* This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.¹⁰⁷ There are presently approximately 55 licensees in this service. We are unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business size standard for "Cellular and Other Wireless Telecommunications" services.¹⁰⁸ Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.¹⁰⁹

39. *39 GHz Service.* The Commission created a special small business size standard for 39 GHz licenses – an entity that has average gross revenues of \$40 million or less in the three previous calendar years.¹¹⁰ An additional size standard for "very small business" is: an entity that, together with affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.¹¹¹ The SBA has approved these small business size standards.¹¹² The auction of the 2,173 39 GHz licenses began on April 12, 2000 and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses. Consequently, the Commission estimates that 18 or fewer 39 GHz licensees are small entities that may be affected by the rules and policies adopted herein.

40. *Wireless Cable Systems.* Wireless cable systems use 2 GHz band frequencies of the Broadband Radio Service ("BRS"), formerly Multipoint Distribution Service ("MDS"),¹¹³ and the Educational Broadband Service ("EBS"), formerly Instructional Television Fixed Service ("ITFS"),¹¹⁴ to

¹⁰⁶ *Amendment of the Commission's Rules Concerning Maritime Communications*, PR Docket No. 92-257, Third Report and Order and Memorandum Opinion and Order, 13 FCC Rcd 19853 (1998).

¹⁰⁷ This service is governed by Subpart I of Part 22 of the Commission's rules. See 47 C.F.R. §§ 22.1001-1037.

¹⁰⁸ 13 C.F.R. § 121.201, NAICS code 517212.

¹⁰⁹ *Id.*

¹¹⁰ See *Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands*, ET Docket No. 95-183, Report and Order and Notice of Proposed Rulemaking, 12 FCC Rcd 18600, 63 FR 6079 (Feb. 6, 1998).

¹¹¹ *Id.*

¹¹² See Letter from Aida Alvarez, Administrator, SBA, to Kathleen O'Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC (Feb. 4, 1998).

¹¹³ MDS, also known as Multichannel Multipoint Distribution Service ("MMDS"), is regulated by Part 21 of the Commission's rules, see 47 C.F.R. Part 21, subpart K, and has been renamed the Broadband Radio Service (BRS). See *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands; Part 1 of the Commission's Rules - Further Competitive Bidding Procedures; Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and the Instructional Television Fixed Service Amendment of Parts 21 and 74 to Engage in Fixed Two-Way Transmissions; Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico; Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, WT Docket Nos. 03-66, 03-67, 02-68, and 00-230, MM Docket No. 97-217, RM-10586, RM-9718, Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Rcd 14165 (2004) (*MDS/ITFS Order*).

¹¹⁴ ITFS systems are regulated by Part 74 of the Commission's rules; see 47 C.F.R. Part 74, subpart I. ITFS, an educational service, has been renamed the Educational Broadband Service (EBS). See *MDS/ITFS Order*, 19 FCC Rcd 14165. ITFS licensees, however, are permitted to lease spectrum for MDS operation.

transmit video programming and provide broadband services to residential subscribers.¹¹⁵ These services were originally designed for the delivery of multichannel video programming, similar to that of traditional cable systems, but over the past several years licensees have focused their operations instead on providing two-way high-speed Internet access services.¹¹⁶ We estimate that the number of wireless cable subscribers is approximately 100,000, as of March 2005. Local Multipoint Distribution Service ("LMDS") is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.¹¹⁷ As described below, the SBA small business size standard for the broad census category of Cable and Other Program Distribution, which consists of such entities generating \$13.5 million or less in annual receipts, appears applicable to MDS, ITFS and LMDS.¹¹⁸ Other standards also apply, as described.

41. The Commission has defined small MDS (now BRS) and LMDS entities in the context of Commission license auctions. In the 1996 MDS auction,¹¹⁹ the Commission defined a small business as an entity that had annual average gross revenues of less than \$40 million in the previous three calendar years.¹²⁰ This definition of a small entity in the context of MDS auctions has been approved by the SBA.¹²¹ In the MDS auction, 67 bidders won 493 licenses. Of the 67 auction winners, 61 claimed status as a small business. At this time, the Commission estimates that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent MDS licensees that have gross revenues that are not more than \$40 million and are thus considered small entities.¹²² MDS licensees and wireless cable operators that did not receive their licenses as a result of the MDS auction fall under the SBA small business size standard for Cable and Other Program Distribution. Information available to us indicates that there are approximately 850 of these licensees and operators that do not generate revenue in excess of \$13.5 million annually. Therefore, we estimate that there are approximately 850 small entity MDS (or BRS) providers, as defined by the SBA and the Commission's auction rules.

¹¹⁵ See *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Eleventh Annual Report*, 20 FCC Rcd 2507, 2565, para. 131 (2006) (2006 Cable Competition Report).

¹¹⁶ *Id.*

¹¹⁷ See *Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fix Satellite Services*, CC Docket No. 92-297, Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rulemaking, 12 FCC Rcd 12545 (1997) (*Local Multipoint Distribution Service Order*).

¹¹⁸ 13 C.F.R. § 121.201, NAICS code 517510.

¹¹⁹ MDS Auction No. 6 began on November 13, 1995, and closed on March 28, 1996. (67 bidders won 493 licenses.)

¹²⁰ 47 C.F.R. § 21.961(b)(1).

¹²¹ See *Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service & in the Instructional Television Fixed Service*, MM Docket No. 94-131, PP Docket No. 93-253, Report and Order, 10 FCC Rcd 9589 (1995).

¹²² 47 U.S.C. § 309(j). Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA's small business size standards for "other telecommunications" (annual receipts of \$13.5 million or less). See 13 C.F.R. § 121.201, NAICS code 517910.

42. Educational institutions are included in this analysis as small entities; however, the Commission has not created a specific small business size standard for ITFS (now EBS).¹²³ We estimate that there are currently 2,032 ITFS (or EBS) licensees, and all but 100 of the licenses are held by educational institutions. Thus, we estimate that at least 1,932 ITFS licensees are small entities.

43. In the 1998 and 1999 LMDS auctions,¹²⁴ the Commission defined a small business as an entity that has annual average gross revenues of less than \$40 million in the previous three calendar years.¹²⁵ Moreover, the Commission added an additional classification for a "very small business," which was defined as an entity that had annual average gross revenues of less than \$15 million in the previous three calendar years.¹²⁶ These definitions of "small business" and "very small business" in the context of the LMDS auctions have been approved by the SBA.¹²⁷ In the first LMDS auction, 104 bidders won 864 licenses. Of the 104 auction winners, 93 claimed status as small or very small businesses. In the LMDS re-auction, 40 bidders won 161 licenses. Based on this information, we believe that the number of small LMDS licenses will include the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers as defined by the SBA and the Commission's auction rules.

44. *Local Multipoint Distribution Service.* Local Multipoint Distribution Service (LMDS) is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.¹²⁸ The auction of the 1,030 LMDS licenses began on February 18, 1998 and closed on March 25, 1998. The Commission established a small business size standard for LMDS licensees as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.¹²⁹ An additional small business size standard for "very small business" was added as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.¹³⁰ The SBA has approved these small business size standards in the context of LMDS auctions.¹³¹ There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 40 winning bidders. Based on this information, we conclude that the number of small LMDS licenses consists of the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers.

¹²³ In addition, the term "small entity" under SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on ITFS licensees.

¹²⁴ The Commission has held two LMDS auctions: Auction 17 and Auction 23. Auction No. 17, the first LMDS auction, began on February 18, 1998, and closed on March 25, 1998. (104 bidders won 864 licenses.) Auction No. 23, the LMDS re-auction, began on April 27, 1999, and closed on May 12, 1999. (40 bidders won 161 licenses.)

¹²⁵ See *Local Multipoint Distribution Service Order*, 12 FCC Rcd at 12545.

¹²⁶ *Id.*

¹²⁷ See Letter from A. Alvarez, Administrator, SBA, to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, FCC (January 6, 1998).

¹²⁸ See *Local Multipoint Distribution Service Order*, 12 FCC Rcd 12545.

¹²⁹ *Id.*

¹³⁰ See *id.*

¹³¹ See Letter from Aida Alvarez, Administrator, SBA, from Dan Phythyon, Chief, Wireless Telecommunications Bureau, FCC (Jan. 6, 1998).

45. *218-219 MHz Service.* The first auction of 218-219 MHz spectrum resulted in 170 entities winning licenses for 594 Metropolitan Statistical Area (MSA) licenses. Of the 594 licenses, 557 were won by entities qualifying as a small business. For that auction, the small business size standard was an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.¹³² In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we established a small business size standard for a "small business" as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not to exceed \$15 million for the preceding three years.¹³³ A "very small business" is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not to exceed \$3 million for the preceding three years.¹³⁴ We cannot estimate, however, the number of licenses that will be won by entities qualifying as small or very small businesses under our rules in future auctions of 218-219 MHz spectrum.

46. *24 GHz – Incumbent Licensees.* This analysis may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band and applicants who wish to provide services in the 24 GHz band. The applicable SBA small business size standard is that of "Cellular and Other Wireless Telecommunications" companies. This category provides that such a company is small if it employs no more than 1,500 persons.¹³⁵ According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.¹³⁶ Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.¹³⁷ Thus, under this size standard, the great majority of firms can be considered small. These broader census data notwithstanding, we believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent¹³⁸ and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

47. *24 GHz – Future Licensees.* With respect to new applicants in the 24 GHz band, the small business size standard for "small business" is an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not in excess of \$15 million.¹³⁹ "Very small business" in the 24 GHz band is an entity that, together with controlling interests and

¹³² *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fourth Report and Order, 9 FCC Rcd 2330, 59 FR 24947 (May 13, 1994).

¹³³ *Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 15 FCC Rcd 1497, 64 FR 59656 (Nov. 3, 1999).

¹³⁴ *Id.*

¹³⁵ 13 C.F.R. § 121.201, NAICS code 517212.

¹³⁶ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Employment Size of Firms Subject to Federal Income Tax: 1997," Table 5, NAICS code 513322 (issued Oct. 2000).

¹³⁷ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

¹³⁸ Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

¹³⁹ *Amendments to Parts 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, WT Docket No. 99-327, Report and Order, 15 FCC Rcd 16934, 16967, para. 77 (2000); see also 47 C.F.R. § 101.538(a)(2).

affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.¹⁴⁰ The SBA has approved these small business size standards.¹⁴¹ These size standards will apply to the future auction, if held.

2. Cable and OVS Operators

48. *Cable Television Distribution Services.* Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies."¹⁴² The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. To gauge small business prevalence for these cable services we must, however, use current census data that are based on the previous category of Cable and Other Program Distribution and its associated size standard; that size standard was: all such firms having \$13.5 million or less in annual receipts.¹⁴³ According to Census Bureau data for 2002, there were a total of 1,191 firms in this previous category that operated for the entire year.¹⁴⁴ Of this total, 1,087 firms had annual receipts of under \$10 million, and 43 firms had receipts of \$10 million or more but less than \$25 million.¹⁴⁵ Thus, the majority of these firms can be considered small.

49. *Cable Companies and Systems.* The Commission has also developed its own small business size standards, for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers, nationwide.¹⁴⁶ Industry data indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard.¹⁴⁷ In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.¹⁴⁸ Industry data indicate that, of 7,208 systems nationwide, 6,139 systems have under 10,000 subscribers,

¹⁴⁰ *Amendments to Parts 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, WT Docket No. 99-327, Report and Order, 15 FCC Rcd 16934, 16967, para. 77 (2000); see also 47 C.F.R. § 101.538(a)(1).

¹⁴¹ See Letter from Gary M. Jackson, Assistant Administrator, SBA, to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC (July 28, 2000).

¹⁴² U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers" (partial definition); <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

¹⁴³ 13 C.F.R. § 121.201, NAICS code 517110.

¹⁴⁴ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, Table 4, Receipts Size of Firms for the United States: 2002, NAICS code 517510 (issued November 2005).

¹⁴⁵ *Id.* An additional 61 firms had annual receipts of \$25 million or more.

¹⁴⁶ 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of \$100 million or less in annual revenues. *Implementation of Sections of the 1992 Cable Act: Rate Regulation*, Sixth Report and Order and Eleventh Order on Reconsideration, MM Docket Nos. 92-266, 93-215, 10 FCC Rcd 7393, 7408 (1995).

¹⁴⁷ These data are derived from: R.R. Bowker, *Broadcasting & Cable Yearbook 2006*, "Top 25 Cable/Satellite Operators," pages A-8 & C-2 (data current as of June 30, 2005); Warren Communications News, *Television & Cable Factbook 2006*, "Ownership of Cable Systems in the United States," pages D-1805 to D-1857.

¹⁴⁸ 47 C.F.R. § 76.901(c).

and an additional 379 systems have 10,000-19,999 subscribers.¹⁴⁹ Thus, under this second size standard, most cable systems are small

50. *Cable System Operators.* The Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which is “a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000.”¹⁵⁰ The Commission has determined that an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate.¹⁵¹ Industry data indicate that, of 1,076 cable operators nationwide, all but ten are small under this size standard.¹⁵² We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million,¹⁵³ and therefore we are unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.

51. *Open Video Systems (OVS).* In 1996, Congress established the open video system (OVS) framework, one of four statutorily recognized options for the provision of video programming services by local exchange carriers (LECs).¹⁵⁴ The OVS framework provides opportunities for the distribution of video programming other than through cable systems. Because OVS operators provide subscription services,¹⁵⁵ OVS falls within the SBA small business size standard of Cable and Other Program Distribution Services, which consists of such entities having \$13.5 million or less in annual receipts.¹⁵⁶ The Commission has certified 25 OVS operators, with some now providing service. Broadband service providers (BSPs) are currently the only significant holders of OVS certifications or local OVS franchises.¹⁵⁷ As of June, 2005, BSPs served approximately 1.4 million subscribers, representing 1.5 percent of all MVPD households.¹⁵⁸ Affiliates of Residential Communications Network, Inc. (RCN), which serves about 371,000 subscribers as of June, 2005, is currently the largest BSP and 14th largest

¹⁴⁹ Warren Communications News, *Television & Cable Factbook 2006*, “U.S. Cable Systems by Subscriber Size,” page F-2 (data current as of Oct. 2005). The data do not include 718 systems for which classifying data were not available.

¹⁵⁰ 47 U.S.C. § 543(m)(2); see 47 C.F.R. § 76.901(f) & nn. 1-3.

¹⁵¹ 47 C.F.R. § 76.901(f); see *FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, Public Notice, DA 01-158, 16 FCC Rcd 2225 (Cable Services Bureau, Jan. 24, 2001).

¹⁵² These data are derived from: R.R. Bowker, *Broadcasting & Cable Yearbook 2006*, “Top 25 Cable/Satellite Operators,” pages A-8 & C-2 (data current as of June 30, 2005); Warren Communications News, *Television & Cable Factbook 2006*, “Ownership of Cable Systems in the United States,” pages D-1805 to D-1857.

¹⁵³ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority’s finding that the operator does not qualify as a small cable operator pursuant to § 76.901(f) of the Commission’s rules. See 47 C.F.R. § 76.909(b).

¹⁵⁴ 47 U.S.C. § 571(a)(3)-(4). See *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Eleventh Annual Report*, 20 FCC Rcd 2507, 2549, para. 88 (2006) (2006 Cable Competition Report).

¹⁵⁵ See 47 U.S.C. § 573.

¹⁵⁶ 13 C.F.R. § 121.201, NAICS code 517510.

¹⁵⁷ See *2006 Cable Competition Report*, 20 FCC Rcd at 2549, para. 88. BSPs are newer firms that are building state-of-the-art, facilities-based networks to provide video, voice, and data services over a single network.

¹⁵⁸ See *id.* at 2507, para. 14.

MVPD.¹⁵⁹ RCN received approval to operate OVS systems in New York City, Boston, Washington, D.C. and other areas. The Commission does not have financial information regarding the entities authorized to provide OVS, some of which may not yet be operational. We thus believe that at least some of the OVS operators may qualify as small entities.

3. Internet Service Providers

52. *Internet Service Providers.* The SBA has developed a small business size standard for Internet Service Providers (ISPs). ISPs "provide clients access to the Internet and generally provide related services such as web hosting, web page designing, and hardware or software consulting related to Internet connectivity."¹⁶⁰ Under the SBA size standard, such a business is small if it has average annual receipts of \$23 million or less.¹⁶¹ According to Census Bureau data for 2002, there were 2,529 firms in this category that operated for the entire year.¹⁶² Of these, 2,437 firms had annual receipts of under \$10 million, and an additional 47 firms had receipts of between \$10 million and \$24,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

4. Other Internet-Related Entities

53. *Web Search Portals.* Our action pertains to VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The Commission has not adopted a size standard for entities that create or provide these types of services or applications. However, the Census Bureau has identified firms that "operate web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format. Web search portals often provide additional Internet services, such as e-mail, connections to other web sites, auctions, news, and other limited content, and serve as a home base for Internet users."¹⁶³ The SBA has developed a small business size standard for this category; that size standard is \$6.5 million or less in average annual receipts.¹⁶⁴ According to Census Bureau data for 2002, there were 342 firms in this category that operated for the entire year.¹⁶⁵ Of these, 303 had annual receipts of under \$5 million, and an additional 15 firms had receipts of between \$5 million and \$9,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

54. *Data Processing, Hosting, and Related Services.* Entities in this category "primarily . . . provid[e] infrastructure for hosting or data processing services."¹⁶⁶ The SBA has developed a small

¹⁵⁹ See *2006 Cable Competition Report*, 20 FCC Rcd at 2549, para. 89. WideOpenWest is the second largest BSP and 16th largest MVPD, with cable systems serving about 292,000 subscribers as of June, 2005. The third largest BSP is Knology, serving approximately 170,800 subscribers as of June 2005. *Id.*

¹⁶⁰ U.S. Census Bureau, "2002 NAICS Definitions: 518111 Internet Service Providers," available at <http://www.census.gov/epcd/naics02/def/NDEF518.HTM>.

¹⁶¹ 13 C.F.R. § 121.201, NAICS code 518111.

¹⁶² U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 518111 (issued Nov. 2005).

¹⁶³ U.S. Census Bureau, "2002 NAICS Definitions: 518112 Web Search Portals," available at <http://www.census.gov/epcd/naics02/def/NDEF518.HTM>.

¹⁶⁴ 13 C.F.R. § 121.201, NAICS code 518112.

¹⁶⁵ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 518112 (issued Nov. 2005).

¹⁶⁶ U.S. Census Bureau, "2002 NAICS Definitions: 518210 Data Processing, Hosting, and Related Services," available at <http://www.census.gov/epcd/naics02/def/NDEF518.HTM>.

business size standard for this category; that size standard is \$23 million or less in average annual receipts.¹⁶⁷ According to Census Bureau data for 2002, there were 6,877 firms in this category that operated for the entire year.¹⁶⁸ Of these, 6,418 had annual receipts of under \$10 million, and an additional 251 firms had receipts of between \$10 million and \$24,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

55. *All Other Information Services.* "This industry comprises establishments primarily engaged in providing other information services (except new syndicates and libraries and archives)."¹⁶⁹ Our action pertains to VoIP services, which could be provided by entities that provide other services such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The SBA has developed a small business size standard for this category; that size standard is \$6.5 million or less in average annual receipts.¹⁷⁰ According to Census Bureau data for 2002, there were 155 firms in this category that operated for the entire year.¹⁷¹ Of these, 138 had annual receipts of under \$5 million, and an additional four firms had receipts of between \$5 million and \$9,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

56. *Internet Publishing and Broadcasting.* "This industry comprises establishments engaged in publishing and/or broadcasting content on the Internet exclusively. These establishments do not provide traditional (non-Internet) versions of the content that they publish or broadcast."¹⁷² The SBA has developed a small business size standard for this census category; that size standard is 500 or fewer employees.¹⁷³ According to Census Bureau data for 2002, there were 1,362 firms in this category that operated for the entire year.¹⁷⁴ Of these, 1,351 had employment of 499 or fewer employees, and six firms had employment of between 500 and 999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

57. *Software Publishers.* These companies may design, develop or publish software and may provide other support services to software purchasers, such as providing documentation or assisting in installation. The companies may also design software to meet the needs of specific users.¹⁷⁵ The SBA has developed a small business size standard of \$23 million or less in average annual receipts for all of the following pertinent categories: Software Publishers, Custom Computer Programming Services, and Other Computer Related Services.¹⁷⁶ For Software Publishers, Census Bureau data for 2002 indicate that

¹⁶⁷ 13 C.F.R. § 121.201, NAICS code 518210.

¹⁶⁸ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 518210 (issued Nov. 2005).

¹⁶⁹ U.S. Census Bureau, "2002 NAICS Definitions: 519190 All Other Information Services," available at <http://www.census.gov/epcd/naics02/def/NDEF519.HTM>.

¹⁷⁰ 13 C.F.R. § 121.201, NAICS code 519190.

¹⁷¹ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 519190 (issued Nov. 2005).

¹⁷² U.S. Census Bureau, "2002 NAICS Definitions: 516110 Internet Publishing and Broadcasting," available at <http://www.census.gov/epcd/naics02/def/NDEF516.HTM>.

¹⁷³ 13 C.F.R. § 121.201, NAICS code 516110.

¹⁷⁴ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 516110 (issued Nov. 2005).

¹⁷⁵ See U.S. Census Bureau, "2002 NAICS Definitions: 511210 Software Publishers," available at <http://www.census.gov/epcd/naics02/def/NDEF511.HTM>.

¹⁷⁶ 13 C.F.R. § 121.201, NAICS codes 511210, 541511, and 541519.

there were 6,155 firms in the category that operated for the entire year.¹⁷⁷ Of these, 7,633 had annual receipts of under \$10 million, and an additional 403 firms had receipts of between \$10 million and \$24,999,999. For providers of Custom Computer Programming Services, the Census Bureau data indicate that there were 32,269 firms that operated for the entire year.¹⁷⁸ Of these, 31,416 had annual receipts of under \$10 million, and an additional 565 firms had receipts of between \$10 million and \$24,999,999. For providers of Other Computer Related Services, the Census Bureau data indicate that there were 6,357 firms that operated for the entire year.¹⁷⁹ Of these, 6,187 had annual receipts of under \$10 million, and an additional 101 firms had receipts of between \$10 million and \$24,999,999. Consequently, we estimate that the majority of the firms in each of these three categories are small entities that may be affected by our action.

5. Equipment Manufacturers

58. SBA small business size standards are given in terms of "firms." Census Bureau data concerning computer manufacturers, on the other hand, are given in terms of "establishments." We note that the number of "establishments" is a less helpful indicator of small business prevalence in this context than would be the number of "firms" or "companies," because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the census numbers provided below may reflect inflated numbers of businesses in the given category, including the numbers of small businesses.

59. *Electronic Computer Manufacturing.* This category "comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers."¹⁸⁰ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁸¹ According to Census Bureau data, there were 485 establishments in this category that operated with payroll during 2002.¹⁸² Of these, 476 had employment of under 1,000, and an additional four establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority of these establishments are small entities.

60. *Computer Storage Device Manufacturing.* These establishments manufacture "computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media."¹⁸³ The SBA has developed a small business size standard for this category of

¹⁷⁷ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 511210 (issued Nov. 2005).

¹⁷⁸ U.S. Census Bureau, 2002 Economic Census, Subject Series: Professional, Scientific, and Technical Services, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 541511 (issued Nov. 2005).

¹⁷⁹ U.S. Census Bureau, 2002 Economic Census, Subject Series: Professional, Scientific, and Technical Services, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 541519 (issued Nov. 2005).

¹⁸⁰ U.S. Census Bureau, 2002 NAICS Definitions, "334111 Electronic Computer Manufacturing," available at <http://www.census.gov/epcd/naics02/def/ND334111.HTM#N334111>.

¹⁸¹ 13 C.F.R. § 121.201, NAICS code 334111.

¹⁸² U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Electronic Computer Manufacturing," Table 4, NAICS code 334111 (issued Dec. 2004).

¹⁸³ U.S. Census Bureau, 2002 NAICS Definitions, "334112 Computer Storage Device Manufacturing," available at <http://www.census.gov/epcd/naics02/def/ND334112.HTM#N334112>.

manufacturing; that size standard is 1,000 or fewer employees.¹⁸⁴ According to Census Bureau data, there were 170 establishments in this category that operated with payroll during 2002.¹⁸⁵ Of these, 164 had employment of under 500, and five establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities

61. *Computer Terminal Manufacturing.* "Computer terminals are input/output devices that connect with a central computer for processing."¹⁸⁶ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁸⁷ According to Census Bureau data, there were 71 establishments in this category that operated with payroll during 2002, and all of the establishments had employment of under 1,000.¹⁸⁸ Consequently, we estimate that all of these establishments are small entities.

62. *Other Computer Peripheral Equipment Manufacturing.* Examples of peripheral equipment in this category include keyboards, mouse devices, monitors, and scanners.¹⁸⁹ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁹⁰ According to Census Bureau data, there were 860 establishments in this category that operated with payroll during 2002.¹⁹¹ Of these, 851 had employment of under 1,000, and an additional five establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority of these establishments are small entities.

63. *Audio and Video Equipment Manufacturing.* These establishments manufacture "electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications."¹⁹² The SBA has developed a small business size standard for this category of manufacturing; that size standard is 750 or fewer employees.¹⁹³ According to Census Bureau data, there were 571 establishments in this category that operated with payroll during 2002.¹⁹⁴ Of these, 560 had employment of under 500, and ten establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

¹⁸⁴ 13 C.F.R. § 121.201, NAICS code 334112.

¹⁸⁵ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Computer Storage Device Manufacturing," Table 4, NAICS code 334112 (issued Dec. 2004).

¹⁸⁶ U.S. Census Bureau, 2002 NAICS Definitions, "334113 Computer Terminal Manufacturing," available at <http://www.census.gov/epcd/naics02/def/ND334113.HTM#N334113>.

¹⁸⁷ 13 C.F.R. § 121.201, NAICS code 334113.

¹⁸⁸ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Computer Terminal Manufacturing," Table 4, NAICS code 334113 (issued Dec. 2004). In fact, all had employment of under 500.

¹⁸⁹ U.S. Census Bureau, 2002 NAICS Definitions, "334119 Other Computer Peripheral Equipment Manufacturing," available at <http://www.census.gov/epcd/naics02/def/ND334119.HTM#N334119>.

¹⁹⁰ 13 C.F.R. § 121.201, NAICS code 334119.

¹⁹¹ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Other Computer Peripheral Equipment Manufacturing," Table 4, NAICS code 334119 (issued Dec. 2004).

¹⁹² U.S. Census Bureau, 2002 NAICS Definitions, "334310 Audio and Video Equipment Manufacturing," available at <http://www.census.gov/epcd/naics02/def/ND334310.HTM#N334310>.

¹⁹³ 13 C.F.R. § 121.201, NAICS code 334310.

¹⁹⁴ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Audio and Video Equipment Manufacturing," Table 4, NAICS code 334310 (issued Dec. 2004).

64. *Electron Tube Manufacturing.* These establishments are “primarily engaged in manufacturing electron tubes and parts (except glass blanks).”¹⁹⁵ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 750 or fewer employees.¹⁹⁶ According to Census Bureau data, there were 102 establishments in this category that operated with payroll during 2002.¹⁹⁷ Of these, 97 had employment of under 500, and one establishment had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

65. *Bare Printed Circuit Board Manufacturing.* These establishments are “primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components.”¹⁹⁸ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.¹⁹⁹ According to Census Bureau data, there were 936 establishments in this category that operated with payroll during 2002.²⁰⁰ Of these, 922 had employment of under 500, and 12 establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

66. *Semiconductor and Related Device Manufacturing.* Examples of manufactured devices in this category include “integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells and other optoelectronic devices.”²⁰¹ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.²⁰² According to Census Bureau data, there were 1,032 establishments in this category that operated with payroll during 2002.²⁰³ Of these, 950 had employment of under 500, and 42 establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

67. *Electronic Capacitor Manufacturing.* These establishments manufacture “electronic fixed and variable capacitors and condensers.”²⁰⁴ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.²⁰⁵ According to Census

¹⁹⁵ U.S. Census Bureau, 2002 NAICS Definitions, “334411 Electron Tube Manufacturing,” available at <http://www.census.gov/epcd/naics02/def/ND334411.HTM#N334411>.

¹⁹⁶ 13 C.F.R. § 121.201, NAICS code 334411.

¹⁹⁷ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, “Electron Tube Manufacturing,” Table 4, NAICS code 334411 (issued Dec. 2004).

¹⁹⁸ U.S. Census Bureau, 2002 NAICS Definitions, “334412 Bare Printed Circuit Board Manufacturing,” available at <http://www.census.gov/epcd/naics02/def/ND334412.HTM#N334412>.

¹⁹⁹ 13 C.F.R. § 121.201, NAICS code 334412.

²⁰⁰ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, “Bare Printed Circuit Board Manufacturing,” Table 4, NAICS code 334412 (issued Jan. 2005).

²⁰¹ U.S. Census Bureau, 2002 NAICS Definitions, “334413 Semiconductor and Related Device Manufacturing,” available at <http://www.census.gov/epcd/naics02/def/ND334413.HTM#N334413>.

²⁰² 13 C.F.R. § 121.201, NAICS code 334413.

²⁰³ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, “Semiconductor and Related Device Manufacturing,” Table 4, NAICS code 334413 (issued Jan. 2005).

²⁰⁴ U.S. Census Bureau, 2002 NAICS Definitions, “334414 Electronic Capacitor Manufacturing,” available at <http://www.census.gov/epcd/naics02/def/ND334414.HTM#N334414>.

²⁰⁵ 13 C.F.R. § 121.201, NAICS code 334414.

Bureau data, there were 104 establishments in this category that operated with payroll during 2002.²⁰⁶ Of these, 101 had employment of under 500, and two establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

68. *Electronic Resistor Manufacturing.* These establishments manufacture “electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.”²⁰⁷ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.²⁰⁸ According to Census Bureau data, there were 79 establishments in this category that operated with payroll during 2002.²⁰⁹ All of these establishments had employment of under 500. Consequently, we estimate that all of these establishments are small entities.

69. *Electronic Coil, Transformer, and Other Inductor Manufacturing.* These establishments manufacture “electronic inductors, such as coils and transformers.”²¹⁰ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.²¹¹ According to Census Bureau data, there were 365 establishments in this category that operated with payroll during 2002.²¹² All of these establishments had employment of under 500. Consequently, we estimate that all of these establishments are small entities.

70. *Electronic Connector Manufacturing.* These establishments manufacture “electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic.”²¹³ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.²¹⁴ According to Census Bureau data, there were 321 establishments in this category that operated with payroll during 2002.²¹⁵ Of these, 315 had employment of under 500, and three establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

71. *Printed Circuit Assembly (Electronic Assembly) Manufacturing.* These are establishments “primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards.”²¹⁶ The SBA has developed a small business size standard for this category

²⁰⁶ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, “Electronic Capacitor Manufacturing,” Table 4, NAICS code 334414 (issued Jan. 2005).

²⁰⁷ U.S. Census Bureau, 2002 NAICS Definitions, “334415 Electronic Resistor Manufacturing,” available at <http://www.census.gov/epcd/naics02/def/ND334415.HTM#N334415>.

²⁰⁸ 13 C.F.R. § 121.201, NAICS code 334415.

²⁰⁹ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, “Electronic Resistor Manufacturing,” Table 4, NAICS code 334415 (issued Jan. 2005).

²¹⁰ U.S. Census Bureau, 2002 NAICS Definitions, “334416 Electronic Coil, Transformer, and Other Inductor Manufacturing,” available at <http://www.census.gov/epcd/naics02/def/ND334416.HTM#N334416>.

²¹¹ 13 C.F.R. § 121.201, NAICS code 334416.

²¹² U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, “Electronic Coil, Transformer, and Other Inductor Manufacturing,” Table 4, NAICS code 334416 (issued Jan. 2005).

²¹³ U.S. Census Bureau, 2002 NAICS Definitions, “334417 Electronic Connector Manufacturing,” available at <http://www.census.gov/epcd/naics02/def/ND334417.HTM#N334417>.

²¹⁴ 13 C.F.R. § 121.201, NAICS code 334417.

²¹⁵ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, “Electronic Connector Manufacturing,” Table 4, NAICS code 334417 (issued Jan. 2005).

²¹⁶ U.S. Census Bureau, 2002 NAICS Definitions, “334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing,” available at <http://www.census.gov/epcd/naics02/def/ND334418.HTM#N334418>.

of manufacturing; that size standard is 500 or fewer employees.²¹⁷ According to Census Bureau data, there were 868 establishments in this category that operated with payroll during 2002.²¹⁸ Of these, 839 had employment of under 500, and 18 establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

72. *Other Electronic Component Manufacturing.*²¹⁹ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.²²⁰ According to Census Bureau data, there were 1,627 establishments in this category that operated with payroll during 2002.²²¹ Of these, 1,616 had employment of under 500, and eight establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

73. *Fiber Optic Cable Manufacturing.* These establishments manufacture "insulated fiber-optic cable from purchased fiber-optic strand."²²² The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.²²³ According to Census Bureau data, there were 96 establishments in this category that operated with payroll during 2002.²²⁴ Of these, 95 had employment of under 1,000, and one establishment had employment of 1,000 to 2,499. Consequently, we estimate that the majority or all of these establishments are small entities.

74. *Other Communication and Energy Wire Manufacturing.* These establishments manufacture "insulated wire and cable of nonferrous metals from purchased wire."²²⁵ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.²²⁶ According to Census Bureau data, there were 356 establishments in this category that operated with payroll during 2002.²²⁷ Of these, 353 had employment of under 1,000, and three establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority or all of these establishments are small entities.

²¹⁷ 13 C.F.R. § 121.201, NAICS code 334418.

²¹⁸ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Printed Circuit Assembly (Electronic Assembly) Manufacturing," Table 4, NAICS code 334418 (issued Jan. 2005).

²¹⁹ U.S. Census Bureau, 2002 NAICS Definitions, "334419 Other Electronic Component Manufacturing," available at <http://www.census.gov/epcd/naics02/def/ND334419.HTM#N334419>.

²²⁰ 13 C.F.R. § 121.201, NAICS code 334419.

²²¹ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Other Electronic Component Manufacturing," Table 4, NAICS code 334419 (issued Jan. 2005).

²²² U.S. Census Bureau, 2002 NAICS Definitions, "335921 Fiber Optic Cable Manufacturing," available at <http://www.census.gov/epcd/naics02/def/ND335921.HTM#N335921>.

²²³ 13 C.F.R. § 121.201, NAICS code 335921.

²²⁴ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Fiber Optic Cable Manufacturing," Table 4, NAICS code 335921 (issued Dec. 2004).

²²⁵ U.S. Census Bureau, 2002 NAICS Definitions, "335929 Other Communication and Energy Wire Manufacturing," available at <http://www.census.gov/epcd/naics02/def/ND335929.HTM#N335929>.

²²⁶ 13 C.F.R. § 121.201, NAICS code 335929.

²²⁷ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, "Other Communication and Energy Wire Manufacturing," Table 4, NAICS code 335929 (issued Dec. 2004).

D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

75. In this Report and Order, we are requiring telecommunications carriers and providers of interconnected VoIP service to collect certain information and take other actions to comply with LNP and other numbering administration obligations. For example, we are requiring both interconnected VoIP providers and their numbering partners to facilitate a customer's porting request to or from an interconnected VoIP provider, which means that the interconnected VoIP provider has an affirmative legal obligation to take all steps necessary to initiate or allow a port-in or port-out itself or through its numbering partner on behalf of the interconnected VoIP customer, subject to a valid port request, without unreasonable delay or unreasonable procedures that have the effect of delaying or denying porting of the number.²²⁸ We also prohibit interconnected VoIP providers and their numbering partners from entering into agreements that would prohibit or unreasonably delay an interconnected VoIP service end user from porting between interconnected VoIP providers, or to or from a wireline carrier or a covered CMRS provider.²²⁹ Further, we expect interconnected VoIP providers to fully inform their customers about limitations on porting between providers, particularly limitations that result from the portable nature of, and use of non-geographic numbers by, certain interconnected VoIP services.²³⁰

76. We are also requiring interconnected VoIP providers to contribute to meet shared numbering administration and LNP costs. The reporting requirements for determining interconnected VoIP providers' contribution to the shared cost of numbering administration and LNP require interconnected VoIP providers to file an annual FCC Form 499-A.²³¹ We require interconnected VoIP providers to include in their annual FCC Form 499-A filing historical revenue information for the relevant year, including all information necessary to allocate revenues across the seven LNPA regions.²³² To alleviate the burdens of attributing costs among the seven LNPA regions, we allow these providers to use a proxy based on the percentage of subscribers a provider serves in a particular region for reaching an estimate for allocating their end-user revenues to the appropriate regional LNPA.²³³

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

77. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include (among others) the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.²³⁴

78. The *IP-Enabled Services Notice* sought comment on whether numbering obligations should be extended to IP-enabled services, and invited comment on the effect various proposals would

²²⁸ See Report and Order, *supra* para. 32.

²²⁹ See *id.*, *supra* para. 33.

²³⁰ See *id.*, *supra* note 114.

²³¹ See *id.*, *supra* para. 40.

²³² See *id.*

²³³ See *id.*, *supra* para. 38.

²³⁴ 5 U.S.C. § 603(c).

have on small entities, as well as the effect alternative rules would have on these entities.²³⁵ However, we must assess the interests of small businesses in light of the overriding public interest in ensuring that all consumers benefit from local number portability. In the Report and Order, the Commission found that allowing customers of interconnected VoIP services to receive the benefits of LNP is fundamentally important for the protection of consumers and benefits not only customers, but the interconnected VoIP providers themselves.²³⁶ Specifically, the Commission found that the ability of end users to retain their NANP telephone numbers when changing service providers gives customers flexibility in the quality, price, and variety of services they can choose to purchase. Allowing customers to respond to price and service changes without changing their telephone numbers will enhance competition, a fundamental goal of section 251 of the Act.²³⁷ In addition, the Commission found that failure to extend LNP obligations to interconnected VoIP providers and their numbering partners would thwart the effective and efficient administration of the Commission's number administration responsibilities under section 251 of the Act.²³⁸

79. The Commission concluded that because interconnected VoIP providers, including small businesses, benefit from LNP, all interconnected VoIP providers, including small businesses, should contribute to meet shared LNP costs.²³⁹ However, to alleviate costs involved in the attribution systems for all of their end-user services, when filing FCC Form 499-A, the Commission allowed interconnected VoIP providers, including small businesses, to use a proxy based on the percentage of subscribers a provider serves in a particular region for allocating their end-user revenues to the appropriate regional LNPA.²⁴⁰

80. **Report to Congress:** The Commission will send a copy of the Order, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act.²⁴¹ A copy of the Order and FRFA (or summaries thereof) will also be published in the Federal Register.²⁴²

²³⁵ See *IP-Enabled Services Notice*, 19 FCC Rcd at 4912-14, paras. 74-76.

²³⁶ See Report and Order, *supra* paras. 17, 26.

²³⁷ See *id.*

²³⁸ See *id.*, *supra* para. 27.

²³⁹ See *id.*, *supra* para. 38.

²⁴⁰ See *id.*

²⁴¹ See 5 U.S.C. § 801(a)(1)(A).

²⁴² See 5 U.S.C. § 604(b).

APPENDIX D

Final Regulatory Flexibility Analysis
(Intermodal Local Number Portability)

CC Docket No. 95-116

1. As required by the Regulatory Flexibility Act, as amended (RFA),¹ an Initial Regulatory Flexibility Analysis (IRFA) was published for the *Intermodal Number Portability Order*.² The Commission sought written public comment on the IRFA. We received comments specifically directed toward the IRFA, which are discussed below. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

A. Need for, and Objectives of, the Rules

2. Section 251(b) of the Communications Act requires local exchange carriers to provide number portability, to the extent technically feasible, in accordance with the requirements prescribed by the Commission.⁴ In the *Intermodal Number Portability Order*, the Commission found that porting from a wireline carrier to a wireless carrier is required where the requesting wireless carrier's coverage area overlaps the geographic location in which the customer's wireline number is provisioned, provided that the porting-in carrier maintains the number's original rate center designation following the port.⁵ The United States Court of Appeals for the District of Columbia remanded the *Intermodal Number Portability Order* to the Commission to prepare the required FRFA on the impact of the order on carriers that qualify as small entities under the RFA.⁶ After considering information received from commenters in response to the IRFA, we conclude that wireline carriers qualifying as small entities under the RFA will be required to provide wireline-to-wireless intermodal porting where the requesting wireless carrier's coverage area overlaps the geographic location in which the customer's wireline number is provisioned, provided that the porting-in carrier maintains the number's original rate center designation following the port.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

3. In this section, we respond to comments filed in response to the IRFA.⁷ To the extent the Commission received comments raising general small business concerns during this proceeding, those comments are discussed throughout the *Intermodal Number Portability Order*.

4. As an initial matter, we reject arguments that carriers that qualify as "small entities" should not have to comply with the intermodal porting requirements until the Commission addresses issues

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² See *Federal Communications Commission Seeks Comment on Initial Regulatory Flexibility Analysis in Telephone Number Portability Proceeding*, CC Docket No. 95-116, Public Notice, 20 FCC Rcd 8616 (2005) (*Number Portability IRFA Notice*); see also 70 Fed. Reg. 41655 (Jul. 20, 2005).

³ See 5 U.S.C. § 604.

⁴ 47 U.S.C. § 251(b).

⁵ See *Intermodal Number Portability Order*, 18 FCC Rcd at 23706, para. 22.

⁶ See *United States Telecom Ass'n. v. FCC*, 400 F.3d at 43.

⁷ See 5 U.S.C. § 604.

pertaining to rating and routing that are pending in the intercarrier compensation proceeding.⁸ The issues that have been raised in this proceeding with respect to transporting calls to ported numbers are also before the Commission in the context of all numbers (without distinguishing between ported or non-porting numbers) in the intercarrier compensation proceeding.⁹ Further, as the Commission found in the *Intermodal Number Portability Order*, the issue of transport costs associated with calls to ported numbers is outside the scope of this proceeding and not relevant to the application of the LNP obligations under the Act.¹⁰

5. We also reject recommendations that the Commission create a partial or blanket exemption for small carriers from the wireline-to-wireless intermodal porting requirements based on the high costs of implementation.¹¹ We find that small carriers have not demonstrated such significant costs associated with implementation of LNP to warrant an exemption. Several small carriers claim that they may face a variety of costs associated with wireline-to-wireless intermodal porting, which would be excessive in light of their small customer bases.¹² However, other commenters point out that the cost information these carriers present shows a large range of cost estimates, and in fact, even when the estimates are taken at face value, they indicate that the cost of wireline-to-wireless intermodal LNP does not impose a

⁸ See, e.g., NTCA/OPASTCO Comments, CC Docket No. 95-116, at 18-19 (filed Aug. 19, 2005); NTCA/OPASTCO Reply, CC Docket No. 95-116, at 5 (filed Sept. 7, 2005); Office of Advocacy, SBA Comments, CC Docket No. 95-116, at 8 (filed Aug. 15, 2005); Missouri Small Telephone Company Group, CC Docket No. 95-116, at 4-7 (filed Aug. 19, 2005); Nebraska Rural Independent Companies Comments, CC Docket No. 95-116, at 6-7 (filed Aug. 19, 2005).

⁹ Rating and routing issues are currently before the Commission in several proceedings. See, e.g., *Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, Notice of Proposed Rulemaking, 16 FCC Rcd 9610 (2001) (*Intercarrier Compensation Notice of Proposed Rulemaking*); *Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, Further Notice of Proposed Rulemaking, 20 FCC Rcd 4685 (2005) (*Intercarrier Compensation Further Notice*); *Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, Order, 21 FCC Rcd 14764 (WCB 2007); *Pleading Cycle Extended for Comment on Amendments to the Missouri Plan Intercarrier Compensation Proposal to Incorporate a Federal Benchmark Mechanism*, CC Docket No. 01-92, Public Notice, 22 FCC Rcd 5098 (2007); Sprint Petition for Declaratory Ruling, CC Docket No. 01-92, at 1 (filed May 9, 2002); see also *Comment Sought on Petitions for Declaratory Ruling Regarding Intercarrier Compensation for Wireless Traffic*, CC Docket 01-92, Public Notice, 17 FCC Rcd 19046 (2002); ASAP Paging, Inc. Petition for Preemption of Public Utility Commission of Texas Concerning Retail Rating of Local Calls to CMRS Carriers, WC Docket No. 04-6 (filed Dec. 22, 2003); *Pleading Cycle Establishing for Petition of ASAP Paging, Inc. for Preemption of the Public Utility Commission of Texas Concerning Retail Rating of Local Calls to CMRS Carriers*, WC Docket No. 04-6, Public Notice, 19 FCC Rcd 936 (2004).

¹⁰ See *Intermodal Number Portability Order*, 18 FCC Rcd at 23713, para. 40. We emphasize that our findings in this FRFA are limited to the context of the wireline-to-wireless intermodal LNP requirements that are applicable to wireline carriers qualifying as small entities under the RFA. We make no determination regarding issues pending in the intercarrier compensation proceeding and nothing in this FRFA should be viewed as prejudging the outcome of that proceeding. Our decision here does not prejudice the ability of state commissions to consider rating and routing issues or transport costs in their review of petitions filed pursuant to section 251(f)(2).

¹¹ See, e.g., Missouri Small Telephone Company Group Comments, CC Docket No. 95-116, at 13 (filed Aug. 19, 2005); Nebraska Rural Independent Companies Comments, CC Docket No. 95-116, at 8 (filed Aug. 19, 2005); Rural Iowa Independent Telephone Association Comments, CC Docket No. 95-116, at 5 (filed Aug. 19, 2005); South Dakota Telecommunications Association, CC Docket No. 95-116, at 6 (filed Aug. 19, 2005).

¹² See, e.g., Missouri Small Telephone Company Group Comments, CC Docket No. 95-116, at 2-6 (filed Aug. 19, 2005); Montana Small Rural Independents Comments, CC Docket No. 95-116, at 10 (filed Aug. 19, 2005); Nebraska Rural Independent Companies Comments, CC Docket No. 95-116, at 4 (filed Aug. 19, 2005); USTA Comments, CC Docket No. 95-116, at 8-10 (filed Aug. 19, 2005); USTA Reply, CC Docket No. 95-116, at 8 (filed Sept. 6, 2005).

significant economic burden on small entities.¹³ In addition, we are not persuaded based on this record that the costs of implementing LNP are as large as the commenters suggest, given the scant support they provide for their estimates and their failure to demonstrate that all the estimated costs are of the sort that the Commission would allow to be attributed to the LNP end-user charge. For example, some commenters cite their estimated costs associated with transporting calls to ported numbers.¹⁴ However, as discussed above, the Commission previously declined to consider these as LNP-related costs, rather than costs of interconnection more generally, and the commenters here do not demonstrate that the Commission should reverse that conclusion.¹⁵

6. Further, in response to small carrier concerns about LNP implementation costs, we note that wireline carriers generally only are required to provide LNP upon receipt of a specific request for the provision of LNP by another carrier.¹⁶ Thus, many of the small carriers may not be required to implement LNP immediately because there is no request to do so. Indeed, as the Commission found in the *First Number Portability Order on Reconsideration*, these rights effectively constitute steps that minimize the economic impact of LNP on small entities.¹⁷ Further, carriers have the ability to petition the Commission for a waiver of their obligation to port numbers to wireless carriers if they can provide substantial, credible evidence that there are special circumstances that warrant a departure from existing rules.¹⁸ In addition, under section 251(f)(2), a LEC with fewer than two percent of the nation's subscriber lines installed in the aggregate nationwide may petition the appropriate state commission for suspension or

¹³ See, e.g., CTIA Comments, CC Docket No. 95-116, at 7 (filed Aug. 19, 2005); Verizon Wireless Comments, CC Docket No. 95-116, at 2 (filed Aug. 19, 2005). CTIA, for example, citing the Missouri Small Telephone Company Group's implementation cost estimate of \$1,000,000 for all of its twenty-five member companies, notes that, when divided by the 88,500 lines the group's members serve and divided by the five years during which carriers are permitted to recover these non-recurring charges, the charge amounts to \$0.19 per line, per month. See CTIA Reply, CC Docket No. 95-116, at 13 (filed Sept. 6, 2005). Verizon Wireless notes that, in Iowa, a rural carrier can implement LNP for a monthly per customer cost of \$0.18, in Nebraska, a carrier can do so for \$0.67, and in Missouri, a carrier can complete the implementation for \$0.11 per month. See Verizon Wireless Reply, CC Docket No. 95-116, at 2 (filed Sept. 6, 2005). Further, such costs may be even less for those carriers who have already implemented wireline-to-wireline porting and thus have the infrastructure for porting already in place.

¹⁴ The South Dakota Telecommunications Association, for example, indicated that its member companies estimated transport costs to range from \$0.20 to \$30 per line, per month. See South Dakota Telecommunications Association Comments, CC Docket No. 95-116, at 3-4 (filed Aug. 29, 2005). One member company of the Missouri Small Telephone Company Group, located in a remote area, estimated its monthly transport cost to be \$1500, or 85% of its monthly recurring LNP costs. See Missouri Small Telephone Company Group Comments, CC Docket No. 95-116, at 3 (filed Aug. 19, 2005).

¹⁵ While the Commission sought comment on this category of costs in the associated IRFA, it did so because the issue was raised by the SBA. See *Number Portability IRFA Notice*, 20 FCC Rcd at 8622, para. 10 & n.20. The Public Notice did not reverse Commission precedent, nor does the record here persuade us to do so.

¹⁶ See *Numbering Resource Optimization; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Telephone Number Portability*, CC Docket Nos. 99-200, 96-98, 95-116, Fourth Report and Order and Fourth Further Notice of Proposed Rulemaking, 18 FCC Rcd 12472, 12475, para. 8 (2003) (*NRO and LNP Fourth Report and Order*). In addition, carriers operating outside of the 100 largest MSAs have six months after receiving a request from another carrier in which to provide LNP. *Id.* at 12475, n.17; see 47 C.F.R. § 52.23(c). The Commission also delegated authority to the state to require carriers within the 100 largest MSAs to implement LNP even in the absence of a request, if doing so "would serve the public interest, because there is actual, meaningful consumer demand, as evidenced by consumer requests" for LNP in such areas. *NRO and LNP Fourth Report and Order*, 18 FCC Rcd at 12476-77, paras. 11-12.

¹⁷ See *First Number Portability Order on Reconsideration*, 12 FCC Rcd at 7343-44, App. D, paras. 29-30.

¹⁸ See 47 C.F.R. § 1.3.

modification of the requirements of section 251(b).¹⁹ We find these existing safeguards further address commenters' concerns regarding the costs on small entities to implement LNP.

C. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply

7. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted.²⁰ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."²¹ In addition, the term "small business" has the same meaning as the term "small business concern" under Section 3 of the Small Business Act.²² Under the Small Business Act, a "small business concern" is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).²³

8. *Wired Telecommunications Carriers.* The SBA has developed a small business size standard for wireline firms within the broad economic census category, "Wired Telecommunications Carriers."²⁴ Under this category, the SBA deems a wireline business to be small if it has 1,500 or fewer employees. Census Bureau data for 2002 show that there were 2,432 firms in this category that operated for the entire year.²⁵ Of this total, 2,395 firms had employment of 999 or fewer employees, and 37 firms had employment of 1,000 employees or more.²⁶ Thus, under this category and associated small business size standard, the majority of firms can be considered small.

9. *Incumbent Local Exchange Carriers.* We have included small incumbent local exchange carriers (LECs) in this RFA analysis. Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The appropriate size standard under SBA rules is for the category of Wired Telecommunications Carriers. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (*e.g.*, a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation."²⁷ The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope.²⁸ We

¹⁹ 47 U.S.C. § 251(f)(2).

²⁰ See 5 U.S.C. § 603(b)(3).

²¹ 5 U.S.C. § 601(6).

²² 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definitions(s) in the Federal Register."

²³ 15 U.S.C. § 632.

²⁴ 13 C.F.R. § 121.201, NAICS code 517110.

²⁵ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517110 (issued Nov. 2005).

²⁶ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

²⁷ 5 U.S.C. § 601(3).

²⁸ See Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to Chairman William E. Kennard, FCC (May 27, 1999). The Small Business Act contains a definition of "small business concern," which the RFA incorporates (continued...)

have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on the Commission's analyses and determinations in other, non-RFA contexts. According to Commission data,²⁹ 1,307 carriers have reported that they are engaged in the provision of incumbent local exchange services. Of these 1,307 carriers, an estimated 1,019 have 1,500 or fewer employees and 288 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small entities.

10. *Competitive Local Exchange Carriers, Competitive Access Providers (CAPs), "Shared-Tenant Service Providers," and "Other Local Service Providers."* Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³⁰ According to Commission data,³¹ 859 carriers have reported that they are engaged in the provision of either competitive access provider services or competitive LEC services. Of these 859 carriers, an estimated 741 have 1,500 or fewer employees and 118 have more than 1,500 employees. In addition, 16 carriers have reported that they are "Shared-Tenant Service Providers," and all 16 are estimated to have 1,500 or fewer employees. In addition, 44 carriers have reported that they are "Other Local Service Providers." Of the 44, an estimated 43 have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, "Shared-Tenant Service Providers," and "Other Local Service Providers" are small entities.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities.

11. There are no significant reporting, recordkeeping or other compliance requirements imposed on small entities by the *Intermodal Number Portability Order*.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

12. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.³²

13. The Commission invited comment on the intermodal porting rules with respect to their application to small entities in light of the RFA requirements. In accordance with the requirements of the

(...continued from previous page)

into its own definition of "small business." See 5 U.S.C. § 632(a) (Small Business Act); 5 U.S.C. § 601(3) (RFA). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. 13 C.F.R. § 121.102(b).

²⁹ FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, *Trends in Telephone Service* at Table 5.3, Page 5-5 (Feb. 2007) (*Trends in Telephone Service*). This source uses data that are current as of October 20, 2005.

³⁰ 13 C.F.R. § 121.201, NAICS code 517110.

³¹ *Trends in Telephone Service* at Table 5.3.

³² See 5 U.S.C. § 603.

RFA, we have considered the potential economic impact of the intermodal porting rules on small entities and conclude that wireline carriers qualifying as small entities under the RFA will be required to provide wireline-to-wireless intermodal porting where the requesting wireless carrier's coverage area overlaps the geographic location in which the customer's wireline number is provisioned, provided that the porting-in carrier maintains the number's original rate center designation following the port.³³ We find that this approach best balances the impact of the costs that may be associated with the wireline-to-wireless intermodal porting rules for small carriers and the public interest benefits of those requirements.

14. Specifically, in the *Intermodal Number Portability Order*, the Commission considered limiting the scope of intermodal porting based on the small carrier concern that requiring porting to a wireless carrier that does not have a physical point of interconnection or numbering resources in the rate center associated with the ported number would give wireless carriers an unfair competitive advantage.³⁴ The Commission found, however, that these considerations did not justify denying wireline consumers the benefit of being able to port their numbers to wireless carriers.³⁵ In addition, the order noted that each type of service offers its own advantages and disadvantage and that consumers would consider these attributes in determining whether or not to port their numbers.³⁶ The order also considered the concern expressed by small carriers that requiring porting beyond wireline rate center boundaries would lead to increased transport costs.³⁷ The Commission concluded that such concerns were outside the scope of the number portability proceeding and noted that the rating and routing issues raised by the rural wireline carriers were also implicated in the context of non-ported numbers and were before the Commission in other proceedings.³⁸

15. Further, if there is a particular case where a carrier faces extraordinary costs, other regulatory avenues for relief are available.³⁹ Specifically, a carrier may petition the Commission for additional time or waiver of the intermodal porting requirements if it can provide substantial, credible evidence that there are special circumstances that warrant departure from existing rules.⁴⁰ In addition, under section 251(f)(2), a LEC with fewer than two percent of the nation's subscriber lines installed in the aggregate nationwide may petition the appropriate state commission for suspension or modification of the requirements of section 251(b).⁴¹ Although some commenters have complained about the time and expense associated with the section 251(f)(2) mechanism,⁴² several others have indicated that the

³³ See Report and Order, *supra* para. 51; see also *Intermodal Number Portability Order*, 18 FCC Rcd at 23698, para. 1.

³⁴ See *id.* at 23703, para. 16.

³⁵ See *id.* at 23708, para. 27.

³⁶ See *id.*

³⁷ See *id.* at 23704, para. 16.

³⁸ See *id.* at 23713, paras. 39-40.

³⁹ See, e.g., CTIA Reply, CC Docket No. 95-116, at 6-7 (filed Sept. 6, 2005); Dobson Cellular Reply, CC Docket No. 95-116, at 8-9 (filed Sept. 6, 2005); Sprint/Nextel Reply, CC Docket No. 95-116, at 16-18 (filed Sept. 6, 2005); T-Mobile Reply, CC Docket No. 95-116, at 8 (filed Sept. 6, 2005); Verizon Wireless Reply, CC Docket No. 95-116, at 2-3 (filed Sept. 6, 2005).

⁴⁰ 47 C.F.R. § 1.3.

⁴¹ 47 U.S.C. § 251(f)(2).

⁴² See, e.g., Nebraska Rural Independent Companies Comments, CC Docket No. 95-116, at 7 (filed Aug. 19, 2005); NTCA/OPASTCO Comments, CC Docket No. 95-116, at 16 (filed Aug. 19, 2005); South Dakota Telecommunications Association Comments, CC Docket No. 95-116, at 7-8 (filed Aug. 19, 2005).

251(f)(2) mechanism has been an effective method of addressing the potential burdens on small carriers.⁴³ Further, in response to small carriers' concerns about LNP implementation costs, we note that wireline carriers generally only are required to provide LNP upon receipt of a specific request for the provision of LNP by another carrier.⁴⁴ Thus, many of the small carriers may not be required to implement LNP immediately because there is no request to do so. Indeed, as the Commission found in the *First Number Portability Order on Reconsideration*, these rights effectively constitute steps that minimize the economic impact of LNP on small entities.⁴⁵ We find these existing safeguards further address commenters' concerns regarding the costs on small entities to implement LNP.

16. While we recognize that wireline carriers will still incur implementation and recurrent costs, we conclude that the benefits to the public of requiring wireline-to-wireless intermodal LNP outweigh the economic burden imposed on these carriers.⁴⁶ Creating a partial or blanket exemption from the wireline-to-wireless intermodal porting requirements for small entities would harm consumers in small and rural areas across the country by preventing them from being able to port on a permanent basis. It might also discourage further growth of competition between wireless and wireline carriers in smaller markets across the country. We continue to believe that the intermodal LNP requirements are important for promoting competition between the wireless and wireline industries and generating innovative service offerings and lower prices for consumers. Wireless number porting activity since the advent of porting has been significant and evidence shows that the implementation of LNP has, in fact, yielded important benefits for consumers, such as improved customer retention efforts by carriers.⁴⁷ By reinstating, immediately, the wireline-to-wireless intermodal porting requirement, this approach ensures that more consumers in small and rural communities will be able to port and experience the competitive benefits of LNP.

F. Report to Congress

17. The Commission will send a copy of this FRFA in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act.⁴⁸ A copy of the FRFA (or a summary thereof) will also be published in the Federal Register.⁴⁹

⁴³ See, e.g., Iowa Utility Board Comments, CC Docket No. 95-116, at 6 (filed Aug. 19, 2005); Montana Independent Telecommunications Systems Comments, CC Docket No. 95-116, at 12-13 (filed Aug. 19, 2005) (commenting that the section 251(f) state proceeding was a highly effective way of addressing these LNP issues before a decision-maker who was familiar with the particular nature of the small rural LECs).

⁴⁴ See *NRO and LNP Fourth Report and Order*, 18 FCC Rcd at 12475, para. 8. In addition, carriers operating outside of the 100 largest MSAs have six months after receiving a request from another carrier in which to provide LNP. See *id.* at 12475, n.17; see also 47 C.F.R. § 52.23(c).

⁴⁵ See *First Number Portability Order on Reconsideration*, 12 FCC Rcd at 7343-44, App. D, paras. 29-30.

⁴⁶ We thus reject commenters' arguments that demand for intermodal porting among rural customers is low and does not justify imposing these costs on small carriers. See, e.g., Montana Small Rural Independents Comments, CC Docket No. 95-116, at 6 (filed Aug. 19, 2005); Rural Iowa Independent Telephone Association Comments, CC Docket No. 95-116, at 2 (filed Aug. 19, 2005).

⁴⁷ *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with respect to Commercial Mobile Services*, WT Docket No. 06-17, Eleventh Report, 21 FCC Rcd 10947, 11006, para. 148 (2006).

⁴⁸ See 5 U.S.C. § 801(a)(1)(A).

⁴⁹ See 5 U.S.C. § 604(b).

APPENDIX E

**Initial Regulatory Flexibility Analysis
WC Docket Nos. 07-243 and 07-244**

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ the Commission has prepared the present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities that might result from this Notice of Proposed Rulemaking (Notice). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice provided above. The Commission will send a copy of the Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.² In addition, the Notice and the IRFA (or summaries thereof) will be published in the Federal Register.³

A. Need for, and Objectives of, the Proposed Rules

2. In this Notice, we consider whether there are additional numbering requirements the Commission should adopt to benefit customers of telecommunications and interconnected VoIP services. Specifically, we seek comment on whether the Commission should extend other LNP requirements and numbering-related rules, including compliance with N11 code assignments, to interconnected VoIP providers.⁴ We also seek comment on whether the Commission should adopt rules specifying the length of the porting intervals or other changes to the LNP validation process, or other details of the porting process.⁵ Among other things, we tentatively conclude that the Commission should adopt rules reducing the porting interval for wireline-to-wireline and intermodal simple port requests, specifically, to a 48-hour porting interval.⁶ We seek comment on our tentative conclusions and issues related to our tentative conclusions. For each of these issues, we also seek comment on the burdens, including those placed on small carriers, associated with corresponding Commission rules related to each issue.⁷

B. Legal Basis

3. The legal basis for any action that may be taken pursuant to this Notice is contained in sections 1, 4(i), 4(j), 251 and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i)-(j), 251, 303(r).

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules May Apply

4. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules.⁸ The RFA generally defines the

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² See 5 U.S.C. § 603(a).

³ See *id.*

⁴ See Notice, *supra* para. 53.

⁵ See *id.*, *supra* paras. 54-66.

⁶ See *id.*, *supra* paras. 59-65.

⁷ See *id.*, *supra* paras. 54-66.

⁸ 5 U.S.C. §§ 603(b)(3), 604(a)(3).

term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."⁹ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.¹⁰ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).¹¹

5. *Small Businesses.* Nationwide, there are a total of approximately 22.4 million small businesses, according to SBA data.¹²

6. *Small Organizations.* Nationwide, there are approximately 1.6 million small organizations.¹³

7. *Small Governmental Jurisdictions.* The term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."¹⁴ Census Bureau data for 2002 indicate that there were 87,525 local governmental jurisdictions in the United States.¹⁵ We estimate that, of this total, 84,377 entities were "small governmental jurisdictions."¹⁶ Thus, we estimate that most governmental jurisdictions are small.

1. Telecommunications Service Entities

a. Wireline Carriers and Service Providers

8. We have included small incumbent local exchange carriers (LECs) in this present RFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (*e.g.*, a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation."¹⁷ The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope.¹⁸ We have therefore included small incumbent LECs in this

⁹ 5 U.S.C. § 601(6).

¹⁰ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such terms which are appropriate to the activities of the agency and publishes such definitions(s) in the Federal Register."

¹¹ 15 U.S.C. § 632.

¹² See SBA, Programs and Services, SBA Pamphlet No. CO-0028, at 40 (July 2002).

¹³ Independent Sector, The New Nonprofit Almanac & Desk Reference (2002).

¹⁴ 5 U.S.C. § 601(5).

¹⁵ U.S. Census Bureau, Statistical Abstract of the United States: 2006, Section 8, at 272, Table 415.

¹⁶ We assume that the villages, school districts, and special districts are small, and total 48,558. See U.S. Census Bureau, Statistical Abstract of the United States: 2006, Section 8, at 273, Table 417. For 2002, Census Bureau data indicate that the total number of county, municipal, and township governments nationwide was 38,967, of which 35,819 were small. *Id.*

¹⁷ 15 U.S.C. § 632.

¹⁸ Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of "small-business concern," which the RFA incorporates into its own definition of "small business." See 15 U.S.C. § 632(a) (Small Business Act); 5 U.S.C. § 601(3) (RFA).

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RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

9. *Incumbent LECs.* Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁹ According to Commission data,²⁰ 1,303 carriers have reported that they are engaged in the provision of incumbent local exchange services. Of these 1,303 carriers, an estimated 1,020 have 1,500 or fewer employees and 283 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our action.

10. *Competitive LECs, Competitive Access Providers (CAPs), "Shared-Tenant Service Providers," and "Other Local Service Providers."* Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²¹ According to Commission data,²² 859 carriers have reported that they are engaged in the provision of either competitive access provider services or competitive LEC services. Of these 859 carriers, an estimated 741 have 1,500 or fewer employees and 118 have more than 1,500 employees. In addition, 16 carriers have reported that they are "Shared-Tenant Service Providers," and all 16 are estimated to have 1,500 or fewer employees. In addition, 44 carriers have reported that they are "Other Local Service Providers." Of the 44, an estimated 43 have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, "Shared-Tenant Service Providers," and "Other Local Service Providers" are small entities.

11. *Local Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²³ According to Commission data,²⁴ 184 carriers have reported that they are engaged in the provision of local resale services. Of these, an estimated 181 have 1,500 or fewer employees and three have more than 1,500 employees. Consequently, the Commission estimates that the majority of local resellers are small entities that may be affected by our action.

12. *Toll Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁵ According to Commission data,²⁶ 881 carriers have reported that they are engaged in the

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SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. See 13 C.F.R. § 121.102(b).

¹⁹ 13 C.F.R. § 121.201, NAICS code 517110.

²⁰ FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, *Trends in Telephone Service* at Table 5.3, page 5-5 (Feb. 2007) (*Trends in Telephone Service*). This source uses data that are current as of October 20, 2005.

²¹ 13 C.F.R. § 121.201, NAICS code 517110.

²² *Trends in Telephone Service* at Table 5.3.

²³ 13 C.F.R. § 121.201, NAICS code 517310.

²⁴ *Trends in Telephone Service* at Table 5.3.

²⁵ 13 C.F.R. § 121.201, NAICS code 517310.

provision of toll resale services. Of these, an estimated 853 have 1,500 or fewer employees and 28 have more than 1,500 employees. Consequently, the Commission estimates that the majority of toll resellers are small entities that may be affected by our action.

13. *Payphone Service Providers (PSPs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for payphone services providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁷ According to Commission data,²⁸ 657 carriers have reported that they are engaged in the provision of payphone services. Of these, an estimated 653 have 1,500 or fewer employees and four have more than 1,500 employees. Consequently, the Commission estimates that the majority of payphone service providers are small entities that may be affected by our action.

14. *Interexchange Carriers (IXCs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁹ According to Commission data,³⁰ 330 carriers have reported that they are engaged in the provision of interexchange service. Of these, an estimated 309 have 1,500 or fewer employees and 21 have more than 1,500 employees. Consequently, the Commission estimates that the majority of IXCs are small entities that may be affected by our action.

15. *Operator Service Providers (OSPs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for operator service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³¹ According to Commission data,³² 23 carriers have reported that they are engaged in the provision of operator services. Of these, an estimated 22 have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the Commission estimates that the majority of OSPs are small entities that may be affected by our action.

16. *Prepaid Calling Card Providers*. Neither the Commission nor the SBA has developed a small business size standard specifically for prepaid calling card providers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³³ According to Commission data,³⁴ 104 carriers have reported that they are engaged in the provision of prepaid calling cards. Of these, 102 are estimated to have 1,500 or fewer employees and two have more than 1,500 employees. Consequently, the Commission estimates that all or the majority of prepaid calling card providers are small entities that may be affected by our action.

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²⁶ *Trends in Telephone Service* at Table 5.3.

²⁷ 13 C.F.R. § 121.201, NAICS code 517110.

²⁸ *Trends in Telephone Service* at Table 5.3.

²⁹ 13 C.F.R. § 121.201, NAICS code 517110.

³⁰ *Trends in Telephone Service* at Table 5.3.

³¹ 13 C.F.R. § 121.201, NAICS code 517110.

³² *Trends in Telephone Service* at Table 5.3.

³³ 13 C.F.R. § 121.201, NAICS code 517310.

³⁴ *Trends in Telephone Service* at Table 5.3.

17. *800 and 800-Like Service Subscribers.*³⁵ These toll-free services fall within the broad economic census category of Telecommunications Resellers. This category “comprises establishments engaged in purchasing access and network capacity from owners and operators of telecommunications networks and reselling wired and wireless telecommunications services (except satellite) to businesses and households. Establishments in this industry resell telecommunications; they do not operate transmission facilities and infrastructure.”³⁶ The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.³⁷ Census Bureau data for 2002 show that there were 1,646 firms in this category that operated for the entire year.³⁸ Of this total, 1,642 firms had employment of 999 or fewer employees, and four firms had employment of 1,000 employees or more.³⁹ Thus, the majority of these firms can be considered small. Additionally, it may be helpful to know the total numbers of telephone numbers assigned in these services. Commission data show that, as of June 2006, the total number of 800 numbers assigned was 7,647,941, the total number of 888 numbers assigned was 5,318,667, the total number of 877 numbers assigned was 4,431,162, and the total number of 866 numbers assigned was 6,008,976.⁴⁰

b. International Service Providers

18. The Commission has not developed a small business size standard specifically for providers of international service. The appropriate size standards under SBA rules are for the two broad census categories of “Satellite Telecommunications” and “Other Telecommunications.” Under both categories, such a business is small if it has \$13.5 million or less in average annual receipts.⁴¹

19. The first category of Satellite Telecommunications “comprises establishments primarily engaged in providing point-to-point telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications.”⁴² For this category, Census Bureau data for 2002 show that there were a total of 371 firms that operated for the entire year.⁴³ Of this total, 307 firms had annual receipts of under \$10 million, and 26 firms had receipts of \$10 million to \$24,999,999.⁴⁴ Consequently, we estimate that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

³⁵ We include all toll-free number subscribers in this category, including those for 888 numbers.

³⁶ U.S. Census Bureau, 2007 NAICS Definitions, “517911 Telecommunications Resellers” (partial definition); <http://www.census.gov/naics/2007/def/ND517911.HTM#N517911>.

³⁷ 13 C.F.R. § 121.201, NAICS code 517911.

³⁸ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 5, NAICS code 517310 (issued Nov. 2005). Prior to 2007, the subject category was numbered 517310.

³⁹ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

⁴⁰ *Trends in Telephone Service* at Tables 18.4-18.8.

⁴¹ 13 C.F.R. § 121.201, NAICS codes 517410 and 517910.

⁴² U.S. Census Bureau, “2002 NAICS Definitions: 517410 Satellite Telecommunications,” available at <http://www.census.gov/epcd/naics02/def/ND517410.HTM> (visited Oct. 16, 2007).

⁴³ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 517410 (issued Nov. 2005).

⁴⁴ *Id.* An additional 38 firms had annual receipts of \$25 million or more.

20. The second category of Other Telecommunications “comprises establishments primarily engaged in (1) providing specialized telecommunications applications, such as satellite tracking, communications telemetry, and radar station operations; or (2) providing satellite terminal stations and associated facilities operationally connected with one or more terrestrial communications systems and capable of transmitting telecommunications to or receiving telecommunications from satellite systems.”⁴⁵ For this category, Census Bureau data for 2002 show that there were a total of 332 firms that operated for the entire year.⁴⁶ Of this total, 259 firms had annual receipts of under \$10 million and 15 firms had annual receipts of \$10 million to \$24,999,999.⁴⁷ Consequently, we estimate that the majority of Other Telecommunications firms are small entities that might be affected by our action.

c. Wireless Telecommunications Service Providers

21. Below, for those services subject to auctions, we note that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated.

22. *Wireless Service Providers.* The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of “Paging”⁴⁸ and “Cellular and Other Wireless Telecommunications.”⁴⁹ Under both SBA categories, a wireless business is small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.⁵⁰ Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.⁵¹ Thus, under this category and associated small business size standard, the majority of firms can be considered small. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.⁵² Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.⁵³ Thus, under this second category and size standard, the majority of firms can, again, be considered small.

⁴⁵ U.S. Census Bureau, “2002 NAICS Definitions: 517910 Other Telecommunications,” available at <http://www.census.gov/epcd/naics02/def/ND517910.HTM> (visited Oct. 16, 2007).

⁴⁶ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 517910 (issued Nov. 2005).

⁴⁷ *Id.* An additional 14 firms had annual receipts of \$25 million or more.

⁴⁸ 13 C.F.R. § 121.201, NAICS code 517211 (changed from 513321 in Oct. 2002).

⁴⁹ 13 C.F.R. § 121.201, NAICS code 517212 (changed from 513322 in Oct. 2002).

⁵⁰ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 5, NAICS code 517211 (issued Nov. 2005).

⁵¹ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is firms with “1000 employees or more.”

⁵² U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 5, NAICS code 517212 (issued Nov. 2005).

⁵³ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is firms with “1000 employees or more.”

23. *Cellular Licensees.* The SBA has developed a small business size standard for wireless firms within the broad economic census category "Cellular and Other Wireless Telecommunications."⁵⁴ Under this SBA category, a wireless business is small if it has 1,500 or fewer employees. For the census category of Cellular and Other Wireless Telecommunications, Census Bureau data for 2002 show that there were 1,397 firms in this category that operated for the entire year.⁵⁵ Of this total, 1,378 firms had employment of 999 or fewer employees, and 19 firms had employment of 1,000 employees or more.⁵⁶ Thus, under this category and size standard, the majority of firms can be considered small. Also, according to Commission data, 437 carriers reported that they were engaged in the provision of cellular service, Personal Communications Service (PCS), or Specialized Mobile Radio (SMR) Telephony services, which are placed together in the data.⁵⁷ We have estimated that 260 of these are small under the SBA small business size standard.⁵⁸

24. *Paging.* The SBA has developed a small business size standard for the broad economic census category of "Paging."⁵⁹ Under this category, the SBA deems a wireless business to be small if it has 1,500 or fewer employees. Census Bureau data for 2002 show that there were 807 firms in this category that operated for the entire year.⁶⁰ Of this total, 804 firms had employment of 999 or fewer employees, and three firms had employment of 1,000 employees or more.⁶¹ In addition, according to Commission data,⁶² 365 carriers have reported that they are engaged in the provision of "Paging and Messaging Service." Of this total, we estimate that 360 have 1,500 or fewer employees, and five have more than 1,500 employees. Thus, in this category the majority of firms can be considered small.

25. We also note that, in the *Paging Second Report and Order*, the Commission adopted a size standard for "small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁶³ In this context, a small business is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.⁶⁴ The SBA has approved this definition.⁶⁵ An auction of Metropolitan Economic

⁵⁴ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in Oct. 2002).

⁵⁵ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517212 (issued Nov. 2005).

⁵⁶ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is firms with "1000 employees or more."

⁵⁷ *Trends in Telephone Service* at Table 5.3.

⁵⁸ *Id.*

⁵⁹ 13 C.F.R. § 121.201, NAICS code 517211.

⁶⁰ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 517211 (issued Nov. 2005).

⁶¹ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

⁶² *Trends in Telephone Service*, Table 5.3.

⁶³ *Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems*, WT Docket No. 96-18, PP Docket No. 93-235, Second Report and Order, 12 FCC Rcd 2732, 2811-2812, paras. 178-181 (*Paging Second Report and Order*); see also *Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems*, WT Docket No. 96-18, PP Docket No. 93-235, Memorandum Opinion and Order on Reconsideration, 14 FCC Rcd 10030, 10085-10088, paras. 98-107 (1999).

⁶⁴ *Paging Second Report and Order*, 12 FCC Rcd at 2811, para. 179.

Area (MEA) licenses commenced on February 24, 2000, and closed on March 2, 2000. Of the 2,499 licenses auctioned, 985 were sold.⁶⁶ Fifty-seven companies claiming small business status won 440 licenses.⁶⁷ An auction of MEA and Economic Area (EA) licenses commenced on October 30, 2001, and closed on December 5, 2001. Of the 15,514 licenses auctioned, 5,323 were sold.⁶⁸ One hundred thirty-two companies claiming small business status purchased 3,724 licenses. A third auction, consisting of 8,874 licenses in each of 175 EAs and 1,328 licenses in all but three of the 51 MEAs commenced on May 13, 2003, and closed on May 28, 2003. Seventy-seven bidders claiming small or very small business status won 2,093 licenses.⁶⁹ We also note that, currently, there are approximately 74,000 Common Carrier Paging licenses.

26. *Wireless Telephony.* Wireless telephony includes cellular, personal communications services (PCS), and specialized mobile radio (SMR) telephony carriers. As noted earlier, the SBA has developed a small business size standard for "Cellular and Other Wireless Telecommunications" services.⁷⁰ Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.⁷¹ According to Commission data, 432 carriers reported that they were engaged in the provision of wireless telephony.⁷² We have estimated that 221 of these are small under the SBA small business size standard.

27. *Broadband Personal Communications Service.* The broadband Personal Communications Service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission defined "small entity" for Blocks C and F as an entity that has average gross revenues of \$40 million or less in the three previous calendar years.⁷³ For Block F, an additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁷⁴ These standards defining "small entity" in the context of broadband PCS auctions have been approved by the SBA.⁷⁵ No small businesses, within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders won

(...continued from previous page)

⁶⁵ See Letter from Aida Alvarez, Administrator, Small Business Administration, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau (dated Dec. 2, 1998) (SBA Dec. 2, 1998 Letter).

⁶⁶ See "929 and 931 MHz Paging Auction Closes," Public Notice, 15 FCC Rcd 4858 (WTB 2000).

⁶⁷ *Id.*

⁶⁸ See *Lower and Upper Paging Band Auction Closes*, Public Notice, 16 FCC Rcd 21821 (WTB 2002).

⁶⁹ See *Lower and Upper Paging Bands Auction Closes*, Public Notice, 18 FCC Rcd 11154 (WTB 2003).

⁷⁰ 13 C.F.R. § 121.201, NAICS code 517212.

⁷¹ *Id.*

⁷² *Trends in Telephone Service* at Table 5.3.

⁷³ See *Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap*, WT Docket No. 96-59, Report and Order, 11 FCC Rcd 7824, 61 FR 33859 (July 1, 1996) (*PCS Order*); see also 47 C.F.R. § 24.720(b).

⁷⁴ See *PCS Order*, 11 FCC Rcd 7824.

⁷⁵ See, e.g., *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5332, 59 FR 37566 (July 22, 1994).

approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.⁷⁶ On March 23, 1999, the Commission re-auctioned 347 C, D, E, and F Block licenses. There were 48 small business winning bidders. On January 26, 2001, the Commission completed the auction of 422 C and F Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in this auction, 29 qualified as "small" or "very small" businesses. Subsequent events, concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant.

28. *Narrowband Personal Communications Services.* The Commission held an auction for Narrowband PCS licenses that commenced on July 25, 1994, and closed on July 29, 1994. A second auction commenced on October 26, 1994 and closed on November 8, 1994. For purposes of the first two Narrowband PCS auctions, "small businesses" were entities with average gross revenues for the prior three calendar years of \$40 million or less.⁷⁷ Through these auctions, the Commission awarded a total of 41 licenses, 11 of which were obtained by four small businesses.⁷⁸ To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size standard in the Narrowband PCS Second Report and Order.⁷⁹ A "small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million.⁸⁰ A "very small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million.⁸¹ The SBA has approved these small business size standards.⁸² A third auction commenced on October 3, 2001 and closed on October 16, 2001. Here, five bidders won 317 (Metropolitan Trading Areas and nationwide) licenses.⁸³ Three of these claimed status as a small or very small entity and won 311 licenses.

29. *Rural Radiotelephone Service.* The Commission has not adopted a size standard for small businesses specific to the Rural Radiotelephone Service.⁸⁴ A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (BETRS).⁸⁵ The Commission

⁷⁶ FCC News, Broadband PCS, D, E and F Block Auction Closes, No. 71744 (rel. Jan. 14, 1997); *see also* Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licenses, WT Docket No. 97-82, Second Report and Order, 12 FCC Rcd 16436, 62 FR 55348 (Oct. 24, 1997).

⁷⁷ Implementation of Section 309(j) of the Communications Act – Competitive Bidding Narrowband PCS, Third Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, 10 FCC Rcd 175, 196, para. 46 (1994).

⁷⁸ See Announcing the High Bidders in the Auction of ten Nationwide Narrowband PCS Licenses, Winning Bids Total \$617,006,674, Public Notice, PNWL 94-004 (rel. Aug. 2, 1994); Announcing the High Bidders in the Auction of 30 Regional Narrowband PCS Licenses; Winning Bids Total \$490,901,787, Public Notice, PNWL 94-27 (rel. Nov. 9, 1994).

⁷⁹ Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS, ET Docket No. 92-100, PP Docket No. 93-253, Second Report and Order and Second Further Notice of Proposed Rule Making, 15 FCC Rcd 10456, 10476, para. 40 (2000).

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² See Letter from Aida Alvarez, Administrator, Small Business Administration, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission (dated Dec. 2, 1998).

⁸³ See Narrowband PCS Auction Closes, Public Notice, 16 FCC Rcd 18663 (WTB 2001).

⁸⁴ See 47 C.F.R. § 22.99 (defining Rural Radiotelephone Service).

⁸⁵ See 47 C.F.R. §§ 22.757, 22.759 (defining BETRS).

uses the SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," *i.e.*, an entity employing no more than 1,500 persons.⁸⁶ There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

30. *Air-Ground Radiotelephone Service.* The Commission has not adopted a small business size standard specific to the Air-Ground Radiotelephone Service.⁸⁷ We will use SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," *i.e.*, an entity employing no more than 1,500 persons.⁸⁸ There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small under the SBA small business size standard.

31. *Offshore Radiotelephone Service.* This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.⁸⁹ There are presently approximately 55 licensees in this service. We are unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business size standard for "Cellular and Other Wireless Telecommunications" services.⁹⁰ Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.⁹¹

2. Cable and OVS Operators

32. *Cable Television Distribution Services.* Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies."⁹² The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. To gauge small business prevalence for these cable services we must, however, use current census data that are based on the previous category of Cable and Other Program Distribution and its associated size standard; that size standard was: all such firms having \$13.5 million or less in annual receipts.⁹³ According to Census Bureau data for 2002, there were a total of 1,191 firms in this previous category that operated for the entire year.⁹⁴ Of this total, 1,087 firms had annual receipts of under \$10

⁸⁶ 13 C.F.R. § 121.201, NAICS code 517212.

⁸⁷ See 47 C.F.R. § 22.99 (defining Air-Ground Radiotelephone Service).

⁸⁸ 13 C.F.R. § 121.201, NAICS code 517212 (changed from 513322 in Oct. 2002).

⁸⁹ This service is governed by Subpart I of Part 22 of the Commission's rules. See 47 C.F.R. §§ 22.1001-22.1037.

⁹⁰ 13 C.F.R. § 121.201, NAICS code 517212.

⁹¹ *Id.*

⁹² U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers" (partial definition); <http://www.census.gov/naics/2007/def/ND517110.HTM#N517110>.

⁹³ 13 C.F.R. § 121.201, NAICS code 517110.

⁹⁴ U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, Table 4, Receipts Size of Firms for the United States: 2002, NAICS code 517510 (issued November 2005).

million, and 43 firms had receipts of \$10 million or more but less than \$25 million.⁹⁵ Thus, the majority of these firms can be considered small.

33. *Cable Companies and Systems.* The Commission has also developed its own small business size standards, for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers, nationwide.⁹⁶ Industry data indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard.⁹⁷ In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.⁹⁸ Industry data indicate that, of 7,208 systems nationwide, 6,139 systems have under 10,000 subscribers, and an additional 379 systems have 10,000-19,999 subscribers.⁹⁹ Thus, under this second size standard, most cable systems are small

34. *Cable System Operators.* The Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."¹⁰⁰ The Commission has determined that an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate.¹⁰¹ Industry data indicate that, of 1,076 cable operators nationwide, all but ten are small under this size standard.¹⁰² We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million,¹⁰³ and therefore we are unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.

35. *Open Video Systems (OVS).* In 1996, Congress established the open video system (OVS) framework, one of four statutorily recognized options for the provision of video programming services by

⁹⁵ *Id.* An additional 61 firms had annual receipts of \$25 million or more.

⁹⁶ 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of \$100 million or less in annual revenues. *Implementation of Sections of the 1992 Cable Act: Rate Regulation*, Sixth Report and Order and Eleventh Order on Reconsideration, MM Docket Nos. 92-266, 93-215, 10 FCC Rcd 7393, 7408 (1995).

⁹⁷ These data are derived from: R.R. Bowker, *Broadcasting & Cable Yearbook 2006*, "Top 25 Cable/Satellite Operators," pages A-8 & C-2 (data current as of June 30, 2005); Warren Communications News, *Television & Cable Factbook 2006*, "Ownership of Cable Systems in the United States," pages D-1805 to D-1857.

⁹⁸ 47 C.F.R. § 76.901(c).

⁹⁹ Warren Communications News, *Television & Cable Factbook 2006*, "U.S. Cable Systems by Subscriber Size," page F-2 (data current as of Oct. 2005). The data do not include 718 systems for which classifying data were not available.

¹⁰⁰ 47 U.S.C. § 543(m)(2); see 47 C.F.R. § 76.901(f) & nn. 1-3.

¹⁰¹ 47 C.F.R. § 76.901(f); see *FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, Public Notice, DA 01-158, 16 FCC Rcd 2225 (Cable Services Bureau, Jan. 24, 2001).

¹⁰² These data are derived from: R.R. Bowker, *Broadcasting & Cable Yearbook 2006*, "Top 25 Cable/Satellite Operators," pages A-8 & C-2 (data current as of June 30, 2005); Warren Communications News, *Television & Cable Factbook 2006*, "Ownership of Cable Systems in the United States," pages D-1805 to D-1857.

¹⁰³ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(f) of the Commission's rules. See 47 C.F.R. § 76.909(b).

local exchange carriers (LECs).¹⁰⁴ The OVS framework provides opportunities for the distribution of video programming other than through cable systems. Because OVS operators provide subscription services,¹⁰⁵ OVS falls within the SBA small business size standard of Cable and Other Program Distribution Services, which consists of such entities having \$13.5 million or less in annual receipts.¹⁰⁶ The Commission has certified 25 OVS operators, with some now providing service. Broadband service providers (BSPs) are currently the only significant holders of OVS certifications or local OVS franchises.¹⁰⁷ As of June, 2005, BSPs served approximately 1.4 million subscribers, representing 1.5 percent of all MVPD households.¹⁰⁸ Affiliates of Residential Communications Network, Inc. (RCN), which serves about 371,000 subscribers as of June, 2005, is currently the largest BSP and 14th largest MVPD.¹⁰⁹ RCN received approval to operate OVS systems in New York City, Boston, Washington, D.C. and other areas. The Commission does not have financial information regarding the entities authorized to provide OVS, some of which may not yet be operational. We thus believe that at least some of the OVS operators may qualify as small entities.

3. Internet Service Providers

36. *Internet Service Providers.* The SBA has developed a small business size standard for Internet Service Providers (ISPs). ISPs "provide clients access to the Internet and generally provide related services such as web hosting, web page designing, and hardware or software consulting related to Internet connectivity."¹¹⁰ Under the SBA size standard, such a business is small if it has average annual receipts of \$23 million or less.¹¹¹ According to Census Bureau data for 2002, there were 2,529 firms in this category that operated for the entire year.¹¹² Of these, 2,437 firms had annual receipts of under \$10 million, and an additional 47 firms had receipts of between \$10 million and \$24,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

37. *All Other Information Services.* "This industry comprises establishments primarily engaged in providing other information services (except new syndicates and libraries and archives)."¹¹³ The SBA has developed a small business size standard for this category; that size standard is \$6.5 million

¹⁰⁴ 47 U.S.C. § 571(a)(3)-(4). See *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Eleventh Annual Report*, 20 FCC Rcd 2507, 2549, para. 88 (2006) (2006 Cable Competition Report).

¹⁰⁵ See 47 U.S.C. § 573.

¹⁰⁶ 13 C.F.R. § 121.201, NAICS code 517510.

¹⁰⁷ See 2006 Cable Competition Report, 20 FCC Rcd at 2549, para. 88. BSPs are newer firms that are building state-of-the-art, facilities-based networks to provide video, voice, and data services over a single network.

¹⁰⁸ See *id.* at 2507, para. 14.

¹⁰⁹ See 2006 Cable Competition Report, 20 FCC Rcd at 2549, para. 89. WideOpenWest is the second largest BSP and 16th largest MVPD, with cable systems serving about 292,000 subscribers as of June, 2005. The third largest BSP is Knology, serving approximately 170,800 subscribers as of June 2005. *Id.*

¹¹⁰ U.S. Census Bureau, "2002 NAICS Definitions: 518111 Internet Service Providers," available at <http://www.census.gov/epcd/naics02/def/ND518111.HTM> (visited Oct. 16, 2007).

¹¹¹ 13 C.F.R. § 121.201, NAICS code 518111 (changed from 514191, "On-Line Information Services," in Oct. 2002).

¹¹² U.S. Census Bureau, 2002 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 518111 (issued Nov. 2005).

¹¹³ U.S. Census Bureau, "2002 NAICS Definitions: 519190 All Other Information Services," available at <http://www.census.gov/epcd/naics02/def/ND519190.HTM> (visited Oct. 16, 2007).

or less in average annual receipts.¹¹⁴ According to Census Bureau data for 2002, there were 155 firms in this category that operated for the entire year.¹¹⁵ Of these, 138 had annual receipts of under \$5 million, and an additional four firms had receipts of between \$5 million and \$9,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

4. Equipment Manufacturers

38. SBA small business size standards are given in terms of "firms." Census Bureau data concerning computer manufacturers, on the other hand, are given in terms of "establishments." We note that the number of "establishments" is a less helpful indicator of small business prevalence in this context than would be the number of "firms" or "companies," because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the census numbers provided below may reflect inflated numbers of businesses in the given category, including the numbers of small businesses.

39. *Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.* The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment."¹¹⁶ The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: all such firms having 750 or fewer employees.¹¹⁷ According to Census Bureau data for 2002, there were a total of 1,041 establishments in this category that operated for the entire year.¹¹⁸ Of this total, 1,010 had employment of under 500, and an additional 13 had employment of 500 to 999.¹¹⁹ Thus, under this size standard, the majority of firms can be considered small.

40. *Telephone Apparatus Manufacturing.* The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing wire telephone and data communications equipment. These products may be standalone or board-level components of a larger

¹¹⁴ 13 C.F.R. § 121.201, NAICS code 519190.

¹¹⁵ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 514199 (issued Oct. 2000). This category was created for the 2002 Economic Census by taking a portion of the superseded 1997 category, "All Other Information Services," NAICS code 514199. The data cited in the text above are derived from the superseded category.

¹¹⁶ U.S. Census Bureau, 2002 NAICS Definitions, "334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing," available at <http://www.census.gov/epcd/naics02/def/NDEF334.HTM#N3342>.

¹¹⁷ 13 C.F.R. § 121.201, NAICS code 334220.

¹¹⁸ U.S. Census Bureau, American FactFinder, 2002 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 334220 (released May 26, 2005); <http://factfinder.census.gov>. The number of "establishments" is a less helpful indicator of small business prevalence in this context than would be the number of "firms" or "companies," because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 2002, which was 929.

¹¹⁹ *Id.* An additional 18 establishments had employment of 1,000 or more.

system. Examples of products made by these establishments are central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, LAN modems, multi-user modems, and other data communications equipment, such as bridges, routers, and gateways.¹²⁰ The SBA has developed a small business size standard for Telephone Apparatus Manufacturing, which is: all such firms having 1,000 or fewer employees.¹²¹ According to Census Bureau data for 2002, there were a total of 518 establishments in this category that operated for the entire year.¹²² Of this total, 511 had employment of under 1,000, and an additional 7 had employment of 1,000 to 2,499.¹²³ Thus, under this size standard, the majority of firms can be considered small.

41. *Semiconductor and Related Device Manufacturing.* Examples of manufactured devices in this category include “integrated circuits, memory chips, microprocessors, diodes, transistors, solar cells and other optoelectronic devices.”¹²⁴ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.¹²⁵ According to Census Bureau data, there were 1,032 establishments in this category that operated with payroll during 2002.¹²⁶ Of these, 950 had employment of under 500, and 42 establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

42. *Computer Storage Device Manufacturing.* These establishments manufacture “computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media.”¹²⁷ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹²⁸ According to Census Bureau data, there were 170 establishments in this category that operated with payroll during 2002.¹²⁹ Of these, 164 had employment of under 500, and five establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities.

¹²⁰ U.S. Census Bureau, 2002 NAICS Definitions, “334210 Telephone Apparatus Manufacturing,” available at <http://www.census.gov/epcd/naics02/def/NDEF334.HTM#N3342>.

¹²¹ 13 C.F.R. § 121.201, NAICS code 334210.

¹²² U.S. Census Bureau, American FactFinder, 2002 Economic Census, Industry Series, Industry Statistics by Employment Size, NAICS code 334210 (released May 26, 2005); <http://factfinder.census.gov>. The number of “establishments” is a less helpful indicator of small business prevalence in this context than would be the number of “firms” or “companies,” because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 2002, which was 450.

¹²³ *Id.* An additional 4 establishments had employment of 2,500 or more.

¹²⁴ U.S. Census Bureau, 2002 NAICS Definitions, “334413 Semiconductor and Related Device Manufacturing,” available at <http://www.census.gov/epcd/naics02/def/ND334413.HTM#N334413>.

¹²⁵ 13 C.F.R. § 121.201, NAICS code 334413.

¹²⁶ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, “Semiconductor and Related Device Manufacturing,” Table 4, NAICS code 334413 (issued Jan. 2005).

¹²⁷ U.S. Census Bureau, “2002 NAICS Definitions: 334112 Computer Storage Device Manufacturing,” available at <http://www.census.gov/epcd/naics02/def/ND334112.HTM> (visited Oct. 16, 2007).

¹²⁸ 13 C.F.R. § 121.201, NAICS code 334112.

¹²⁹ U.S. Census Bureau, 2002 Economic Census, Industry Series: Manufacturing, “Computer Storage Device Manufacturing,” Table 4, NAICS code 334112 (issued Dec. 2004).

D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

43. Should the Commission decide to adopt any further numbering requirements to benefit customers of telecommunications and interconnected VoIP service, the associated rules potentially could modify the reporting and recordkeeping requirements of certain telecommunications providers and interconnected VoIP service providers. For example, the Commission seeks comment on whether it should require interconnected VoIP providers to comply with N11 code assignments.¹³⁰ Additionally, the Commission seeks comment on whether the Commission should adopt a requirement that carriers identify all errors possible in a given LSR and describe the basis for rejection when rejecting a port request.¹³¹ The Commission also tentatively concludes that it should adopt rules reducing the porting interval for wireline-to-wireline and intermodal simple port requests, specifically to a 48-hour porting interval, and seeks comment on whether the Commission should establish time limits on the porting process for all types of simple port requests or just certain types of ports.¹³² Further, the Commission seeks comment on whether there are any technical impediments or advances that affect the overall length of the porting interval such that it should adopt different porting intervals for particular types of simple ports.¹³³ These proposals may impose additional reporting and recordkeeping requirements on entities. Also, we seek comment on whether any of these proposals place burdens on small entities, and whether alternatives might lessen such burdens while still achieving the goals of this proceeding.¹³⁴ Entities, especially small businesses, are encouraged to quantify the costs and benefits or any reporting requirement that may be established in this proceeding.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

44. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include (among others) the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.¹³⁵

45. The Commission's primary objective is to ensure that that consumers benefit from LNP. We seek comment on the burdens, including those placed on small carriers, associated with related Commission rules and whether the Commission should adopt different requirements for small businesses. Specifically, we seek comment on the benefits and burdens, including the burdens on small entities, of requiring interconnected VoIP providers to comply with N11 code assignments and other numbering requirements.¹³⁶ We also seek comment on the benefits and burdens, including the burdens on small entities, of the specific requirements on the validation process proposed in the Notice and any other such

¹³⁰ See Notice, *supra* para. 53.

¹³¹ See *id.*, *supra* para. 57.

¹³² See *id.*, *supra* para. 59.

¹³³ See *id.*, *supra* para. 63.

¹³⁴ See *id.*, *supra* paras. 53, 58, 64.

¹³⁵ 5 U.S.C. § 603(c).

¹³⁶ See Notice, *supra* para. 53.

requirements.¹³⁷ Further, the Commission seeks comment on the benefits and burdens, including the burdens on small entities, of adopting rules regarding porting intervals for all types of simple port requests.¹³⁸

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

46. None.

¹³⁷ See *id.*, *supra* para. 58.

¹³⁸ See *id.*, *supra* para. 64.

**STATEMENT OF
CHAIRMAN KEVIN J. MARTIN**

Re: Telephone Number Requirements for IP-Enabled Services Providers; Local Number Portability Porting Interval and Validation Requirements; IP-Enabled Services; Telephone Number Portability; CTIA Petitions for Declaratory Ruling on Wireline-Wireless Porting Issues; Numbering Resource Optimization, WC Docket Nos. 07-243, 07-244, 04-36, CC Docket Nos. 95-116, 99-200

I am pleased the Commission today adopts this item addressing local number portability because it provides important consumer benefits by promoting competition for consumer telephone services. I have consistently supported local number portability because it allows consumers to choose a cheaper or more innovative service. I have also consistently maintained that establishing a level playing field promotes competition. As interconnected VoIP providers have increasingly entered the market, it is important that consumers be able to transfer their number to and from these providers just like transfers between carriers. I also support the actions to streamline the process and time required to switch from wireline to wireless service in order to provide consumers the ability to change providers without undue burden or delay.

**STATEMENT OF
COMMISSIONER MICHAEL J. COPPS**

Re: *IP-Enabled Services*, WC Docket No. 04-36; *Telephone Number Portability*, CC Docket No. 95-116; *CTIA Petitions for Declaratory Ruling on Wireline-Wireless Porting Issues, Final Regulatory Flexibility Analysis, Numbering Resource Optimization*, CC Docket No. 99-200; *Telephone Number Requirements for IP-Enabled Services Providers*, WC Docket No. 07-243; *Local Number Portability Porting Interval and Validation Requirements*, WC Docket No. 07-244, Report and Order, Declaratory Ruling, Order on Remand, and Notice of Proposed Rulemaking

In the 1996 Telecommunications Act, Congress imposed a number portability obligation on providers so consumers could retain their phone numbers when switching carriers. This was both consumer-friendly and competition-friendly. Local number portability is a real success story. Today's item works to ensure that consumers continue to benefit from local number portability when it comes to interconnected VoIP services. I am pleased to support it.

Today's Order also streamlines the port validation process by requiring providers to validate a consumer's porting request based upon no more than four specified criteria. By providing clarity to carriers in this regard, consumers will benefit from more timely and efficient processing of their requests. I want to thank Chairman Martin and my colleagues for supporting my proposal to address this issue here rather than making consumers wait any longer for its resolution. I also support the few remaining questions the Commission poses regarding the obligations of interconnected VoIP providers and the timing interval expected for intermodal porting requests. I am pleased that the Order includes my suggestion that when determining the appropriate porting interval we should take into account the evolving nature of technologies and business practices with the goal of reducing porting times to the shortest reasonable time-period. I am optimistic that we will be able to complete this proceeding rapidly if all interested parties work together.

A lesson to be learned from the success of local number portability is that the Commission should be seeking out additional ways to break down barriers that impede consumers from taking advantage of competition, such as wireless and broadband early termination fees and the locking of phone features. The more we do on such initiatives, the better it will be for consumers and competition. That's a win-win in my book.

**STATEMENT OF
COMMISSIONER JONATHAN S. ADELSTEIN
Approving in part, concurring in part**

Re: IP-Enabled Services; Telephone Number Portability; CTIA Petitions for Declaratory Ruling on Wireline-Wireless Porting Issues; Final Regulatory Flexibility Analysis; Numbering Resources Optimization; Telephone Number Requirements for IP-Enabled Service Providers; Local Number Portability Porting Interval and Validation Requirements; WC Docket No. 04-36, CC Docket Nos. 95-116 and 99-200, WC Docket Nos. 07-243 and 07-244; Report and Order, Declaratory Ruling, Order on Remand, and Notice of Proposed Rulemaking.

Through this Order we expand the availability of local number portability, which has provided important benefits to consumers through the ability to take their number with them when they change providers. Congress viewed the ability of consumers to keep their phone numbers to be an important component of the effort to develop local phone competition and consumer choice, and our experiences of the past four years have borne out this prediction.

I'm pleased that this Order extends number portability to interconnected voice over Internet Protocol (VoIP) providers. To their credit, many interconnected VoIP providers have acknowledged the need to offer number portability to their customers. I fully agree with the Order's conclusion that consumers reasonably expect that they will have the ability to take their number with them when they switch to another provider, whether they subscribe to an interconnected VoIP provider or another provider of telecommunications services. So, I support the decision to apply these requirements evenly.

I also appreciate the Order's efforts to address the process for completing requested ports. Given the Order's findings that many ports are delayed due to difficulties with "burdensome porting-related procedures," the Commission should take steps to improve this process, not only for providers but also for consumers. In this respect, I am particularly hopeful that we can work to reduce the porting interval for simple porting requests, so that consumers are left on hold no longer than necessary.

This Order also responds to a 2005 remand from the U.S. Court of Appeals for the District of Columbia Circuit by re-imposing number portability requirements on small carriers. The Commission's prior decision to extend these requirements to small carriers was stayed because the Commission failed to comply with the Regulatory Flexibility Act (RFA). While this Order checks a box by completing the final analysis required by the RFA, we miss an opportunity here to address some of the critical and expensive underlying issues – such as the transport costs associated with calls to ported numbers – that are exacerbated by our porting requirements.

Four years ago, when these portability requirements were first imposed, I called on the Commission to resolve this critical intercarrier compensation issue as quickly and comprehensively as possible, so I'm disappointed that we've made no more progress since then, and fail to do so here. Although this Commission could do more to recognize and address the unique needs of small providers, I am pleased that small providers will have the ability to raise these issues before state commissions through the process set out by Congress in Section 251(f)(2) and I will concur to this portion of the Order.

**STATEMENT OF
COMMISSIONER DEBORAH TAYLOR TATE**

Re: IP-Enabled Services; Telephone Number Portability; CTIA Petitions for Declaratory Ruling on Wireline-Wireless Porting Issues; Final Regulatory Flexibility Analysis; Numbering Resource Optimization; Telephone Number Requirements for IP-Enabled Services Providers; Local Number Portability Porting Interval and Validation Requirements, WC Docket No. 04-36, CC Docket No. 95-116; CC Docket No. 99-200; WC Docket No. 07-243; WC Docket No. 07-244, Report And Order, Declaratory Ruling, Order On Remand, And Notice Of Proposed Rulemaking.

As both Congress and this Commission have recognized, the ability of a customer to retain his or her local telephone number when switching providers is a critical component for competition in the local exchange market. Local number portability promotes competition between providers of local telephone services by eliminating a major disincentive to switch carriers. Specifically, the ability of end users to retain their telephone numbers when changing service providers gives customers flexibility in the quality, price, and variety of services they can choose to purchase. Local number portability also helps ensure efficient use and uniform administration of numbering resources. In this order we take several steps to ensure that consumers continue to enjoy the benefits of local competition. We extend the benefits of number portability to VoIP customers by requiring VoIP providers to ensure that customers have the ability to port their telephone numbers when changing service providers to or from a VoIP provider. Additionally, we extend to interconnected VoIP providers the obligation to contribute to shared numbering administration costs, ensuring regulatory parity among providers of similar services.

We also take important steps to facilitate existing number portability so customers more fully benefit from these requirements. We clarify that no carriers may obstruct or delay the porting process by demanding more information than is necessary to validate a customer's request to keep their telephone number when changing carriers and streamline the porting process and time interval.

**STATEMENT OF
COMMISSIONER ROBERT M. McDOWELL**

Re: Telephone Number Requirements for IP-Enabled Services Providers, Local Number Portability Porting Interval and Validation Requirements, IP-Enabled Services, Telephone Number Portability, CTIA Petitions for Declaratory Ruling on Wireline-Wireless Porting Issues, Final Regulatory Flexibility Analysis, Numbering Resource Optimization, Report and Order, Declaratory Ruling, Order on Remand, and Notice of Proposed Rulemaking, WC Docket No. 07-243, WC Docket No. 07-244 WC Docket No. 04-36, CC Docket No. 95-116, CC Docket No. 99-200

The steps we are taking today promote consumer freedom in the voice and information service markets by allowing customers to port their telephone number to and from Voice over Internet Protocol (VoIP) services across all platforms. In this world of converging telecommunications technologies, it is vital that the Commission ensure that our regulations do not favor one type of service provider over another and that consumers are empowered to choose among all the services these new technologies offer. By extending local numbering portability requirements to VoIP providers, we now give consumers the ability to keep their telephone numbers when they decide to switch to or from wireline, wireless or VoIP services. Furthermore, the obligation to port numbers quickly and efficiently will further benefit consumers when they switch providers and give regulatory certainty to market players.

Our action today also fosters regulatory parity. Because VoIP services are increasingly becoming a substitute for traditional telephone service in the marketplace, it is critical that we extend local number portability obligations to those service providers. Just as we have previously required interconnected VoIP providers to comply with obligations for E911, universal service, customer proprietary network information protections and disability access, extending our local number portability requirements levels out the regulatory landscape even further.

However, in an effort to refine our overall numbering obligations, we seek comment on a number of specific issues affecting the extent of obligations and elements of the porting process. I will be particularly interested to review the comments regarding the validation of port requests and porting intervals.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)	
)	
Universal Service Contribution Methodology	)	WC Docket No. 06-122
)	
Federal-State Joint Board on	)	CC Docket No. 96-45
Universal Service)	
)	
1998 Biennial Regulatory Review –	)	CC Docket No. 98-171
Streamlined Contributor Reporting)	
Requirements Associated with Administration)	
of Telecommunications Relay Service, North)	
American Numbering Plan, Local Number)	
Portability, and Universal Service Support)	
Mechanisms)	
)	
Telecommunications Services for Individuals	)	CC Docket No. 90-571
with Hearing and Speech Disabilities, and the)	
Americans with Disabilities Act of 1990)	
)	
Administration of the North American	)	CC Docket No. 92-237
Numbering Plan and North American	)	NSD File No. L-00-72
Numbering Plan Cost Recovery Contribution)	
Factor and Fund Size)	
)	
Number Resource Optimization	)	CC Docket No. 99-200
)	
Telephone Number Portability	)	CC Docket No. 95-116
)	
Truth-in-Billing and Billing Format	)	CC Docket No. 98-170
)	
IP-Enabled Services	)	WC Docket No. 04-36

REPORT AND ORDER AND NOTICE OF PROPOSED RULEMAKING

Adopted: June 21, 2006

Released: June 27, 2006

Comment Date: 30 days from publication in the Federal Register

Reply Comment Date: 60 days from publication in the Federal Register

By the Commission: Chairman Martin and Commissioner Tate and Commissioner McDowell issuing separate statements; Commissioner Copps and Commissioner Adelstein concurring in part and issuing separate statements.

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I. INTRODUCTION

1. In this Report and Order (Order) and Notice of Proposed Rulemaking (Notice) we make interim modifications to the existing approach for assessing contributions to the federal universal service fund (USF or Fund) in order to provide stability while we continue to examine more fundamental reform. The interim changes we make in this Order are essential for securing the viability of universal service – a fundamental goal of communications policy as expressed in the Communications Act – in the near-term.¹ In 1996, Congress directed the Commission and the states to take the steps necessary to establish support mechanisms to ensure the delivery of affordable telecommunications services to all Americans in a changing competitive environment.² Since then, the Commission has undertaken a number of reforms to

¹ See 47 U.S.C. § 151 (“One of Congress’s primary purposes in establishing the Federal Communications Commission was to “make available . . . to all the people of the United States . . . a rapid, efficient, Nation-wide . . . communications service with adequate facilities at reasonable charges.”). The Communications Act of 1934, as amended (Act or Communications Act), is codified at 47 U.S.C. §§ 151, *et seq.*

² See 47 U.S.C. §254(d); Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996) (1996 Act). The 1996 Act amended the Communications Act.

fulfill the universal service goals established by Congress, and today we take additional steps to continue to satisfy these goals.³

2. In this Order, we take two critical actions to ensure the stability and sufficiency of the Fund.⁴ First, we raise the interim wireless safe harbor from its current 28.5 percent level to 37.1 percent. Second, we establish universal service contribution obligations for providers of interconnected voice over Internet Protocol (VoIP) service.⁵

3. The interim revisions adopted in this Order respond to changes that have occurred in recent years in the telecommunications market, but retain the essential elements of the current approach to USF contributions.⁶ Specifically, while stand-alone interstate long distance revenues have been declining, wireless services and interconnected VoIP services, both of which typically include bundled long distance service, have been growing dramatically. As noted below, from December 2000 to December 2004, the number of wireless subscribers grew from approximately 101 million to approximately 181 million,⁷ and wireless providers' revenues grew from approximately \$70 billion to approximately \$122 billion.⁸ Similarly, the number of VoIP subscribers has grown from about 150 thousand at the end of 2003 to 4.2 million at the end of 2005.⁹ The interim revisions made in this Order respond to these growing pressures on the stability and sustainability of the Fund.¹⁰

³ For example, the Commission has taken steps to remove implicit support from interstate access rates and make that support explicit and portable. See, e.g., *Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers*, CC Docket Nos. 96-262, 94-1, Sixth Report and Order; *Low-Volume Long-Distance Users*, CC Docket No. 99-249, Report and Order; *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Eleventh Report and Order, 15 FCC Rcd 12962 (2000), *aff'd in part, rev'd in part, and remanded in part Texas Office of Pub. Util. Counsel v. FCC*, 265 F.3d 313 (5th Cir. 2001).

⁴ See *Federal-State Joint Board on Universal Service, 1998 Biennial Regulatory Review – Streamlined Contributor Reporting Requirements Associated with Administration of Telecommunications Relay Service, North American Numbering Plan, Local Number Portability, and Universal Service Support Mechanisms, Telecommunications Services for Individuals with Hearing and Speech Disabilities, and the Americans with Disabilities Act of 1990, Administration of the North American Numbering Plan and North American Numbering Plan Cost Recovery Contribution Factor and Fund Size, Number Resource Optimization, Telephone Number Portability*, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, Notice of Proposed Rulemaking, 16 FCC Rcd 9892 (2001) (2001 Notice) (initiating an examination of the contribution methodology). Section 254 of the 1996 Act requires the Commission, among other things, to ensure that there are specific, predictable, and sufficient support mechanisms to preserve and advance universal service. 47 U.S.C. § 254(b)(5), (d). Today, approximately 93 percent of American households subscribe to telephone service, in part, as a result of the Commission's universal service policies. See Federal Communications Commission, *Telephone Subscribership in the United States*, Table 1 (2006), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-265356A1.pdf.

⁵ See 47 C.F.R. § 9.3 (defining interconnected VoIP service).

⁶ See 47 U.S.C. § 254(b)(5), (d).

⁷ See Federal Communications Commission, *Tenth Annual CMRS Competition Report*, Table 2 (2005), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-05-173A1.pdf (2005 CMRS Report).

⁸ See Federal Communications Commission, *Telecommunications Industry Revenues*, Table 7 (2002) (2000 Revenues Report); Federal Communications Commission, *Telecommunications Industry Revenues*, Table 7 (2006) (2004 Revenues Report); see also CTIA, *Background on CTIA's Semi-Annual Wireless Industry Survey*, at 4, available at <http://files.ctia.org/pdf/CTIAEndYear2005Survey.pdf> (visited April 10, 2006) (CTIA 2005 Year End Survey).

⁹ Telecommunications Industry Association, *TIA's 2006 Telecommunications Market Review and Forecast*, 71 (2006) (TIA 2006 Report).

¹⁰ See 47 U.S.C. § 254(b)(5), (d).

4. Unlike many of the proposals that would move to a non-revenue-based contribution methodology and require significant time to implement, retaining a revenues-based approach on an interim basis enables us to implement the revisions required in this Order (including reporting requirements) for the fourth quarter 2006 universal service contribution requirements, which provides more immediate stability to the Fund. While we retain the revenue-based approach for now, we are committed to examining more fundamental reform in this proceeding. To the extent that further modifications of the existing approach may be necessary before we complete fundamental reform and because the steps we take today are interim measures, we seek comment in the Notice on whether modifications to the interim safe harbors established in the Order may be appropriate.

II. BACKGROUND

A. Statutory Provisions

5. The assessment of universal service contributions is governed by the statutory framework established by Congress in the Act.¹¹ Section 1 of the Act states that the Commission is created “[f]or the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges,” and that the agency “shall execute and enforce the provisions of th[e] Act.”¹² Universal service is a key component in communications policy for ensuring that charges are reasonable. Section 254(b) of the 1996 Act instructs the Commission to establish universal service support mechanisms with the goal of ensuring the delivery of affordable telecommunications services to all Americans.¹³ Section 254(b) also provides that Commission policy on universal service shall be based, in part, on the principles that contributions should be equitable and nondiscriminatory, and support mechanisms should be specific, predictable, and sufficient.¹⁴ Section 254(d) of the 1996 Act mandates that “[e]very telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service.”¹⁵ Section 254(d) also vests the Commission with the permissive authority to require “[a]ny other provider of interstate telecommunications . . . to contribute to the preservation and advancement of universal service if the public interest so requires.”¹⁶

B. The Current Contribution Methodology

6. In 1997, in the *Universal Service First Report and Order*, the Commission determined to assess contributions on end-user telecommunications revenues.¹⁷ The Commission concluded that the

¹¹ See 47 U.S.C. §§ 151, 201, 202, 254.

¹² 47 U.S.C. § 151.

¹³ 47 U.S.C. § 254(b).

¹⁴ 47 U.S.C. § 254(b)(4), (5). The Commission adopted the additional principle that federal support mechanisms should be competitively neutral, neither unfairly advantaging nor disadvantaging particular service providers or technologies. See also *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, 12 FCC Rcd 8776, 8801-03, paras. 46-51 (1997) (*Universal Service First Report and Order*) (subsequent history omitted).

¹⁵ 47 U.S.C. § 254(d).

¹⁶ *Id.*

¹⁷ See *Universal Service First Report and Order*, 12 FCC Rcd at 9206-07, paras. 843-44; *Federal-State Joint Board on Universal Service, Access Charge Reform*, Sixteenth Order on Reconsideration and Eighth Report and Order in CC Docket No. 96-45 and Sixth Report and Order in CC Docket No. 96-262, 15 FCC Rcd 1679, 1685, para. 15 (1999) (establishing a single contribution for all universal service support mechanisms based on interstate and international revenues).

revenues approach would be: (1) competitively neutral; (2) easy to administer; and (3) explicit.¹⁸ The Commission concluded that a contribution methodology based on end-user telecommunications revenues would be competitively neutral because it would avoid distorting how carriers chose to structure their businesses or the types of services that they provided.¹⁹ The Commission also determined that a revenue-based approach would be easy to administer.²⁰ Although carriers would need to track their sales to end users, carriers already tracked this information for billing purposes.²¹ Moreover, the Commission could use existing revenue data to identify inaccurate end-user-revenue filings.²² Finally, the Commission found that basing contributions on end-user telecommunications revenues satisfied the statutory requirement that support be explicit because carriers know how much they contribute to the support mechanisms.²³

7. In the *Second Order on Reconsideration*, the Commission set forth the specific methodology for contributors to use to compute their USF contributions.²⁴ The Commission also designated the Universal Service Administrative Company (USAC) as the entity responsible for administering the universal service support mechanisms, including billing contributors, collecting contributions to the universal service support mechanisms, and disbursing universal service support funds.²⁵ The Commission required contributors to report their end-user telecommunications revenues to USAC on a Telecommunications Reporting Worksheet (Worksheet).²⁶

8. The Commission has also implemented various rules and guidelines intended to reduce administrative burdens for certain categories of contributors. For example, the Commission's rules provide that contributors whose annual universal service contribution is expected to be less than \$10,000 are not required to directly contribute to the universal service mechanisms, pursuant to the *de minimis* exemption.²⁷ The Commission's rules further provide a safe harbor for the reporting of

¹⁸ *Universal Service First Report and Order*, 12 FCC Rcd at 9206, 9211, paras. 843, 854.

¹⁹ *Id.* at 9207, paras. 845-46.

²⁰ *Id.* at 9208, para. 848.

²¹ *Id.*

²² *Id.*

²³ *Id.* at 9211, para. 854. Carriers calculate their contributions by multiplying their relevant end-user revenues by the universal service contribution factor. *Id.* Therefore, the cost associated with the preservation and advancement of universal service could be identified without ambiguity. *Id.*

²⁴ *Changes to the Board of Directors of the National Exchange Carrier Association, Inc., Federal-State Joint Board on Universal Service*, CC Docket Nos. 96-45, 97-21, Report and Order and Second Order on Reconsideration, 12 FCC Rcd 18400 (1997) (*Second Order on Reconsideration*).

²⁵ *Id.* at 18423-24, para. 41; see also 47 C.F.R. § 54.701.

²⁶ *Second Order on Reconsideration*, 12 FCC Rcd at 18475, Appendix B. Contributors are required to file quarterly and annually. 47 C.F.R. § 54.711(a).

²⁷ See 47 C.F.R. § 54.708. Section 254(d) of the 1996 Act states that the Commission may exempt a carrier or class of carriers from contributing to the universal service mechanisms if the "carrier's contribution to the preservation and advancement of universal service would be de minimis." 47 U.S.C. § 254(d). The Commission's rules also provide a limited exception to universal service contribution requirements for entities with interstate end-user telecommunications revenues that constitute less than twelve percent of their combined interstate and international end-user telecommunications revenues. See 47 C.F.R. § 54.706(c); See *Federal-State Joint Board on Universal Service, 1998 Biennial Regulatory Review - Streamlined Contributor Reporting Requirements Associated with Administration of Telecommunications Relay Service, North American Numbering Plan, Local Number Portability, and Universal Service Support Mechanisms, Telecommunications Services for Individuals with Hearing and Speech Disabilities, and the Americans with Disabilities Act of 1990, Administration of the North American Numbering Plan and North American Numbering Plan Cost Recovery Contribution Factor and Fund Size, Number Resource* (continued....)

telecommunications revenues when bundling telecommunications services with customer premises equipment or information services.²⁸

9. Of particular note, among those requirements minimizing administrative burdens on contributors, the Commission also established an interim safe harbor for mobile wireless telecommunications providers. Wireless telecommunications providers asserted that they could not identify, without substantial difficulty, the amount of their revenues that are interstate as opposed to intrastate.²⁹ To address this concern, in 1998, the Commission established suggested, or safe harbor, percentages to approximate the percentage of interstate revenue generated by each category of wireless telecommunications provider.³⁰ The Commission stressed that the safe harbor for each category of carrier was intended as guidance and that a wireless carrier could report a percentage of interstate revenue that was less than the safe harbor, provided it could document the computation method used and retained the supporting information.³¹ The Commission initially set the interim safe harbor percentage for cellular, broadband Personal Communications Service (PCS), and digital Specialized Mobile Radio (SMR) providers at 15 percent of total telecommunications revenues, for paging providers at 12 percent of total paging revenues, and analog SMR providers at one percent of total revenues.³²

10. In 2002, the Commission revisited the interim safe harbor and raised the percentage for cellular, broadband PCS, and digital SMR providers to 28.5 percent.³³ The Commission found that the original interim safe harbor percentage no longer reflected the extent to which mobile wireless consumers used their wireless phones for interstate calls, especially given the increased substitution of wireless for

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Optimization, Telephone Number Portability, Truth-in-Billing and Billing Format, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, 98-170, Further Notice of Proposed Rulemaking and Report and Order, 17 FCC Rcd 3752, 3806, para. 125 (2002) (*First Further Notice*).

²⁸ See *Policy and Rules Concerning Interstate, Interexchange Marketplace, Implementation of Section 254(g) of the Communications Act of 1934, as amended, 1998 Biennial Regulatory Review – Review of Customer Premises Equipment And Enhanced Services Unbundling Rules In the Interexchange, Exchange Access and Local Exchange Markets*, CC Docket Nos. 96-61, 98-183, Report and Order, 16 FCC Rcd 7418, 7446-48, paras. 47-54 (2001) (*CPE Bundling Order*).

²⁹ See *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, 13 FCC Rcd 21252, 21255, para. 6 (1998) (*First Wireless Safe Harbor Order*).

³⁰ *Id.* at 21257, para. 11.

³¹ *Id.*

³² *Id.* at 21258-60, paras. 13-15. For cellular, broadband PCS, and digital SMR, the 15 percent safe harbor was based on the nationwide average percentage for interstate wireline traffic reported for purposes of dial equipment minutes weighting program; for paging providers, the 12 percent safe harbor, and for analog SMR providers, the one percent safe harbor, was based on reported revenue on the Telecommunications Reporting Worksheet (FCC Form 499-A) for calendar year 1997. *Id.* at 21259-60, paras. 13-15.

³³ *Federal-State Joint Board on Universal Service, 1998 Biennial Regulatory Review – Streamlined Contributor Reporting Requirements Associated with Administration of Telecommunications Relay Service, North American Numbering Plan, Local Number Portability, and Universal Service Support Mechanisms, Telecommunications Services for Individuals with Hearing and Speech Disabilities, and the Americans with Disabilities Act of 1990, Administration of the North American Numbering Plan and North American Numbering Plan Cost Recovery Contribution Factor and Fund Size, Number Resource Optimization, Telephone Number Portability, Truth-in-Billing and Billing Format*, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, 98-170, Report and Order and Second Further Notice of Proposed Rulemaking, 17 FCC Rcd 24952, 24965, para. 21 (2002) (*Second Wireless Safe Harbor Order*).

traditional wireline service.³⁴ Because the original safe harbor percentage no longer reflected actual market conditions, the Commission found it necessary to increase the safe harbor to ensure that universal service contributions remained equitable and non-discriminatory, as required by section 254(d) of the 1996 Act.³⁵ By ensuring that the contribution base more accurately reflected the marketplace, the Commission improved the continued viability of the Fund.³⁶ Although the Commission retained use of an interim wireless safe harbor, the Commission sought additional comment on the ability of mobile wireless providers to report actual interstate end-user telecommunications revenue and whether the Commission should eliminate the safe harbor.³⁷

C. History of the Current Contribution Methodology Proceeding

11. As part of its efforts to ensure the long-term stability and sufficiency of the universal service support system in an increasingly competitive marketplace, the Commission began a proceeding to revisit the universal service contribution methodology in May 2001.³⁸ In the *2001 Notice*, the Commission sought comment generally on whether and how to streamline and reform the contribution assessment methodology.³⁹ Among other things, the Commission sought comment on whether to modify the existing revenue-based methodology, as well as whether to replace that methodology with one that assesses contributions on the basis of a flat-fee charge, such as a per-line charge.⁴⁰

12. Seeking to further develop the record regarding various proposals submitted in response to the *2001 Notice*, the Commission released a Further Notice of Proposed Rulemaking and Report and Order in February 2002.⁴¹ Specifically, the Commission sought more focused comment on a proposal to replace the existing revenue-based assessment mechanism with one based on the number or capacity of connections provided to a public network.⁴² The *First Further Notice* invited commenters to supplement the record with any new arguments or data on proposals to retain or modify the existing, revenue-based assessment methodology.⁴³ The Commission also sought additional comment on possible reforms to the

³⁴ *Id.* at 24965, para. 21. The Commission based the 28.5 percent safe harbor percentage on traffic studies from CTIA of six wireless carriers. Five unnamed national large wireless carriers reported interstate minutes of use that ranged from 19.6 percent to 28.5 percent. TracFone, a prepaid wireless provider, reported interstate minutes of use of 10 percent. *Id.* at 24967, para. 22.

³⁵ *Id.* at 24965-66, para. 21; see 47 U.S.C. § 254(d).

³⁶ *Second Wireless Safe Harbor Order*, 17 FCC Rcd at 24966, para. 21. The Commission did not find it necessary to adjust the "safe harbor" percentages for paging and analog SMR providers. *Id.* at 24966, para. 23. Wireless carriers may also use the safe harbor percentages to report revenue for purposes of Telecommunications Relay Services, the North American Numbering Plan, and the Local Number Portability programs. *Id.* at 24968, para. 27. The Commission also found it was in the interest of consistency, equity, and fairness to adopt an all-or-nothing rule requiring wireless telecommunications providers who chose to report using the safe harbor do so for all affiliated entities. Under this rule, wireless providers may report revenues at either the legal entity level or on a consolidated basis, but are required to report either actual or safe harbor revenues for all of their affiliated legal entities within the same safe harbor category. *Id.* at 24967, para. 25.

³⁷ See *Second Wireless Safe Harbor Order*, 17 FCC Rcd at 24983-94, para. 68.

³⁸ See generally *2001 Notice*, 16 FCC Rcd 9892.

³⁹ *Id.* at 9894, para. 2.

⁴⁰ *Id.*

⁴¹ See generally *First Further Notice*, 17 FCC Rcd 3752.

⁴² *Id.* at 3765, para. 31, 3766-89, paras. 34-83.

⁴³ *Id.* at 3789, para. 84.

manner in which carriers recover contribution costs from their customers.⁴⁴ In addition, in the further notice portion of the *Second Wireless Safe Harbor Order*, the Commission sought additional comment on capacity-based proposals that had been developed in the record.⁴⁵ The Commission also sought comment on a telephone-number based proposal advanced by AT&T and the Ad Hoc Telecommunications Users Group (Ad Hoc).⁴⁶ The Commission subsequently sought comment on a Commission staff study, which estimated potential contribution assessment levels under the then-newly modified revenue-based method and the three connection-based proposals in the further notice portion of the *Second Wireless Safe Harbor Order*.⁴⁷

D. Regulation of Interconnected VoIP Services

13. On March 10, 2004, the Commission initiated a proceeding to examine issues relating to Internet Protocol (IP)-enabled services – services and applications making use of the IP, including, but not limited to, VoIP services.⁴⁸ In the *IP-Enabled Services Notice*, the Commission asked commenters to address, among other things, the universal service contribution obligations of both facilities-based and non-facilities-based providers of IP-enabled services.⁴⁹ The Commission sought comment on its authority, including mandatory and permissive authority under section 254(d), to require universal service contributions by IP-enabled service providers.⁵⁰ The Commission asked, if certain classes of IP-enabled services are determined to be information services, could or should the Commission require non-facilities-based providers of such services to contribute to universal service pursuant to its permissive authority.⁵¹ Parties were asked to comment on whether non-facilities-based providers “provide” telecommunications.⁵² The Commission asked commenters to address how it could exercise its permissive authority over facilities-based and non-facilities-based providers of IP-enabled services in an equitable and nondiscriminatory fashion.⁵³ The Commission sought comment on how, as a practical

⁴⁴ *Id.* at 3791, para. 89.

⁴⁵ *Second Wireless Safe Harbor Order*, 17 FCC Rcd at 24983-95, paras. 66-95.

⁴⁶ *Id.* at 24995-97, paras. 96-100.

⁴⁷ *Commission Seeks Comment on Staff Study Regarding Alternative Contribution Methodologies*, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, 98-170, Public Notice, 18 FCC Rcd 3006 (2003) (*Staff Study*). Comments and reply comments were filed on March 31 and April 18, 2003, respectively, and were incorporated in the record of *Second Wireless Safe Harbor Order*. *Id.* at 3007.

⁴⁸ See *IP-Enabled Services*, WC Docket No. 04-36, Notice of Proposed Rulemaking, 19 FCC Rcd 4863, 4864, para. 1 n.1 (2004) (*IP-Enabled Services Notice*). Comments were filed by May 28, 2004 and reply comments were filed by July 14, 2004. See *Pleading Cycle Established for Comments in IP-Enabled Services Rulemaking Proceeding*, WC Docket No. 04-36, Public Notice, 19 FCC Rcd 5589 (2004); *Wireline Competition Bureau Extends Reply Comment Deadlines for IP-Enabled Services Rulemaking and SBC's "IP Platform Services" Forbearance Petition*, WC Docket Nos. 04-29, 04-36, Public Notice, 19 FCC Rcd 10474 (2004); see also Appendix B (List of Commenters).

⁴⁹ See *IP-Enabled Services Notice*, 19 FCC Rcd at 4905, para. 63. Given the comprehensive questions the Commission asked in the *IP-Enabled Services Notice*, and the Commission's well-known use of safe harbors for USF contributions by other types of providers, we reject Vonage's contention that parties received inadequate notice of the actions we take in this Order. Vonage June 14, 2006 *Ex Parte* Comments at 7.

⁵⁰ See *IP-Enabled Services Notice*, 19 FCC Rcd at 4905, para. 63.

⁵¹ *Id.* at 4905, para. 64.

⁵² *Id.*

⁵³ *Id.*

matter, providers would identify the portion of their IP-enabled service revenues that constitute assessable telecommunications revenues for universal service purposes.⁵⁴

14. On November 9, 2004, the Commission adopted the *Vonage Order*,⁵⁵ in which it preempted an order of the Minnesota Public Utilities Commission (Minnesota Commission) that applied Minnesota's traditional "telephone company" regulations to Vonage's DigitalVoice service⁵⁶ – an interconnected VoIP service under the definition subsequently adopted by the Commission.⁵⁷ Without classifying Vonage's service as either an "information service" or a "telecommunications service" under the Act, the Commission held that DigitalVoice cannot be separated into interstate and intrastate communications for compliance with Minnesota's requirements without negating valid federal policies and rules.⁵⁸ The *Vonage Order* made "clear that this Commission, not the state commissions, has the responsibility and obligation to decide whether certain regulations apply to DigitalVoice and other IP-enabled services having the same capabilities."⁵⁹ The Commission further indicated that it intended to "resolve important regulatory matters with respect to IP-enabled services generally, including services such as DigitalVoice, concerning issues such as the Universal Service Fund" in the *IP-Enabled Services* proceeding.⁶⁰

15. Since the *Vonage Order*, the Commission twice has adopted regulations for certain providers of IP-enabled services. On May 19, 2005, the Commission adopted its first Report and Order – the *VoIP 911 Order* – in the *IP-Enabled Services* proceeding.⁶¹ In that order, the Commission defined a particular category of IP-enabled services – "interconnected VoIP services" – as services that (1) enable real-time, two-way voice communications; (2) require a broadband connection from the user's location; (3) require IP-compatible customer premises equipment; and (4) permit users to receive calls from and terminate calls to the PSTN.⁶² Declining to determine the statutory classification of interconnected VoIP services at that time, the Commission asserted its ancillary jurisdiction under Title I of the Act to require interconnected VoIP service providers to supply 911 emergency calling capabilities to their customers.⁶³ On August 5, 2005, the Commission adopted another order in which it determined that providers of interconnected VoIP services, as defined in the *VoIP 911 Order*, are subject to the Communications Assistance for Law Enforcement Act (CALEA).⁶⁴ The Commission's decision that CALEA obligations

⁵⁴ *Id.*

⁵⁵ See *Vonage Holdings Corporation Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission*, WC Docket No. 03-211, Memorandum Opinion and Order, 19 FCC Rcd 22404 (2004) (*Vonage Order*), petition for review pending, *Nat'l Ass'n of State Util. Consumer Advocates v. FCC*, No. 05-1122 (8th Cir.).

⁵⁶ Vonage's DigitalVoice service assigns its users North American Numbering Plan (NANP) numbers and provides them the ability to place and receive calls to and from the public switched telephone network (PSTN). See *Vonage Order* at 22407-08, paras. 8-9.

⁵⁷ See *IP-Enabled Services*, WC Docket No. 04-36; *E911 Requirements for IP-Enabled Service Providers*, WC Docket No. 05-196, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245, 10257-58, para. 24 (2005) (*VoIP 911 Order*) (defining "interconnected VoIP service"), petitions for review pending, *Nuvio Corp. v. FCC*, No. 05-1248 (D.C. Cir.).

⁵⁸ See *Vonage Order*, 19 FCC Rcd at 22411-12, para. 14.

⁵⁹ *Id.* at 22405, para. 1.

⁶⁰ *Vonage Order*, 19 FCC Rcd at 22411, n.46; 22432, para. 44.

⁶¹ See generally *VoIP 911 Order*, 20 FCC Rcd 10245.

⁶² *Id.* at 10257-58, para. 24.

⁶³ *Id.* at 10246, para. 1.

apply to interconnected VoIP services was consistent with the approach taken in the *VoIP 911 Order*, in that the decision rested in part on the fact that interconnected VoIP services allow customers to originate calls to and receive calls from the PSTN.⁶⁵

III. DISCUSSION

16. In this Order, we adopt interim revisions to the existing approach for assessing contributions for the federal USF that will preserve and advance universal service in the short term, while we continue to explore more fundamental reform. These interim revisions comport with the requirements of section 254, and do so in a manner that responds to recent developments in the communications industry marketplace.⁶⁶ First, we raise the interim mobile wireless safe harbor from 28.5 percent to 37.1 percent. Second, we establish universal service contribution obligations for providers of interconnected VoIP service.

A. Need for Immediate Interim Measures

17. We conclude that immediate interim measures to revise the existing approach to USF contributions are necessary and in the public interest to preserve and advance universal service.⁶⁷ There is widespread agreement that the Fund is currently under significant strain.⁶⁸ The size of the Fund has grown significantly, with disbursements rising from approximately \$4.4 billion in 2000 to approximately \$6.5 billion in 2005, and is projected to grow even further in the coming years.⁶⁹ Moreover, changing market conditions, including the decline in long distance revenue and the growth of wireless and

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⁶⁴ See *Communications Assistance for Law Enforcement Act and Broadband Access and Services*, ET Docket No. 04-295, RM-10865, First Report and Order and Further Notice of Proposed Rulemaking, 20 FCC Rcd 14989, 14991-92, para. 8 (2005) (*CALEA First Report and Order*), *aff'd*, *American Council on Education v. FCC*, No. 05-1404 (D.C. Cir. June 9, 2006). Based on the independent language of the CALEA statute, the Commission found in the *CALEA First Report and Order* that providers of these services satisfy CALEA's definition of "telecommunications carrier" because these services replace significant functions of traditional telephone service, including circuit-switched voice service. See *id.* at 15001, 15003-04, 15009-10, paras. 23, 27-31, 42.

⁶⁵ *Id.* at 15009-10, para. 42.

⁶⁶ See 47 U.S.C. § 254(b), (d).

⁶⁷ *Id.*

⁶⁸ See, e.g., Letter from James S. Blaszkak, Counsel for Ad Hoc, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 96-45, 01-92, at 3, filed Mar. 1, 2006 (Ad Hoc Mar. 1, 2006 *Ex Parte* Letter) ("There is a serious, looming USF funding problem."); Letter from Paul Garnett, Assistant Vice President, Regulatory Affairs, CTIA, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, Attach. at 3, filed Jan. 25, 2006 (CTIA Jan. 25, 2006 *Ex Parte* Letter) ("Accelerating consumer demand of IP-enabled, broadband, and other information services" as well as "[i]nformation service provider self-identification" is "plac[ing] the current universal service contribution system at risk – especially going forward."); Letter from Kathleen Grillo, Vice President, Federal Regulatory, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, Attach. at 1, filed Mar. 3, 2006 (Verizon Mar. 3, 2006 *Ex Parte* Letter) ("Declines in long distance revenues, combined with the proliferation of bundled services and IP-based alternatives to traditional long distance, will continue to destabilize the USF funding base."); Letter from Antoinette C. Bush and John M. Beahn, Counsel for Virgin Mobile, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, Attach. at 6, filed Mar. 18, 2005 (Virgin Mobile Mar. 18, 2005 *Ex Parte* Letter) ("The current pool of contributors cannot satisfy the increasing demands placed on the USF.").

⁶⁹ See Universal Service Administrative Company, *2000 Annual Report*, at 4, available at <http://www.universalservice.org/about/governance/annual-reports/2000/pg4.asp> (visited April 4, 2006); Federal Communications Commission, *Universal Service Monitoring Report*, at 1-36, Table 1.11 (2005) (*2005 Monitoring Report*); see Universal Service Administrative Company, *2005 Annual Report*, at 47 (2006), available at http://www.universalservice.org/_res/documents/about/pdf/annual-report-2005.pdf.

interconnected VoIP services, are eroding the assumptions that form the basis for the current revenue-based system.

18. When the revenue-based system was adopted in 1997, assessable interstate revenues were growing. The total assessable revenue base has recently declined, however, from about \$79.0 billion in 2000 to about \$74.7 billion in 2004,⁷⁰ while Fund disbursements grew from approximately \$4.4 billion in 2000 to approximately \$5.7 billion in 2004, and continued to grow to approximately \$6.5 billion in 2005.⁷¹ Declines in the contribution base combined with growth in the size of the Fund increasingly have placed upward pressure on the percentage of assessable revenues that must be contributed to the Fund (the "contribution factor"). The contribution factor grew from 5.9 percent in the first quarter of 2000 to 8.9 percent in the fourth quarter of 2004, and is 10.9 percent for the second quarter of 2006.⁷² The pressure caused by a declining revenue base combined with growing disbursement needs jeopardizes the immediate sufficiency and stability of the support mechanisms, demonstrating the need for immediate, interim USF improvements, while we continue to pursue long-term fundamental reform of the contribution methodology.⁷³

19. At the same time as the Fund has grown and its contribution base has declined, wireless and interconnected VoIP services have experienced dramatic growth. From 2000 to 2004, annual revenues of wireless service providers grew from approximately \$70 billion to \$122 billion.⁷⁴ During this period, the number of wireless subscribers grew from approximately 101 million to 181 million,⁷⁵ and continued to grow by more than twenty-five million subscribers in 2005.⁷⁶ This compares to negative growth in the number of wireline switched access lines, which declined from approximately 192 million in December 2000 to 177 million in December 2004.⁷⁷ Similarly, over the same time frame, interconnected VoIP providers experienced robust growth in subscribership, with the number of subscribers rising from approximately 150 thousand subscribers in 2003 to 1.2 million subscribers in 2004, and to 4.2 million

⁷⁰ See 2000 Revenues Report, Table 4; 2004 Revenues Report, Table 4.

⁷¹ See *supra* n.69.

⁷² See Proposed First Quarter 2000 Universal Service Contribution Factor, CC Docket 96-45, Public Notice, 15 FCC Rcd 3660 (1999); 2005 Monitoring Report, at 1-34, Table 1; Proposed Second Quarter 2006 Universal Service Contribution Factor, CC Docket No. 96-45, Public Notice, DA 06-571 (rel. March 13, 2006). We note that, since 2000, the Commission has modified the contribution factor slightly by adding a circularity adjustment to eliminate contributions on charges passed through to end users. See *Second Wireless Safe Harbor Order*, 17 FCC Rcd at 24971-72, para. 35. This change reduces the contribution base by the amount of universal service pass-through charges theoretically billed during the quarter.

⁷³ See 47 U.S.C. § 254(b), (d). Because any delay in implementation of the interim requirements we establish today would undermine our goal of preserving the stability and sufficiency of the Fund in the short term, we reject requests for a lengthier implementation schedule. See Letter from Melissa E. Newman, Vice President – Federal Regulatory, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, at 2 (filed June 13, 2006) (Qwest June 13, 2006 *Ex Parte* Letter).

⁷⁴ See *supra* n.8.

⁷⁵ See *supra* n.7.

⁷⁶ See Federal Communications Commission, *Local Telephone Competition: Status as of June 30, 2005*, at 2, Table 14 (2006) (2005 Local Competition Report); *CTIA 2005 Year End Survey* at 2. Although the total number of wireless subscribers differs slightly between the 2005 Local Competition Report and the CTIA 2005 Year End Survey (e.g., 181 million versus 182 million, respectively, for December 2004) due to differences in how the data were compiled, both reports show dramatic increase in the number of wireless subscribers since 2000.

⁷⁷ See 2005 Local Competition Report, Table 1. Wireline switched access lines grew minimally in the first six months of 2005, from 177,827,375 lines to 178,179,552 lines. *Id.*

subscribers at the end of 2005.⁷⁸ We, therefore, tailor the interim measures we adopt in this Order to respond to these marketplace developments.⁷⁹

20. We also find that taking the measured interim steps we adopt today will minimize the impact of any changes on consumers, Fund contributors, and USF administration. For example, by retaining the core aspects of the current interstate revenue-based contribution methodology, consumers should expect to see no significant change in their bills as a result of this Order. In particular, the structure of the telephone bills of a typical local exchange company customer should not change as a result of this Order.⁸⁰ In addition, we expect that the increase in the interim wireless safe harbor, which wireless carriers may use as one of a few options to account for interstate and international revenues, will have a smaller impact on the amount wireless consumers may be charged via a pass-through line item on their bills than would more fundamental reform, such as changing to a non-revenues-based contribution methodology.⁸¹ Fund contributors, moreover, will continue reporting interstate end-user telecommunications services revenues, and will continue doing so on reporting forms that will remain largely unchanged, thereby minimizing the need for contributors or the Fund administrator to make significant changes to their billing, provisioning, or information collection systems.⁸² This contrasts sharply with most of the fundamental reform proposals in the record, which generally claim that transitioning to a new methodology will require at least a year to accomplish.⁸³ Finally, by continuing to collect based on revenues, the Fund administrator and the Commission should be able to continue to detect inconsistencies in the information filed by contributors, as well as conduct contributor audits as

⁷⁸ See *TIA 2006 Report*, at 71. The *TIA 2006 Report* does not report the number of VoIP subscribers before 2003. Estimates are that VoIP subscribership will grow to 19 million by the end of 2009. These figures are for *residential* VoIP service. *Id.*

⁷⁹ See *infra* sections III.B (increasing the interim wireless safe harbor), III.C (applying contribution obligations to providers of interconnected VoIP service).

⁸⁰ Although we expect that the changes we adopt may impact most interconnected VoIP providers and their customers, the number of affected customers and providers will be considerably fewer than would be affected if we were to adopt more fundamental reform at this time.

⁸¹ See Letter from Maureen A. Thompson, Executive Director, Keep USF Fair Coalition, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, at 1, filed Mar. 27, 2006 (Keep USF Fair *Ex Parte* Letter); Letter from Mitchell Brecher, Counsel for TracFone, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 96-45, 98-171, 90-571, 92-337, 99-200, 98-170, filed Aug. 17, 2005 (attaching letter from Mary M. Martin, Chairman, The Seniors Coalition, to Kevin Martin, Chairman, FCC, dated Aug. 2, 2005) (Seniors Coalition *Ex Parte* Letter); Letter from David Certner, Director Federal Affairs, AARP, to Michael K. Powell, Chairman, FCC, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, 98-170, at 2, filed Apr. 28, 2003 (AARP *Ex Parte* Letter).

⁸² Although raising the interim wireless safe harbor level may increase the amount wireless service providers are required to contribute, it does not require wireless service providers to implement any major billing or other systems changes.

⁸³ See, e.g., Letter from Melissa E. Newman, Vice President-Federal Regulatory, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, Attach. at 9, filed Mar. 21, 2006 (Qwest Mar. 21, 2006 *Ex Parte* Letter) (estimating a transition period of 18 months); Letter from Kathleen Grillo, Vice President, Federal Regulatory, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, Attach. at 3, filed Mar. 28, 2006 (Verizon Mar. 28, 2006 *Ex Parte* Letter) (estimating a transition period of one year). See also, e.g., Letter from Jeanine Poltronieri, Vice President, Federal Regulatory, BellSouth, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, Attach. at 2, filed Oct. 24, 2005 (BellSouth Oct. 24, 2005 *Ex Parte* Letter) (noting previous one year transition period to implement current revenue-based system was facilitated by prior related-work to the effected systems); Letter from Jeanine Poltronieri, Vice President, Federal Regulatory, BellSouth, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, Attach. at 10, filed Mar. 23, 2005 (suggesting a three year transition period to migrate long distance revenues to numbers). BellSouth also recommended that, due to the complexity of a numbers-based method, the Commission adopt a numbers-based method and then issue a further notice examining specific and detailed implementation issues. BellSouth Oct. 24, 2005 *Ex Parte* Letter, Attach. at 1.

necessary. Because of the minimal operational affect the changes adopted herein will have on Fund contributors and Fund administration, the changes can and will be implemented in time for contributions for the fourth quarter of 2006.

21. In making our decision today, we considered the voluminous record in light of the current pressures on the Fund.⁸⁴ We decline to adopt, at this time, more fundamental changes to the entire

⁸⁴ Commenters generally supported telephone number-based proposals or hybrid proposals that would combine a telephone numbers-based system with a revenue- or connection-based component. For example, several commenters, including Ad Hoc Telecommunications Users Committee (Ad Hoc), BellSouth, and the Satellite Industry Association (SIA), propose that the Commission switch from a revenue-based approach to a pure numbers-based contribution methodology. See, e.g., Letter from James S. Blaszk, Counsel for Ad Hoc, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, filed Mar. 9, 2006 (Ad Hoc Mar. 9, 2006 *Ex Parte* Letter); Letter from Jeanine Poltronieri, Vice President, Federal Regulatory, BellSouth, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, filed Feb. 13, 2006; Letter from Christine Reilly, Counsel for SIA, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, filed Mar. 16, 2006. Other commenters, such as Verizon and Qwest, support a contribution system based on both numbers (including working telephone numbers associated with interconnected VoIP services) and revenues (for services that do not use telephone numbers, such as special access, private line, other dedicated services, and prepaid calling cards). Verizon Mar. 28, 2006 *Ex Parte* Letter, Attach. at 2; Qwest Mar. 21, 2006 *Ex Parte* Letter, Attach. at 2, 5, 8. Still other commenters, including CTIA, the Intercarrier Compensation Forum (ICF), and USTelecom, support a hybrid mechanism that would assess contributions based on working telephone numbers and connections. See, e.g., Letter from Gary M. Epstein, Counsel for Intercarrier Compensation Forum (ICF), to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-92, Attach. at 3, filed Nov. 22, 2005 (ICF Nov. 22, 2005 *Ex Parte* Letter); Letter from Paul Garnett, Assistant Vice President, Regulatory Affairs, CTIA, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, filed Jan. 25, 2006 (CTIA Jan. 25, 2006 *Ex Parte* Letter); Letter from Robin E. Tuttle, Counsel, USTelecom, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, filed Jan. 11, 2006 (USTelecom Jan. 11, 2006 *Ex Parte* Letter). In general, these commenters advocate assessing contributions based on switched connections, assessing one contribution unit for each working telephone number. For non-switched connections that do not use telephone numbers, these commenters, in general, would charge one or more contribution units, based on capacity levels, which would be reviewed periodically. These commenters, however, disagree about how to set the tiers and which types of services, if any, should be subject to reduced assessments. Compare ICF Nov. 22, 2005 *Ex Parte* Letter with CTIA Jan. 25, 2006 *Ex Parte* Letter and USTelecom Jan. 11, 2006 *Ex Parte* Letter.

Finally, other commenters propose that we retain a revenue-based contribution methodology. See, e.g., Letter from Mitchell F. Brecher, Counsel for TracFone, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, 98-170, at 1, filed June 14, 2005 (TracFone June 14, 2005 *Ex Parte* Letter) (suggesting that the contribution base is financially secure); Virgin Mobile Mar. 18, 2005 *Ex Parte* Letter, Attach. at 12 (supporting a revenue-based methodology). These commenters generally suggest that we should broaden the base of contributors by raising or eliminating the wireless safe harbor and by including all voice services, such as VoIP, to safeguard the Fund. See, e.g., Letter David C. Bergmann, Assistant Consumers' Counsel, Chair, NASUCA, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 96-45, 01-92, 03-133, at 2, filed Feb. 27, 2006 (NASUCA Feb. 27, 2006 *Ex Parte* Letter); TracFone June 14, 2005 *Ex Parte* Letter at 1; Virgin Mobile Mar. 18, 2005 *Ex Parte* Letter, Attach. at 6 (proposing that the base be broadened to include VoIP but not addressing changes to the wireless safe harbor); Letter from Daniel Mitchell, Vice President, Legal and Industry, NTCA, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 96-45, 80-286, MB Docket Nos. 05-255, 05-311, WC Docket No. 04-440, USF Contribution Methodology Attach. at 2, 3, filed Mar. 16, 2006 (NTCA Mar. 16, 2006 *Ex Parte* Letter). See Letter from L. Charles Keller, Counsel for Sage Telecom, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 95-45, 01-92, Attach. at 2, filed Aug. 31, 2005 ("providers that compete with USF contributors also should contribute to USF"). See also Letter from Stuart Polikoff, Director of Government Relations, OPASTCO, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, 98-170, 02-33, 01-92, at 2, filed Dec. 14, 2005 (advocating "broadest possible base of contributors" including "all facilities-based broadband Internet access providers, over all platforms"). Many colleges and universities, which offer telephone service to students, oppose moving to a numbers- or connections-based methodology because they believe they would likely experience dramatic increases in their contribution obligations under such proposals. See, e.g., Letter from Patricia Todus, President, ACUTA, and Mark Luker, Vice President, EDUCAUSE, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, filed May 31, 2006 (ACUTA represents over 800 institutes of higher

(continued....)

universal service program or to the contribution methodology. For example, one commenter has suggested that the entire universal service program is "broken" and advocated that a "holistic, coordinated rational reform of all universal support mechanisms" is necessary.⁸⁵ It argued that reforming the contribution methodology in isolation, without addressing distribution issues, is ill-advised.⁸⁶ Other parties advocate fundamentally reforming the contribution methodology by moving away from a revenue-based approach.⁸⁷ The scale of reforming universal service is considerable, and we will continue to work towards stabilizing the Fund, as well as the entire universal service system. We note, however, that a consensus approach to reform has not developed. Thus, while we recognize that there may be merit to fundamental reform of the current USF contribution methodology, we find, at this time, that the discrete interim reforms we make to expand the contribution base will best promote the statutory requirements set forth in section 254 of the 1996 Act in the near-term, while providing the Commission with the opportunity to continue to address the challenges of fundamental reform.⁸⁸

22. Accordingly, with the reforms detailed below, we continue to fulfill the Commission's obligation to develop a specific, predictable, and sufficient contribution mechanism to preserve and advance universal service.⁸⁹

B. Wireless Provider Contributions

23. To sustain the sufficiency of the Fund at this time, we raise the current interim safe harbor for mobile wireless providers to a level that better reflects that industry's interstate revenues in light of the extraordinary growth of wireless services since 2002, the last time the Commission revisited this issue. This action will help ensure that the Fund can obtain sufficient revenues in a way that does not disrupt or

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education in the United States and EDUCAUSE represents over 2,000 colleges, universities, and educational associations); Letter from John C. Meets, Vice President for Administration and Finance, Wesleyan University, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, at 1, filed Mar. 7, 2006 (estimating contribution increase from \$1,182 to \$75,600 per year); Letter from George W. Ellis, Associate Academic Vice President Information Technologies, University of South Florida, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, at 1, filed Feb. 13, 2006 (estimating contribution increase from \$18,000 to over \$180,000). Similarly, certain low income, low volume consumers that make no or very few long distance telephone calls – for example, senior citizens or others with low or fixed incomes – object to non-revenue-based proposals, claiming that they would be charged higher universal service pass-through charges. See, e.g., Keep USF Fair *Ex Parte* Letter at 1; Seniors Coalition *Ex Parte* Letter, Attach.; AARP *Ex Parte* Letter at 2.

⁸⁵ See Letter from Craig J. Brown, Corporate Counsel, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, Attach. at 2-3, filed Sept. 15, 2005 (Qwest Sept. 15, 2005 *Ex Parte* Letter). But see Qwest Mar. 21, 2006 *Ex Parte* Letter, Attach. at 2-3 (now advocating a revenue-based numbers-based hybrid approach and including contributions from VoIP providers).

⁸⁶ Qwest Sept. 15, 2005 *Ex Parte* Letter, Attach. at 2-3.

⁸⁷ See, e.g., Virgin Mobile Mar. 18, 2005 *Ex Parte* Letter at 5 (recommending fundamental reform to expand the base of contributors, limit high cost distribution, and eliminate waste, fraud, and abuse); Letter from Gary M. Epstein, Counsel for Inter-carrier Compensation Forum (ICF), to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-92, at 2, filed Oct. 5, 2004 (ICF Oct. 5, 2004 *Ex Parte* Letter) (supporting comprehensive reform). Most commenters assert that for any large scale reform of the USF contribution system, a transition period is needed to modify their tracking and billing systems and to begin reporting numbers and capacity using a modified FCC Form 499A, the Telecommunications Reporting Worksheet. See e.g., ICF Nov. 22, 2005 *Ex Parte* Letter, Attach. at 7. The membership of the ICF is comprised of AT&T, Global Crossing, GCI, Iowa Telecom, Level 3, MCI, SBC, Sprint, and Valor (supports a numbers/connections hybrid), and Verizon (supports a numbers/revenue hybrid). ICF Oct. 5, 2004 *Ex Parte* Letter at 1. See also *supra* n.84.

⁸⁸ See 47 U.S.C. § 254(b), (d).

⁸⁹ See 47 U.S.C. § 254(b), (d); see also *First Further Notice*, 17 FCC Red 3752.

harm consumers. We raise the wireless safe harbor from 28.5 percent to 37.1 percent.⁹⁰ We also take additional steps to safeguard the Fund by requiring mobile wireless providers that use traffic studies (rather than use the safe harbor) to report actual interstate revenues to submit those traffic studies to USAC and to the Commission.

24. The 1996 Act directs the Commission to develop the contribution mechanism in a manner that results in carriers contributing on an equitable and nondiscriminatory basis.⁹¹ As the Commission found when first establishing the interim wireless safe harbor, in determining what is equitable and nondiscriminatory, the Commission looks to ensure that the contribution methodology does not treat similarly situated contributors differently.⁹² As noted earlier, we have witnessed an explosion of wireless growth since we first established, and then revised, the interim wireless safe harbor. There were approximately 69 million subscribers in 1998 and approximately 141 million subscribers in 2002, whereas by the end of 2005, there were approximately 208 million subscribers.⁹³ The record demonstrates that the percentage of interstate mobile wireless traffic has grown as well.⁹⁴ By raising the interim wireless safe harbor to reflect more accurately current subscribership and usage levels and other marketplace developments, we ensure that mobile wireless service providers' obligations are on par with carriers offering similar service that must report based on actual interstate end-user telecommunications revenue (e.g., wireline telecommunications providers).

25. We now revise the interim safe harbor to 37.1 percent, the highest percentage of interstate and international usage by a wireless company supported in the record.⁹⁵ Specifically, according to a traffic study conducted by TNS Telecoms for TracFone Wireless, the (then) seven large national mobile wireless service providers' interstate minutes of use ranged from 11.9 percent to 37.1 percent.⁹⁶ Accordingly, consistent with the Commission's previous rationale for raising the interim wireless safe

⁹⁰ See NASUCA Feb. 27, 2006 *Ex Parte* Letter (noting that the current interim wireless safe harbor likely understates the current level of interstate traffic); NTCA Mar. 16, 2006 *Ex Parte* Letter (urging the Commission to eliminate or increase the wireless safe harbor); TracFone Jun. 14, 2005 *Ex Parte* Letter (urging the Commission to eliminate or increase the wireless safe harbor).

⁹¹ See 47 U.S.C. § 254(d).

⁹² See *First Wireless Safe Harbor Order*, 13 FCC Rcd at 21257, para. 10.

⁹³ *CTIA 2005 Year End Survey*, at 5.

⁹⁴ See *infra* n.96.

⁹⁵ See Letter from L. Charles Keller, Counsel to Verizon Wireless, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, 98-170, filed Oct. 28, 2002, Attach. at 1 (Verizon Wireless Oct. 28, 2002 *Ex Parte* Letter) ("A safe harbor, updated to reflect current wireless calling activity, furthers the policy objectives of promoting equitable contributions, fund stability and administrative simplicity.").

⁹⁶ See TracFone Jun. 14, 2005 *Ex Parte* Letter, Attach. 2 at 13. The survey analyzed call records from the third quarter of 2004 and based on information contained on customer bills, allocated minutes of use to the interstate and intrastate jurisdiction based on the originating numbering plan area (NPA) state and the terminating NPA state. See *id.*, Attach. 2 at 6. Since the survey was conducted, the Commission granted applications from Nextel and Sprint to transfer control of Nextel's licenses and authorizations to Sprint. See *Application of Nextel Communications, Inc. and Sprint Corporation for Consent to Transfer Licenses and Authorizations*, WT Docket No. 05-63, Memorandum Opinion and Order, 20 FCC Rcd 13967 (2005).

This range of the percent of interstate minutes-of-use is consistent with a preliminary Commission staff analysis that shows aggregate wireless service providers' interstate minutes-of-use to have grown to approximately 29 percent. The data analyzed by staff did not lend the numbers to individual company analysis.

harbor to the highest level in the record, and based on the record now before us, we set the revised interim wireless safe harbor at 37.1 percent.⁹⁷

26. We disagree with those parties that assert that the Commission should not rely on the TNS Telecoms traffic study because of concerns with sample size and methodology.⁹⁸ Notably, no other wireless provider has proposed an alternative safe harbor level or submitted a traffic study that looks at various wireless providers to support a different, updated, interim safe harbor level. Indeed, none of the parties that criticize the TNS Telecoms study have submitted any data or statistical analysis that would show a specific upward bias in the TNS Telecoms study. Other parties, moreover, claim that the existing safe harbor is too low and should be raised; however, these parties also fail to propose a specific safe harbor level.⁹⁹ Although the TNS Telecoms study remains the best evidence in the record because wireless providers have not submitted alternative data,¹⁰⁰ we recognize that individual wireless providers have access to a considerably larger amount of company-specific caller data, which may result in an individual provider calculating a more accurate result for the particular company. It is for this reason that we rely on the TNS Telecoms traffic study only to establish the revised interim wireless safe harbor level and that each wireless provider retains the option of reporting its revenues based on a company-specific traffic study or on its actual interstate end-user telecommunications revenues.¹⁰¹ We also invite these companies to provide evidence in response to the Notice that accompanies this Order. The purpose of the interim wireless safe harbor thus remains to give those providers that either cannot or choose not to determine their actual interstate end-user telecommunications revenues or approximate the revenues based on a traffic study another means of computing the necessary revenue information.

27. We therefore find that setting the interim safe harbor at the high end of the range in the record remains a reasonable approach. For these reasons, mobile wireless providers that choose to use the revised interim safe harbor must report 37.1 percent of their telecommunications revenues as interstate beginning with fourth quarter 2006 projected revenues that they will report on the August 1, 2006 FCC Form 499-Q.

28. Although we set the revised interim wireless safe harbor at 37.1 percent, we believe that we could have set it at a higher level. The record established in these dockets shows that, not only has there been tremendous wireless subscriber growth since the interim safe harbor was first established in 1998, but that there has been considerable growth in the percentage of interstate mobile wireless traffic. Thus, we have increased the safe harbor from 15 percent in 1998, to 28.5 percent in 2002, and to 37.1 percent in the instant Order. To avoid having to again reset the safe harbor in a few years, we could have trended

⁹⁷ See *Second Wireless Safe Harbor Order*, 17 FCC Rcd at 24966, para. 22. The interim safe harbors for paging and analog SMR dispatch will remain at 12 percent and 1 percent, respectively. See Letter from Frederick M. Joyce, Counsel to USA Mobility, Inc., to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, Attach. at 4, filed June 8, 2006 ("The current 'safe harbor' percentage that the FCC has assigned the paging industry is fair and reasonable.").

⁹⁸ See Letter from John T. Scott, III, Vice President and Deputy General Counsel, Verizon Wireless, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, at 2-3, filed June 2, 2006 (Verizon Wireless June 2, 2006, Letter). See also Letter from Cheryl A. Tritt, Counsel to T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, at 2, filed June 8, 2006 (T-Mobile June 8, 2006, Letter); Letter from L. Charles Keller, Counsel to Cingular Wireless LLC, to Marlene H. Dortch, Secretary, FCC, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, 98-170, at 1, filed June 9, 2006; Letter from Paul Garnett, CTIA, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, at 3, filed June 14, 2006.

⁹⁹ E.g., NTCA Mar. 16, 2006 *Ex Parte* Letter.

¹⁰⁰ See Letter from Mitchell F. Brecher, Counsel for TracFone, to Marlene Dortch, Secretary, FCC, CC Docket No. 96-45, filed February 23, 2005; Verizon Wireless June 2, 2006, Letter; T-Mobile June 8, 2006, Letter.

¹⁰¹ See *First Wireless Safe Harbor Order*, 13 FCC Rcd at 21258, para. 12.

the data to several years in the future and established a safe harbor at the higher level that would result. Moreover, although we adopted the interim wireless safe harbor in part because wireless providers historically have claimed it difficult to identify interstate versus intrastate revenues, it is the Commission's policy preference that providers contribute to the Fund based on their actual data rather than on a safe harbor percentage where possible.¹⁰² Were we to establish a higher safe harbor than the one we now establish, we would create additional incentives for wireless providers to report their actual revenues. Nevertheless, after carefully balancing the benefits and burdens of a higher safe harbor, we choose not to establish a higher safe harbor level here because we are not convinced that a higher percentage is necessary at this time.¹⁰³

29. In addition to revising the wireless safe harbor, we take an additional step to address concerns that wireless telephony providers who report actual interstate revenues may not be doing so accurately. Specifically, we require any wireless telephony provider that uses a traffic study to determine its actual interstate revenues for universal service contribution purposes to submit the traffic study to the Commission and to USAC for review. Preliminary review by Commission staff of FCC Form 499-A filings and other reports appears to reveal several discrepancies in the data filed by wireless telephony providers. For example, we are concerned that itemized charges for toll service on wireless telephony customers' bills that should be reported as toll service revenues on FCC Form 499-A are not being properly reported.¹⁰⁴ Toll services are telecommunications services that enable customers to communicate outside of their local exchange calling areas.¹⁰⁵ Many wireless telephony customers subscribe to plans that give them fixed amounts of minutes which can be used either for local or long distance service. Other wireless telephony customers, however, pay by the minute for some or all calls. For long distance service, the charge is often made up of an air time charge that is the same for local and long distance calls, and an additional toll charge that applies only to long distance calls. For some wireless telephony providers, toll service revenues include these additional charges for intrastate, interstate, and international toll calls. Commission staff analysis, however, raises the concern that some filers are not reporting their separately stated toll revenues correctly.

30. We note that wireless telephony providers reported a total of \$1.3 billion of toll revenues on their FCC Forms 499-A for 2004.¹⁰⁶ The U.S. Department of Commerce, Bureau of the Census, however, estimates that wireless telephony providers earned \$7.1 billion in "long-distance" revenues in 2004.¹⁰⁷ Moreover, in 2004, 53 wireless telephony providers reported a total of \$31.7 billion in total end-user telecommunications revenues (which is the sum of revenues from fixed local service, payphone service, mobile service other than toll, and toll service, less the revenues from telecommunications service provided for resale) without reporting a single dollar of toll revenues on their FCC Forms 499-A.¹⁰⁸ These facts suggest that some wireless filers may have failed to properly account for toll revenues on their FCC Forms 499-A.

¹⁰² See Letter from Paul Garnett, CTIA, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, at 1-2, filed June 2, 2006.

¹⁰³ We intend to continue to monitor wireless usage patterns, and may revise the interim wireless safe harbor in the future accordingly.

¹⁰⁴ See Federal Communications Commission, Instructions to the Telecommunications Reporting Worksheet, Form 499-A, Section III.C.3, p.20 (2006) (*2006 Instructions for FCC Form 499-A*).

¹⁰⁵ *Id.* at Section III.C.4, p.23.

¹⁰⁶ 2004 Revenues Report, Table 7.

¹⁰⁷ U.S. Census Bureau, *2004 Service Annual Survey: Information Sector Services*, Table 3.3.8 (2005), available at http://www.census.gov/svsd/www/services/sas/sas_data/51/sas51_331-3313_2004.pdf.

¹⁰⁸ This information is based on a staff analysis of the FCC Form 499-A filings. Individual filings are not available to the public in order to protect the confidentiality of the filings.

31. In addition, of the \$1.3 billion in toll revenue reported on FCC Forms 499-A in 2004, wireless telephony providers reported that \$24 million was attributable to international toll service. According to the FCC Section 43.61 International Traffic Data Report for 2004, however, nine wireless carriers alone reported \$596 million of international toll service revenues.¹⁰⁹ These figures indicate that some filers may be underreporting international toll revenues on their FCC Forms 499-A.¹¹⁰

32. In light of these apparent data discrepancies, we take an additional step to ensure the accuracy of reported revenue data.¹¹¹ Currently, a mobile wireless provider that reports actual revenue data must provide, upon request, documentation to support the reporting of actual interstate telecommunications revenues.¹¹² We note that a mobile wireless provider may use traffic studies as a proxy for calculating its total amount of actual interstate revenues. We are concerned that the use of traffic studies may be, in part, a cause of these data reporting problems.¹¹³ For example, mobile wireless providers have incentives to bias any traffic studies to minimize their amount of interstate and international end-user revenues and thereby minimize their Fund contributions; there are no countervailing market forces to offset these incentives.¹¹⁴ Consequently, we now require any mobile wireless provider that uses a traffic study to determine its interstate end-user revenues for universal service contribution purposes to submit the study to the Commission and to USAC for review.¹¹⁵ Any mobile wireless provider using a traffic study shall submit the traffic study no later than the deadline for submitting the FCC Form 499-Q for the same time

¹⁰⁹ Federal Communications Commission, *2004 International Telecommunications Data*, Tab D (2006), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-264309A1.pdf.

¹¹⁰ Commission staff has also identified possible discrepancies in reported FCC Form 499-A data that is not restricted to the data submitted by mobile wireless providers. First, staff analysis of FCC Form 499-A filings for 2004 reveals that 306 filers reported a total of \$3.1 billion of local exchange revenues, while reporting less than one percent of those revenues as interstate. See Federal Communications Commission, *Instructions to the Telecommunications Reporting Worksheet, Form 499-A*, Section II-A, p. 4. (2004); see also *2006 Instructions for FCC Form 499-A*, Section II-A, p. 4. We are concerned that some of these filers may be underreporting the interstate revenues associated with their local exchange service. Second, we note that 436 filers reported a total of \$508 million of local private line service revenues on their FCC Forms 499-A in 2004, but did not report a single dollar of those revenues as interstate or international. We are concerned that some of these filers may have failed to properly report local private line revenues.

¹¹¹ See Letter from Paul W. Garnett, CTIA, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, Attach. at 4, filed Feb. 22, 2005 (CTIA Feb. 22, 2005 *Ex Parte* Letter) (stating that the Commission should "minimize opportunities for telecommunications providers to avoid contribution obligations").

¹¹² See *Second Wireless Safe Harbor Order*, 17 FCC Red at 24966, para. 24.

¹¹³ Cf. *Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, Reply Comments of Montana Independent Telecommunications Systems (MITS), the Montana Telecommunications Association (MTA), Mid-Rivers Telephone Cooperative and Ronan Telephone Company at 25 (filed July 20, 2005).

¹¹⁴ Letter from Roger C. Sherman, Sprint Nextel Corporation, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, WC Docket No. 04-36, at 1-2, filed June 14, 2006 (supporting "reasonable standards, best practices, or guidelines to ensure that traffic studies accurately reflect interstate usage").

¹¹⁵ Traffic studies may rely on statistical sampling to estimate the proportion of minutes that are interstate and international. Such sampling techniques must be designed to produce a margin of error of no more than one percent with a confidence level of 95%. If the sampling technique does not employ a completely random sample (e.g., if stratified samples are used), then the respondent must document the sampling technique and explain why it does not result in a biased sample. Traffic studies should include, at a minimum: (1) an explanation of the sampling and estimation methods employed and (2) an explanation as to why the study results in an unbiased estimate with the accuracy specified above. Mobile wireless providers should retain all data underlying their traffic studies as well as all documentation necessary to facilitate an audit of the study data and be prepared to make this data and documentation available to the Commission upon request.

period.¹¹⁶ We also remind wireless carriers that, while they are permitted to continue to report revenues at either the legal entity level or on a consolidated basis, they are required to decide whether to report either actual or safe harbor revenues for all of their affiliated legal entities within the same safe harbor category.¹¹⁷

33. Accordingly, we take this opportunity to caution universal service contributors (and other entities reporting data to the Commission) that we will not hesitate to use our enforcement authority to investigate and remedy these and other discrepancies in data reported to the Commission.¹¹⁸ Moreover, we expect filers that have made reporting errors to re-file the relevant FCC forms or reports as soon as possible (regardless of whether the forms are due to the Commission, USAC, or another entity). To the extent that filers determine that they should have made additional contributions to the Fund, we further expect those entities to work with USAC to resolve their contribution obligations.

C. Interconnected VoIP Services

34. We require providers of "interconnected VoIP services," as defined by the Commission,¹¹⁹ to contribute to the federal USF under the existing contribution methodology on an interim basis.¹²⁰ As described above, the number of VoIP subscribers in the United States has grown significantly in recent years, and we expect that trend to continue.¹²¹ At the same time, the USF contribution base has been shrinking, and the contribution factor has risen considerably as a result.¹²² We therefore find that extending USF contribution obligations to providers of interconnected VoIP services is necessary at this time in order to respond to these growing pressures on the stability and sustainability of the Fund.¹²³

¹¹⁶ For example, if a wireless provider uses a traffic study to determine its projected interstate revenues for its February 1, 2007, FCC Form 499-Q submission, the provider must submit the study to the Commission and to USAC no later than February 1, 2007.

Only mobile wireless providers that rely on traffic studies are required to submit those studies to the Commission and to USAC. Wireless providers that otherwise report actual interstate and international end-user revenues are not required to submit their data, but continue to be required to retain the data and to provide it upon request.

¹¹⁷ See *Second Wireless Safe Harbor Order*, 17 FCC Rcd at 24967, para. 25.

¹¹⁸ See CTIA Feb. 22, 2005 *Ex Parte* Letter, Attach. at 4 ("The FCC must vigorously enforce its contribution rules."); Letter from Paul W. Garnett, CTIA, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, at 2, filed June 7, 2006 ("The Commission also retains the option of auditing traffic studies."). We also note that corporate officers certifying the accuracy of their FCC Form 499 filings should note that filing inaccurate or untruthful information may lead to prosecution under the criminal provisions of Title 18 of the United States Code. See 47 C.F.R. § 54.711.

¹¹⁹ 47 C.F.R. § 9.3. See *VoIP 911 Order*, 20 FCC Rcd at 10257-58, para. 24; see also *CALEA First Report and Order*, 20 FCC Rcd at 15008, para. 39.

¹²⁰ To the extent that the Commission adopts another contribution methodology in the future, we expect that interconnected VoIP providers, or the carriers providing VoIP providers their numbers, would be required to contribute under that methodology as well.

¹²¹ See *supra* para. 19.

¹²² See *supra* para. 18.

¹²³ See Letter from Jeanine A. Poltronieri, Vice President, Federal Regulatory, BellSouth, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, at 1 (filed June 2, 2006) ("[I]t is imperative that VoIP providers contribute to universal service support as soon as is practicable."). But see Letter from Staci L. Pies, President, Voice on the Net (VON) Coalition, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, WC Docket No. 04-36, at 1 (filed June 5, 2006) (opposing the adoption of an interim approach to USF contribution obligations for interconnected VoIP providers).

35. The Commission has not yet classified interconnected VoIP services as “telecommunications services” or “information services” under the definitions of the Act.¹²⁴ Again here, we do not classify these services. To the extent interconnected VoIP services are telecommunications services, they are of course subject to the mandatory contribution requirement of section 254(d).¹²⁵ Absent our final decision classifying interconnected VoIP services, we analyze the issues addressed in this Order under our permissive authority pursuant to section 254(d) and our Title I ancillary jurisdiction. Specifically, we find that interconnected VoIP providers are “providers of interstate telecommunications” under section 254(d), and we assert the Commission’s permissive authority to require interconnected VoIP providers “to contribute to the preservation and advancement of universal service” because “the public interest so requires.”¹²⁶ We also exercise our ancillary jurisdiction to extend contribution obligations to interconnected VoIP providers. We note that both Vonage and the VON Coalition have stated on the record in this proceeding their belief that interconnected VoIP providers should be required to contribute to the Fund, apparently conceding that the Commission has the authority to impose such a requirement.¹²⁷ Finally, we address implementation issues related to our requirement that interconnected VoIP providers contribute to the USF.

1. Scope

36. We extend universal service obligations to providers of interconnected VoIP services, as previously defined by the Commission. The Commission has defined “interconnected VoIP services” as those VoIP services that: (1) enable real-time, two-way voice communications; (2) require a broadband connection from the user’s location; (3) require IP-compatible customer premises equipment; and (4) permit users to receive calls from and terminate calls to the PSTN.¹²⁸ We emphasize that interconnected VoIP service offers the *capability* for users to receive calls from and terminate calls to the PSTN; the obligations we establish apply to all VoIP communications made using an interconnected VoIP service, even those that do not involve the PSTN.¹²⁹ Furthermore, these obligations apply regardless of how the interconnected VoIP provider facilitates access to and from the PSTN, whether directly or by making arrangements with a third party. Finally, we recognize that the definition of interconnected VoIP services may need to expand as new VoIP services increasingly substitute for traditional phone service.¹³⁰

¹²⁴ See *IP-Enabled Services Notice*, 19 FCC Rcd at 4893-94, paras. 43-44.

¹²⁵ 47 U.S.C. § 254(d) (“Every telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, to the specific, predictable, and sufficient mechanisms established by the Commission to preserve and advance universal service.”); see also, e.g., Virginia Commission *IP-Enabled Services* Comments at 5 (asserting that VoIP is properly characterized as a telecommunications service).

¹²⁶ 47 U.S.C. § 254(d).

¹²⁷ See Letter from Staci L. Pies, President, VON Coalition, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, WC Docket No. 04-36, at 1 (filed June 14, 2006) (*VON Coalition June 14, 2006 Ex Parte Letter*) (“The VON Coalition agrees that applying USF contributions to Interconnected VoIP services is primarily a question of ‘how’ as opposed to ‘if’ or ‘when.’”); Vonage June 14, 2006 *Ex Parte* Comments at 1 (“Vonage believes that VoIP providers, like itself, should pay into the federal Universal Service Fund (‘USF’). Thus, Vonage supports the FCC’s efforts to comprehensively reform the USF – and even its efforts to adopt interim measures that would include interconnected VoIP providers in the universal service contribution base.”).

¹²⁸ *VoIP 911 Order*, 20 FCC Rcd at 10257-58, para. 24.

¹²⁹ See *id.* at 10257-58, para. 24; see also *CALEA First Report and Order*, 20 FCC Rcd at 15008, para. 39. To the extent that the Commission modifies its definition of interconnected VoIP in the future, we expect that the USF obligations we impose today would continue to apply.

¹³⁰ *VoIP 911 Order*, 20 FCC Rcd 10245, 10277, para. 58.

37. We believe that it is appropriate to require USF contributions from interconnected VoIP providers because this approach is consistent with important principles that the Commission has established in its implementation of section 254 of the Act. Specifically, the Commission has previously found it appropriate to extend universal service contribution obligations to classes of providers that benefit from universal service through their interconnection with the PSTN.¹³¹ In addition, in the *Universal Service First Report and Order*, the Commission established competitive neutrality as a principle to guide the development of universal service policies.¹³² As discussed in more detail below, we find that these two principles support our conclusion that extending universal service contribution obligations to this particular category of providers is in the public interest.

2. Authority

a. Permissive Authority Under Section 254(d)

38. Section 254(d) states that the Commission may require “[a]ny other provider of interstate telecommunications” to contribute to universal service, “if the public interest so requires.”¹³³ Pursuant to the Act’s definitions, a “provider of interstate telecommunications” provides “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.”¹³⁴ Unlike providers of interstate telecommunications services, however, providers of interstate telecommunications do not necessarily “offer” telecommunications “for a fee directly to the public.”¹³⁵ The Commission has previously used this permissive authority to require private carriers and payphone aggregators to contribute to the Fund.¹³⁶ In the *IP-Enabled Services Notice*, the Commission sought comment on, among other things, its authority, including mandatory and permissive authority under section 254(d), to require universal service contributions by IP-enabled service providers.¹³⁷

39. *Providers of Interstate Telecommunications.* We find that interconnected VoIP providers are “providers of interstate telecommunications” as required for the use of the permissive authority pursuant section 254(d). Specifically, using the Act’s definitions, we find that interconnected VoIP providers “provide” “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.”¹³⁸

40. First, we must consider whether interconnected VoIP providers “provide” telecommunications. Congress did not define the term “provide” or “provider,” but the structure of the

¹³¹ See, e.g., *Universal Service First Report and Order*, 12 FCC Rcd at 9184-85, para. 797 (finding it appropriate to require payphone aggregators to contribute to universal service support mechanisms because they interconnect with the PSTN).

¹³² *Universal Service First Report and Order*, 12 FCC Rcd at 8801-03, paras. 46-52.

¹³³ 47 U.S.C. § 254(d).

¹³⁴ 47 U.S.C. § 153(43).

¹³⁵ 47 U.S.C. § 153(46).

¹³⁶ *Universal Service First Report and Order*, 12 FCC Rcd at 9183-86, paras. 794-800.

¹³⁷ See *IP-Enabled Services Notice*, 19 FCC Rcd at 4905, para. 63. In the *IP-Enabled Services Notice*, the Commission also asked commenters to address, among other things, the universal service contribution obligations of both facilities-based and non-facilities-based providers of IP-enabled services. *IP-Enabled Services Notice*, 19 FCC Rcd at 4905-08, paras. 63-66. In this Order, we do not distinguish between facilities-based interconnected VoIP providers and “over-the-top” interconnected VoIP providers. *SBC/AT&T Merger Order*, 20 FCC Rcd at 18337-38, para. 86 (describing facilities-based and over-the-top VoIP providers).

¹³⁸ 47 U.S.C. § 153(43).

Act informs us that “provide” is a different and more inclusive term than “offer.”¹³⁹ It is settled law that the determination of what is “offered,” under the Act’s definitions, “turns on the nature of the functions the end user is offered.”¹⁴⁰ Had Congress intended us to look at the same factors in analyzing our permissive authority under section 254(d), it would have referred to “other offerors of telecommunications.” Because Congress used a different term – “providers” – we understand Congress to have meant something broader. Common definitions of the term “provide” suggest that we should consider the meaning of “provide” from a supply side, *i.e.*, from the provider’s point of view. For example, Black’s Law Dictionary defines “provide” to mean “[t]o make, procure, or furnish for future use, prepare. To supply; to afford; to contribute.”¹⁴¹ Transmission is an input into the finished service “offered” to the customer. But from the interconnected VoIP provider’s point of view, we believe that the provider “provides” more than just a finished service. We believe that it is reasonable to conclude that a provider “furnishes” or “supplies” components of a service, in this case, transmission.

41. Second, we determine that interconnected VoIP providers provide “telecommunications.” As the Commission has recognized, “the heart of ‘telecommunications’ is transmission.”¹⁴² The Commission has previously concluded that interconnected VoIP services involve “transmission of [voice] by aid of wire, cable, or other like connection” and/or “transmission by radio” of voice.¹⁴³ Indeed, by definition, interconnected VoIP services are those “permitting users to receive calls from and terminate calls to the PSTN.”¹⁴⁴ To provide this capability, interconnected VoIP providers may rely on their own facilities or provide access to the PSTN through others. “Over the top” interconnected VoIP providers generally purchase access to the PSTN from a telecommunications carrier who accepts outgoing traffic from and delivers incoming traffic to the interconnected VoIP provider’s media gateway.¹⁴⁵ The telecommunications carrier supplies transmission to or from the PSTN user, or transmits the communication to another carrier that can transmit the communication to the PSTN user. Facilities-based interconnected VoIP providers similarly enter into arrangements with telecommunications carriers to complete communications to and from the PSTN. The telecommunications carriers involved in originating or terminating a communication via the PSTN are by definition offering “telecommunications.” Just as the Commission has previously found resellers to be supplying telecommunications to their customers even though they do not own or operate the transmission

¹³⁹ We acknowledge that in the past, the Commission has sometimes used the terms “offer” and “provide” interchangeably. See, e.g., *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report to Congress, 13 FCC Red 11501, 11530, para. 59 (1998) (“A telecommunications service is a telecommunications service regardless of whether it is provided using wireline, wireless, cable, satellite, or some other infrastructure.”). In those instances, however, the Commission was clearly discussing telecommunications services, and just as clearly did not intend to make any sort of statement about how the two terms should be interpreted relative to each other.

¹⁴⁰ *Inquiry Concerning High-Speed Access to the Internet over Cable and Other Facilities; Internet Over Cable Declaratory Ruling; Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities*, GN Docket No. 00-185, CS Docket No. 02-52, Declaratory Ruling and Notice of Proposed Rulemaking, 17 FCC Red 4798, 4822-23, para. 38 (2002), *aff’d sub nom.* *National Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 125 S. Ct. 2688, 2702-10 (2005).

¹⁴¹ *Black’s Law Dictionary* 1244 (6th ed. 1990); see also *American Heritage Dictionary of the English Language* 1411 (4th ed. 2000) (defining “provide” as, *inter alia*, “[t]o furnish; supply; and “[t]o make available; afford”); *Merriam Webster’s Collegiate Dictionary* 940 (10th ed. 1996) (defining “provide” as, *inter alia*, “to supply or make available”).

¹⁴² *Pulver Order*, 19 FCC Red at 3312, para. 9.

¹⁴³ *VoIP 911 Order*, 20 FCC Red at 10261-62, para. 28.

¹⁴⁴ *Id.* at 10257-58, para. 24.

¹⁴⁵ See, e.g., *PointOne Comments*, CC Docket No. 99-200, at 5 (filed Aug. 16, 2004) (“[M]any IP providers already connect to the PSTN through softswitch technology and the use of gateways . . .”).

facilities,¹⁴⁶ we find interconnected VoIP providers to be “providing” telecommunications regardless of whether they own or operate their own transmission facilities or they obtain transmission from third parties. In contrast to services that merely use the PSTN to supply a finished product to end users, interconnected VoIP supplies PSTN transmission *itself* to end users.¹⁴⁷

42. Finally, the Commission previously determined that Vonage’s interconnected VoIP service is a jurisdictionally mixed service in which part of the service is interstate in nature.¹⁴⁸ We believe that other interconnected VoIP services similarly are jurisdictionally mixed and thus are subject to USF contributions on interstate and international revenues. For these reasons, we conclude that interconnected VoIP providers are “providers of interstate telecommunications” under section 254(d).

43. *Public Interest.* Next, we must consider whether requiring interconnected VoIP providers to contribute to the USF is in the public interest. We conclude that it is.¹⁴⁹ The Commission has previously found it in the public interest to extend universal service contribution obligations to classes of providers that benefit from transmission services through their interconnection with the PSTN.¹⁵⁰ We believe that providers of interconnected VoIP services similarly benefit from universal service because much of the appeal of their services to consumers derives from the ability to place calls to and receive calls from the PSTN, which is supported by universal service mechanisms.¹⁵¹ As the Fifth Circuit explained, “Congress designed the universal service scheme to exact payments from those companies benefiting from the

¹⁴⁶ See *Universal Service First Report and Order*, 12 FCC Rcd at 9179, para. 787 (identifying resellers as telecommunications carriers that provide interstate telecommunications services for purposes of section 254(d)).

¹⁴⁷ Moreover, interconnected VoIP services are not merely directory services that provide information to Internet users without providing transmission. Interconnected VoIP providers do more than just “use” some telecommunications to connect servers to the Internet. Rather, they self-provide or contract with underlying carriers or providers for transmission services, including interconnection with the PSTN. In this way, interconnected VoIP services are distinguished from services that do not supply connectivity to any PSTN user. See *Pulver Order*, 19 FCC Rcd at 3312, para. 9. For the reasons explained above, we disagree with the VON Coalition’s assertion that interconnected VoIP providers do not provide telecommunications and that the use of permissive authority is therefore inappropriate. See VON Coalition June 14, 2006 *Ex Parte* Letter at 8.

¹⁴⁸ See *Vonage Order*, 19 FCC Rcd at 22413, para. 18 (“The nature of DigitalVoice precludes any suggestion that the service could be characterized as a purely intrastate service.”).

¹⁴⁹ See, e.g., BellSouth *IP-Enabled Services* Comments at 48-49; CWA *IP-Enabled Services* Comments at 17-18; NTCA *IP-Enabled Services* Comments at 9; SBC *IP-Enabled Services* Comments at 112-13 (all arguing that interconnected VoIP providers should be required to contribute to the USF).

¹⁵⁰ See *supra* n.131.

¹⁵¹ See, e.g., Minnesota Commission *IP-Enabled Services* Comments at 12; NASUCA *IP-Enabled Services* Comments at 69; Illinois Commission *IP-Enabled Services* Comments at 15; Texas Attorney General *IP-Enabled Services* Comments at 11 (all arguing that universal service obligations are appropriate for service providers who benefit from interconnection with the PSTN). VoIP service providers generally offer “in network” or “IP-to-IP” calls for free. See, e.g., Yahoo! Inc., Voice, http://messenger.yahoo.com/feat_voice.php?_ylt=AmvWJkIiw3XQ4TH8EsWFUgdwMMIF (visited Apr. 7, 2005) (“Free, Worldwide PC-to-PC Calls”). VoIP service providers are able to charge, however, for PSTN interconnection. See, e.g., Vonage America Inc., Products and Service, http://www.vonage.com/products.php?lid=nav_products (visited Apr. 7, 2006); Skype Rates (Skype per-minute rates for calls to traditional landline and mobile phones). Indeed, PSTN interconnection is the primary, or sole, source of revenue for many VoIP service providers. See, e.g., eBay Inc., SEC Form 10-K at 9-10 (filed Feb. 24, 2006), available at <http://www.sec.gov/Archives/edgar/data/1065088/0000950134060003678/f17187e10vk.htm> (“Skype’s premium offerings, which are currently Skype’s primary source of revenue, provide Skype’s users with low-cost connectivity to traditional fixed-line and mobile telephones.”); Vonage Holdings Corp., SEC Form S-1 at 1 (filed Feb. 8, 2006), available at <http://www.sec.gov/Archives/edgar/data/1272830/000104746906001567/a2167036zs-1.htm>.

provision of universal service.”¹⁵² Like other contributors to the Fund, interconnected VoIP providers are “dependent on the widespread telecommunications network for the maintenance and expansion of their business,” and they “directly benefit[] from a larger and larger network.”¹⁵³ It is therefore consistent with Commission precedent to impose obligations that correspond with the benefits of universal service that these providers already enjoy.

44. We also find that the principle of competitive neutrality supports our conclusion that we should require interconnected VoIP providers to contribute to the support mechanisms. Competitive neutrality means that “universal service support mechanisms and rules neither unfairly advantage nor disadvantage one provider over another, and neither unfairly favor nor disfavor one technology over another.”¹⁵⁴ As the Commission has noted, interconnected VoIP service “is increasingly used to replace analog voice service.”¹⁵⁵ As the interconnected VoIP service industry continues to grow, and to attract subscribers who previously relied on traditional telephone service, it becomes increasingly inappropriate to exclude interconnected VoIP service providers from universal service contribution obligations.¹⁵⁶ Moreover, we do not want contribution obligations to shape decisions regarding the technology that interconnected VoIP providers use to offer voice services to customers or to create opportunities for regulatory arbitrage. The approach we adopt today reduces the possibility that carriers with universal service obligations will compete directly with providers without such obligations. We therefore find that the principle of competitive neutrality is served by extending universal service obligations to interconnected VoIP service providers.

45. Thus, based on the record before us, we find that interconnected VoIP providers, like telecommunications carriers, have built their businesses, or a part of their businesses, on access to the PSTN. For these reasons, we find that the public interest requires interconnected VoIP providers, as providers of interstate telecommunications, to contribute to the preservation and advancement of universal service in the same manner as carriers that provide interstate telecommunications services. Finally, we note that the inclusion of such providers as contributors to the support mechanisms will broaden the funding base, lessening contribution requirements on telecommunications carriers or any particular class of telecommunications providers.

b. Ancillary Jurisdiction

46. In addition to permissive authority under section 254(d), we exercise our ancillary jurisdiction under Title I of the Act to extend universal service contribution obligations to interconnected VoIP providers. We conclude that regardless of the statutory classification of these services, the Commission has ancillary jurisdiction to promote universal service by adopting universal service contribution rules for interconnected VoIP services, and commenters largely agree.¹⁵⁷ Ancillary

¹⁵² *Texas Office of Pub. Util. Counsel v. FCC*, 183 F.3d at 428.

¹⁵³ *Id.* (“Paging carriers such as Celpage benefit from a larger and more universal public network system, because it increases the number of potential locations for paging use.”).

¹⁵⁴ *Universal Service First Report and Order*, 12 FCC Rcd at 8801, para. 47.

¹⁵⁵ *CALEA First Report and Order*, 20 FCC Rcd at 15009-10, para. 42.

¹⁵⁶ *SBC/AT&T Merger Order*, 20 FCC Rcd at 18337, para. 85; *cf. Universal Service First Report and Order*, 12 FCC Rcd at 9184-85, para. 797 (finding that payphone aggregators should be required to contribute to universal service support mechanisms “because they directly compete with mandatory contributors to universal service”).

¹⁵⁷ See, e.g., AT&T *IP-Enabled Services* Comments at 39 n.28; AFB *IP-Enabled Services* Comments at 4-5; BellSouth *IP-Enabled Services* Comments at 23-24; Cisco *IP-Enabled Services* Comments at 15-16; Cox *IP-Enabled Services* Comments at 22-25; Global Crossing *IP-Enabled Services* Comments at 15-16; U.S. Conference of Catholic Bishops *IP-Enabled Services* Comments at 12-13. But see, e.g., California PUC *IP-Enabled Services* Comments at 39-40; CompTel *IP-Enabled Services* Comments at 18-19; Covad *IP-Enabled Services* Comments at (continued....)

jurisdiction may be employed, in the Commission's discretion, when Title I of the Act gives the Commission subject matter jurisdiction over the service to be regulated¹⁵⁸ and the assertion of jurisdiction is "reasonably ancillary to the effective performance of [its] various responsibilities."¹⁵⁹ Both predicates for ancillary jurisdiction are satisfied here.

47. First, as we concluded in the *VoIP 911 Order*, interconnected VoIP services fall within the subject matter jurisdiction granted to us in the Act.¹⁶⁰ Second, our analysis requires us to evaluate whether imposing universal service contribution obligations is reasonably ancillary to the effective performance of the Commission's various responsibilities. Based on the record in this matter, we find that section 254 and section 1 of the Act provide the requisite nexus.

48. Section 254 requires the Commission to establish "specific, predictable, and sufficient mechanisms . . . to preserve and advance universal service."¹⁶¹ The Act requires telecommunications carriers to contribute to those mechanisms on a mandatory basis, and as discussed above, section 254(d) grants the Commission permissive authority to require other "providers of interstate telecommunications" to contribute.¹⁶² As discussed above, we recognize that interconnected VoIP service "is increasingly used to replace analog voice service."¹⁶³ We expect that trend to continue. If we do not require interconnected VoIP providers to contribute, the revenue base that supports the Fund will continue to shrink, while these providers continue to benefit from their interconnection to the PSTN. We believe that this trend threatens the stability of the Fund and our action to extend contributions obligations to interconnected VoIP

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22-24 (all questioning whether the Commission can exercise its ancillary jurisdiction to regulate IP-enabled services).

¹⁵⁸ See *United States v. Southwestern Cable Co.*, 392 U.S. 157, 177-78 (1968) (*Southwestern Cable*). *Southwestern Cable*, the lead case on the ancillary jurisdiction doctrine, upheld certain regulations applied to cable television systems at a time before the Commission had an express congressional grant of regulatory authority over that medium. See *id.* at 170-71. In *Midwest Video I*, the Supreme Court expanded upon its holding in *Southwestern Cable*. The plurality stated that "the critical question in this case is whether the Commission has reasonably determined that its origination rule will 'further the achievement of long-established regulatory goals in the field of television broadcasting by increasing the number of outlets for community self-expression and augmenting the public's choice of programs and types of services.'" *United States v. Midwest Video Corp.*, 406 U.S. 649, 667-68 (1972) (*Midwest Video I*) (quoting *Amendment of Part 74, Subpart K, of the Commission's Rules and Regulations Relative to Community Antenna Television Systems; and Inquiry into the Development of Communications Technology and Services to Formulate Regulatory Policy and Rulemaking and/or Legislative Proposals*, Docket No. 18397, First Report and Order, 20 FCC 2d 201, 202 (1969) (*CATV First Report and Order*)). The Court later restricted the scope of *Midwest Video I* by finding that if the basis for jurisdiction over cable is that the authority is ancillary to the regulation of broadcasting, the cable regulation cannot be antithetical to a basic regulatory parameter established for broadcast. See *FCC v. Midwest Video Corp.*, 440 U.S. 689, 700 (1979) (*Midwest Video II*); see also *American Library Ass'n v. FCC*, No. 04-1037, slip op. (D.C. Cir. May 6, 2005) (holding that the Commission lacked authority to impose broadcast content redistribution rules on equipment manufacturers using ancillary jurisdiction because the equipment at issue was not subject to the Commission's subject matter jurisdiction over wire and radio communications).

¹⁵⁹ *Southwestern Cable*, 392 U.S. at 178.

¹⁶⁰ See *VoIP 911 Order*, 20 FCC Rcd at 10261-62, para. 28 ("[I]nterconnected VoIP services are covered by the statutory definitions of 'wire communication' and/or 'radio communication' because they involve 'transmission of [voice] by aid of wire, cable, or other like connection . . . ' and/or 'transmission by radio . . . ' of voice. Therefore, these services come within the scope of the Commission's subject matter jurisdiction granted in section 2(a) of the Act."'). This determination has not been challenged in the pending appeal of the *VoIP 911 Order*. See *supra* n.57.

¹⁶¹ 47 U.S.C. § 254(d).

¹⁶² 47 U.S.C. § 254(b)(4), (d).

¹⁶³ *CALEA First Report and Order*, 20 FCC Rcd at 15009-10, para. 42.

providers is “reasonably ancillary to the effective performance of [our] responsibilities”¹⁶⁴ under section 254. Thus, we determine, as required, that the approach we adopt today “will ‘further the achievement of long-established regulatory goals’”¹⁶⁵ to preserve and advance universal service through specific, predictable, and sufficient contribution mechanisms.

49. In addition, section 1 of the Act charges the Commission with responsibility to “make available, so far as possible, to all the people of the United States, . . . a rapid, efficient, Nation-wide, . . . wire and radio communication service with adequate facilities at reasonable charges.”¹⁶⁶ In light of this statutory mandate, promoting universal service became one of the Commission’s primary responsibilities under the Act even before Congress adopted section 254 in 1996. Before the 1996 Act, the Commission relied exclusively on its Title I ancillary jurisdiction to adopt regulations establishing a fund to further this statutory goal.¹⁶⁷ In *Rural Telephone Coalition v. FCC*, the United States Court of Appeals for the District of Columbia Circuit upheld the Commission’s assertion of ancillary jurisdiction to establish a funding mechanism to support universal service in the absence of specific statutory authority as ancillary to its responsibilities under section 1 of the Act to “further the objective of making communications service available to all Americans at reasonable charges.”¹⁶⁸ We conclude that as more consumers begin to rely on interconnected VoIP services for their communications needs, the action we take here ensures that the Commission continues to “further the achievement of long-established regulatory goals”¹⁶⁹ to “make available . . . communication service with adequate facilities at reasonable charges.”¹⁷⁰ Thus, pursuant to our ancillary jurisdiction, we extend USF contribution obligations to providers of interconnected VoIP services.¹⁷¹

¹⁶⁴ *Southwestern Cable*, 392 U.S. at 178.

¹⁶⁵ *Midwest Video I*, 406 U.S. at 667-68 (quoting *CATV First Report and Order*, 20 FCC 2d at 202).

¹⁶⁶ 47 U.S.C. § 151. Our actions today are not in conflict or otherwise inconsistent with any other provision of the Act. We acknowledge that section 230 of the Act provides that “[i]t is the policy of the United States – to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation.” 47 U.S.C. § 230(b)(2). We do not, however, believe that this policy statement precludes us from adopting universal service contribution rules for interconnected VoIP providers here. We note that the Commission’s discussion of section 230 in the *Vonage Order* as cautioning against regulation was limited to “traditional common carrier economic regulations.” *Vonage Order*, 19 FCC Rcd at 22426, para. 35.

¹⁶⁷ *First Decision*, 96 FCC 2d at 795.

¹⁶⁸ *Rural Tel. Coalition v. FCC*, 838 F.2d 1307, 1315 (D.C. Cir. 1988).

¹⁶⁹ *Midwest Video I*, 406 U.S. at 667-68 (quoting *CATV First Report and Order*, 20 FCC 2d at 202).

¹⁷⁰ 47 U.S.C. § 151.

¹⁷¹ We do not believe that the grant of permissive authority in section 254(d) precludes us from exercising our ancillary jurisdiction in the universal service context. As noted above, before Congress enacted section 254, the D.C. Circuit held that the Commission had ancillary jurisdiction to require universal service contributions. See *Rural Tel. Coalition v. FCC*, 838 F.2d at 1315; see also *NTCA June 14, 2006 Ex Parte Letter* at 5-6. Nothing in the legislative history, text, or structure of the 1996 Act suggests that Congress intended to strip the Commission of its ancillary authority over universal service obligations by adopting section 254. The statutory construction maxim of *expressio unius est exclusio alterius* – the mention of one thing implies the exclusion of another – does not require a different result. This maxim is non-binding and “is often misused.” *Shook v. District of Columbia Fin. Responsibility & Management Assistance Auth.*, 132 F.3d 775, 782 (D.C. Cir. 1998). “The maxim’s force in particular situations depends entirely on context, whether or not the draftsmen’s mention of one thing, like a grant of authority, does really necessarily, or at least reasonably, imply the preclusion of alternatives.” *Id.* Here, we believe that the relevant provision in section 254(d) was intended to confirm the Commission’s authority to require providers of interstate telecommunications to make universal service contributions and not to limit the Commission’s pre-existing authority to require others to make such contributions. See, e.g., *Shook*, 132 F.3d at 782 (noting that Congress sometimes “drafts statutory provisions that appear preclusive of other unmentioned

(continued....)

3. Implementation

50. In this section, we address implementation issues related to our requirement that interconnected VoIP providers contribute to the USF. Because we are expanding the base of contributors, certain entities that in the past have not been required to report interstate and international revenues will now be required to do so. For that reason, we provide a brief overview of our reporting requirements. This Order does not fully explain all of the Commission's requirements. Interconnected VoIP providers that are new to the USF procedures should familiarize themselves with the Commission's USF rules and with FCC Forms 499-A and 499-Q Telecommunications Reporting Worksheets and the accompanying instructions.¹⁷²

51. *Identifying Revenues for Reporting Purposes.* Most interconnected VoIP providers offer packages of services to consumers for a single price that include telecommunications, as discussed above,¹⁷³ along with CPE and/or features that may be information services. To the extent that an interconnected VoIP provider has chosen to structure its offerings in this manner, it may use the safe harbors established in the *CPE Bundling Order* to determine the appropriate amount of telecommunications revenues to be reported (as distinguished from revenue derived from non-telecommunications).¹⁷⁴ Interconnected VoIP service providers are not obligated to use either of the safe harbors in the *CPE Bundling Order*, but we emphasize that other allocation methods may not be considered reasonable and will be evaluated on a case-by-case basis in an audit context.¹⁷⁵

52. Interconnected VoIP providers must report and contribute to the USF on all their interstate and international end-user telecommunications revenues. To fulfill this obligation, interconnected VoIP providers have three options: (1) they may use the interim safe harbor established in this Order; (2) they may report based on their actual interstate telecommunications revenues; or (3) they may rely on traffic studies, subject to the conditions described below.

53. As we recognized in the *Vonage Order*, it is difficult for some interconnected VoIP providers to separate their traffic on a jurisdictional basis.¹⁷⁶ Indeed, many of these VoIP providers have advocated to us in other proceedings that their services are "inherently interstate."¹⁷⁷ Consistent with this advocacy

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possibilities—just as it sometimes drafts provisions that appear duplicative of others—simply, in Macbeth's words, "to make assurance double sure"). Absent any affirmative evidence that Congress intended to limit the Commission's judicially recognized ancillary jurisdiction in this area, we find that the *expressio unius* maxim "is simply too thin a reed to support the conclusion that Congress has clearly resolved [the] issue." *Mobile Communications Corp. v. FCC*, 77 F.3d 1399, 1405 (D.C. Cir. 1996); see also *Martini v. Federal Nat'l Mortgage Ass'n*, 178 F.3d 1336, 1342-43 (D.C. Cir. 1999) (noting that the *expressio unius* principle is particularly unhelpful in addressing issues of administrative law).

¹⁷² Revised Forms 499-A and 499-Q are attached to this Order and Notice at Appendices C and D, respectively.

¹⁷³ See *supra* paras. 38-45.

¹⁷⁴ *CPE Bundling Order*, 16 FCC Rcd at 7446-48, paras. 47-51.

¹⁷⁵ See *id.* at 7448, paras. 52-54.

¹⁷⁶ See *Vonage Order*, 19 FCC Rcd at 22405, para. 1.

¹⁷⁷ Numerous VoIP providers have argued that "VoIP services are interstate in nature." Letter from John T. Nakahata, Counsel to Level 3, to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 03-211, 03-266, 04-36, Attach. at 1 (filed Nov. 3, 2004) (attaching a letter from the VON Coalition, MCI, 8x8, Inc., AT&T, Avaya Inc., Dialpad, EDS, EDUCAUSE, iBasis, IceNet, ITAA, Level 3, PointOne, pulver.com, Qovia, Skype, Telic Communications, USA Datanet, and Voiceglo, to Michael K. Powell, Chairman, FCC, dated Nov. 2, 2004); see also, e.g., VON Coalition Comments, WC Docket No. 03-211, at 15 (filed Oct. 27, 2003) ("[T]he Commission should determine that all VoIP traffic is jurisdictionally interstate . . .").

and based on the conclusions in the Vonage Order,¹⁷⁸ we find that it would be reasonable for us to treat the interconnected VoIP traffic as 100% interstate for USF purposes. Indeed, in another context where providers were unable to separate their interstate telecommunications revenues from other revenues, the Commission found a safe harbor of 100 percent to be reasonable.¹⁷⁹ Nevertheless, we establish a safe harbor that is lower than 100 percent as a convenient alternative for interconnected VoIP providers. Our safe harbor is necessarily the product of line drawing.¹⁸⁰ In adopting a safe harbor we consider what would be an appropriate analogue. One industry report has estimated that 83.8 percent of VoIP traffic in 2004 was either long distance or international and only 16.2 percent was local.¹⁸¹ Thus, it appears that VoIP traffic is predominantly long distance or international. As such, it is much like wireline toll service which similarly offers interstate, intrastate toll, and international services. In fact, as stated in paragraph 55 below, VoIP services are often marketed as a substitute for wireline toll service.¹⁸² The percentage of interstate revenues reported to the Commission by wireline toll providers is 64.9 percent. We therefore find that establishing a safe harbor of 64.9 percent is reasonable for purposes of this interim action.¹⁸³

54. Moreover, we believe that setting the safe harbor at 64.9 percent is reasonable pending the completion of the attached NPRM where we seek comment on whether to change or eliminate all of the safe harbors.¹⁸⁴ To set the safe harbor lower would permit providers that actually provide more interstate service to escape universal service contribution obligations for some of their interstate traffic, thus undermining our actions to preserve and advance the goals of universal service. Furthermore, to the extent the safe harbor percentage is higher than some providers' actual interstate use, providers may instead contribute to the fund based on actual revenue allocations or by conducting a traffic study, as described below. We encourage interconnected VoIP providers to explore these more precise avenues for determining the jurisdictional nature of their revenues.¹⁸⁵

¹⁷⁸ See *Vonage Order*, 19 FCC Rcd at 22405, para. 1.

¹⁷⁹ See *CPE Bundling Order*, 16 FCC Rcd at 7447-48, paras. 51-52.

¹⁸⁰ See *Access Charge Reform*, CC Docket No. 96-262, Fifth Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 14221, 14276, para. 96 (1999) (*Pricing Flexibility Order*), *aff'd*, *WorldCom, Inc. v. FCC*, 238 F.3d 449 (D.C. Cir. 2001) (citing *United States v. FCC*, 707 F.2d 610, 618 (D.C. Cir. 1983)); see also *Sinclair v. FCC*, 284 F.3d 148, 159 (D.C. Cir. 2002) ("Where issues involve 'elusive' and 'not easily defined' areas . . . our review is considerably more deferential, according broad leeway to the Commission's line-drawing determinations.") (citation omitted); *AT&T v. FCC*, 220 F.3d 607, 627 (D.C. Cir. 2000) (stating that "the Commission has wide discretion to determine where to draw administrative lines").

¹⁸¹ See *iLocus Weekly Newsletter*, Sept. 16, 2005, available at www.ilocus.com. This same report estimated that in 2005, 66.2 percent of all VoIP traffic was either long distance or international. See *iLocus Weekly Newsletter*, Mar. 21, 2006, available at www.ilocus.com. Either estimate indicates that VoIP traffic is predominately long distance or international.

¹⁸² See *infra* para. 55.

¹⁸³ 2004 Revenues Report, Table 8. This category of providers includes interexchange carriers, operator service providers, prepaid calling card providers, satellite service providers, toll resellers, and "other toll carriers." *Id.*

¹⁸⁴ See *infra* paras. 68-69.

¹⁸⁵ Vonage concedes that application of a safe harbor is appropriate but argues about the correct percentage. See Vonage June 14, 2006 *Ex Parte* at 8 ("Vonage would support an interim safe harbor of 23% . . ."). Vonage's argument that establishing a safe harbor of 64.9 percent is inconsistent with the *VoIP 911 Order* has no merit. See *id.* at 6. The Commission's rationale for imposing 911 obligations on interconnected VoIP providers was that customers reasonably expect interconnected VoIP service to function like traditional telephone service in some ways. See *VoIP 911 Order*, 20 FCC Rcd at 10256-57, para. 23. Nowhere in the *VoIP 911 Order* did the Commission suggest that interconnected VoIP traffic is predominantly local. Accordingly, there is no inconsistency between the two orders.

55. We do not believe that the percentage used as the wireless safe harbor would serve as a reasonable safe harbor for interconnected VoIP.¹⁸⁶ Indeed, the record reflects that interconnected VoIP service is often marketed as an economical way to make interstate and international calls, as a lower-cost substitute for wireline toll service.¹⁸⁷ For purposes of a safe harbor, it is reasonable to account for the many customers who purchase these services to place a high volume of interstate and international calls, and benefit from the pricing plans the providers offer for such services. We believe that these characteristics differentiate it from wireless service. Accordingly, we find that the interconnected VoIP safe harbor should be substantially higher than the wireless safe harbor in order to properly capture interstate revenues.

56. While, as stated above, interconnected VoIP providers may report their actual interstate telecommunications revenues, we recognize that some interconnected VoIP providers do not currently have the ability to identify whether customer calls are interstate and therefore subject to the section 254(d) contribution requirement. Indeed, a fundamental premise of our decision to preempt Minnesota's regulations in the *Vonage Order* was that it was impossible to determine whether calls by Vonage's customers stay within or cross state boundaries.¹⁸⁸ Therefore, an interconnected VoIP provider may rely on traffic studies or the safe harbor described above in calculating its federal universal service contributions. Alternatively, to the extent that an interconnected VoIP provider develops the capability to track the jurisdictional confines of customer calls, it may calculate its universal service contributions based on its actual percentage of interstate calls.¹⁸⁹ Under this alternative, however, we note that an interconnected VoIP provider with the capability to track the jurisdictional confines of customer calls would no longer qualify for the preemptive effects of our *Vonage Order* and would be subject to state regulation. This is because the central rationale justifying preemption set forth in the *Vonage Order* would no longer be applicable to such an interconnected VoIP provider.

¹⁸⁶ But see Letter from Tina M. Pidgeon, Vice President, Federal Regulatory Affairs, General Communication, Inc., to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45 (filed June 9, 2006) (*GCI June 9, 2006 Ex Parte Letter*); Letter from Neal M. Goldberg, General Counsel, National Cable & Telecommunications Association, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, at 1 (filed June 13, 2006); Vonage June 14, 2006 *Ex Parte* Comments at 2-5 (all arguing that a safe harbor for VoIP providers should be applied in a manner consistent with the safe harbor for wireless carriers).

¹⁸⁷ See, e.g., Global Crossing Announces New VoIP LDS Service Offering Enterprises Extended Local Presence, <http://www.globalcrossing.com/xml/news/2005/march/07.xml> (last visited June 20, 2006); Broadvoice Rate Plans, <http://www.broadvoice.com/rateplans.html> (last visited June 15, 2006); NetZeroVoice Long Distance, <http://www.netzero.net/voip/rates.html?sep=voip> (last visited June 15, 2006); Sunrocket, *All-Inclusive Service*, <http://www.sunrocket.com/advantages/all-inclusive/> (last visited June 15, 2006); Vonage, <http://www.vonage.com/index.php?ic=1> (last visited June 15, 2006) (all promoting VoIP rate plans that save customers money on interstate and/or international calls); see also Robert Poe, "Telegeography Projects 38 Percent Jump in International VoIP Traffic," *VoIP Magazine*, Nov. 14, 2005, http://www.voip-magazine.com/index.php?option=com_content&task=view&id=586 (reporting that international telephone traffic is increasing generally, and that the VoIP portion of that international traffic is increasing faster than conventional TDM-based international traffic).

¹⁸⁸ See *Vonage Order*, 19 FCC Rcd at 22418-23, paras. 23-31.

¹⁸⁹ Because we permit interconnected VoIP providers to report on actual interstate revenues, this Order does not require interconnected VoIP providers that are currently contributing based on actual revenues to revise their current practices. Cf. *GCI June 9, 2006 Ex Parte Letter* at 1. Interconnected VoIP providers must maintain – and must provide to the Commission or to USAC upon request – documentation to support the percentage of interstate telecommunications revenues that they report. Cf. *Second Wireless Safe Harbor Order*, 17 FCC Rcd at 24966, para. 24. We remind providers that the Commission has the authority to investigate compliance with these requirements and to take appropriate enforcement action upon discovery of noncompliance.

57. In lieu of using the interim safe harbor or reporting actual interstate telecommunications revenues, interconnected VoIP providers may rely on traffic studies, as noted above, and as CMRS carriers may do.¹⁹⁰ The record indicates that traffic studies are a feasible option for providers of interconnected VoIP.¹⁹¹ However, before it can begin to base its USF contributions on a traffic study, an interconnected VoIP provider must submit its proposed traffic study to the Commission for approval. While prior Commission approval of traffic studies is not required for wireless carriers, we have nonetheless identified concerns in the wireless context with the use of traffic studies as a replacement for reporting actual revenues, and we now require wireless carriers to submit their traffic studies to the Commission and to USAC.¹⁹² If we were to allow interconnected VoIP providers to rely on unapproved traffic studies, we would risk extending the problems we have identified with the use of traffic studies by wireless carriers to a new technology, and possibly creating unforeseen problems as well. For these reasons, we find it appropriate to require prior Commission approval of any traffic study on which an interconnected VoIP provider proposes to rely.¹⁹³ Until the Commission has approved an interconnected VoIP provider's proposed traffic study, that provider may use the interim safe harbor. We may extend this treatment to wireless traffic studies in the future, but we decline to do so today. While there would be a benefit to parity of requirements between wireless and interconnected VoIP providers, a pre-approval requirement for wireless traffic studies would be disruptive to wireless contributors who, unlike interconnected VoIP providers, are already relying on the current regime.

58. We take one additional interim action here to ensure the health of the USF pending broader reform. As we stated earlier, we have not yet classified interconnected VoIP as either a telecommunications service or an information service. Because we have not yet made that classification, some interconnected VoIP providers may hold themselves out as telecommunications carriers, but others do not, considering themselves instead to be "end users." Carriers that provide telecommunications service inputs to the latter group of interconnected VoIP providers therefore have been reporting the resulting revenues as end-user revenues and including them in their bases.¹⁹⁴ Because we do not classify interconnected VoIP today, nor do we attempt to quantify the magnitude of USF contributions from carriers that supply wholesale inputs to interconnected VoIP providers, carriers supplying telecommunications services to interconnected VoIP providers who are not themselves carriers should continue to include the revenues derived therefrom in their own contribution bases for two full quarters

¹⁹⁰ See *supra* paras. 29-33; see also *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Order and Order on Reconsideration, 18 FCC Rcd 1421, 1425-26, para. 8 (2003). An interconnected VoIP provider that chooses to rely on a traffic study must ensure that the study conforms to the requirements detailed in this Order. See *supra* n.115. While interconnected VoIP providers may lack systems to track the jurisdictional nature of individual calls, they are required to know – either automatically or through interaction with the customer – the location of each customer, which will also be the origination point of the customer's calls. See *VoIP 911 Order*, 20 FCC Rcd at 10271, para. 46.

¹⁹¹ See Letter from Thomas Jones, Counsel for Cbeyond Communications LLC, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, WC Docket No. 04-36, at 1 (filed June 14, 2006) ("Cbeyond has determined that it would likely be able to conduct accurate traffic studies for determining its interstate and intrastate revenues for VoIP services it may offer in the future."); see also *id.*; Sprint Nextel June 14, 2006 *Ex Parte* Letter at 1 (both urging the Commission to permit interconnected VoIP providers to use traffic studies).

¹⁹² See *supra* para. 29.

¹⁹³ But see Letter from Cheryl A. Tritt, Counsel to T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, FCC, CC Docket No. 96-45, at 2; Vonage June 14, 2006 *Ex Parte* Comments at 5 (both opposing a requirement that interconnected VoIP providers' traffic studies be approved in advance by the Commission).

¹⁹⁴ When the service was provided through an intrastate tariff or otherwise determined to be intrastate, it may not have been included in the carrier's end user revenues for federal USF purposes.

after the effective date of this Order.¹⁹⁵ Wholesale carriers may not exclude these revenues by invoking the "carrier's carrier" rule during this interim period.¹⁹⁶ To the extent required, we waive here Commission rule 54.706(b) for the duration of this requirement.¹⁹⁷

59. We recognize that, by requiring on an interim basis that both the underlying carrier and the interconnected VoIP provider contribute based (in part) on the revenues derived from providing the underlying transmission, the Fund may receive contributions from telecommunications revenues associated with the same facilities two times. We emphasize that this is a temporary measure, and we do not take this step lightly. We are concerned, however, that if carriers are permitted to invoke the carrier's carrier rule immediately to exclude revenues from interconnected VoIP providers, the result could be a net decrease in the Fund in the short term. Such a result would be inconsistent with our obligation to ensure a sufficient and sustainable Fund and to preserve and advance universal service.¹⁹⁸ By continuing to require contributions from carriers supplying transmission facilities to interconnected VoIP providers for an additional two quarters, we eliminate any risk of decreasing the Fund while we implement contribution obligations for interconnected VoIP providers. Further, we find nothing in section 254 of the 1996 Act that prohibits this interim approach.

60. *Reporting Requirements.* Providers of interconnected VoIP services will follow the same basic USF reporting procedures as other providers of interstate and international telecommunications, using the same forms and filing instructions. Contributors to USF report historical gross-billed, projected gross-billed, and projected collected end-user interstate and international revenues quarterly on FCC Form 499-Q.¹⁹⁹ Interconnected VoIP service providers will be required to file FCC Form 499-Q beginning on August 1, 2006.²⁰⁰ Contributors report gross-billed and actual collected end-user interstate and international revenues on FCC Form 499-A on April 1 of each year.²⁰¹ Interconnected VoIP service providers will be required to file a completed FCC Form 499-A beginning on April 1, 2007.

61. Under Commission rules, a provider of interstate and international telecommunications whose annual universal service contribution is expected to be less than \$10,000 is not required to contribute to the USF, or to file a Telecommunications Reporting Worksheet unless it is required to contribute to other support and cost recovery mechanisms.²⁰² Interconnected VoIP providers that satisfy

¹⁹⁵ We believe that this action addresses the VON Coalition's concern about double counting of interconnected VoIP revenues. See VON Coalition June 14, 2006 *Ex Parte* Letter at 3.

¹⁹⁶ See 47 C.F.R. § 54.706(b) (basing contributions on "end-user telecommunications revenues").

¹⁹⁷ See *WAT Radio v. FCC*, 418 F.2d 1153, 1158-59 (D.C. Cir. 1969), *aff'd*, 459 F.2d 1203 (D.C. Cir. 1972); *Northeast Cellular Tel. Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

¹⁹⁸ See 47 U.S.C. §§ 254(b), (d).

¹⁹⁹ See *Second Wireless Safe Harbor Order*, 17 FCC Rcd at 24969, para. 29.

²⁰⁰ Interconnected VoIP providers who will be submitting the FCC Form 499-Q for the first time because of this Order are not required to complete lines 115-118 on the Form until they submit the Form for the February 1, 2007 deadline. All other portions of the Form must be completed beginning with the submissions due August 1, 2006. Cf. *Qwest* June 13, 2006 *Ex Parte* Letter at 2.

²⁰¹ See *Second Wireless Safe Harbor Order*, 17 FCC Rcd at 24969, para. 29. The FCC Forms 499-A and 499-Q and instructions, along with information for new service providers and contributors, are posted on USAC's website at: <http://forms.universalservice.org>.

²⁰² See 47 C.F.R. § 54.708; Instructions to the Telecommunications Reporting Worksheet, FCC Form 499-A, at 5, 31, April 2006. Section 254(d) of the Act states that the Commission may exempt a carrier or class of carriers from contributing to the universal service mechanisms if the "carrier's contribution to the preservation and advancement of universal service would be *de minimis*." 47 U.S.C. § 254(d). Providers that qualify for the *de minimis* exemption are considered end users for USF reporting purposes, and they must notify the carriers from which they purchase telecommunications that they are exempt from contribution requirements and must be considered end users for USF (continued....)

this *de minimis* exemption need not contribute to the Fund.²⁰³ We find, however, that it is appropriate to require all providers of interconnected VoIP services – including those that satisfy the *de minimis* exemption – to register with the Commission in order to facilitate our enforcement of the obligations the Commission has imposed in this Order on providers of interconnected VoIP services.²⁰⁴ In order to fulfill this reporting requirement, every interconnected VoIP provider that has not already registered with the Commission (and designated an agent for service of process) must complete and file an FCC Form 499-A with blocks 1, 2, and 6 completed.²⁰⁵ Providers should refer to the instructions on the revised FCC Form 499-A for additional details on how to complete this registration requirement. Interconnected VoIP providers will receive an FCC Registration Number (FRN) when they register with the Commission. Because providers must have an FRN in order to submit required USF filings, it is the responsibility of the interconnected VoIP provider to register with the Commission and obtain an FRN prior to the August 1, 2006 deadline for filing FCC Form 499-Q.

62. Finally, interconnected VoIP providers must comply with the Commission's rules with respect to recovering USF contributions from their customers. Contributors may choose to recover part or all of their universal service contributions from their customers, but they are prohibited from marking up universal service line-item amounts above the relevant contribution factor.²⁰⁶

IV. TECHNICAL MATTERS

63. This Order shall be effective upon publication in the Federal Register, subject to OMB approval for new information collection requirements. We find good cause for the Order to be effective upon publication because the Order is necessary to maintain the stability and sufficiency of the universal

(...continued from previous page)

contribution purposes. See *Federal-State Joint Board on Universal Service; Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Transport Rate Structure and Pricing, End User Common Line Charge*, Fourth Order on Reconsideration in CC Docket No. 96-45, Report and Order in CC Docket Nos. 96-45, 96-262, 94-1, 91-213, 95-72, 13 FCC Rcd 5318, 5482, para. 298 (1997).

²⁰³ The \$10,000 revenue limit is an annual limit. Because an interconnected VoIP provider may, as a result of this Order, contribute to the Fund for the first time in the fourth quarter of 2006, we find that such an interconnected VoIP provider will satisfy the *de minimis* exemption for this quarter only if its fourth-quarter 2006 contributions would be less than \$2,500.

²⁰⁴ See, e.g., 47 C.F.R. § 54.707 (authorizing the Fund administrator to audit Fund contributors).

²⁰⁵ We require interconnected VoIP providers to register with the Commission and designate an agent for service of process pursuant to section 4(i) of the Act. See 47 U.S.C. 154(i). Cf. 47 C.F.R. § 64.1195; *Consumer Information Bureau Reminds Telecommunications Carriers of Their Obligations to Register and Designate an Agent for Service of Process*, CC Docket No. 94-129, Public Notice, 17 FCC Rcd 1736 (2002) (describing the Commission's registration requirements for telecommunications carriers).

²⁰⁶ See 47 C.F.R. § 54.712; see also *Second Wireless Safe Harbor Order*, 17 FCC Rcd at 24976-83, paras. 45-63. Furthermore, we note that in the *Wireline Broadband Internet Access Order*, the Commission permitted facilities-based providers to cease providing the transmission component underlying that service as a separate common carrier service if they choose. See *Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities; Universal Service Obligations of Broadband Providers; Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services; Computer III Further Remand Proceedings*, CC Docket Nos. 02-33, 01-337, 95-20, 98-10, Report and Order, 20 FCC Rcd 14853, 14899-14900, paras. 87-88 (2005). To the extent that a provider has discontinued providing that service as a common carrier service, it is not required to contribute to the universal service fund based on the revenues derived from providing that transmission service after the expiration of the 270 day contribution freeze period. See *id.* at 14915-16, para. 113. Any line item on a customer bill should reflect only those universal service contributions that a provider is required to make, consistent with rule 54.712. See Letter from Mark J. O'Connor, Counsel to EarthLink, Inc., to Marlene H. Dortch, Secretary, FCC, CC Docket No. 02-33, at 1 (filed June 7, 2006).

service fund, as required by section 254(d) of the 1996 Act.²⁰⁷ Specifically, the Order must be effective by August 1, 2006, the date by which contributors must submit their Form 499-Q filings containing their revenue projections for the fourth quarter of 2006, so that fourth quarter contributions to Fund will include revenues from interconnected VoIP and wireless services as contemplated herein. Including these additional revenues as soon as the fourth quarter of 2006 is essential to ensure the sustainability of the Fund in the near-term while the Commission continues to examine more fundamental reform.

64. On our own motion, we amend section 54.5 of our rules to correct a typographical error. Section 54.5 currently defines "contributor" as "an entity required to contribute to the universal service support mechanisms pursuant to § 54.703."²⁰⁸ Section 54.706 addresses which entities are required to contribute to the universal service support mechanisms, not section 54.703.²⁰⁹ Accordingly, we amend section 54.5 to define "contributor" as "an entity required to contribute to the universal service support mechanisms pursuant to § 54.706." Further, in the sections of our rules that we revise to conform to this Order, we also remove references to our contribution methodology prior to April 1, 2003 which are now outdated. Because these rule changes are non-substantive, the notice and comment and effective date provisions of the Administrative Procedure Act are inapplicable.²¹⁰

V. NOTICE OF PROPOSED RULEMAKING

65. In this Notice, we seek to further refine the record concerning the interim requirements established in the accompanying Order for mobile wireless providers and for interconnected VoIP providers, while we continue to examine more fundamental contribution methodology reform.²¹¹ In the Order, we increased the interim wireless safe harbor from 28.5 percent to 37.1 percent to reflect more accurately actual wireless interstate usage.²¹² We also require providers of interconnected VoIP service to contribute to the Fund, by reporting their actual interstate revenues, by using a traffic study (if approved by the Commission), or by using a safe harbor of 64.9 percent.²¹³

66. First, we seek comment on whether to eliminate or raise the interim wireless safe harbor. Wireless providers may base contributions on actual interstate and international revenues or on traffic studies conducted to approximate these revenues.²¹⁴ In light of these options, we seek comment on whether we should eliminate the interim wireless safe harbor or whether there remains a need to

²⁰⁷ See 5 U.S.C. § 553(d)(3) ("The required publication or service of a substantive rule shall be made not less than 30 days before its effective date, except ... as otherwise provided by the agency for good cause found and published with the rule."). See also 47 C.F.R. §§ 1.103(a), 1.427(b).

²⁰⁸ 47 C.F.R. § 54.5.

²⁰⁹ Compare 47 C.F.R. § 54.706 with 47 C.F.R. § 54.703.

²¹⁰ 5 U.S.C. § 553.

²¹¹ We hereby incorporate the comments, *ex parte* presentations, and any other submissions on the universal service contribution methodology filed in CC Docket Nos. 96-45, 98-171, 90-571, 92-237/NSD File No. L-00-72, 99-200, 95-116, 98-170, and WC Docket No. 04-36 into WC Docket No. 06-122. Commenters need not resubmit material previously filed in those proceedings in WC Docket No. 06-122. The Initial Regulatory Flexibility Analysis for this Notice is set forth in Appendix F.

²¹² See *supra* para. 23; see also TracFone Jun. 14 *Ex Parte* Letter, Attach. 2 at 13.

²¹³ See *supra* para. 52.

²¹⁴ See *supra* paras. 23-33. For example, Verizon Wireless suggested that wireless carriers could use call detail records and baseline assumptions to develop a reasonable proxy for allocating wireless revenues for USF purposes. See Verizon Wireless Oct. 28, 2002 *Ex Parte* Letter, Attach. at 1 (proposing that wireless carriers use cell site and area code information, among other things, to determine the percentage of minutes attributable to interstate and international calls, and then apply that percentage to all qualifying end-user revenues).

perpetuate a wireless safe harbor. We seek comment on whether mobile wireless providers can, or should be able to, determine their actual interstate and international end-user revenues. If we decide to eliminate the wireless safe harbor, we seek comment on how mobile wireless providers would determine their actual usage and whether we should continue to permit wireless providers to use traffic studies. For example, the study relied on in the Order utilized originating and terminating Numbering Plan Areas (NPAs), or area codes, to identify interstate revenues.²¹⁵ We seek comment on whether originating and terminating NPAs reflect whether a call is interstate or international. We also seek comment on whether originating and terminating cell sites could be used to determine the jurisdictional nature of a call. Are there other methods of determining jurisdiction? We ask commenters to address associated difficulties and costs of implementation. We also seek comment on whether there are unique difficulties associated with analyzing either outgoing or incoming calls, and whether it is necessary to analyze both types of calls or would, for example, out-bound calls reasonably approximate all interstate and international usage.²¹⁶

67. If we decide to retain a wireless safe harbor, we seek comment on whether a safe harbor of 37.1 percent for interstate and international end-user revenue is appropriate or whether the safe harbor should be raised. Given that mobile wireless providers retain the option of reporting their actual interstate end-user telecommunications revenues, we have found that setting the interim safe harbor at the high end of the market for interstate and international end-user revenue is a reasonable approach.²¹⁷ If 37.1 percent does not reflect the high end of the market, what percentage does? Since 1998, we have increased the interim wireless safe harbor twice to reflect more accurately wireless interstate end-user revenue.²¹⁸ We are mindful that these increases in the safe harbor percentage lagged market conditions, resulting in collecting fewer Fund contributions than market conditions would have supported.²¹⁹ We seek comment on how to determine the safe harbor percentage to better reflect market conditions on an ongoing basis. For example, should we periodically (e.g., annually, quarterly) adjust the interim safe harbor percentage to reflect wireless interstate end-user revenue trends? If so, how would we establish these trends?

68. Second, we seek comment on the USF obligations we have established in this Order for interconnected VoIP providers. We encourage commenters to describe possible ways in which our new requirements for interconnected VoIP providers could be improved. Given the interim nature of this Order, we welcome suggestions for a permanent approach to USF contributions from interconnected VoIP providers.

69. In particular, we seek comment on whether to eliminate or change the interim safe harbor we establish in the Order for providers of interconnected VoIP service. We ask commenters to address whether a safe harbor continues to be appropriate for providers of interconnected VoIP service. Can providers of interconnected VoIP service identify the amount of actual interstate and international, as opposed to intrastate, telecommunications they provide? If so, should we require that these providers report based on actual data? If not, is 64.9 percent the most appropriate level, or should we adjust the interim interconnected VoIP safe harbor?²²⁰ We ask that commenters advocating a change to the safe

²¹⁵ See *supra* n.96.

²¹⁶ See TracFone Jun.14 *Ex Parte* Letter, Attach. 2 at 7 (relying only on outgoing calls).

²¹⁷ See *supra* paras. 25-27.

²¹⁸ We have increased the wireless safe harbor from 15% in 1998, to 28.5% in 2002, to 37.1% in this Order. See *First Wireless Safe Harbor Order*, 13 FCC Rcd at 21257, para. 11; *Second Wireless Safe Harbor Order*, 17 FCC Rcd at 24965, para. 21; *supra* para. 23.

²¹⁹ For example, the safe harbor percentage adopted in this Order is based on bill harvesting data that is almost two years old. See TracFone Jun.14 *Ex Parte* Letter, Attach. 2 (using third quarter 2004 data).

²²⁰ See *supra* para. 53.

harbor explain the basis of their proposed revised safe harbor and how the safe harbor should be calculated.

70. *New Docket.* In this Notice, we open a new docket – WC Docket No. 06-122. All filings made in response to this Notice and those addressing the Commission's universal service contribution methodology rules generally, should be filed in WC Docket No. 06-122. Although we urge parties that previously filed in CC Docket Nos. 96-45, 98-171, 90-571, 92-237/NSD File No. L-00-72, 99-200, 95-116, 98-170, or WC Docket No. 04-36 on the universal service contribution methodology to re-file in new WC Docket No. 06-122, such filings nevertheless will be considered in this proceeding. Therefore, we incorporate by reference comments filed in CC Docket Nos. 96-45, 98-171, 90-571, 92-237/NSD File No. L-00-72, 99-200, 95-116, 98-170, or WC Docket No. 04-36 that are responsive to the issues raised in this proceeding. CC Docket Nos. 96-45, 98-171, 90-571, 92-237/NSD File No. L-00-72, 99-200, 95-116, 98-170, and WC Docket No. 04-36 will remain open for other non-universal service contribution methodology related filings.

VI. PROCEDURAL MATTERS

A. Final Regulatory Flexibility Analysis

71. As required by the Regulatory Flexibility Act of 1980, *see* 5 U.S.C. § 604, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) of the possible significant economic impact on small entities of the policies and rules addressed in this document. The FRFA is set forth in Appendix E.

B. Initial Regulatory Flexibility Analysis

72. As required by the Regulatory Flexibility Act of 1980, *see* 5 U.S.C. § 603, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules addressed in this document. The IRFA is set forth in Appendix F. Written public comments are requested on this IFRA. Comments must be identified as responses to the IFRA and must be filed by the deadlines for comments on the Notice provided below in section VI.E.

C. Paperwork Reduction Act Analysis

73. This document contains new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other federal agencies are invited to comment on the new information collection requirements contained in this proceeding.

D. Congressional Review Act

74. The Commission will send a copy of this Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act (CRA), *see* 5 U.S.C. § 801(a)(1)(A).

E. Comment Filing Procedures

75. Pursuant to sections 1.415 and 1.419 of the Commission's rules,²²¹ interested parties may file comments on this NPRM within 30 days after publication in the Federal Register and may file reply

²²¹ 47 C.F.R. §§ 1.415, 1.419.

comments within 60 days after publication in the Federal Register. All filings related to this Order and the Notice of Proposed Rulemaking shall refer to WC Docket No. 06-122 only. We hereby incorporate the comments, *ex parte* presentations, and any other submissions on the universal service contribution methodology filed in CC Docket No. 96-45, CC Docket No. 98-171, CC Docket No. 90-571, CC Docket No. 92-237/NSD File No. L-00-72, CC Docket No. 99-200, CC Docket No. 95-116, CC Docket No. 98-170, and WC Docket No. 04-36. Commenters need not resubmit material previously filed in those proceedings in WC Docket No. 06-122.

76. Comments may be filed using (1) the Commission's Electronic Comment Filing System (ECFS), (2) the Federal Government's eRulemaking Portal, or (3) by filing paper copies.²²²

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: <http://www.fcc.gov/cgb/ecfs/> or the Federal eRulemaking Portal: <http://www.regulations.gov>. Filers should follow the instructions provided on the website for submitting comments.
- For ECFS filers, if multiple docket or rulemaking numbers appear in the caption of this proceeding, filers must transmit one electronic copy of the comments for each docket or rulemaking number referenced in the caption. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions, filers should send an e-mail to ecfs@fcc.gov, and include the following words in the body of the message, "get form." A sample form and directions will be sent in response.
- Paper Filers: Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- The Commission's contractor will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, NE., Suite 110, Washington, DC 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail should be addressed to 445 12th Street, SW, Washington DC 20554.

77. Parties must also send a courtesy copy of their filing to Antoinette Stevens, Telecommunications Access Policy Division, Wireline Competition Bureau, Federal Communications

²²² See Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121 (1998).

Commission, 445 12th Street, S.W., Room 5-B540, Washington, D.C. 20554. Antoinette Stevens's email address is Antoinette.Stevens@fcc.gov and telephone number is (202) 418-7387.

78. Filings and comments are also available for public inspection and copying during regular business hours at the FCC Reference Information Center, Portals II, 445 12th Street, S.W., Room CY-A257, Washington, D.C., 20554. Copies may also be purchased from the Commission's duplicating contractor, BCPI, 445 12th Street, S.W., Room CY-B402, Washington, D.C. 20554. Customers may contact BCPI through its website: www.bcpiweb.com, by e-mail at fcc@bcpiweb.com, by telephone at (202) 488-5300 or (800) 378-3160, or by facsimile at (202) 488-5563.

79. For further information regarding this proceeding, contact Amy Bender, Wireline Competition Bureau, (202) 418-1469, e-mail: Amy.Bender@fcc.gov.

80. In addition to filing comments with the Secretary, a copy of any Paperwork Reduction Act (PRA) comments on the information collection(s) contained herein should be submitted to Judith B. Herman, Federal Communications Commission, Room 1-C804, 445 12th Street, S.W., Washington, D.C. 20554, or via the Internet to Judith-B.Herman@fcc.gov, and to Kristy L. LaLonde, OMB Desk Officer, Room 10234 NEOB, 725 17th Street, N.W., Washington, D.C. 20503 via the Internet to Kristy.L.LaLonde@omb.eop.gov or by fax to (202) 395-5167.

F. Accessible Formats

81. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at (202) 418-0531 (voice), (202) 418-7365 (TTY).

VII. ORDERING CLAUSES

82. Accordingly, IT IS ORDERED that, pursuant to sections 1, 2, 4(i), 4(j), 201, 202, 218-220, 254, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i)-(j), 201, 202, 218-220, 254, and 303(r), this Report and Order and Notice of Proposed Rulemaking in WC Docket No. 06-122, CC Docket No. 96-45, CC Docket No. 98-171, CC Docket No. 90-571, CC Docket No. 92-237/NSD File No. L-00-72, CC Docket No. 99-200, CC Docket No. 95-116, CC Docket No. 98-170, and WC Docket No. 04-36 IS ADOPTED, Part 54 of the Commission's Rules, 47 C.F.R. Part 54, IS AMENDED as set forth in Appendix A, Form 499-A IS AMENDED as set forth in Appendix C, and Form 499-Q IS AMENDED as set forth in Appendix D. The Report and Order shall become effective upon publication in the Federal Register. The information collection contained in the Report and Order will become effective following OMB approval.²²³ The Commission will publish a document at a later date establishing the effective date.

83. IT IS FURTHER ORDERED that, pursuant to sections 1, 2, 4(i), 4(j), 201, 202, 218-220, 254, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i)-(j), 201, 202, 218-220, 254, and 303(r), any mobile wireless provider that uses a traffic study to report actual interstate revenue data for universal service contribution purposes SHALL SUBMIT the traffic study to the Commission and to USAC.

84. IT IS FURTHER ORDERED that, pursuant to sections 1, 2, 4(i), 4(j), 201, 202, 218-220, 254, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i)-(j), 201, 202, 218-220, 254, and 303(r), any provider of interconnected VoIP service that proposes to use a traffic

²²³ In light of the importance of these rules, the Commission is seeking emergency approval from OMB. The Commission will issue a public notice announcing the date upon which the information collection requirements set forth in this Order shall become effective following receipt of such emergency approval.

study to report actual interstate revenue data for universal service contribution purposes SHALL PETITION the Commission for approval of its proposed traffic study.

85. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Report and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

86. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)

Implementation of the Non-Accounting)
Safeguards of Sections 271 and 272 of the)
Communications Act of 1934, as amended.)

CC Docket No. 96-149

**FIRST REPORT AND ORDER
AND FURTHER NOTICE OF PROPOSED RULEMAKING**

Adopted: December 23, 1996

Released: December 24, 1996

Comment Date: February 19, 1997

Reply Comment Date: March 21, 1997

By the Commission:

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I. INTRODUCTION

1. In February 1996, the Telecommunications Act of 1996 became law.¹ The intent of the 1996 Act is "to provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition."²

¹ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996 Act), to be codified at 47 U.S.C. §§ 151 et seq. Hereinafter, all citations to the 1996 Act will be to the 1996 Act as it will be codified in the United States Code. The 1996 Act amended the Communications Act of 1934. We will refer to the Communications Act of 1934, as amended, as "the Communications Act" or "the Act."

² See Joint Statement of Managers, S. Conf. Rep. No. 104-230, 104th Cong., 2d Sess. I (1996) (Joint Explanatory Statement).

2. In this proceeding, we adopt non-accounting safeguards, pursuant to section 272 of the Communications Act, to govern entry by the Bell Operating Companies (BOCs) into certain new markets.³ This proceeding is one of a series of interrelated rulemakings that collectively will implement the telephony provisions of the 1996 Act. Other proceedings under the 1996 Act have focused on opening markets to entry by new competitors,⁴ establishing rules to preserve and advance universal service,⁵ establishing rules for competition in those markets that are opened to competitive entry,⁶ and on lifting legal and regulatory barriers to competition.⁷

3. Upon enactment, the 1996 Act permitted the BOCs immediately to provide interLATA⁸ services⁹ that originate outside of their in-region states.¹⁰ The 1996 Act conditions

³ We define the term "BOC" as that term is defined in 47 U.S.C. § 153(4).

⁴ See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, FCC 96-325 (rel. Aug. 8, 1996) (First Interconnection Order), Motion for stay of the FCC's Rules Pending Judicial Review denied, FCC 96-378 (rel. Sep. 17, 1996), partial stay granted, Iowa Util. Bd. v. Federal Communications Commission, No. 96-3321, WL 589204 (8th Cir. Oct. 15, 1996) (Iowa Utilities Board v. FCC), Order Lifting Stay in Part, (8th Cir. Nov. 1, 1996); Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, Second Report and Order, and Memorandum Opinion and Order, FCC 96-333 (rel. Aug. 8, 1996) (Second Interconnection Order); appeal docketed Bell Atlantic Telephone Companies v. FCC, No. 90-567 (D.C. Cir. Sept. 16, 1996), People of the State of California v. FCC, No. 96-3519 (8th Cir. Sept. 23, 1996), SBC Communications Inc. v. FCC, No. 96-1414 (D.C. Cir. Nov. 1, 1996).

⁵ See Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Recommended Decision, FCC 96J-3 (rel. Nov. 8, 1996) (Universal Joint Board Recommended Decision); Order Establishing Joint Board on Universal Service, CC Docket No. 96-45, Notice of Proposed Rulemaking, FCC 96-93 (rel. Mar. 8, 1996).

⁶ See Amendment of the Commission's Rules to Establish Competitive Service Safeguards for Local Exchange Carrier Provision of Commercial Mobile Radio Services, WT Docket No. 96-162, Notice of Proposed Rulemaking, Order on Remand, and Waiver Order, FCC 96-319 (rel. Aug. 13, 1996).

⁷ See Common Carrier Bureau Seeks Suggestions on Forbearance, DA 96-798, Public Notice (rel. May 17, 1996); Policy and Rules Concerning the Interstate, Interexchange Marketplace: Implementation of Section 254(g) of the Communications Act of 1934, CC Docket No. 96-61, Second Report and Order, FCC 96-424 (rel. Oct. 31, 1996) (Second Interexchange Order).

⁸ Under the 1996 Act, a "local access and transport area" (LATA) is "a contiguous geographic area (A) established before the date of enactment of the [1996 Act] by a [BOC] such that no exchange area includes points within more than 1 metropolitan statistical area, consolidated metropolitan statistical area, or State, except as expressly permitted under the AT&T Consent Decree; or (B) established or modified by a [BOC] after such date of enactment and approved by the Commission." 47 U.S.C. § 153(25). LATAs were created as part of the Modification of Final Judgment's (MFJ) "plan of reorganization" under which the BOCs were divested from AT&T. United States v. Western Elec. Co., 552 F. Supp. 131 (D.D.C. 1982), aff'd sub nom. Maryland v. United States, 460 U.S. 1001 (1983); United States v. Western Elec. Co., 569 F. Supp. 1057 (D.D.C. 1983) (Plan of Reorganization), aff'd sub nom. California v. United States, 464 U.S. 1013 (1983); see also United States v. Western Elec. Co., No. 82-0192 (D.D.C. Apr. 11, 1996) (vacating the MFJ). Pursuant to the MFJ, "all BOC territory in the continental United States [was] divided into LATAs, generally centering upon a city or other identifiable community of interest."

the BOCs' entry into in-region interLATA services on their compliance with certain provisions of section 271. Under section 271, we must determine, among other things, whether the BOC has complied with the safeguards imposed by section 272 and the rules adopted herein.¹¹ Section 272 addresses the BOCs' provision of interLATA telecommunications services originating in states in which they provide local exchange and exchange access services, interLATA information services,¹² and BOC manufacturing activities.¹³

United States v. Western Elec. Co., 569 F. Supp. 990, 993 (D.D.C. 1983).

⁹ The 1996 Act defines "interLATA services" as "telecommunications between a point located in a local access and transport area and a point located outside such area." 47 U.S.C. § 153(21).

¹⁰ For purposes of this proceeding, we have defined the term "in-region state" as that term is defined in 47 U.S.C. § 271(i)(1). We note that section 271(j) provides that a BOC's in-region services include 800 service, private line service, or their equivalents that terminate in an in-region state of that BOC and that allow the called party to determine the interLATA carrier, even if such services originate out-of-region. Id. § 271(j); see also Bell Operating Company Provision of Out-of-Region Interstate Interexchange Services, CC Docket No. 96-21, Report and Order, FCC 96-288 (rel. July 1, 1996) (Interim BOC Out-of-Region Order) (addressing BOC provision of out-of-region, domestic, interstate, interexchange services).

¹¹ 47 U.S.C. § 271(d)(3)(B). The Commission also must find, within 90 days, that the interconnection agreements or statements approved by the appropriate state commission under section 252 satisfy the competitive checklist contained in section 271(c)(2)(B), and that the BOC's entry into the in-region interLATA market is "consistent with the public interest, convenience and necessity." Id. §§ 271(d)(3)(A), (d)(3)(C). In acting on a BOC's application for authority to provide in-region interLATA services, the Commission must consult with the Attorney General and give substantial weight to the Attorney General's evaluation of the BOC's application. In addition, the Commission must consult with the applicable state commission to verify that the BOC complies with the requirements of section 271(c). Id. § 271(d)(2)(B).

¹² The 1996 Act excludes electronic publishing (as defined in section 274(h)) and alarm monitoring (as defined in section 275(e)) from the separate affiliate requirement for interLATA information services. 47 U.S.C. § 272(a)(2)(C).

¹³ The MFJ prohibited the BOCs from providing information services, providing interLATA services, manufacturing and selling telecommunications equipment, and manufacturing customer premises equipment (CPE). The information services restriction was modified in 1987 to allow BOCs to provide voice messaging services and to transmit information services generated by others. United States v. Western Elec. Co., 673 F. Supp. 525 (D.D.C. 1987); United States v. Western Elec. Co., 714 F. Supp. 1 (D.D.C. 1988). In 1991, the restriction on BOC ownership of content-based information services was lifted. United States v. Western Elec. Co., 767 F. Supp. 308 (D.D.C. 1991), stav vacated, United States v. Western Elec. Co., 1991-1 Trade Cases (CCH) ¶ 69,610 (D.C. Cir. 1991). The 1996 Act defines the term "AT&T Consent Decree" to refer to the MFJ and all subsequent judgments or orders related to the MFJ. 47 U.S.C. § 153(3). In the text of this order, we use the term "MFJ" and "MFJ Court" only to refer to the AT&T Consent Decree as defined in the 1996 Act and by the decisions of the D.C. District Court. We will cite with particularity to the terms of the original Modification of Final Judgment cited at United States v. Western Elec. Co. 552 F. Supp. at 226-232.

4. On July 18, 1996, we initiated this proceeding by releasing a Notice of Proposed Rulemaking (Notice)¹⁴ that sought comment on the non-accounting separate affiliate and nondiscrimination safeguards of the 1996 Act. These provisions govern the BOCs' entry into certain new markets. We initiated a separate proceeding to address the accounting safeguards required to implement sections 260 and 272 through 276 of the Communications Act.¹⁵ Comments on the non-accounting separate affiliate and nondiscrimination safeguards were filed on August 15, 1996, and reply comments were filed on August 30, 1996.¹⁶

5. The Notice also sought comment on whether we should relax the dominant carrier classification that under our current rules would apply to in-region, interstate, domestic, interLATA services provided by the BOCs' interLATA affiliates. Further, the Notice sought comment on whether we should modify our existing rules for regulating the provision of in-region, interstate, interexchange services by independent local exchange carriers (LECs) (namely, carriers not affiliated with a BOC). Finally, the Notice considered whether to apply the same regulatory treatment to the BOC affiliates' and independent LECs' provision of in-region, international services, as would apply to the provision of in-region, interstate, domestic, interLATA services and in-region, interstate, domestic interexchange services, respectively. This order addresses only the non-accounting separate affiliate and nondiscrimination safeguards in sections 271 and 272. The classification of BOC affiliates or independent LECs (and their affiliates) as dominant or non-dominant will be addressed in a separate Report and Order in this docket.

6. In this order, we promulgate rules and policies implementing, and, where necessary, clarifying the non-accounting separate affiliate and nondiscrimination safeguards prescribed by Congress in sections 271 and 272. These safeguards are intended both to protect subscribers to BOC monopoly services, such as local telephony, against the potential risk of having to pay costs incurred by the BOCs to enter competitive markets, such as interLATA services and equipment manufacturing, and to protect competition in those markets from the BOCs' ability to use their existing market power in local exchange services to obtain an anticompetitive advantage in those new markets the BOCs seek to enter. Our action today continues the process of enhancing competition in all telecommunications markets as envisioned by the 1996 Act.

¹⁴ Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended; and Regulatory Treatment of LEC Provisions of Interexchange Services Originating in the LEC's Local Exchange Area, CC Docket No. 96-149, Notice of Proposed Rulemaking, FCC 96-308 (rel. July 18, 1996).

¹⁵ See Accounting Safeguards for Common Carriers Under the Telecommunications Act of 1996, CC Docket No. 96-150, Notice of Proposed Rulemaking, 11 FCC Rcd 9054 (1996) (Accounting Safeguards NPRM).

¹⁶ Appendix A lists the parties that filed comments and replies.

A. Background

7. The fundamental objective of the 1996 Act is to bring to consumers of telecommunications services in all markets the full benefits of vigorous competition. As we recognized in the First Interconnection Order, "[t]he opening of all telecommunications markets to all providers will blur traditional industry distinctions and bring new packages of services, lower prices, and increased innovation to American consumers."¹⁷ With the removal of legal, economic, and regulatory impediments to entry, providers of various telecommunications services will be able to enter each other's markets and provide various services in competition with one another. Both the BOCs and other firms, most notably existing interexchange carriers, will be able to offer a widely recognized brand name that is associated with telecommunications services. As firms expand the scope of their existing operations to new product lines, they will increasingly offer consumers the ability to purchase local, intraLATA, and interLATA telecommunications services, as well as wireless, information, and other services, from a single provider (*i.e.*, "one stop shopping"), and other advantages of vertical integration.¹⁸

8. The 1996 Act opens local markets to competing providers by imposing new interconnection and unbundling obligations on existing providers of local exchange service, including the BOCs. The 1996 Act also allows the BOCs to provide interLATA services in the states where they currently provide local exchange and exchange access services once they satisfy the requirements of section 271. Moreover, by requiring compliance with the competitive checklist set out in section 271(c)(2)(B) as a prerequisite to BOC provision of in-region interLATA service, the statute links the effective opening of competition in the local market with the timing of BOC entry into the long distance market, so as to ensure that neither the BOCs nor the existing interexchange carriers could enjoy an advantage from being the first to enter the other's market.

9. In enacting section 272, Congress recognized that the local exchange market will not be fully competitive immediately upon its opening. Congress, therefore, imposed in section 272 a series of separate affiliate requirements applicable to the BOCs' provision of certain new services and their engagement in certain new activities. These requirements are designed, in the absence of full competition in the local exchange marketplace, to prohibit anticompetitive discrimination and cost-shifting, while still giving consumers the benefit of competition.

10. As we observed in the Notice, BOC entry into in-region interLATA services raises issues for competition and consumers, even after a BOC has satisfied the requirements of section

¹⁷ First Interconnection Order at ¶ 4.

¹⁸ There are economies of scope where it is less costly for a single firm to produce a bundle of goods or services together, than it is for two or more firms, each specializing in distinct product lines, to produce them separately. See, *e.g.*, John C. Panzar and Robert D. Willig, Economies of Scope, 71 Am. Econ. Rev. of Papers and Proc. 268 (1981); William J. Baumol, John C. Panzar, and Robert D. Willig, Contestable Markets and the Theory of Industry Structure 71-79 (1982); Daniel F. Spulber, Regulation and Markets 114-15 (1989).

271(d)(3). BOCs currently are the dominant providers of local exchange and exchange access services in their in-region states, accounting for approximately 99.1 percent of the local service revenues in those markets.¹⁹ If a BOC is regulated under rate-of-return regulation, a price caps structure with sharing (either for interstate or intrastate services), a price caps scheme that adjusts the X-factor periodically based on changes in industry productivity, or if any revenues it is allowed to recover are based on costs recorded in regulated books of account, it may have an incentive to allocate improperly to its regulated core business costs that would be properly attributable to its competitive ventures.

11. In addition, a BOC may have an incentive to discriminate in providing exchange access services and facilities that its affiliate's rivals need to compete in the interLATA telecommunications services and information services markets. For example, a BOC may have an incentive to degrade services and facilities furnished to its affiliate's rivals, in order to deprive those rivals of efficiencies that its affiliate enjoys. Moreover, to the extent carriers offer both local and interLATA services as a bundled offering, a BOC that discriminates against the rivals of its affiliates could entrench its position in local markets by making these rivals' offerings less attractive. With respect to BOC manufacturing activities, a BOC may have an incentive to purchase only equipment manufactured by its section 272 affiliate, even if such equipment is more expensive or of lower quality than that available from other manufacturers.²⁰

12. Moreover, if a BOC charges other firms prices for inputs that are higher than the prices charged, or effectively charged, to the BOC's section 272 affiliate, then the BOC could create a "price squeeze."²¹ In that circumstance, the BOC affiliate could lower its retail price to reflect its unfair cost advantage, and competing providers would be forced either to match the price reduction and absorb profit margin reductions or maintain their retail prices at existing levels and accept market share reductions. This artificial advantage may allow the BOC affiliate to win customers even though a competing carrier may be a more efficient provider in serving the customer. Unlawful discriminatory preferences in the quality of the service or preferential

¹⁹ Industry Analysis Division, Telecommunications Industry Revenue: TRS Worksheet Data (Com. Car. Bur. Feb. 1996). Tables 18 and 15 show that BOC local and access revenues in 1994 were \$61.4 billion, while Competitive Access Provider (CAP) local and access revenues both in and out of BOC regions were only \$281 million. We acknowledge that the CAP rate of growth is high, but their share of the overall end market is small and is the key factor.

²⁰ Whenever a competing manufacturer sells its product at a price that exceeds the marginal cost of producing it, the possibility exists that a BOC would have an incentive to favor its affiliate's product over the competitor's, even when it is inefficient to do so. In general, the greater the difference between the competitor's price and cost, the greater the incentive for the BOC to favor its affiliate.

²¹ See, e.g., P.L. Joskow, Mixing Regulatory and Antitrust Policies in the Electric Power Industry: The Price Squeeze and Retail Market Competition, in Antitrust and Regulation: Essays in Memory of John J. McGowan 173-239 (F.M. Fisher ed., 1985); S.C. Salop and D.T. Scheffman, Raising Rivals' Costs, 73 Am. Econ. Rev. Papers & Proc. 267 (1983); T.G. Krattenmaker and S.C. Salop, Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power over Price, 96 Yale L.J. 209 (1986).

dissemination of information provided by BOCs to their section 272 affiliates, as a practical matter, can have the same effect as charging unlawfully discriminatory prices. If a BOC charged the same rate to its affiliate for a higher quality access service than the BOC charged to unaffiliated entities for a lower quality service, or disclosed information concerning future changes in network architecture to its manufacturing affiliate before disclosing it to others, the BOC could effectively create the same "price squeeze" discussed above.

13. The structural and nondiscrimination safeguards contained in section 272 ensure that competitors of the BOC's section 272 affiliate have access to essential inputs, namely, the provision of local exchange and exchange access services, on terms that do not discriminate against the competitors and in favor of the BOC's affiliate. Because the BOC has the incentive to provide its affiliate with the most efficient access, the statute requires the BOC to provide competitors the same access. Access to such inputs on nondiscriminatory terms will enable a new entrant to compete effectively, assuming it is at least as efficient as the BOC and/or its section 272 affiliate. At the same time, Congress also was sensitive to the value to the BOCs of potential efficiencies stemming from economies of scale. Our task is to implement section 272 in a manner that ensures that the fundamental goal of the 1996 Act is attained -- to open all telecommunications markets to robust competition -- but at the same time does not impose requirements on the BOCs that will unfairly handicap them in their ability to compete. The rules and policies adopted in this order seek to preserve the carefully crafted statutory balance to the extent possible until facilities-based alternatives to the local exchange and exchange access services of the BOCs make those safeguards no longer necessary.²²

B. Overview and Summary

14. Section 272 allows a BOC to engage in the manufacturing of telecommunications equipment and CPE, the origination of certain interLATA telecommunications services,²³ and the provision of interLATA information services,²⁴ as long as the BOC provides these activities through a separate affiliate. Unless extended by the Commission, the statutory separate affiliate requirements for manufacturing and interLATA telecommunications services expire three years after a BOC or any BOC affiliate is authorized to provide in-region interLATA services.²⁵ The

²² Access Charge Reform, CC Docket No. 96-262, Notice of Proposed Rulemaking, FCC 96-488 (rel. Dec. 24, 1996) (Access Charge Reform NPRM).

²³ Specifically, the separate affiliate requirement applies to the origination of interLATA telecommunications services, other than specified incidental interLATA services, out-of-region services, and previously authorized activities. 47 U.S.C. § 272(a)(2)(B).

²⁴ Id. § 272(a)(2)(C).

²⁵ Id. § 272(f)(1).

statutory interLATA information services separate affiliate requirement expires on February 8, 2000, four years after enactment of the 1996 Act, unless extended by the Commission.²⁶

15. This order implements the structural separation requirements mandated by section 272 in a manner that is designed to prevent improper cost allocation between the BOC and its section 272 affiliate and discrimination by the BOC in favor of its section 272 affiliate. In particular, we construe the section 272(b)(1) "operate independently" requirement to prohibit the BOC and its section 272 affiliate from jointly owning transmission and switching facilities or the land and buildings on which such facilities are located. Moreover, we prohibit a BOC and its affiliates, other than the section 272 affiliate itself, from providing operating, installation, and maintenance services associated with the facilities owned by the section 272 affiliate. Similarly, a section 272 affiliate may not provide such services associated with the BOC's facilities. These requirements should reduce the potential for the improper allocation of costs to the BOC that should be allocated to the section 272 affiliate. In addition, they should ensure that a section 272 affiliate must follow the same procedures as its competitors in order to gain access to a BOC's facilities. Consistent with these requirements and those established pursuant to sections 272(b)(5) and 272(c)(1), however, a section 272 affiliate may negotiate with an affiliated BOC on an arm's length basis to obtain transmission and switching facilities, to arrange for collocation of facilities, and to provide or obtain services other than those expressly prohibited herein.

16. The structural separation requirements of section 272, in conjunction with the affirmative nondiscrimination obligations imposed by that section, also are intended to address concerns that the BOCs could potentially use local exchange and exchange access facilities to discriminate against competitors in order to gain an anticompetitive advantage for their affiliates that engage in competitive activities. We interpret section 272(c)(1) as imposing a flat prohibition against discrimination more stringent than the bar on "unjust and unreasonable" discrimination contained in section 202 of the Act. In short, the BOCs must treat all other entities in the same manner in which they treat their section 272 affiliates. We conclude that a BOC may not discriminate in favor of its section 272 affiliate by: 1) providing exchange access services to competing interLATA service providers at a higher rate than the rate offered to its section 272 affiliate; 2) providing a lower quality service to competing interLATA service providers than the service it provides to its section 272 affiliate at a given price; 3) giving preference to its affiliate's equipment in the procurement process; or 4) failing to provide advance information about network changes to its competitors. We seek comment in a Further Notice of Proposed Rulemaking on specific disclosure requirements to implement section 272(e)(1).

17. In this order, we also seek to ensure that BOC section 272 affiliates have the same opportunity to compete for customers as other long distance service providers. The joint marketing rules we have established limit the ability of the largest interexchange carriers to market jointly their interLATA service with resold BOC local exchange service, until the BOC receives in-region, interLATA authority under section 271 or until 36 months after enactment of

²⁶ Id. § 272(f)(2).

the 1996 Act. Once the BOC receives interLATA authority, the restrictions on interexchange carrier joint marketing expire, and the interexchange carriers and the BOCs and their section 272 affiliates may engage in the same types of marketing activities.

18. In addition, we clarify that the Communications Act allows a section 272 affiliate to purchase unbundled elements pursuant to section 251(c)(3)²⁷ and telecommunications services at wholesale rates under section 251(c)(4).²⁸ Thus, the section 272 affiliate may provide integrated services in the same manner as other competitors. Such an approach is consistent with the objectives of the 1996 Act, which are to give service providers the freedom to develop a wide array of service packages and allow consumers to select what best suits their needs. We note, however, that the BOC may not transfer local exchange and exchange access facilities and capabilities to the section 272 affiliate, or another affiliate, in order to evade regulatory requirements.

19. We recognize that no regulatory scheme can completely prevent or deter discrimination, particularly in its more subtle forms. In this order, we shift the burden of production to the BOCs in the context of section 271(d)(6) enforcement proceedings in order to alleviate the burden on the complainant and facilitate the detection of anticompetitive behavior. Because the BOC is likely to be in sole possession of most of the relevant information necessary to establish the complainant's case, shifting the burden is the most efficient way of resolving complaints alleging violations of the conditions of in-region interLATA entry under section 271(d)(3). The goal of this proceeding and others is to establish a regulatory framework that enables service providers to enter each other's markets and compete on an equal footing by not allowing one service provider to game regulatory requirements in such a way as to hinder competition.

II. SCOPE OF COMMISSION AUTHORITY

A. Rulemaking Authority

1. Background

20. In the Notice, we addressed the scope of the Commission's authority, pursuant to sections 271 and 272, over interLATA services, interLATA information services and

²⁷ 47 U.S.C. § 251(c)(3).

²⁸ 47 U.S.C. § 251(c)(4).

manufacturing activities.²⁹ Although we did not seek comment on whether the Commission has authority to adopt rules implementing section 272, several commenters addressed this issue.

2. Comments

21. Certain BOCs and USTA maintain that the Commission lacks authority to adopt rules implementing the non-accounting safeguards contained in section 272.³⁰ They further maintain that, even if the Commission has such authority, it should not adopt any rules because they are not necessary. These and other parties argue that section 272 contains detailed separate affiliate requirements and therefore is self-executing and needs little or no interpretation.³¹ They further suggest that all of the Commission's proposed regulations are impermissible because they go beyond the basic terms of section 272.³² Bell Atlantic and USTA assert that Congress clearly intended for section 272 to be a self-executing provision because a Senate bill provision specifying that the Commission implement regulations under section 272 was removed from the legislation in conference.³³

22. In response, other parties argue that the Commission has the authority to, and should, promulgate rules implementing section 272. AT&T, TIA, and Time Warner maintain that the Commission has authority, pursuant to other provisions of the Act, including sections 4(i), 201(b), and 303(r), to adopt rules implementing section 272, even though section 272 does not

²⁹ Notice at ¶¶ 19-30. In the Notice, in addressing the scope of sections 271 and 272, we referred to "interLATA services" and "interLATA information services" separately (but in the same analysis). In part III.A.1 of this Order, we determine that "interLATA services" includes "interLATA information services." Accordingly, in the discussion in this section regarding the scope of sections 271 and 272, we refer only to interLATA services, but intend that the use of that term include interLATA information services.

³⁰ Bell Atlantic at 2-3 (with regard to intrastate services); BellSouth at 3-6; SBC at 2-5 (Commission has authority to implement and enforce section 272, but may not expand those requirements); USTA at 2-3, 7-8; USTA Reply at 3.

³¹ USTA at 3-4, 7-8; Bell Atlantic at 2-3; BellSouth at 3-6. BellSouth also argues that Congress did not grant the Commission authority to adopt "legislative" rules other than accounting rules, and therefore any rules the Commission adopts would constitute "interpretive" rules not entitled to judicial deference. BellSouth at 3 (citing Chevron, U.S.A., Inc. v. Natural Resources Defense Council, 467 U.S. 837, 842-43 (1984)); see also SBC at 2-5; U S West Reply at 4 (stating that, "although the Commission certainly retains its general rulemaking authority, it should tread lightly here"); PacTel at 3-4 (stating that there are ambiguities in section 272 for which the "Commission's guidance would be helpful," but stating that "[b]eyond those difficulties, the only specific areas where Congress envisioned further rulemaking by the FCC were accounting and record keeping").

³² Bell Atlantic at 2-3; BellSouth at 4-6; USTA at 8; SBC at 2-5 (stating that the Commission has authority to implement and enforce section 272, but may not expand those requirements).

³³ Bell Atlantic at 3; USTA at 3.

specifically direct the Commission to adopt rules.³⁴ AT&T and Time Warner state that the Commission has the authority to adopt implementing rules when Congress enacts broad principles that require interpretation,³⁵ and that section 272 contains ambiguities that require explanation in order to effectuate the 1996 Act's purposes.³⁶ Time Warner argues that the courts have consistently held that the Commission has expansive rather than limited powers to conduct general rulemakings, so long as those rulemakings are based on permissible public interest goals and are a reasonable means to achieve those goals.³⁷ Finally, in response to the claim that the removal of specific 272 rulemaking authority indicates that Congress intended for section 272 to be self-executing, AT&T argues that Congress could have precluded the Commission from adopting rules, but did not.³⁸

3. Discussion

23. We reject as unfounded the assertion that the Commission lacks authority to adopt regulations implementing section 272. Sections 4(i), 201(b), and 303(r) of the Act authorize the Commission to adopt any rules it deems necessary or appropriate in order to carry out its responsibilities under the Act, so long as those rules are not otherwise inconsistent with the Act.³⁹ Nothing in section 272 bars the Commission from exercising the rulemaking authority granted by these sections of the Act to clarify and implement the requirements of section 272. Moreover, courts repeatedly have held that the Commission's general rulemaking authority is "expansive" rather than limited.⁴⁰ In addition, as AT&T notes, it is well-established that an agency has the

³⁴ AT&T Reply at 6-7 & n.14; TIA Reply at 6-7; Time Warner Reply at 4-6; see also LDDS Reply at 2-4; MCI Reply at 2 n.6.

³⁵ AT&T Reply at 6 (citing *Morton v. Ruiz*, 415 U.S. 199, 231 (1974), and *Chevron, U.S.A., Inc. v. Natural Resources Defense Council*, 467 U.S. 837 (1984)); Time Warner Reply at 6.

³⁶ AT&T Reply at 8-14; LDDS Reply at 3-4; MCI Reply at 2; see also PacTel at 3 (stating that "it would serve the interests of justice for the Commission to indicate in advance -- whether by rule or otherwise -- how it interprets any ambiguous requirements in § 272 so that the BOCs may be advised of what is necessary to comply"); Sprint Reply at 2-3.

³⁷ Time Warner Reply at 5-6 (citing *Nat'l Broadcasting Co. v. United States*, 319 U.S. 190, 219 (1943) and *Fed. Communications Comm'n v. Nat'l Citizens Comm. for Broadcasting*, 436 U.S. 775, 776, 793 (1978)); see also Sprint Reply at 2-3 (stating that "[t]he ability of the Commission to use general rulemaking procedures to provide further guidance to the states and interested parties and to thereby explicate the policies and interpretations it intends to adopt in its administration of the statute entrusted to its jurisdiction so as to carry out the intent of Congress is at the heart of the regulatory process").

³⁸ AT&T Reply at 6.

³⁹ See *United States v. Storer Broadcasting Co.*, 351 U.S. 192, 202-03 (1956).

⁴⁰ *Nat'l Broadcasting Co. v. United States*, 319 U.S. 190, 219 (1943); see also *Fed. Communications Comm'n v. Nat'l Citizens Comm. for Broadcasting*, 436 U.S. 775, 793 (1978).

authority to adopt rules to administer congressionally mandated requirements.⁴¹ Contrary to those parties that argue that section 272 is self-executing, we find that Congress enacted in section 272 broad principles that require interpretation and implementation in order to ensure an efficient, orderly, and uniform regime governing BOC entry into in-region interLATA telecommunications and other markets covered by section 272. In the Notice, we identified areas of ambiguity in the requirements of section 272 with the specific goal of clarifying and implementing Congress's intent in that provision. That remains our goal in this Order. Due to the importance of the introduction of competition to the local exchange market, we believe this Order to be both important and necessary to protect BOC customers and new entrants. Further, we agree with PacTel that it serves the interests of justice for us to clarify in advance the section 272 requirements so that BOCs and other parties may be advised of what is required to meet the condition for 271 authorization that in-region interLATA services be provided in compliance with section 272.⁴²

24. We are not persuaded by the argument that the removal of the Senate bill's provision regarding implementing regulations from the 1996 Act indicates Congress's intent that section 272 be self-executing. Parties advancing this argument rely on a rule of statutory construction providing that, when a provision in a prior draft is altered in the final legislation, Congress intended a change from the prior version. The courts have rejected this rule of statutory construction, however, when changes from one draft to another are not explained.⁴³ In this instance, the only statement from Congress regarding the meaning of the omission of the Senate provision appears in the Joint Explanatory Statement. According to that Statement, all differences between the Senate Bill, the House Amendment, and the substitute reached in conference are noted therein "except for clerical corrections, conforming changes made necessary by agreements reached by the conferees, and minor drafting and clerical changes."⁴⁴ Because the Joint Explanatory Statement did not address the removal of the Senate bill provision, the logical inference is that Congress regarded the change as an inconsequential modification, rather than a significant alteration. Moreover, it seems implausible that, in enacting the final version of section 272, Congress intended a radical alteration of the Commission's general rulemaking authority.

⁴¹ See Chevron, U.S.A., Inc. v. Natural Resources Defense Council, 467 U.S. 837 (1984); Morton v. Ruiz, 415 U.S. 199, 231 (1974) (holding that "[t]he power of an administrative agency to administer a congressionally created . . . program necessarily requires the formulation of policy and the making of rules to fill any gap left, implicitly or explicitly, by Congress").

⁴² See PacTel at 3.

⁴³ Mead Corp. v. Tilley, 490 U.S. 714, 723 (1989); Rastelli v. Warden, 782 F.2d 17, 23 (2d Cir. 1986); Drummond Coal v. Watt, 735 F.2d 469, 474 (11th Cir. 1984).

⁴⁴ Joint Explanatory Statement at 113.

We therefore conclude that elimination of the proposed provision was a nonsubstantive change.⁴⁵ Based on the foregoing, we find, pursuant to the general rulemaking authority vested in the Commission by sections 4(i), 201(b), and 303(r) of the Act, and consistent with fundamental principles of administrative law, that the Commission has the requisite authority to promulgate rules implementing section 272 of the Act.

B. Scope of Commission's Authority Regarding InterLATA Services

a. Background

25. In the Notice, we tentatively concluded that the Commission's authority under sections 271 and 272 applies to intrastate and interstate interLATA services provided by BOCs or their affiliates.⁴⁶ We based this tentative conclusion in part on our analysis that Congress intended sections 271 and 272 to replace the pre-Act restrictions on the BOCs contained in the MFJ, which barred their provision of both intrastate and interstate interLATA services.⁴⁷ We also observed that the interLATA/intraLATA distinction appears to some extent to have supplanted the traditional interstate/intrastate distinction for purposes of sections 271 and 272.⁴⁸ We further noted that reading sections 271 and 272 as applying to all interLATA services fits well with the structure of the statute as a whole,⁴⁹ and that reading the sections as limited to interstate services would lead to implausible results.⁵⁰ We also indicated that we do not believe that section 2(b) of the Act precludes the conclusion that our authority under sections 271 and 272 applies to intrastate as well as interstate interLATA services.⁵¹ Finally, we asked parties that disagreed with the foregoing analysis to comment on the extent to which the Commission may have authority to preempt state regulation with respect to some or all of the non-accounting matters addressed by sections 271 and 272.⁵²

⁴⁵ In addition, even if the removal were considered as more than inconsequential, we believe that the most plausible explanation is that Congress found such a specification unnecessary in light of sections 4(i), 201(b), 303(r), and long-standing principles of administrative law.

⁴⁶ Notice at ¶ 25.

⁴⁷ *Id.* at ¶ 21.

⁴⁸ *Id.* at ¶ 22.

⁴⁹ *Id.* at ¶ 23.

⁵⁰ *Id.* at ¶ 25.

⁵¹ *Id.* at ¶ 26.

⁵² *Id.* at ¶ 28.

b. Comments

26. Many parties, including BellSouth, PacTel, USTA and the New York Commission, agree that sections 271 and 272 cover both intrastate and interstate services.⁵³ DOJ, BellSouth, and AT&T maintain that the Act, by its terms, explicitly covers intrastate interLATA services and thus, grants the Commission authority over intrastate interLATA services for purposes of sections 271 and 272.⁵⁴ DOJ and AT&T argue that, because the grant is explicit, section 2(b) does not bar the Commission from adopting rules that apply to the provision of intrastate interLATA services.⁵⁵ These and other parties generally argue, as a separate basis for finding that sections 271 and 272 extend to both intrastate and interstate interLATA services, that Congress intended for the Act to replace the MFJ.⁵⁶ These parties contend that, since the MFJ restrictions applied to the BOCs' provision of both intrastate and interstate interLATA services, Congress intended for sections 271 and 272 to apply to the BOCs' provision of both types of services as well.⁵⁷ Indeed, several of these parties maintain that interpreting sections 271 and 272 as covering both intrastate and interstate interLATA services is the only reasonable interpretation.⁵⁸ Several parties further maintain that section 2(b) of the Act does not affect this analysis.⁵⁹

⁵³ DOJ Reply at 4-7; New York Commission at 2-3 (but arguing that the Commission lacks authority to establish rules applicable to intrastate interLATA services); BellSouth at 15; PacTel at 3 (maintaining, however, that "Congress did not give the FCC plenary authority over those services to implement any and all regulations and safeguards whatsoever."); USTA at 7 (but arguing that section 272 is self-executing); AT&T at 8; AT&T Reply at 3-4; Sprint Reply at 9-10; Sprint Reply at 4; MCI at 3; MCI Reply at 3-4; Excel at 11; CompTel at 3-6; TRA at 5-6; ITAA at 5-7.

⁵⁴ DOJ Reply at 4-5 (arguing that the Act's definitions of the terms "LATA," and "interLATA" include intrastate services); AT&T at 8 (arguing that the Act's definition of the term "interLATA" applies to both intrastate and interstate services so long as they cross a LATA boundary); BellSouth at 15-16 (stating that "[t]he explicit grants of FCC jurisdiction in Sections 271 and 272 override the generic restrictions on FCC jurisdiction in Section 2(b)," but arguing that "these exemptions must be narrowly construed in order to preserve the meaning of 2(b)"); see also CompTel at 4, 5 (stating that "[p]ursuant to the MFJ, LATAs were defined based 'upon a city or other identifiable community or interest,' without limitation by state boundaries. Because a single state may contain more than one LATA, interLATA communications may be intrastate as well as interstate in nature." (footnote omitted)).

⁵⁵ DOJ Reply at 6-7; AT&T at 8-9.

⁵⁶ New York Commission at 2-4 (maintaining, however, that the Commission lacks authority to establish rules applicable to intrastate interLATA services); BellSouth at 15; USTA at 7; DOJ Reply at 5-6; AT&T at 8 n.7; MCI at 3; Excel at 11; CompTel at 5-6; TRA at 5-6; ITAA at 5-7.

⁵⁷ New York Commission at 2-4 (maintaining, however, that the Commission lacks authority to establish rules applicable to intrastate interLATA services); BellSouth at 15; USTA at 7; AT&T at 8 n.7; DOJ Reply at 5-6; MCI at 3; Excel at 11; CompTel at 5-6; TRA at 5-6; ITAA at 5-7.

⁵⁸ DOJ Reply at 7; MCI at 5; MCI Reply at 3-4; Excel at 11; ITAA at 5-6; CompTel at 5-6.

⁵⁹ AT&T at 8-9; Sprint Reply at 5; MCI at 5; TRA at 6-7; see also DOJ Reply at 6-7.

27. State representatives and some of the BOCs, however, challenge our tentative conclusion that sections 271 and 272 give the Commission authority over intrastate interLATA services.⁶⁰ These parties argue that sections 2(b) and 601(c) of the Act bar the Commission from exercising authority under sections 271 and 272 to establish rules applicable to intrastate services.⁶¹ Although the New York Commission agrees with our tentative view that the term "interLATA" covers both intrastate and interstate services,⁶² other parties objecting to our reading of the scope of sections 271 and 272 generally do not address the issue of whether the term "interLATA services" as used in the Act or the MFJ includes intrastate interLATA services. Instead, they appear to contend that, even if the term "interLATA services" includes both intrastate and interstate services, section 2(b) precludes the Commission from establishing rules applicable to intrastate interLATA services.⁶³ According to these parties, states have authority to establish rules to govern the BOCs' provision of intrastate interLATA services,⁶⁴ and it is premature for the Commission at this time to preempt states from exercising that authority.⁶⁵ NARUC and the Missouri Commission claim that the legislative history shows that Congress intended to limit the Commission's authority under sections 271 and 272 to interstate services. In support of this claim, these parties point to the fact that the House and Senate versions of the pre-conference bill exempted sections 271 and 272 from section 2(b), but those exemptions were removed in the final legislation.⁶⁶

28. Parties opposing our tentative conclusions also argue that, although the MFJ restrictions on the BOCs applied to both interstate and intrastate interLATA services, the states retained authority to regulate a BOC's intrastate interLATA services when such services were authorized by the MFJ Court.⁶⁷ They assert, therefore, that, even if sections 271 and 272 apply to intrastate services, those provisions would not divest the states of authority over intrastate

⁶⁰ Bell Atlantic at 3; BellSouth at 15-17; California Commission at 2-9; Missouri Commission at 3; New York Commission at 2-6; Ohio Commission at 2-5; Wisconsin Commission Reply at 3-11; NARUC at 4-7.

⁶¹ Bell Atlantic at 3; BellSouth at 15-16; California Commission at 2-3; Missouri Commission at 3; New York Commission at 3-5; Ohio Commission at 2; Wisconsin Commission Reply at 3; NARUC at 7.

⁶² New York Commission at 2-3.

⁶³ Bell Atlantic at 3; BellSouth at 15-16; California Commission at 2-3; Missouri Commission at 2-3; New York Commission at 2-5; Ohio Commission at 2; NARUC at 7; see Wisconsin Commission Reply at 2, 6-8.

⁶⁴ BellSouth at 15-17; California Commission at 5-6, 9; Missouri Commission at 2-3; New York Commission at 2-5; Ohio Commission at 2-5; Wisconsin Commission Reply at 3-5, 6-11; NARUC at 5-7.

⁶⁵ New York Commission at 5-6; Wisconsin Commission Reply at 5-6; NARUC at 4-5.

⁶⁶ NARUC at 7; Missouri Commission at 3; see also Bell Atlantic at 3.

⁶⁷ California Commission at 3-4; Missouri Commission at 2; New York Commission at 3-4; NARUC at 6.

services,⁶⁴ and that the Commission's authority, if it exists, under sections 271 and 272, is not plenary.⁶⁹

29. None of the parties opposing our reading of the scope of sections 271 and 272 contends that the Commission's authority under section 271(d) to authorize BOC entry into in-region interLATA services does not extend to BOC provision of intrastate interLATA services. The Wisconsin Commission argues, however, that "a state might decide that, for intrastate interLATA purposes, BOC (or affiliate) entry into intrastate interLATA markets should be delayed subject to satisfaction of previously-made infrastructure investment commitments, needed quality of service improvements, universal service obligations, or some other factor for which delayed or conditioned entry into intrastate interLATA markets is appropriate leverage exercised in the public interest."⁷⁰

3. Discussion

30. For the reasons set forth below, we conclude that sections 271 and 272, and the Commission's authority thereunder, apply to intrastate as well as interstate interLATA services provided by the BOCs or their affiliates. We base this conclusion on the scope of the pre-1996 Act MFJ restrictions on the BOCs' provision of interLATA services, as well as on the plain language of sections 271 and 272, and the requirements of those sections. In addition, we find that section 2(b) does not bar the Commission from establishing regulations to clarify and implement the requirements of section 272 that apply to intrastate interLATA services and other intrastate matters that are within the scope of section 272. We hold, therefore, that the rules we establish to implement section 272 are binding on the states, and the states may not impose regulations with respect to BOC provision of intrastate interLATA service that are inconsistent with section 272 and the Commission's rules under section 272. We emphasize, however, that the scope of the Commission's authority under sections 271 and 272 extends only to matters covered by those sections. Those sections do not alter the jurisdictional division of authority with respect to matters falling outside their scope. For example, rates charged to end users for intrastate interLATA service have traditionally been subject to state authority, and will continue to be.

⁶⁴ California Commission at 3; Missouri Commission at 2; New York Commission at 3; Ohio Commission at 2; Wisconsin Commission Reply at 4; NARUC at 5-7.

⁶⁹ BellSouth at 15; PacTel at 3. BellSouth and PacTel argue that Congress did not intend to give the Commission plenary jurisdiction over intrastate interLATA services. BellSouth at 15; PacTel at 3.

⁷⁰ Wisconsin Commission Reply at 7.

31. We stated in the Notice, and several parties agree, that section 601(a) of the 1996 Act indicates that Congress intended the provisions of the Act to supplant the MFJ.⁷¹ That section provides:

Any conduct or activity that was, before the date of enactment of this Act, subject to any restriction or obligation imposed by the [MFJ] shall, on and after such date, be subject to the restrictions and obligations imposed by the Communications Act of 1934 as amended by this Act and shall not be subject to the restrictions and the obligations imposed by [the MFJ].⁷²

No party challenges the fact that the MFJ generally prohibited the BOCs and their affiliates from providing any interLATA services -- interstate or intrastate.⁷³ Moreover, no party challenges the fact that the term "interLATA services" as used in the MFJ referred to both intrastate and interstate services.⁷⁴

32. Similarly, with respect to the term "interLATA services" as used in sections 271 and 272, the DOJ, AT&T, and BellSouth maintain that, because the Act defines the term "interLATA" to include intrastate services, references in sections 271 and 272 to interLATA services apply to both intrastate and interstate services. We agree.

33. The Act defines "interLATA service" as "telecommunications between a point in a local access and transport area and a point located outside such area."⁷⁵ The Act further defines the term "LATA" as "a contiguous geographic area . . . established before the date of enactment of the [1996 Act] by a Bell operating company such that no exchange area includes points within more than 1 metropolitan statistical area, consolidated metropolitan statistical area, or State, except as expressly permitted under the [MFJ]" or subsequently modified with approval of the

⁷¹ Notice at ¶ 21; DOJ Reply at 5-6; New York Commission at 2-4 (maintaining, however, that the Commission lacks authority to establish rules applicable to intrastate interLATA services); Missouri Commission at 2 (but arguing that states still retain jurisdiction, as they did under the MFJ); BellSouth at 15-16 (stating that "the FCC unquestionably has authority to entertain and act upon Section 271 applications for BOC interLATA entry, whether interstate or intrastate;" but asserting that "Congress did not intend to give the Commission plenary jurisdiction over intrastate interLATA services"); AT&T at 8 n.7; Excel at 11; CompTel at 5-6; TRA at 5-6; ITAA Comments at 5.

⁷² 1996 Act, § 601(a), 110 Stat. 56, 143 (to be codified as a note following 47 U.S.C. § 152).

⁷³ See United States v. Western Electric Co., 552 F. Supp. 131, 227 (D.D.C. 1982) (subsequent history omitted).

⁷⁴ See id., 552 F. Supp. at 229 (defining "exchange area" and "interexchange telecommunications"); United States v. Western Electric Co., 569 F. Supp. 990, 993 (D.D.C. 1983) (explaining that the term "local access and transport area" was being used as a replacement for "exchange area") (subsequent history omitted).

⁷⁵ 47 U.S.C. § 153(21).

Commission.⁷⁶ This definition expressly recognizes that a LATA may comprise an area, such as a metropolitan statistical area, that is smaller than a state.⁷⁷ Indeed, the DOJ notes that most LATAs established by the MFJ consist of only parts of individual states; only nine LATAs out of a total of 158 encompass an entire state.⁷⁸ Thus, by defining an interLATA service as telecommunications from a point inside a LATA to a point outside a LATA, the Act expressly recognizes that interLATA services may include telecommunications between two LATAs within a single state. Accordingly, we find that the term "interLATA services," as used in sections 271 and 272, expressly refers to both intrastate and interstate services.

34. Although the term "interLATA services" as used in the MFJ and in sections 271 and 272 refers to both interstate and intrastate interLATA services, the New York Commission and others assert that, when Congress transferred responsibility for enforcing the prohibition on the BOCs' provision of interLATA services from the U.S. District Court to the Commission, it intended to limit our authority only to interstate interLATA services.⁷⁹ To the contrary, we find that reading sections 271 and 272 as granting the Commission authority over intrastate as well as interstate interLATA services is consistent with, and indeed necessary to effectuate, Congress's intent that sections 271 and 272 replace the restrictions of the MFJ with respect to BOC provision of interLATA services.

35. The jurisdictional limitation that the New York Commission and others seek to read into sections 271 and 272 would lead to implausible results. Specifically, under that statutory interpretation, the BOCs would have been permitted to provide in-region, intrastate, interLATA services upon enactment, without complying with the section 271 entry requirements or the section 272 safeguards, and subject only to any existing, generally applicable state rules on interexchange entry. Any such rules, presumably, would not have been specifically directed at BOC entry, because of the long-standing MFJ prohibition on entry. Because concerns about BOC control of bottleneck facilities needed for the provision of in-region interLATA services are applicable to both interstate and intrastate services, it seems clear that sections 271 and 272 apply equally to the BOCs' provision of both intrastate and interstate, in-region, interLATA services. We find no reasonable basis for concluding that Congress intended to lift the MFJ's ban on BOC provision of intrastate interLATA services, which constitute approximately 30 percent of interLATA traffic, and permit the BOCs to offer such services before satisfying the requirements

⁷⁶ 47 U.S.C. § 153(25). As the court stated, "simply put, [a Standard Metropolitan Statistical Area] is a U.S. Department of Commerce designation that includes a city and its suburbs. United States v. Western Electric Co., 569 F.Supp. at 993, n.8.

⁷⁷ States served by a BOC with only one LATA are: Delaware, Maine, New Hampshire, New Mexico, Rhode Island, South Dakota, Utah, Vermont, and Wyoming. The District of Columbia is covered entirely by one LATA that also covers portions of southern Maryland and northern Virginia. DOJ Reply at 6 n.4.

⁷⁸ DOJ Reply at 6.

⁷⁹ See Bell Atlantic at 3; BellSouth at 15-16; California Commission at 2-3; Missouri Commission at 2-3; New York Commission at 2-5; Ohio Commission at 2; Wisconsin Commission Reply at 3-4; NARUC at 5-7.

of sections 271 and 272.⁸⁰ As the DOJ notes, "Congress could not have intended, for example, to open up the intrastate interLATA market immediately for BOC entry, without the carefully-devised entry requirements of Section 271, while at the same time establishing those requirements with respect to interstate interLATA entry. Nor could Congress have meant to defeat the safeguards carefully imposed under Section 272 by permitting the BOCs to engage in the behavior which Section 272 prohibits, as long as they do it within the individual states."⁸¹ Indeed, we find it significant that neither the states nor the BOCs have argued that such a result was intended. In light of this analysis, we find that the Commission's authority under sections 271 and 272 extends to both intrastate and interstate interLATA services.

36. Similarly, several parties support the conclusion that our authority to consider the applications of BOCs seeking to provide in-region interLATA service pursuant to section 271(d) applies to both interstate and intrastate services.⁸² None of the state representatives and BOCs commenting on this issue claims that the Commission's authority under section 271(d) does not apply to a BOC's provision of intrastate interLATA services. Despite the lack of controversy on this point, several commenters claim that rules adopted under section 272 apply only to interstate services.⁸³ We believe that the requirements of sections 271 and 272 repudiate this argument. In granting an application under section 271(d), the Commission must determine, among other things, that the BOC meets the requirements of section 271(d)(3)(B). Under this provision, the Commission must find that the requested authorization "will be carried out in accordance with the requirements of section 272."⁸⁴ In light of the Commission's authority to approve entry into both intrastate and interstate in-region interLATA service, pursuant to section 271, it seems logical and necessary that the Commission's authority to impose safeguards established by section 272, should similarly extend to both intrastate and interstate interLATA service.

37. Several parties have argued that, although the MFJ restrictions on the BOCs applied to both interstate and intrastate interLATA services, the states retained authority to regulate a BOC's intrastate interLATA services when such services were authorized by the MFJ court. They assert, therefore, that, even if sections 271 and 272 apply to intrastate services, those

⁸⁰ See Industry Analysis Division, Telecommunications Industry Revenue: TRS Fund Worksheet Data, Table 6 (Com. Car. Bur. Feb. 1996).

⁸¹ DOJ Reply at 7.

⁸² DOJ Reply at 4-7; New York Commission at 2 (maintaining, however, that the Commission lacks authority to establish rules regarding intrastate services); AT&T at 8; AT&T Reply at 3-5; MCI at 3; MCI Reply at 3-4; Sprint at 9-10; Sprint Reply at 4; USTA at 7 (but arguing that section 272 is self-implementing); Excel at 11; CompTel at 3-4; TRA at 5-6; ITAA at 5-7; BellSouth at 15 (maintaining, however, that Congress did not intend to give the Commission plenary jurisdiction over intrastate interLATA services); PacTel at 3.

⁸³ Bell Atlantic at 3; BellSouth at 15-16; California Commission at 2-3; Missouri Commission at 2-3; New York Commission at 2-5; Ohio Commission at 2; NARUC at 7; see Wisconsin Commission Reply at 2, 6-8.

⁸⁴ 47 U.S.C. §271(d)(3).

provisions would not divest the states of authority over intrastate services. As we stated at the outset of this discussion, the scope of the Commission's authority under sections 271 and 272 extends only to matters covered by those sections, *i.e.*, authorization for BOC entry into in-region interLATA service and the safeguards imposed in section 272. We do not dispute that the states retain their authority to regulate intrastate services in other contexts.

38. We further find that the requirements of sections 271 and 272 buttress our conclusions regarding the scope of the Commission's jurisdiction. For example, we find it significant that section 271(h) directs the Commission to address intrastate matters relating to BOC provision of incidental interLATA services. That section states that "[t]he Commission shall ensure that the provision of [incidental interLATA services] by a Bell operating company or its affiliate will not adversely affect telephone exchange service ratepayers or competition in any telecommunications market."⁸⁵ Telephone exchange service is primarily an intrastate service. This reference to a plainly intrastate service indicates that the scope of section 271 encompasses intrastate matters, and thus the Commission's authority thereunder applies to both intrastate and interstate interLATA services.

39. State representatives and some BOCs argue that sections 2(b) and 601(c) of the Act preserve the states' authority to adopt rules regarding BOC provision of intrastate interLATA services. They argue that section 2(b) bars the Commission from exercising authority under sections 271 and 272 to establish rules applicable to intrastate interLATA services.⁸⁶ For the reasons set forth below, we find that section 2(b) does not preclude us from finding that sections 271 and 272, and our authority to promulgate rules thereunder, apply to BOC provision of intrastate interLATA services.

40. In Louisiana Public Service Commission v. Federal Communications Commission, the Supreme Court determined that, in order to overcome section 2(b)'s limits on the Commission's jurisdiction with respect to intrastate communications service, Congress must either modify section 2(b) or grant the Commission additional authority.⁸⁷ As explained above, we find that the term "interLATA services," by the Act's own definition, includes intrastate services, and that Congress, in sections 271 and 272, expressly granted the Commission authority over intrastate interLATA services for purposes of those sections. Accordingly, consistent with the

⁸⁵ Id. § 271(h) (emphasis added).

⁸⁶ As noted above, with the exception of the New York Commission, the parties challenging the Commission's authority to preempt state regulation do not address the issue of whether the term "interLATA services" should be interpreted — by definition or otherwise — to include both intrastate as well as interstate services.

⁸⁷ Louisiana Public Service Comm'n v. Fed. Communications Comm'n, 476 U.S. 355, 377 (1986). Section 2(b) provides that, except as provided in certain enumerated sections [not including sections 271 and 272], "nothing in [the Communications Act] shall be construed to apply or to give the Commission jurisdiction with respect to . . . charges, classifications, practices, services, facilities, or regulations for or in connection with intrastate communications service by wire or radio of any carrier." 47 U.S.C. § 152(b).

Court's statement in Louisiana, we find that section 2(b) does not limit our authority over intrastate interLATA services under sections 271 and 272.

41. In addition, we find that, in enacting sections 271 and 272 after section 2(b), and squarely addressing therein the issues before us, Congress intended for sections 271 and 272 to take precedence over any contrary implications based on section 2(b).⁸⁸ In construing these provisions, we are mindful that "it is a commonplace of statutory construction that the specific governs the general."⁸⁹ Moreover, where amended and original sections of a statute cannot be harmonized, the new provisions should be construed to prevail as the latest declaration of legislative will.⁹⁰ We find also that, in enacting the 1996 Act, there are other instances where Congress indisputably gave the Commission intrastate jurisdiction without amending section 2(b). For instance, section 251(e)(1) provides that "[t]he Commission shall have exclusive jurisdiction over those portions of the North American Numbering Plan that pertain to the United States."⁹¹ Section 253 directs the Commission to preempt state regulations that prohibit the ability to provide intrastate services. Section 276(b) directs the Commission to "establish a per call compensation plan to ensure that payphone service providers are fairly compensated for each and every completed intrastate and interstate call."⁹² Section 276(c) provides that, "[t]o the extent that any State [payphone] requirements are inconsistent with the Commission's regulations, the Commission's regulations on such matters shall preempt such State requirements."⁹³ None of these provisions is specifically excepted from section 2(b), yet *all* of them explicitly give the Commission jurisdiction over intrastate matters. Thus, we find that the lack of an explicit exception in section 2(b) does not require us to conclude that the Commission's jurisdiction under sections 271 and 272 is limited to interstate services. A contrary holding would nullify several explicit grants of authority to the Commission, noted above, and would render substantial parts of the statute meaningless. Thus, in this instance, we believe that the lack of an explicit exception in section 2(b) is not dispositive of the scope of the Commission's jurisdiction.

42. Moreover, as stated above, with the exception of the New York Commission, the parties challenging the Commission's authority to preempt state regulation under sections 272 do not address the issue of whether "interLATA services" are defined by the Act to include intrastate services. The New York Commission agrees with us that it does. These parties (including the New York Commission) also do not challenge the proposition that Congress vested in the

⁸⁸ See, e.g., Morales v. Trans World Airlines, Inc., 504 U.S. 374, 384 (1992).

⁸⁹ Morales v. Trans World Airlines, Inc., 504 U.S. at 384.

⁹⁰ 2 J. Sutherland, Statutory Construction § 22.34 (6th ed.); see also American Airlines, Inc. v. Remis Industries, Inc., 494 F.2d 196, 200 (2nd Cir. 1974).

⁹¹ 47 U.S.C. § 251(e)(1).

⁹² Id. § 276(b).

⁹³ Id. § 276(c).

Commission authority over BOC entry into all in-region interLATA services -- intrastate and interstate. We find it difficult to reconcile these parties' silence on these issues, as well as the New York Commission's agreement that "interLATA services" includes intrastate services, with their position that section 2(b) limits the application of the Commission's implementing rules under section 272 to interstate interLATA services. If, as it remains undisputed in the record, the Commission would necessarily determine, in assessing whether to allow BOC entry into in-region interLATA services, whether a BOC's provision of intrastate as well as interstate interLATA services complies with section 272, we can find no basis to maintain that the Commission's authority under sections 271 and 272 does not include authority to apply its interpretation of section 272 to all of the interLATA services -- intrastate and interstate -- at issue in the BOC's 271 in-region interLATA services application.

43. NARUC and the Missouri Commission stress that earlier drafts of the legislation would have amended section 2(b) to make an exception for certain sections of Title II, including sections 271 and 272, but the enacted version did not include that exception. They argue that this change demonstrates that Congress intended that section 2(b)'s limitations remain fully in force with regard to sections 271 and 272. We find this argument unpersuasive.

44. As noted above, parties that attach significance to the omission of the proposed amendment of section 2(b) rely on a rule of statutory construction providing that, when a provision in a prior draft is altered in the final legislation, Congress intended a change from the prior version. This rule of statutory construction has been rejected, however, when changes from one draft to another are not explained.⁹⁴ In this instance, the only statement from Congress regarding the meaning of the omission of the section 2(b) amendment appears in the Joint Explanatory Statement. According to the Joint Explanatory Statement, all differences between the Senate Bill, the House Amendment, and the substitute reached in conference are noted therein "except for clerical corrections, conforming changes made necessary by agreements reached by the conferees, and minor drafting and clerical changes."⁹⁵ Because the Joint Explanatory Statement did not address the removal of the section 2(b) amendment from the final bill, the logical inference is that Congress regarded the change as an inconsequential modification rather than a significant alteration. It seems implausible that, by enacting the final version, Congress intended a radical alteration of the Commission's authority under sections 271 and 272, given the total lack of legislative history to that effect. Based on the foregoing, we conclude that elimination of the proposed amendment of section 2(b) was a nonsubstantive change.

45. Moreover, even if it were appropriate to speculate as to the meaning of the omission of the section 2(b) exception, we disagree with the argument that the omission necessarily indicates that Congress intended not to provide the Commission authority over

⁹⁴ Mead Corp v. Tilley, 490 U.S. at 723; Rastelli v. Warden, 782 F.2d at 23; Drummond Coal v. Watt, 735 F.2d at 474.

⁹⁵ Joint Explanatory Statement at 113.

intrastate services in sections 271 and 272. We find it is equally possible that Congress omitted the exception based on an understanding that the use of the term interLATA in sections 271 and 272 established a clear grant of authority over intrastate services and therefore that such an exception was unnecessary.

46. We similarly are not persuaded that section 601(c) of the 1996 Act evinces an intent by Congress to preserve states' authority over intrastate matters. Section 601(c) of the 1996 Act provides that the Act and its amendments "shall not be construed to modify, impair, or supersede Federal, State, or local law unless expressly so provided in such Act or amendments."⁹⁶ As explained above, we conclude that sections 271 and 272, which apply to interLATA services, were expressly intended to modify federal and state law and jurisdictional authority.

47. For all of the reasons discussed above, we conclude that sections 271 and 272, and the Commission's authority thereunder, apply to intrastate and interstate interLATA services provided by the BOCs or their affiliates. We hold, therefore, that the rules we establish to implement section 272 are binding on the states, and the states may not impose, with respect to BOC provision of intrastate interLATA service, requirements inconsistent with sections 271 and 272 and the Commission's rules under those provisions. In this regard, based on what we find is clear congressional intent that the Commission is authorized to make determinations regarding BOC entry into interLATA services, we reject the suggestion by the Wisconsin Commission that, after the Commission has granted a BOC application for authority under section 271, a state nonetheless may condition or delay BOC entry into intrastate interLATA services.⁹⁷

C. Scope of Commission's Authority Regarding Manufacturing Services

48. In the Notice, we tentatively concluded that the Commission's authority under section 272 extends to all BOC manufacturing of telecommunications equipment and CPE. Only two parties, Sprint and TIA, commented on this issue, and both agreed with our tentative conclusion.

49. We adopt our tentative conclusion that our authority under section 272 extends to all BOC manufacturing of telecommunications equipment and CPE. As we stated in the Notice, to the extent that sections 271 and 272 address BOC manufacturing activities, we believe that the same statutory analysis set forth above with respect to interLATA services would apply. We see no basis for distinguishing among the various subsections of sections 271 and 272. Even apart from that analysis, however, we believe that the provisions concerning manufacturing clearly apply to all manufacturing activities. Section 2(b) of the Communications Act limits the

⁹⁶ 1996 Act, § 601(c)(1), 110 Stat. 56, 143 (to be codified as a note following 47 U.S.C. § 152).

⁹⁷ We note that a state would retain authority to enforce obligations relating to a BOC's provision of intrastate interLATA service, such as those identified by the Wisconsin Commission, through mechanisms other than denial or delayed of entry into the intrastate interLATA market.

Commission's authority over "charges, classifications, practices, services, facilities, or regulation for or in connection with intrastate communications service."⁹⁸ Even though, for the reasons stated above, we find section 2(b) not to be relevant to sections 271 and 272, we find that the manufacturing activities addressed by sections 271 and 272 are not, in any event, within the scope of section 2(b). Alternatively, even if section 2(b) were deemed to apply with respect to BOC manufacturing, we find that such manufacturing activities plainly cannot be segregated into interstate and intrastate portions. Thus, any state regulation inconsistent with sections 271 and 272 or our implementing regulations would necessarily thwart and impede federal policies, and should be preempted.⁹⁹

III. ACTIVITIES SUBJECT TO SECTION 272 REQUIREMENTS

50. Section 272(a) provides that a BOC (including any affiliate) that is a LEC subject to the requirements of section 251(c) may provide certain services only through a separate affiliate.¹⁰⁰ Under section 272, BOCs (or BOC affiliates) may engage in the following activities only through one or more affiliates that are separate from the incumbent LEC entity: (A) manufacturing activities; (B) interLATA telecommunications services that originate in-region;¹⁰¹ and (C) interLATA information services.¹⁰² We discuss below both the activities subject to the section 272 separate affiliate requirements and the activities that are exempt from these requirements.

⁹⁸ 47 U.S.C. § 152(b).

⁹⁹ See Louisiana Public Service Comm'n, at 377.

¹⁰⁰ 47 U.S.C. § 272(a)(1).

¹⁰¹ Section 272(a)(2)(B) exempts from the separate affiliate requirement for origination of interLATA telecommunications services certain incidental interLATA services (as described in sections 271(g)(1), (2), (3), (5), and (6)), out-of-region services (as described in section 271(b)(2)), and previously authorized activities (as described in section 271(f)).

¹⁰² Although they are information services (see 47 U.S.C. §§ 153(20), 272(a)(2)(C)), electronic publishing (as defined in section 274(h)) and alarm monitoring services (as defined in section 275(e)) are exempted from the section 272 separate affiliate requirements, and are subject to their own specific statutory separate affiliate and/or nondiscrimination requirements.

A. General Issues**1. Definition of "interLATA services"****a. Background**

51. In the Notice, we indicated that the 1996 Act defines "interLATA service" as a telecommunications service.¹⁰³ We further stated that, where the 1996 Act draws distinctions between in-region and out-of-region "interLATA services," these distinctions do not apply to interLATA information services.¹⁰⁴

b. Comments

52. Although we did not specifically seek comment on this analysis, several parties disagree with our interpretation of the scope of the term "interLATA services." BellSouth and MFS argue that the definition of "interLATA services" includes interLATA information services.¹⁰⁵ They further dispute our view that "interLATA service" only refers to "telecommunications services," arguing that the statutory definition in section 3(21) refers to "telecommunications" provided across LATA boundaries, not to "telecommunications services" provided across LATA boundaries.¹⁰⁶ MFS states that "telecommunications" is defined in section 3(43) as the transmission of information without change in the form or content of the information, whereas "information services" are defined in section 3(20) as the "offering of a capability for generating, . . . or making available information via telecommunications."¹⁰⁷ Therefore, argues MFS, "interLATA information services" must logically incorporate the transmission of, or capability for transmitting, information between LATAs, which is an interLATA service.¹⁰⁸

53. In addition, BellSouth states that section 271(b) describes how section 271 applies to several categories of "interLATA services," including "incidental interLATA services." Since certain of the "incidental interLATA services" set forth in section 271(g) are indisputably information services, BellSouth argues that "interLATA services" must encompass interLATA

¹⁰³ Notice at ¶ 41 n.80.

¹⁰⁴ Id.

¹⁰⁵ BellSouth at 19 n.45; accord ITAA at 7; MFS at 10; Ameritech Reply at 33; MFS Reply at 6-7; see also MCI Reply at 8.

¹⁰⁶ BellSouth at 22-23 & n.55; MFS Reply at 6.

¹⁰⁷ MFS Reply at 6.

¹⁰⁸ Id.; accord BellSouth at 23.

information services.¹⁰⁹ MFS also argues that, because Congress distinguished between interLATA telecommunications services and interLATA information services in section 272(a)(2), its use of the term "interLATA services" in section 271 clearly indicates an intent to include both information and telecommunications services.¹¹⁰ MFS specifically argues that the section 271 restrictions apply to "interLATA services" and are not limited to "interLATA telecommunications services."¹¹¹

54. MCI notes that BellSouth's interpretation of "interLATA services" as encompassing both interLATA telecommunications and information services in section 271(b) would mean that a BOC could not provide in-region interLATA information services until it had obtained section 271 authorization.¹¹² In response, BellSouth acknowledges that, prior to providing interLATA information services that are neither previously authorized activities under section 271(f) nor incidental interLATA services under section 271(g), the BOCs are required to obtain section 271 authorization from the Commission.¹¹³

c. Discussion

55. Upon consideration of the arguments raised in the record, we modify our interpretation of the scope of the term "interLATA service." Consistent with the views of the commenters that addressed this point, we conclude that the term "interLATA services" encompasses both interLATA information services and interLATA telecommunications services.¹¹⁴

56. We are persuaded that the definition of "interLATA service," which is "telecommunications between a point located in a [LATA] and a point located outside such area,"¹¹⁵ does not limit the scope of the term to telecommunications services because, as MFS and BellSouth point out, information services are also provided via telecommunications. Elsewhere in this Report and Order, we conclude that "interLATA information services" must include a

¹⁰⁹ BellSouth at 21-22; see also Letter from Robert T. Blau, Vice President - Executive and Federal Regulatory Affairs, BellSouth, to Carol Matthey, Deputy Division Chief, Policy and Program Planning Division, Common Carrier Bureau, at 1-2 (filed Oct. 29, 1996) (BellSouth Oct. 29 Ex Parte).

¹¹⁰ MFS at 10.

¹¹¹ Id.

¹¹² MCI Reply at 8.

¹¹³ See BellSouth Oct. 29 Ex Parte at 1-2.

¹¹⁴ E.g., BellSouth at 19 n.45; accord ITAA at 7; MFS at 10; Ameritech Reply at 33; MFS Reply at 6-7; see also MCI Reply at 8.

¹¹⁵ 47 U.S.C. § 153(21).

bundled, interLATA transmission component.¹¹⁶ Thus, interLATA information services are provided via interLATA telecommunications transmissions and, accordingly, fall within the definition of "interLATA service." Moreover, we believe that it is a more natural, common-sense reading of "interLATA services" to interpret it to include both telecommunications services and information services. In addition, as MFS argues, in section 272(a)(2), Congress uses and distinguishes between "interLATA telecommunications services" and "interLATA information services," demonstrating that it limited the term "interLATA services" to transmission services when it wished to. Further, if Congress had intended the term "interLATA services" to include only interLATA telecommunications services, its use of the term "interLATA telecommunications services" in section 272(a)(2) would have been unnecessary and redundant.

57. As MCI points out, interpreting the term "interLATA services" to include both interLATA telecommunications and interLATA information services means that a BOC may not provide in-region interLATA information services until it obtains section 271 authorization.¹¹⁷ As a practical matter, we believe that interpreting "interLATA services" to include interLATA information services will not alter the application of section 271. As noted above, and discussed in greater detail below, we conclude that the term "interLATA information service" refers to an information service that incorporates as a necessary, bundled element an interLATA telecommunications transmission component provided to the customer for a single charge.¹¹⁸ Thus, regardless of whether we interpret "interLATA service" to include interLATA information services, a BOC would be required to obtain section 271 authorization prior to providing, in-region, the interLATA telecommunications transmission component of an interLATA information service.

2. Application of Section 272 Safeguards to International InterLATA Services

58. In the Notice, we tentatively concluded that Congress intended the section 272 safeguards to apply to all domestic and international interLATA services.¹¹⁹ All of the parties that commented on this point supported this tentative conclusion.¹²⁰ As noted above, the 1996 Act defines "interLATA services" as "telecommunications between a point located in a [LATA] and a point located outside such area."¹²¹ The definition does not distinguish between domestic and international interLATA services. Further, international telecommunications services, which

¹¹⁶ See *infra* part III.F.2.

¹¹⁷ MCI Reply at 8.

¹¹⁸ See *infra* part III.F.2.

¹¹⁹ Notice at ¶ 32.

¹²⁰ AT&T at 9-10; Comptel at 8; Excel at 12; ITAA at 5; USTA at 9; TRA at 8; MCI at 6; Sprint at 11; DOJ Reply at 8.

¹²¹ 47 U.S.C. § 153(21).

originate in a LATA and terminate in a country other than the United States, or vice versa, fit within the statutory definition of interLATA services. Thus, we hereby adopt our tentative conclusion.

3. Provision of Services through a Single Affiliate

a. Background

59. In the Notice, we tentatively concluded that BOCs may conduct all, or some combination of, manufacturing activities, interLATA telecommunications services, and interLATA information services through a single separate affiliate, so long as the affiliate satisfies all statutory and regulatory requirements imposed on the provision of each type of service.¹²² Elsewhere in the Notice, we sought comment on whether the 1996 Act permits us to, and if so, whether we should, interpret or apply any of the requirements of section 272(b) differently with respect to a BOC's provision of interLATA telecommunications services, which are regulated under Title II, as opposed to a BOC's engagement in manufacturing and provision of interLATA information services, which are unregulated activities.¹²³ In addition, we sought comment on how we could impose different regulatory requirements if a BOC provides both regulated and unregulated services through a single affiliate.¹²⁴

b. Comments

60. The majority of parties agree that BOCs may engage in manufacturing activities, and also provide interLATA telecommunications services and interLATA information services, through the same affiliate.¹²⁵ Further, most of the parties that commented on these issues state that neither the text of the statute nor regulatory concerns mandate that we apply the section 272(b) requirements differently to regulated services and unregulated activities offered through such an affiliate.¹²⁶ The Ohio Commission asserts, however, that BOCs should not be permitted to offer regulated interLATA telecommunications services together with unregulated competitive services, unless they are willing to have their unregulated services subject to the same scrutiny

¹²² Notice at ¶ 33.

¹²³ The Commission retains ancillary jurisdiction over unregulated services pursuant to Title I of the Communications Act of 1934. See 47 U.S.C. § 154(i).

¹²⁴ *Id.* at ¶ 56.

¹²⁵ Ameritech at 63; Bell Atlantic, Exhibit 1, at 1; NYNEX at 38 n.52; PacTel at 4; US West at 19; USTA at 10; Sprint at 12-13; TIA at 15.

¹²⁶ *E.g.*, MCI at 22 (expressing no opinion as to manufacturing); PacTel at 18-19; TIA at 19-20; USTA at 18-19. *Contra* Ohio Commission at 8.

as their regulated services.¹²⁷ VoiceTel argues that BOCs should be required to separate the provision of manufacturing activities from other competitive services, to prevent the interLATA service operations provided by the BOC's affiliate from obtaining an unfair advantage through access to information about manufacturing developments.¹²⁸

c. Discussion

61. Based on the comments submitted in the record and our analysis of the 1996 Act, we adopt our tentative conclusion that BOCs may conduct all, or some combination, of manufacturing activities, interLATA telecommunications services, and interLATA information services through a single separate affiliate. Section 272(a) requires a BOC to provide these services through "one or more affiliates" that are "separate from any operating company entity that is subject to the requirements of section 251(c)."¹²⁹ We conclude that this language is intended to allow the BOCs flexibility in structuring their provision of competitive services, so long as those services are separated from the BOCs' provision of any local exchange services that are subject to the requirements of section 251(c).

62. We further conclude, as a policy matter, that it is not necessary to require the BOCs to separate their manufacturing activities from their provision of interLATA telecommunications services and interLATA information services, as suggested by VoiceTel.¹³⁰ First, a BOC's manufacturing activities do not entail control over bottleneck local exchange facilities. Second, during the period that the MFJ prohibited the BOCs from engaging in manufacturing activities, a competitive market for these activities developed.¹³¹ The market for

¹²⁷ Ohio Commission at 8.

¹²⁸ VoiceTel at 10-11.

¹²⁹ 47 U.S.C. § 272(a)(1).

¹³⁰ See VoiceTel at 10-11. In contrast, the Telecommunications Industry Association, a national trade association representing manufacturers and suppliers of telecommunications equipment and customer premises equipment (CPE), agrees that the BOCs may provide manufacturing activities through the same section 272 affiliate that provides interLATA telecommunications services and interLATA information services. TIA at 15-16.

¹³¹ Under the MFJ, the BOCs were not prohibited from providing CPE. In 1987, the Commission lifted the structural separation requirement it had imposed on BOC provision of CPE, based in part on a determination that the CPE industry was substantially competitive. See Furnishing of Customer Premises Equipment by the Bell Operating Companies and the Independent Telephone Companies, CC Docket No. 86-79, Report & Order, 2 FCC Rcd 143, 147, ¶ 25 (1987) (BOC CPE Relief Order); see also Procedures for Implementing the Detariffing of Customer Premises Equipment and Enhanced Services (Second Computer Inquiry), CC Docket No. 81-893, Memorandum Opinion & Order, 8 FCC Rcd 3891, 3891, ¶ 5 (1993).

information services is fully competitive;¹³² the market for interLATA telecommunications services is also substantially competitive.¹³³ Thus, while a BOC may achieve certain efficiencies and economies of scope by conducting all three categories of activity through the same section 272 affiliate, it cannot thereby increase its ability to exercise market power in either the manufacturing, interLATA telecommunications services, or interLATA information services markets. Further, we note that section 273, which is the subject of a separate proceeding,¹³⁴ establishes additional safeguards applicable to BOC manufacturing activities, which are intended to promote competition and prevent discrimination.¹³⁵ For these reasons, we conclude that BOCs may conduct all, or some combination of, manufacturing activities, interLATA telecommunications services, and interLATA information services through the same section 272 affiliate.

63. Further, we decline to adopt different requirements pursuant to section 272(b) for regulated and unregulated activities. The safeguards of section 272(b) apply to any "separate affiliate required by" section 272(a).¹³⁶ Thus, the section 272(b) safeguards address the BOCs' potential to allocate costs improperly and to discriminate in favor of their section 272 affiliates, irrespective of the activities in which those affiliates engage.

4. Manufacturing Activities

64. In the Notice, we stated that BOCs may only engage in manufacturing activities through a separate affiliate that meets the requirements of section 272, and noted that section 273

¹³² See, e.g., Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), CC Docket No. 20828, Final Order, 77 FCC 2d 384, 433, ¶ 128 (1980) (Computer II Final Order); Amendment of Section 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry), CC Docket No. 85-229, Report & Order, 104 FCC 2d 958, 1010, ¶ 95 (1986) (Computer III Phase I Order).

¹³³ See, e.g., Policy and Rules Concerning the Interstate Interexchange Marketplace, CC Docket No. 96-61, Second Report & Order, FCC 96-424, at ¶¶ 21-22 (rel. October 31, 1996) (Tariff Forbearance Order); Motion of AT&T to be Reclassified as a Non-Dominant Carrier, Order, 11 FCC Rcd 3271, 3278-3279, 3288, ¶¶ 9, 26 (1995) (AT&T Nondominance Order); Competition in the Interstate Interexchange Marketplace, CC Docket No. 90-132, Report & Order, 6 FCC Rcd 5880, 5887, ¶ 36 (1991) (First Interexchange Competition Order).

¹³⁴ See Implementation of Section 273 of the Communications Act of 1934, as amended by the Telecommunications Act of 1996, CC Docket No. 96-254, Notice of Proposed Rulemaking, FCC 96-472 (rel. Dec. 11, 1996) (Manufacturing NPRM).

¹³⁵ See, e.g., 47 U.S.C. § 273(c) (requiring the BOCs to file with the Commission and disclose to competitors and interconnecting carriers information regarding protocols and technical requirements for connection with and use of its telephone exchange service facilities); 47 U.S.C. § 273(e) (imposing nondiscrimination requirements, procurement standards, joint network planning and design requirements, and proprietary information protection requirements on BOCs and their manufacturing affiliates).

¹³⁶ 47 U.S.C. § 272(b).

sets forth additional safeguards applicable to BOC entry into manufacturing activities.¹³⁷ Subsequent to the closing of the record in this proceeding, the Commission released a Notice of Proposed Rulemaking to clarify and implement the provisions of section 273.¹³⁸ Several parties have raised arguments relating to the section 273 provisions on the record in this proceeding.¹³⁹ Because this proceeding implements the non-accounting safeguards provisions of sections 271 and 272, arguments relating to the specific provisions of section 273 are more appropriately addressed in the section 273 proceeding. We note that BOCs must conduct their manufacturing activities through a section 272 separate affiliate, manufacture and provide telecommunications equipment and CPE in accordance with section 273, and comply with the regulations that the Commission promulgates to implement both sections 272 and 273.

B. Mergers/Joint Ventures of Two or More BOCs

1. Background

65. In the Notice, we tentatively concluded that, pursuant to sections 271(i)(1)¹⁴⁰ and 153(4)(B),¹⁴¹ if two or more of the BOCs combine their operations through merger or acquisition, the in-region states of the resultant entity shall include all of the in-region states of each of the BOCs involved in the merger/acquisition.¹⁴² We sought comment on whether the entry into a merger agreement or a joint venture arrangement by two or more BOCs affects the application of the section 271 and 272 non-accounting separate affiliate and nondiscrimination requirements

¹³⁷ Notice at ¶ 35.

¹³⁸ See Manufacturing NPRM.

¹³⁹ See, e.g., TIA at 10-15 (addressing the scope of the term "manufacturing"); US West Reply at 20-24 (arguing that section 273(b)(1) authorizes a BOC to participate with a manufacturer in the design of equipment on an unseparated basis and without awaiting section 271(d) authorization); see also ITI/ITAA Reply at 2-3, 9-10.

¹⁴⁰ Section 271(i)(1) provides that "[t]he term 'in-region State' means a State in which a Bell operating company or any of its affiliates was authorized to provide wireline telephone exchange service pursuant to the reorganization plan approved under the AT&T Consent Decree, as in effect on the day before the date of enactment of the Telecommunications Act of 1996." 47 U.S.C. § 271(i)(1).

¹⁴¹ Section 3(4) provides that "[t]he term 'Bell operating company' . . . (B) includes any successor or assign of any such company that provides wireline telephone exchange service; but (C) does not include an affiliate of such company, other than an affiliate described in subparagraph (A) or (B)." 47 U.S.C. § 153(4).

¹⁴² Notice at ¶ 40. Specifically, we noted that Bell Atlantic had announced plans to acquire NYNEX, and that SBC and PacTel had announced their intent to merge. *Id.* at n.74. These mergers have not yet been completed, although on November 5, 1996, the Department of Justice announced that it was closing its investigation into the SBC-PacTel merger, having concluded that the merger does not violate the antitrust laws. See U. S. Department of Justice, Antitrust Division, Antitrust Division Statement Regarding Pacific Telesis/SBC Communications Merger, News Release, DOJ 96-542 (November 5, 1996). In this Order, as in the Notice, we intend that our analysis of mergers between or among BOCs be extended to the acquisition of one BOC by another.

to those BOCs. We further sought comment on whether additional safeguards are required to ensure that these BOCs do not provide the affiliates of their merger partners with an unfair competitive advantage during the pendency of their merger agreement.

2. Comments

66. All parties that commented on this issue unanimously agree with our tentative conclusion that, upon completion of a merger between or among BOCs, the in-region states of a merged entity shall include all of the in-region states of the BOCs involved in the merger.¹⁴³

67. Existing and potential competitors of the BOCs express concern about the incentive and ability of the BOCs to discriminate in favor of the affiliates of their merger or joint venture partners during the pendency of a merger or joint venture. For the purpose of applying the section 272 safeguards, they urge the Commission to treat the regions of BOCs entering a merger or joint venture as combined from the time that they enter into the merger or joint venture agreement.¹⁴⁴ Further, competitors argue that all nondiscrimination safeguards that apply to the BOC's dealings with its own section 272 affiliates should apply to the BOC's dealings with the section 272 affiliates of its merger or acquisition partner, as well as to dealings with a joint venture partner.¹⁴⁵

68. In contrast, the DOJ and several BOCs contend that because BOCs would not become affiliates of one another until a merger is consummated, entry into a merger agreement would have no effect on the application of the section 272 safeguards, which pertain to a BOC's relationship with (and potential discrimination in favor of) its own affiliate.¹⁴⁶ USTA further contends that a rule attributing the in-region service area of merging BOCs to one another during the pendency of a merger would be very difficult to administer.¹⁴⁷ These parties argue that the Commission need not adopt any additional regulations to govern the conduct of proposed merger partners during the pendency of a proposed merger. They claim that sufficient protection against unfair discrimination by BOCs in conjunction with mergers, acquisitions, and joint ventures already exists.¹⁴⁸

¹⁴³ Ameritech at 66; AT&T at 15; Comptel at 11-12; Excel at 3; USTA at 13; MCI at 14; Sprint at 15; ITAA at 9 n.22; New York Commission at 6; TRA at 10; DOJ Reply at 8.

¹⁴⁴ AT&T at 15; Comptel at 12-13; Excel at 2-4; TRA at 10-11; Sprint at 15; Sprint Reply at 8-9; accord New York Commission at 6-7.

¹⁴⁵ TRA at 10-11; Sprint at 15; accord MCI Reply at 7.

¹⁴⁶ DOJ Reply at 9; USTA at 13-14; NYNEX Reply at 28-29; PacTel at 8.

¹⁴⁷ USTA at 13-14; see also PacTel Reply at 5.

¹⁴⁸ DOJ Reply at 9; USTA at 13; Ameritech at 66; Nynex Reply at 28-29; PacTel at 8.

3. Discussion

69. We note the unanimous support among parties that commented on the issue, and hereby affirm our tentative conclusion that, upon completion of a merger between or among BOCs, the in-region states of the merged entity shall include all of the in-region states of each of the BOCs involved in the merger.¹⁴⁹ We decline, however, to adopt a general rule that would treat the regions of merging BOCs as combined prior to completion of the merger, for the purposes of applying the section 272 separate affiliate and nondiscrimination safeguards. Section 272 requires a BOC to provide certain services (interLATA telecommunications and information services and manufacturing activities) through one or more separate affiliates, and establishes nondiscrimination requirements that apply to the BOC's conduct and its relationship with these affiliates. Section 3(1), in turn, defines an "affiliate" as "a person that (directly or indirectly) owns or controls, is owned or controlled by, or is under common ownership and control with, another person."¹⁵⁰ Prior to completion of a merger, the merging BOCs are neither affiliates, nor successors or assigns, of one another. Thus, entry into a merger agreement does not render the section 272 safeguards applicable to a BOC's relationship with its merger partner, nor to its relationship with its merger partner's affiliates. Moreover, treating the regions of merging BOCs as combined from the inception of a merger agreement might create considerable problems in applying the section 271 and 272 safeguards. For example, if BOC A were offering out-of-region interLATA services in BOC B's region at the time the two entered a merger agreement, BOC A might be required immediately to cease the provision of such services until it had received approval under section 271 to offer in-region interLATA services. That result would be both disruptive and confusing to customers.

70. We further decline to adopt any additional regulations applicable to pending mergers or joint ventures between or among BOCs. We are persuaded that adequate protections against discriminatory and anticompetitive conduct already apply to mergers, acquisitions, and joint ventures among BOCs. As the DOJ and other commenters point out, these protections include the nondiscrimination obligations of sections 201 and 202 of the Communications Act, which, among other things, prevent the BOCs from unjustly or unreasonably discriminating in providing facilities or services to interexchange carriers, and would thus govern a BOC's relationship with the long-distance affiliate of its merger partner. Continuing enforcement of the MFJ equal access requirements and pre-existing Commission-prescribed interconnection requirements, pursuant to section 251(g), also safeguards against BOC discrimination in favor of the affiliates of their merger partners. Further, as USTA notes, BOCs will be subject to the pre-

¹⁴⁹ Similarly, where such a transaction takes the form of an acquisition, rather than a merger, pursuant to 47 U.S.C. § 153(4)(B), the surviving BOC shall become the successor or assign of the acquired BOC, and thus the in-region area of the surviving BOC shall include the in-region states of the acquired BOC.

¹⁵⁰ Section 3(1) further provides, "[f]or the purposes of this paragraph, the term 'own' means to own an equity interest (or the equivalent thereof) of more than 10 percent." 47 U.S.C. 153(1).

merger review process under the Hart-Scott-Rodino amendment to the Clayton Act.¹⁵¹ Moreover, as MCI suggests, we retain our authority to impose additional safeguards in the context of particular mergers, should circumstances demonstrate the need for such safeguards, on a case-by-case basis.¹⁵²

C. Previously Authorized Activities

1. Background

71. In the Notice, we sought comment on the meaning of and interaction between sections 271(f), 272(a)(2)(B)(iii), and 272(h).¹⁵³ Specifically, we sought comment on whether, subject to the exception established by section 272(a)(2)(B)(iii), section 272(h) requires the BOCs to come into compliance with the section 272 safeguards with respect to all of the activities listed in section 272(a)(2)(A)-(C) that they were providing on the date of enactment of the 1996 Act.¹⁵⁴ We observed that section 272(a)(2)(B)(iii) establishes an exemption for "previously authorized activities described in section 271(f)" from the separate affiliate requirement for "origination of interLATA telecommunications services."¹⁵⁵ We sought comment on whether Congress intended, through section 272(h), to require BOCs engaged in previously authorized manufacturing activities and interLATA information services to come into compliance with the section-272 requirements.¹⁵⁶

2. Comments

72. Section 271(f). In general, the BOCs interpret section 271(f) to mean that section 271(a), which prohibits BOCs from providing in-region interLATA services prior to obtaining section 271 authorization, does not affect their provision of interLATA services that have already been authorized by the MFJ court, as long as they continue to provide such services in accordance

¹⁵¹ USTA at 13-14; see Hart-Scott-Rodino Antitrust Improvement Act of 1976, P.L. 94-435, Title II, § 201, 90 Stat. 1390, codified at 15 U.S.C. § 18a. The Hart-Scott-Rodino review process provides an opportunity for the DOJ or the FTC to block a proposed merger that would be anticompetitive and would violate federal antitrust laws. By subjecting merging BOCs to the scrutiny of these agencies during the period prior to consummation of their merger, Hart-Scott-Rodino review may curb their incentive to engage in discriminatory conduct during this period.

¹⁵² See MCI at 14-15 (citing Interim BOC Out-of-Region Order at ¶ 33).

¹⁵³ Notice at ¶¶ 34, 38-39.

¹⁵⁴ Id. at ¶ 34, 38.

¹⁵⁵ Id. at ¶ 38.

¹⁵⁶ Id. at ¶ 39.

with the terms and conditions imposed by the MFJ court.¹⁵⁷ Several potential competitors argue that section 271(f) does not address whether BOCs must provide previously authorized services through a section 272 separate affiliate, but rather authorizes the BOCs to continue to provide in-region interLATA services for which they had obtained MFJ waivers prior to enactment of the 1996 Act, without first obtaining section 271 authorization.¹⁵⁸ Interexchange carriers argue that, to the extent certain previously authorized activities are not required eventually to comply with section 272 separate affiliate requirements, they must continue to be provided subject to the terms and conditions contained in an order of the MFJ court.¹⁵⁹

73. Section 272(a)(2)(B)(iii). Bell Atlantic and BellSouth argue that section 272(a)(2)(B)(iii) exempts all previously authorized activities described in section 271(f) from the section 272 separate affiliate requirements.¹⁶⁰ Ameritech and PacTel argue that section 272(a)(2)(B)(iii) exempts from the section 272 separate affiliate requirements all previously authorized interLATA telecommunications services and interLATA information services.¹⁶¹ In general, potential competitors to the BOCs argue that section 272(a)(2)(B)(iii) only exempts previously authorized interLATA telecommunications services from the section 272 separate affiliate requirements.¹⁶² One BOC agrees with this interpretation.¹⁶³ These parties argue that section 272(a)(2)(B)(iii) does not exempt previously authorized interLATA information services from the separate affiliate requirements, because section 272(a)(2)(B)(iii) only applies to interLATA telecommunications services.¹⁶⁴ Although the BOCs and their competitors disagree as to the scope of the section 272(a)(2)(B)(iii) exemption, they agree that the exemption is permanent.¹⁶⁵

¹⁵⁷ BellSouth at 18-19, 24; NYNEX at 39; U S West at 15; *cf.* Ameritech at 63-64.

¹⁵⁸ *See, e.g.*, MCI Reply at 5-6; *see also* TRA at 9; ITAA at 8; Comptel at 10-11.

¹⁵⁹ AT&T at 12 n.12; Comptel at 10-11; MCI at 9 n.21; Sprint at 13 n.10; MCI Reply at 4-5.

¹⁶⁰ Bell Atlantic, Exhibit 1, at 2; BellSouth at 19.

¹⁶¹ Ameritech at 64-65 (arguing that interLATA information services are covered by the section 272(a)(2)(B)(iii) exemption because they are a subset of interLATA telecommunications services); PacTel at 5-6; Ameritech Reply at 32-33; PacTel Reply at 3 (arguing that the scope of section 272(a)(2)(B) is not limited to "telecommunications services" because the excepted categories of "incidental interLATA services" and "previously authorized services" both include information services); *see also* USTA at 12-13; NYNEX Reply at 28 n.87.

¹⁶² MCI at 8-9; Sprint at 13-14; ITAA at 8; Sprint Reply at 6.

¹⁶³ U S West at 16-17.

¹⁶⁴ MCI at 8-9; ITAA at 8; U S West at 16; MCI Reply at 6; Sprint Reply at 6.

¹⁶⁵ Ameritech at 65; BellSouth at 19; NYNEX at 42; MCI at 8-9; Sprint at 13.

74. Section 272(h). Although the BOCs generally agree that section 272(h) authorizes a transition period for compliance with the separate affiliate requirements,¹⁶⁶ their views diverge as to the effect of the section. At one extreme, PacTel argues that section 272(h) does not apply to previously authorized interLATA information or telecommunications services or manufacturing activities, but rather provides a one-year transition period for compliance with requirements imposed on the telephone exchange and exchange access activities BOCs were providing on the date of enactment of the 1996 Act, *e.g.*, compliance with section 272(e).¹⁶⁷ Several BOCs argue that section 272(h) requires only previously authorized manufacturing activities to come into compliance with the separate affiliate requirements, because section 272(a)(2)(B)(iii) exempts all previously authorized services involving interLATA telecommunications, including information services.¹⁶⁸ At the other extreme, U S West argues that section 272(h) applies to all previously authorized manufacturing and interLATA information services, giving BOCs one year from the date of enactment of the 1996 Act to move these services into section 272 separate affiliates.¹⁶⁹ MCI, Sprint, and ITAA endorse U S West's position.¹⁷⁰

75. Differential Treatment. A majority of the BOCs propose interpretations of sections 271(f), 272(a)(2)(B)(iii), and 272(h) that would result in differential treatment for different types of previously authorized services. NYNEX and U S West argue that permanently exempting only previously authorized interLATA telecommunications services from the section 272 separate affiliate requirements makes sense, because most of the telecommunications services for which BOCs obtained MFJ waivers would be impossible, or too costly, to provide on a separated basis.¹⁷¹ Ameritech, however, contends that the Commission should not differentiate between previously authorized interLATA telecommunications services and previously authorized

¹⁶⁶ See NYNEX at 41-42; Bell Atlantic, Exhibit 1, at 2; PacTel at 6; SBC at 11; *see also* MFS Reply at 16.

¹⁶⁷ PacTel at 5-6.

¹⁶⁸ USTA at 12-13; Ameritech Reply at 33; *cf.* NYNEX at 39; Ameritech at 65-66 (section 272(h) allows one year for the BOCs to come into compliance with the section 272 requirements for all interLATA information services and interLATA telecommunications services they are providing pursuant to MFJ waivers that incorporate a separate affiliate requirement.)

¹⁶⁹ U S West at 17-18.

¹⁷⁰ MCI at 8-9; Sprint at 13-14; *see also* ITAA at 8 (specifically referring to interLATA information services).

¹⁷¹ NYNEX at 39-40; U S West at 17. NYNEX and U S West state that most waivers granted by the MFJ court for provision of interLATA telecommunications services contemplated integrated provision of these services, including numerous waivers to provide Extended Area Service (EAS) by expanding the local calling area of a small number of usually rural customers to include nearby "communities of interest" located in another LATA.

information services, arguing that certain previously authorized interLATA information services cannot efficiently be provided on a separated basis.¹⁷²

3. Discussion

76. Based on the record before us and our analysis of the relevant statutory terms, we conclude that BOCs may continue to provide all previously authorized services without interruption, pursuant to the terms and conditions set forth in the MFJ court orders that authorize those services. Previously authorized interLATA information services and manufacturing activities must come into compliance with the section 272 separate affiliate requirements within one year. Previously authorized interLATA telecommunications services, which do not have to comply with the section 272 separate affiliate requirements, must continue to be provided pursuant to the terms and conditions of the MFJ court orders that authorize them.

77. Section 271(f). As a general matter, section 271 addresses the timing and requirements for BOC entry into the interLATA market. Section 271(f) specifies that neither section 271(a) nor section 273 "prohibits" a BOC or its affiliate from engaging, at any time after enactment, in any activity previously authorized by an order of the MFJ court, subject to the terms and conditions imposed by the court.¹⁷³ We conclude that the purpose of Section 271(f) is to preserve the BOCs' ability to engage in previously authorized activities, without first having to obtain section 271 authorization from the Commission. Section 271(f) by its terms does not address, and thus does not preclude, application of the section 272 separate affiliate requirements to previously authorized services. Except for specifying that BOCs may continue to provide previously authorized services pursuant to the terms and conditions contained within the MFJ court order authorizing the service, section 271(f) does not address the manner in which BOCs must structure their provision of previously authorized services, or whether they must provide these services through a separate affiliate. These issues are addressed in section 272.

78. Section 272(a)(2)(B)(iii). Section 272 sets forth separate affiliate and nondiscrimination requirements with which the BOC must comply in order to provide certain services. Separate subsections of section 272(a)(2) establish separate affiliate requirements for BOC provision of manufacturing activities (section 272(a)(2)(A)), origination of interLATA telecommunications services (section 272(a)(2)(B)), and interLATA information services (section

¹⁷² Ameritech at 63-64 (citing United States v. Western Electric, No. 82-0192 (D.D.C. Feb. 6, 1989) (granting a waiver for a reverse directory service provided through the telephone operating company) and United States v. Western Electric, No. 82-0192 (D.D.C. Sept. 11, 1989) (granting a waiver for "telecommunications devices for the deaf" (TDDs) and specifically finding that service to be an information service)).

¹⁷³ Section 273(a), like section 271, incorporates a timing element, permitting a BOC to manufacture and provide equipment "if" the FCC authorizes that BOC (or its affiliate) to provide interLATA services under 271(d). 47 U.S.C. § 273(a). The Joint Explanatory Statement indicates that this section permits a BOC to engage in manufacturing after the Commission authorizes the company to provide interLATA services under section 271(d) in any in-region state. Joint Explanatory Statement at 154.

272(a)(2)(C)). Section 272(a)(2)(B)(iii) exempts "previously authorized activities described in section 271(f)" from the separate affiliate requirement for "origination of interLATA telecommunications services." We conclude that, because this exemption appears in section 272(a)(2)(B), it applies by its terms only to previously authorized activities that involve the origination of interLATA telecommunications services.

79. Previously authorized activities described in section 271(f) may include both manufacturing activities and interLATA information services. Neither of these types of previously authorized activities, however, is exempt from the section 272 separate affiliate requirements, because neither section 272(a)(2)(A) nor section 272(a)(2)(C) contains an exemption for previously authorized activities similar to the explicit exemption set forth in section 272(a)(2)(B)(iii). We reject Ameritech's argument that section 272(a)(2)(B)(iii) exempts previously authorized interLATA information services from the section 272 separate affiliate requirements, because section 272(a)(2)(B) applies only to origination of interLATA telecommunications services.¹⁷⁴ Section 272(a)(2)(C) establishes the separate affiliate requirement for BOC provision of interLATA information services; there are exceptions to this requirement for electronic publishing services and alarm monitoring services, but there is no exception specified for previously authorized activities.

80. Section 272(h). As the majority of commenters agree, section 272(h) establishes a one-year transition period for BOCs to comply with the separate affiliate requirements of section 272 for all services they were providing on the date of enactment of the 1996 Act that are not exempt from these requirements. Because we concluded in the preceding paragraphs that previously authorized interLATA information services and manufacturing activities are not exempt from the section 272 separate affiliate requirements, BOCs providing these services must comply with those requirements within one year of enactment. We reject PacTel's argument that section 272(h) gives the BOCs one year to comply with the various requirements imposed by section 272 on their provision of exchange and exchange access services, because we find these requirements are effective immediately upon a BOC's entry into the in-region interLATA market pursuant to section 271.

81. Differential Treatment. We conclude that, with respect to requiring compliance with the section 272 separate affiliate requirements, Congress intended to treat previously authorized interLATA telecommunications services differently from previously authorized interLATA information services and manufacturing activities. Certain of the BOCs argue that such a distinction is justified because it would be more difficult to provide previously authorized interLATA telecommunications services on a separated basis.¹⁷⁵ Ameritech, however, argues that certain previously authorized interLATA information services, such as TDDS, would be equally

¹⁷⁴ See Ameritech at 64-65.

¹⁷⁵ See, e.g., NYNEX at 39-40; U S West at 17.

difficult to provide on a separated basis.¹⁷⁶ Section 10 of the Communications Act requires us to forbear from applying any provision of the Act that is not necessary to ensure just and reasonable charges and practices in the telecommunications marketplace, or to protect consumers, if we find that such forbearance would promote competition and is consistent with the public interest.¹⁷⁷ Thus, to the extent a BOC demonstrates, with respect to a particular previously authorized interLATA information service, that forbearance from the section 272 separate affiliate requirement fully satisfies the section 10 test, we must forbear from requiring the BOC to provide that service through a section 272 affiliate.

D. Out-of-region interLATA information services

1. Background

82. In the Notice, we tentatively concluded that the BOCs must provide interLATA information services through a separate affiliate, regardless of whether these services are provided in-region or out-of-region. We observed that section 272(a)(2)(B)(ii) exempts out-of-region interLATA services from the separate affiliate requirement for "origination of interLATA telecommunications services," but there is no analogous exemption from the section 272(a)(2)(C) separate affiliate required for interLATA information services (other than electronic publishing and alarm monitoring services).¹⁷⁸

2. Comments

83. BellSouth is the only BOC that addresses this issue, arguing that the statute does not require BOCs to provide out-of-region interLATA information services through a separate affiliate.¹⁷⁹ BellSouth asserts that the Commission's conclusion is based on the faulty premise that interLATA information services do not fall within the definition of "interLATA services" and therefore are not subject to the "in-region"/"out-of-region" dichotomy of section 271.¹⁸⁰ BellSouth further suggests that imposition of a separate affiliate requirement constitutes a prior restraint upon BOC provision of out-of-region information services and may violate the First Amendment.¹⁸¹

¹⁷⁶ Ameritech at 63-64.

¹⁷⁷ 47 U.S.C. § 160.

¹⁷⁸ Notice at ¶ 41.

¹⁷⁹ BellSouth at 20-25.

¹⁸⁰ BellSouth at 20, 21-23.

¹⁸¹ *Id.* at 20-21.

84. All of the other parties that responded to this inquiry support the Commission's tentative conclusion that BOCs must provide out-of-region interLATA information services through a section 272 separate affiliate.¹⁸² Several parties reject BellSouth's argument that the Commission is prevented by the First Amendment from requiring BOCs to provide out-of-region interLATA information services through a separate affiliate.¹⁸³

3. Discussion

85. Based on the record before us and our own statutory analysis, we hereby adopt our tentative conclusion that BOCs must provide out-of-region interLATA information services through a section 272 separate affiliate. Although we concluded above that "interLATA information services" are included within the term "interLATA services" as used in section 271(b), that determination does not alter the conclusion that BOCs must provide out-of-region interLATA information services through a section 272 separate affiliate.¹⁸⁴ Section 271(b)(2) permits a BOC or its affiliate to provide interLATA services, including interLATA information services, that originate outside its in-region states, immediately upon enactment of the 1996 Act. Section 271, however, does not address whether such services must be provided through a separate affiliate; that issue is addressed in section 272(a).

86. Section 272(a)(2)(B) requires a separate affiliate for the "origination of interLATA telecommunications services," but exempts from that requirement "out-of-region services described in section 271(b)(2)."¹⁸⁵ We conclude that the exception created by section 272(a)(2)(B)(ii) extends only to out-of-region interLATA services that are telecommunications services. Section 272(a)(2)(C) requires a separate affiliate for "interLATA information services," and exempts electronic publishing and alarm monitoring services from that requirement. There are no other exceptions to the requirements of section 272(a)(2)(C). As several commenters noted, section 272(a)(2)(B) explicitly excludes out-of-region services, but section 272(a)(2)(C) does not.¹⁸⁶ We agree with MCI that the explicit exclusion of out-of-region interLATA telecommunications services in one subsection of the statute, and the absence of such an express exclusion of out-of-region interLATA information services in another subsection of the same provision, suggests that Congress intended not to exclude the latter from the separate affiliate

¹⁸² AT&T at 12-13; LDDS at 12 n.10; MCI at 15; Sprint at 16; ITAA at 8-9; VoiceTel at 12; MCI Reply at 7-8; Sprint Reply at 11; CIX Reply at 4.

¹⁸³ Sprint Reply at 11; CIX Reply at 5 n.4.

¹⁸⁴ See *supra* part III.A.1.

¹⁸⁵ 47 U.S.C. § 272(a)(2)(B).

¹⁸⁶ MCI at 15; *see also* Sprint at 16; ITAA at 9; CIX Reply at 4.

requirement.¹⁸⁷ Therefore, we find that out-of-region interLATA information services are not excluded from the separate affiliate requirement for interLATA information services.

87. BellSouth has argued that requiring BOCs to provide out-of-region interLATA information services through a section 272 separate affiliate violates the First Amendment.¹⁸⁸ As noted above, we find that this result is required by the statute. Although the courts have ultimate authority to determine the constitutionality of this and other statutes, we find it appropriate to state that we find BellSouth's argument to be without merit.¹⁸⁹ BellSouth bases its argument on an assertion that as "content-related" services, information services are commercial speech entitled to First Amendment protections.¹⁹⁰ We conclude, first, that with respect to certain information services, a BOC neither provides, nor exercises editorial discretion over, the content of the information associated with those particular services, and therefore provision of those information services does not constitute speech subject to First Amendment protections.¹⁹¹ Second, to the extent that BOC provision of other interLATA information services constitutes speech for First Amendment purposes, the section 272 separate affiliate requirement neither prohibits the BOCs from providing such services, nor places any restrictions on the content of the information the BOCs may provide.¹⁹² Instead, the section 272 separate affiliate requirement is a content-neutral restriction on the manner in which BOCs may provide interLATA information services, intended by Congress to protect against improper cost allocation and discrimination concerns. Thus, we conclude that the separate affiliate requirement imposed by section 272 of the Communications Act on BOC provision of interLATA information services does not violate the First Amendment.¹⁹³

¹⁸⁷ MCI at 15 n.36 (citing League to Save Lake Tahoe, Inc. v. Trounday, 598 F.2d 1164, 1171 (9th Cir. 1979)).

¹⁸⁸ BellSouth at 20-21.

¹⁸⁹ The Commission has previously offered its opinion on the constitutionality of other statutory provisions. See Inquiry Into Section 73.1910 of the Commission's Rules and Regulations Concerning the General Fairness Doctrine Obligations of Broadcast Licensees, 102 F.C.C. 2d 143, 155-156, ¶ 18 (1985).

¹⁹⁰ BellSouth at 20.

¹⁹¹ Cf. Turner Broadcasting System, Inc. v. FCC, 114 S. Ct. 2445, 2456 (1994) (Turner). Protocol processing services are examples of information services that do not constitute commercial speech. See *infra* part III.F.1.

¹⁹² Like the must-carry rules at issue in Turner, the section 272 separate affiliate requirement "on [its] face impose[s] burdens and confer[s] benefits without reference to the content of speech." Turner, 114 S. Ct. at 2460.

¹⁹³ Content-neutral time, place, and manner restrictions that serve a substantial government interest are constitutionally permissible. See, e.g., City of Renton v. Playtime Theatres, Inc., 475 U.S. 41, *reh'g denied*, 475 U.S. 1132 (1986).

E. Incidental InterLATA Services

1. Background

88. In the Notice, we sought comment on whether we should establish any non-accounting structural or nonstructural safeguards for BOC provision of the "incidental interLATA services" set forth in section 271(g), in light of section 271(h).¹⁹⁴ Section 271(h) directs the Commission to ensure that the provision of incidental interLATA services "will not adversely affect telephone exchange service ratepayers or competition in any telecommunications market," and states that the provisions of section 271(g) "are intended to be narrowly construed."¹⁹⁵ We also sought comment regarding the interplay between section 271(h) and section 254(k), which prohibits telecommunications carriers from "us[ing] services that are not competitive to subsidize services that are subject to competition."¹⁹⁶

2. Comments

89. The majority of parties that addressed the issue, BOCs and competitors alike, contend that section 272(a)(2)(B)(i) exempts all incidental interLATA services from the separate affiliate requirements of section 272, except section 271(g)(4) information storage and retrieval services.¹⁹⁷ In their comments, however, several parties note that the "incidental interLATA services" listed in section 271(g) include information services as well as telecommunications services.¹⁹⁸

90. Although they generally acknowledge that incidental interLATA services are not subject to section 272 separate affiliate requirements, several competitors argue that the Commission has the authority to, and should, impose separate affiliate requirements on the

¹⁹⁴ Notice at ¶ 37.

¹⁹⁵ 47 U.S.C. § 271(h).

¹⁹⁶ Notice at ¶ 37.

¹⁹⁷ USTA at 10-11; AT&T at 10; MCI at 9-10; Ameritech Reply at 37-38; BellSouth Reply at 25-26; see also BellSouth at 23-24; PacTel at 7; Time Warner at 14-15. But see ITAA at 8-9; CIX Reply at 4-5; cf. MCI Reply at 8.

¹⁹⁸ BellSouth at 23; see also PacTel Reply at 3. BellSouth asserts that audio, video, and other programming services, interactive programming services (47 U.S.C. § 271(g)(1)), alarm monitoring (47 U.S.C. § 271(g)(1)), two-way interactive video and Internet services to schools (47 U.S.C. § 271(g)(2)), and information storage and retrieval systems (47 U.S.C. § 271(g)(4)) are all information services. BellSouth at 21 n.50; see also BellSouth Oct. 29 Ex Parte at 1-2.

provision of these services.¹⁹⁹ In the alternative, competitors propose that incidental interLATA services should be subject to a variety of nonstructural safeguards. AT&T recommends that we apply the nondiscrimination provisions of sections 272(c) and (e) to BOC provision of incidental interLATA services, and that we enforce these requirements through network disclosure, accounting, cost allocation, and reporting requirements.²⁰⁰ MCI argues that, for each service listed in section 271(g), BOCs must unbundle and make available on a nondiscriminatory basis to all carriers the same network elements, facilities, and services used in providing that service, pursuant to the Commission's comparably efficient interconnection (CEI) parameters.²⁰¹ NCTA contends that the Commission should prescribe safeguards related to inbound and outbound telemarketing of video programming services by the BOCs.²⁰²

91. In response, USTA and the BOCs argue that the Commission should not adopt any additional non-accounting structural or non-structural safeguards to govern BOC provision of the incidental interLATA services enumerated in section 271(g).²⁰³ They argue that the Commission already has in place regulations applicable to incidental interLATA services that will protect telephone exchange ratepayers, such as the Part 61 price cap rules and the Part 32 accounting rules and Part 64 cost allocation rules, as well as regulations that ensure telecommunications competition, such as the section 251 interconnection and unbundling rules.²⁰⁴ They further argue that additional safeguards are not warranted by any specific potential competitive harms, and would undercut the efficiencies of integration that Congress intended to permit the BOCs to obtain.²⁰⁵

¹⁹⁹ Time Warner at 33-34 (specifically addressing video services); VoiceTel at 11 (section 254(k) provides authority); AT&T at 11 n.11 (sections 254(k) and 271(h) provide authority to impose separation requirements on a case-by-case basis); TRA at 9-10 (section 271(h) provides authority); NCTA at 3-4; MCI at 10-11 (incidental interLATA services should be subject to Competitive Carrier separation requirements).

²⁰⁰ AT&T at 11-12. But see BellSouth Reply at 25-26 (sections 272(c), 272(e)(2), and 272(e)(4) apply by their terms to BOCs' dealings with affiliates).

²⁰¹ MCI at 11-12. But see BellSouth Reply at 26 (arguing that, under the statute, the Commission cannot require BOCs to unbundle and provide nondiscriminatory access to interLATA transmission services that are components of incidental interLATA services, because although BOCs may provide incidental interLATA services on an unseparated basis without prior section 271 authorization, they may not provide unbundled interLATA transmission services on a similar basis).

²⁰² NCTA at 4.

²⁰³ Ameritech at 66; Bell Atlantic, Exhibit 1, at 1; PacTel at 6-7; U S West at 18; USTA at 11; Ameritech Reply at 37.

²⁰⁴ Bell Atlantic, Exhibit 1, at 1-2; U S West at 18-19; see also PacTel at 7; PacTel Reply at 4-5.

²⁰⁵ USTA at 11; see also PacTel at 7; Ameritech Reply at 38.

3. Discussion

92. Section 271(b)(3) permits the BOCs to provide incidental interLATA services described in section 271(g) immediately after the date of enactment of the 1996 Act. Thus, unlike other in-region interLATA services, BOCs may provide incidental interLATA services originating in their own in-region states without receiving prior authorization from the Commission pursuant to section 271(d). Neither section 271(b) nor section 271(g) addresses whether BOCs must provide incidental interLATA services through a section 272 separate affiliate; this issue is addressed by section 272 itself.

93. Scope of the section 272(a)(2)(B)(i) exemption. Section 272(a)(2)(B)(i) sets forth an exception to the separate affiliate requirement imposed on "origination of interLATA telecommunications services." Congress specifically limited this exception to the "incidental interLATA services described in paragraphs (1), (2), (3), (5), and (6) of section 271(g)."²⁰⁶ Consistent with the analysis set forth in the two immediately preceding sections of this Order, we conclude that the section 272(a)(2)(B)(i) exception applies, by its terms, to the origination of incidental interLATA services that are telecommunications services.²⁰⁷

94. For the most part, the incidental interLATA services enumerated within the section 272(a)(2)(B)(i) exception are telecommunications services.²⁰⁸ Although the incidental interLATA services set forth in sections 271(g)(1)(A), (B), and (C) include audio, video, and other programming services that do not appear to be solely telecommunications services, section 271(h) specifies that these incidental interLATA services "are limited to those interLATA transmissions incidental to the provision by a [BOC] or its affiliate of video, audio, and other programming services that the company or its affiliate is engaged in providing to the public."²⁰⁹ We therefore conclude that, pursuant to section 272(a)(2)(B)(i), BOCs are not required to provide the interLATA telecommunications transmission incidental to provision of the programming services listed in sections 271(g)(1)(A), (B), and (C) through a section 272 separate affiliate.²¹⁰ Moreover,

²⁰⁶ 47 U.S.C. § 272(a)(2)(B)(i).

²⁰⁷ See *supra* parts III.C and III.D.

²⁰⁸ Congress deliberately excluded remote data storage and retrieval services that fall within section 271(g)(4) from the section 272(a)(2)(B)(i) exception. These services are interLATA information services. See *infra* paragraph 121.

²⁰⁹ 47 U.S.C. § 271(h) (emphasis added).

²¹⁰ Although this determination reflects a refinement in our analysis of the meaning of sections 271(g)(1)(A), (B), and (C), and section 272(a)(2)(B)(i), since our issuance of the *OVS Second Report and Order*, it is consistent with our determination in that proceeding that BOCs are not required to provide open video services through a section 272 affiliate. See *Implementation of Section 302 of the Telecommunications Act of 1996*, CS Docket No. 96-46, Second Report & Order, FCC 96-249, ¶ 249 (rel. June 3, 1996) (*OVS Second Report & Order*); see also Time Warner at 33-34. In that proceeding, we concluded that section 653 was silent as to the need for a separate affiliate

alarm monitoring services, listed as incidental interLATA services under section 271(g)(1)(D), are explicitly excepted from the section 272 separate affiliate requirements under section 272(a)(2)(C).

95. In addition, section 271(g)(2), which designates as "incidental interLATA services" the interLATA provision of "two-way interactive video services or Internet services over dedicated facilities to or for elementary and secondary schools as defined in section 254(h)(5)," may encompass services that are not solely telecommunications services.²¹¹ The statute does not classify educational interactive interLATA services as either telecommunications services or information services. We conclude, however, that the explicit inclusion of section 271(g)(2) in the list of services subject to the section 272(a)(2)(B)(i) exception exempts educational interactive interLATA services from the section 272 separate affiliate requirements. This interpretation is consistent with Congress's clear intent, expressed in other provisions of the 1996 Act, to promote the provision of advanced telecommunications and information services, of which educational interactive interLATA services are examples, to eligible public and non-profit elementary and secondary schools.²¹² The inclusion of educational interactive interLATA services among the list of "incidental interLATA services" that BOCs could provide immediately upon enactment of the 1996 Act without prior Commission authorization promotes the congressional goal of rapidly deploying advanced telecommunications by permitting the BOCs to offer such services. Thus, we further find it reasonable to conclude that Congress did not wish to impose a significant regulatory barrier, in the form of a separate affiliate requirement, on BOC provision of these services.²¹³

96. Additional regulation of incidental interLATA services. We decline to impose the section 272 separate affiliate requirements on incidental interLATA services that, as discussed

requirement on provision of open video services, and that Congress had expressly directed that Title II requirements not be applied to the establishment and operation of an open video system under section 653. OVS Second Report & Order at ¶ 249. To the extent we interpreted the section 272(a)(2)(B)(i) exemption more broadly in that proceeding than we do in this proceeding, we determine that our current interpretation is correct.

²¹¹ For simplicity, we refer below to the incidental interLATA services described by section 271(g)(2) as "educational interactive interLATA services."

²¹² For example, section 254(h)(2) of the Communications Act requires the Commission to establish rules to enhance the availability of advanced telecommunications and information services to public institutional users. See 47 U.S.C. § 254(h)(2); Joint Explanatory Statement at 133. In addition, section 706(a) of the 1996 Act requires the Commission to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms)." See 1996 Act, § 706(a), 110 Stat. 56, 153 (codified as a note following 47 U.S.C. § 157).

²¹³ We note that even if any of the section 271(g)(2) educational interactive interLATA services were subject to the section 272 separate affiliate requirements under section 272(a)(2)(C), section 10 mandates that we forbear from enforcing any statutory or regulatory requirement that is not necessary to ensure just and reasonable charges and practices in the telecommunications marketplace, or to protect consumers, if we determine that such forbearance would promote competition and is consistent with the public interest. See 47 U.S.C. § 160.

above, are exempt from those requirements under section 272(a)(2)(B)(i).²¹⁴ Section 272 itself does not require the BOCs to provide these services through a separate affiliate. Further, we conclude as a legal matter that neither section 271(h) nor section 254(k) requires us to impose the section 272 separate affiliate requirements on exempt incidental interLATA services in order to protect telephone exchange ratepayers or competition in the telecommunications market. Moreover, we decline to do so as a matter of policy, because we see no present need to impose structural separation requirements beyond those mandated by Congress in order to protect against improper cost allocation and access discrimination. We likewise decline to impose any other structural separation requirements on BOC provision of these services, as suggested by certain commenters.²¹⁵ This decision comports with the Commission's prior determinations not to impose structural separation requirements in contexts in which it found that nonstructural safeguards provide sufficient protection against improper cost allocation and access discrimination (e.g., BOC provision of enhanced services).²¹⁶

97. Under our rules, the BOCs are subject to existing nonstructural safeguards in their provision of incidental interLATA services, and we conclude that these safeguards are sufficient to protect telephone exchange ratepayers and competition in telecommunications markets, in accordance with section 271(h). For accounting purposes, incidental interLATA services will be treated as non-regulated services under our Part 32 affiliate transaction rules and Part 64 cost allocation rules, and accordingly costs associated with provision of those services may not be allocated to regulated services accounts.²¹⁷ Further, at the federal level and in many states, the BOCs are subject to price cap regulation, which reduces their incentive to engage in strategic

²¹⁴ As noted above, remote data storage and retrieval services that fall within section 271(g)(4) are subject to the section 272 separate affiliate requirements.

²¹⁵ See, e.g., MCI at 10-11 (incidental interLATA services should be subject to Competitive Carrier requirements).

²¹⁶ See Amendment of Section 64.702 of the Commission's Rules and Regulations (Computer III), CC Docket No. 85-229, Phase I, 104 FCC 2d 958 (1986) (Phase I Order), recon., 2 FCC Rcd 3035 (1987) (Phase I Reconsideration Order), further recon., 3 FCC Rcd 1135 (1988) (Phase I Further Reconsideration Order), second further recon., 4 FCC Rcd 5927 (1989) (Phase I Second Further Reconsideration Order); Phase I Order and Phase I Reconsideration Order vacated, California v. FCC, 905 F.2d 1217 (9th Cir. 1990) (California I); Phase II, 2 FCC Rcd 3072 (1987) (Computer III Phase II Order), recon., 3 FCC Rcd 1150 (1988) (Phase II Reconsideration Order), further recon., 4 FCC Rcd 5927 (1989) (Phase II Further Reconsideration Order); Phase II Order vacated, California I, 905 F.2d 1217 (9th Cir. 1990); Computer III Remand Proceeding, 5 FCC Rcd 7719 (1990) (ONA Remand Order), recon., 7 FCC Rcd 909 (1992), pets. for review denied, California v. FCC, 4 F.3d 1505 (9th Cir. 1993) (California II); BOC Safeguards Order, 6 FCC Rcd 7571 (1991), vacated in part and remanded, California v. FCC, 39 F.3d 919 (9th Cir. 1994) (California III), cert. denied, 115 S. Ct. 1427 (1995).

²¹⁷ See 47 C.F.R. §§ 32.23; 32.27; 64.901 et seq. See also Implementation of the Telecommunications Act of 1996: Accounting Safeguards Under the Telecommunications Act of 1996, CC Docket No. 96-150, Report & Order, FCC 96-490, parts III.B.2.b, IV.B.4 (rel. Dec. 24, 1996) (Accounting Safeguards Order).

cost-shifting behavior.²¹⁸ The BOCs are also subject to the section 251 interconnection and unbundling requirements, which compel them to make available to other telecommunications carriers the local network elements and local exchange facilities that such carriers may require to provide services comparable to the incidental interLATA services listed in section 271(g).²¹⁹ Further, the BOCs are subject to network disclosure requirements imposed by section 251(c)(5), which require them to give timely information about network changes to their affiliates' competitors.²²⁰

98. Given the complement of nonstructural safeguards to which the BOCs are subject in their provision of incidental interLATA services, we find that the record in this proceeding does not justify the imposition of additional nonstructural safeguards on these services. We decline to extend to the integrated provision of incidental interLATA services any of the section 272(c) and 272(e) nondiscrimination requirements that depend on the existence of a section 272 affiliate, as suggested by AT&T.²²¹ Further, we decline to adopt any additional unbundling requirements applicable to BOC provision of incidental interLATA services, as suggested by MCI.²²² We agree with BellSouth that it would be inconsistent with the 1996 Act for us to require the BOCs to unbundle and make available interLATA transmission services that they are not authorized to provide except as components of an incidental interLATA service (i.e., without obtaining prior authorization under section 271 or complying with the section 272 separation requirements).²²³ For the foregoing reasons, we decline to adopt any additional structural or nonstructural safeguards applicable specifically to BOC provision of incidental interLATA services.

²¹⁸ See, e.g., Bell Atlantic, Exhibit 1, at 1-2.

²¹⁹ See 47 U.S.C. §§ 251(c)(2) and (3). In addition, the Commission's Open Network Architecture (ONA) rules provide a mechanism for competitors that are not telecommunications carriers to obtain access to network elements and facilities used in the provision of information services. See Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services, CC Docket No. 95-20, Notice of Proposed Rulemaking, 10 FCC Rcd 8360, 8374-75, ¶¶ 19-22 (1995) (Computer III Further Remand Proceedings). These ONA requirements apply to the BOCs regardless of whether they provide information services on an integrated or separated basis. See Computer III Remand Proceedings, CC Docket No. 90-368, Report & Order, 5 FCC Rcd 7719 (1990) (ONA Remand Order). As discussed *infra* at part III.F.4, the ONA requirements remain in place pending our completion of the Computer III Further Remand Proceedings.

²²⁰ See Second Interconnection Order at ¶¶ 165-260. Pending conclusion of the Computer III Further Remand Proceedings, BOCs are also subject to the Computer III network disclosure requirements. See Computer III Phase II Order, 2 FCC Rcd at 3086, 3091-3093, ¶¶ 102, 134-140.

²²¹ See AT&T at 11-12; see also *infra* parts V and VI.

²²² See MCI at 11-12.

²²³ See BellSouth Reply at 26.

F. InterLATA Information Services**1. Relationship Between Enhanced Services and Information Services****a. Background**

99. In the Notice, we sought comment on the services that are included in the statutory definition of "information service,"²²⁴ and whether that term encompasses all activities that the Commission classifies as "enhanced services."²²⁵ We noted that the statutory definition of "information service" is based on the definition used in the MFJ, and that prior to passage of the 1996 Act, neither the Commission nor the MFJ court resolved the question of whether the definition of enhanced services under the Commission's rules was synonymous with the definition of information services under the MFJ.

b. Comments

100. Virtually all parties that commented on this issue agree that the statutory term "information services" encompasses all activities that fall within the Commission's definition of "enhanced services."²²⁶ The majority of commenters, including BOCs, interexchange carriers, and certain organizations representing information service providers (ISPs), advocate that the

²²⁴ The Act defines "information service" as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service." 47 U.S.C. § 153(20).

²²⁵ Notice at ¶ 42. Under the Commission's rules, the term "enhanced services" refers to "services, offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information." See 47 C.F.R. § 64.702(a); see also North American Telecommunications Association Petition for Declaratory Ruling under Section 64.702 of the Commission's Rules Regarding the Integration of Centrex, Enhanced Services, and Customer Premises Equipment, ENF No. 84-2, Memorandum Opinion & Order, 101 FCC 2d 349 (1985) (NATA Centrex Order), recon., 3 FCC Rcd 4385 (1988) (NATA Centrex Reconsideration Order).

²²⁶ But see Ameritech at 69 (asserting that an enhanced service is not the same as an information service); Bell Atlantic, Exhibit 1, at 2-3 (asserting that "information services" do not include protocol processing services, which, with three limited exceptions, are considered "enhanced services").

Commission interpret "information services" to be coextensive with "enhanced services."²²⁷ Other commenters interpret "information services" to be broader than "enhanced services."²²⁸

101. Parties disagree about whether "protocol processing" services fall within the statutory definition of "information services."²²⁹ Bell Atlantic and U S West argue that protocol processing services are not information services, because they do not transform or process the content of the information transmitted by the subscriber.²³⁰ In contrast, ITI, ITAA, and Sprint assert that protocol conversion falls within the statutory definition of an information service, because that definition does not specify that such services must transform or process the content of information transmitted.²³¹

c. Discussion

102. We conclude that all of the services that the Commission has previously considered to be "enhanced services" are "information services." We are persuaded by the arguments advanced by ITAA, CIX, and others, that the differently-worded definitions of "information

²²⁷ See, e.g., PacTel at 9; USTA at 16; MCI at 16; Sprint at 16-17; ITAA at 12-14; IIA Reply at 1-3; CIX Reply at 3-4; ITI/ITAA Reply at 15.

²²⁸ See, e.g., BellSouth at 27 n.67 ("information services" include live operator telemessaging services, but "enhanced services" do not, because such services are not "computer processing applications"); AT&T at 12 n.13 (same); U S West at 11-12 ("enhanced services" are limited to those services offered over common carrier transmission facilities used in interstate communications); CIX Reply at 3.

²²⁹ The Common Carrier Bureau previously explained the term "protocol processing" as follows:

"Protocol" refers to the ensemble of operating disciplines and technical parameters that must be observed and agreed upon by subscribers and carriers in order to permit the exchange of information among terminals connected to a particular telecommunications network. A subscriber's digital transmission necessarily consists of two components: information-bearing symbols and protocol-related symbols. . . . "Protocol processing" is a generic term, which subsumes "protocol conversion" and refers to the use of computers to interpret and react to the protocol symbols as the information contained in a subscriber's message is routed to its destination. "Protocol conversion" is the specific form of protocol processing that is necessary to permit communications between disparate terminals or networks.

IDCMA Petition for a Declaratory Ruling That AT&T's Interspan Frame Relay Service is a Basic Service, Memorandum Opinion & Order, 10 FCC Rcd 13,717, 13,717-18 n.5 (Com. Carrier Bur. 1995) (Frame Relay Order).

²³⁰ Bell Atlantic, Exhibit 1, at 2-3; accord US West at 13. Compare PacTel at 9 (Commission should exclude from the definition of information services the three types of protocol conversion that it does not consider to be enhanced services).

²³¹ ITI/ITAA Reply at 15-16; Sprint Reply at 10.

services" and "enhanced services" can and should be interpreted to extend to the same functions.²³² We believe that interpreting "information services" to include all "enhanced services" provides a measure of regulatory stability for telecommunications carriers and ISPs alike, by preserving the definitional scheme under which the Commission exempted certain services from Title II regulation. We agree with ISPs that regulatory certainty and continuity benefits both large and small service providers.²³³ In sum, we find no basis to conclude that by using the MFJ term "information services" Congress intended a significant departure from the Commission's usage of "enhanced services."

103. We also find, however, that the term "information services" includes services that are not classified as "enhanced services" under the Commission's current rules. Stated differently, we conclude that, while all enhanced services are information services, not all information services are enhanced services. As noted by U S West, "enhanced services" under Commission precedent are limited to services "offered over common carrier transmission facilities used in interstate communications," whereas "information services" may be provided, more broadly, "via telecommunications."²³⁴ Further, we agree with BellSouth and AT&T that live operator telemessaging services that do not involve "computer processing applications" are information services, even though they do not fall within the definition of "enhanced services."²³⁵

104. We further conclude that, subject to the exceptions discussed below, protocol processing services constitute information services under the 1996 Act. We reject Bell Atlantic's argument that "information services" only refers to services that transform or process the content of information transmitted by an end-user, because we agree with Sprint that the statutory definition makes no reference to the term "content," but requires only that an information service transform or process "information."²³⁶ We also agree with ITI and ITAA that an end-to-end protocol conversion service that enables an end-user to send information into a network in one protocol and have it exit the network in a different protocol clearly "transforms" user information.²³⁷ We further find that other types of protocol processing services that interpret and react to protocol information associated with the transmission of end-user content clearly "process" such information. Therefore, we conclude that both protocol conversion and protocol processing services are information services under the 1996 Act.

²³² See ITAA at 13-14; CIX Reply at 3-4.

²³³ Cf. ITAA at 14; IIA Reply at 1-3; ITI/ITAA Reply at 18.

²³⁴ U S West at 11-12.

²³⁵ See *infra* part III.G.2.

²³⁶ See Bell Atlantic, Exhibit 1, at 2; Sprint Reply at 10.

²³⁷ See ITI/ITAA Reply at 17.

105. This interpretation is consistent with the Commission's existing practice of treating end-to-end protocol processing services as enhanced services.²³⁸ We find no reason to depart from this practice, particularly in light of Congress's deregulatory intent in enacting the 1996 Act.²³⁹ Treating protocol processing services as telecommunications services might make them subject to Title II regulation. Because the market for protocol processing services is highly competitive, such regulation is unnecessary to promote competition, and would likely result in a significant burden to small independent ISPs that provide protocol processing services. Thus, policy considerations support our conclusion that end-to-end protocol processing services are information services.²⁴⁰

106. We note that, under Computer II and Computer III, we have treated three categories of protocol processing services as basic services, rather than enhanced services, because they result in no net protocol conversion to the end-user. These categories include protocol processing: 1) involving communications between an end-user and the network itself (e.g., for initiation, routing, and termination of calls) rather than between or among users; 2) in connection with the introduction of a new basic network technology (which requires protocol conversion to maintain compatibility with existing CPE); and 3) involving internetworking (conversions taking place solely within the carrier's network to facilitate provision of a basic network service, that

²³⁸ See Bell Operating Companies Joint Petition for Waiver of Computer II Rules, Order, 10 FCC Rcd 13,758, 13,766, ¶ 51 and 13,770-13,774, app. A (1995) (BOC CEI Plan Approval Order) (approving PacTel CEI plan for provision of enhanced protocol processing services, as well as CEI plan amendments by Bell Atlantic, BellSouth, SWBT, and U S West); see e.g., The Ameritech Operating Companies Plan to Provide Comparably Efficient Interconnection to Providers of Enhanced Protocol Processing Services, Memorandum Opinion & Order, 5 FCC Rcd 3231 (Com. Car. Bur. 1990); New England Telephone and Telegraph Company and New York Telephone Company Plan to Provide Comparably Efficient Interconnection to Providers of Enhanced Protocol Processing Services, Memorandum Opinion & Order, 5 FCC Rcd 56 (Com. Car. Bur. 1990); South Central Bell Telephone Company and Southern Bell Telephone and Telegraph Company Plan for Comparably Efficient Interconnection of Enhanced Services Providers for Synchronous Protocol Processing Services, Memorandum Opinion & Order, 4 FCC Rcd 6825 (Com. Car. Bur. 1989).

²³⁹ We observe that the arguments raised by Bell Atlantic and U S West in favor of treating protocol processing services as telecommunications services are quite similar to arguments that the Commission considered and rejected nearly ten years ago in the Computer III Phase II Order, which affirmed the status of protocol processing as an enhanced service. See Computer III Phase II Order, 2 FCC Rcd at 3078, ¶ 43. In that decision, the Commission found, among other things, that protocol processing services were being effectively provided on a competitive, unregulated basis, and that reclassifying such services as basic services could cloud the regulatory boundary between basic and enhanced services.

²⁴⁰ To the extent that BOCs suggest that the section 272 separate affiliate requirements will impair their provision of protocol processing services, we note that under our Computer III rules, they may continue to provide intraLATA protocol processing services on an integrated basis, pursuant to a CEI plan that has been approved by the Commission. We agree with ITI and ITAA that requiring the BOCs to provide interLATA protocol processing service through a section 272 separate affiliate merely requires them to negotiate the same organizational boundaries and service integration issues that their ISP competitors routinely face. See ITI/ITAA Reply at 18-19.

result in no net conversion to the end-user).²⁴¹ We agree with PacTel that analogous treatment should be extended to these categories of "no net" protocol processing services under the statutory regime.²⁴² Because "no net" protocol processing services are information service capabilities used "for the management, control, or operation of a telecommunications system or the management of a telecommunications service," they are excepted from the statutory definition of information service.²⁴³ Thus, "no net" protocol conversion services constitute telecommunications services, rather than information services, under the 1996 Act.

107. We further find, as suggested by PacTel, that services that the Commission has classified as "adjunct-to-basic" should be classified as telecommunications services, rather than information services.²⁴⁴ In the NATA Centrex order, the Commission held that the enhanced services definition did not encompass adjunct-to-basic services.²⁴⁵ Although the latter services may fall within the literal reading of the enhanced service definition, they facilitate establishment of a basic transmission path over which a telephone call may be completed, without altering the fundamental character of the telephone service. Similarly, we conclude that "adjunct-to-basic" services are also covered by the "telecommunications management exception" to the statutory definition of information services, and therefore are treated as telecommunications services under the 1996 Act.

2. Distinguishing InterLATA Information Services subject to Section 272 from IntraLATA Information Services

a. Background

108. In the Notice, we sought comment on how to distinguish between interLATA information services, which are subject to the section 272 separate affiliate requirements, and

²⁴¹ Frame Relay Order, 10 FCC Rcd at 13,719, ¶¶ 14-16; Computer III Phase II Order, 2 FCC Rcd at 3081-82, ¶¶ 64-71. An example of the third type of protocol conversion occurs when a carrier converts from X.25 to X.75 formatted data at the originating end within the network, transports the data in X.75 format, and then converts the data back to X.25 format at the terminating end.

²⁴² PacTel at 9.

²⁴³ See 47 U.S.C. § 153(20).

²⁴⁴ PacTel at 9. PacTel argues that such treatment of "adjunct-to-basic" services would correspond to the statutory definition of information services, which "does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service." 47 U.S.C. § 153(20); see also U.S. West at 13.

²⁴⁵ NATA Centrex Order, 101 FCC 2d at 359-361, ¶¶ 24-28. Adjunct-to-basic services include, *inter alia*, speed dialing, call forwarding, computer-provided directory assistance, call monitoring, caller i.d., call tracing, call blocking, call return, repeat dialing, and call tracking, as well as certain Centrex features.

intraLATA information services, which are not.²⁴⁶ In particular, we asked whether an information service should be considered an interLATA service only when the service actually involves an interLATA telecommunications transmission component, or, alternatively, when it potentially involves interLATA telecommunications transmissions (e.g., the service can be accessed across LATA boundaries).²⁴⁷ We further sought comment regarding how the manner in which a BOC structures its provision of an information service may affect whether the service is classified as interLATA.²⁴⁸

109. We also invited comment on whether a particular service for which a BOC had applied for or received an MFJ waiver should presumptively be treated as an interLATA information service subject to the separate affiliate requirements of section 272.²⁴⁹ In addition, we sought comment on whether we should presume that services provided by BOCs pursuant to CEI plans approved by the Commission prior to the enactment of the 1996 Act are intraLATA information services.²⁵⁰

b. Comments

110. InterLATA Transmission/Resale: The BOCs, AT&T, and MCI argue that, for an information service to be considered an interLATA information service, the BOC must provide as a necessary component thereof telecommunications between a point located in one LATA and a point outside that LATA.²⁵¹ Certain of the BOCs argue that only interLATA information services in which the BOC's own facilities or services carry the information service across LATA boundaries are subject to section 272 separate affiliate requirements; services in which the interLATA telecommunications transmission component is provided through resale are not subject to section 272.²⁵² USTA argues that BOC provision of interLATA transmission through resale

²⁴⁶ Notice at ¶ 44.

²⁴⁷ Id. at ¶ 44.

²⁴⁸ Id. at ¶ 45. For example, we asked whether an interLATA information service required non-transmission computer facilities used in the provision of the service located in a different LATA from the end-user, or non-transmission facilities located in different LATAs.

²⁴⁹ Id. at ¶ 46.

²⁵⁰ Id. at ¶ 47.

²⁵¹ Ameritech at 67-69; AT&T at 13-14; Bell Atlantic, Exhibit 1, at 3-5; BellSouth at 25; MCI at 17; NYNEX at 42-45; PacTel at 10; U S WEST at 9; Bell Atlantic Reply at 15-17; NYNEX Reply at 27-28.

²⁵² Bell Atlantic, Exhibit 1, at 3-5; see also U S West at 9; USTA at 14; Ameritech Reply at 34; U S West Reply at 29. But see Bell Atlantic Reply at 16 (arguing that interLATA information services are those services that a BOC or its affiliate carries across LATA boundaries, either through its own facilities, or via facilities it leases and resells as its own).

does not raise improper cost allocation and discrimination concerns.²⁵³ In contrast, several potential telecommunications competitors argue that, in accordance with MFJ precedent, BOC provision of an information service with an interLATA transmission component is an interLATA information service, regardless of whether transmission is provided over resold facilities or the BOC's own facilities.²⁵⁴

111. InterLATA Access. AT&T and the BOCs argue that an information service may not be considered interLATA merely because it may be accessed on an interLATA basis by means independently chosen by the customer, such as the services of the customer's presubscribed interexchange provider.²⁵⁵ In contrast, several potential telecommunications competitors and ISPs urge the Commission to define interLATA information services to include any information service that is capable of being accessed across LATA boundaries.²⁵⁶

112. Bundling. AT&T and several of the BOCs assert that an information service is only subject to the section 272 separate affiliate requirement if the interLATA telecommunications transmission component is a bundled component of the information service.²⁵⁷ The BOCs further state that where an interLATA telecommunications service and information service are separately purchased, even if both services are provided by the BOC or its affiliate, they should not be treated together as an interLATA information service.²⁵⁸ MCI conditionally agrees with that position.²⁵⁹

²⁵³ USTA at 14; USTA Reply at 17.

²⁵⁴ AT&T Reply at 4 n.6 (citing United States v. Western Electric, 907 F.2d 160, 163 (D.C. Cir. 1990)); see also MCI at 17; MFS Reply at 9.

²⁵⁵ E.g., AT&T at 14; Bell Atlantic, Exhibit 1, at 4; BellSouth at 25; NYNEX at 43-44; PacTel at 12; U S West at 9-10; Ameritech Reply at 33-34; Bell Atlantic Reply at 15-16; BellSouth Reply at 23; PacTel Reply at 5; U S West Reply at 27-28.

²⁵⁶ E.g., ITAA at 9-10 (arguing that information services capable of providing access to or being accessed by interLATA facilities should be classified as interLATA information services); Sprint at 17-18; TRA at 11-12; ITI/ITAA Reply at 7-8; see also VoiceTel at 11-12; MFS Reply at 12-13.

²⁵⁷ NYNEX at 43, 45; Ameritech at 67 (specifying that the interLATA transmission service and the information service must be provided together for a single charge); see also AT&T at 13-14.

²⁵⁸ NYNEX at 43; U S West at 9-10; accord BellSouth at 25.

²⁵⁹ MCI Reply at 10-11 (the BOC must provide the interLATA telecommunications service through a section 272 affiliate, after having obtained Commission authorization under section 271); see also MFS Reply at 9 (customer must establish an independent relationship with interLATA telecommunications carrier). But see Time Warner Reply at 7-8 (arguing that allowing BOCs separately to provide intraLATA information service and interLATA transmission would permit them to circumvent Congress's clear separate affiliate requirement).

113. Remote Databases/Network Efficiency. Several of the BOCs argue that certain interLATA information services should not be subject to the section 272 separate affiliate requirements. For example, they argue that information services in which the BOC locates a non-transmission database or processor in another LATA are not interLATA information services subject to section 272, but are incidental interLATA services, pursuant to section 271(g)(4).²⁶⁰ They also contend that, where an information service involves interLATA transmission that is provided outside the control of the user solely to incorporate network efficiencies, that information service is excluded from the definition of interLATA information services.²⁶¹

114. Presumptions Regarding Previously Authorized Information Services. Certain BOCs argue that we should presume that BOC provision of an information service without an MFJ waiver (i.e., pursuant to a CEI plan) is an intraLATA service.²⁶² MCI and TRA argue that, when a BOC has sought or obtained an MFJ waiver to provide an information service prior to enactment of the 1996 Act, that information service should be presumed to be interLATA.²⁶³

c. Discussion

115. InterLATA Transmission/Resale. We conclude that, as used in section 272, the term "interLATA information service" refers to an information service that incorporates as a necessary, bundled element an interLATA telecommunications transmission component, provided to the customer for a single charge.²⁶⁴ We find, as noted in the comments of AT&T, MCI, and the BOCs, that this definition of interLATA information service conforms to the MFJ precedent in this area.²⁶⁵ We further conclude that a BOC provides an interLATA information service when

²⁶⁰ Bell Atlantic, Exhibit 1, at 5; see also Ameritech at 67-68; BellSouth Reply at 23-24. But see MCI Reply at 9-10; Sprint Reply at 10.

²⁶¹ BellSouth at 25; see also U S West at 10; PacTel at 10-11; PacTel Reply at 6. PacTel notes that, under the MFJ, a BOC could route exchange and exchange access traffic outside the LATA in which it originated for call processing (switching and screening) so long as the traffic returned to the original LATA for termination or delivery to an interexchange provider's point of presence. PacTel at 10-11.

²⁶² NYNEX at 45 n.61; Bell Atlantic, Exhibit 1, at 4; U S West at 21. But see MFS Reply at 15 (satisfaction of the CEI requirements is irrelevant to classification of services as interLATA or intraLATA).

²⁶³ MCI at 17; TRA at 11-12.

²⁶⁴ An interLATA transmission component is "necessary" to an interLATA information service if it must be used in order for the end-user to make use of the information service capability. For example, a BOC may provide data storage and retrieval services to customers throughout its service region, using one centralized computer data storage facility and dedicated interLATA transmission links that connect the end-user with the data storage facility. In this case, the dedicated interLATA transmission links are "necessary" to the BOC's provision of centralized, interLATA data storage and retrieval services.

²⁶⁵ See United States v. Western Electric, 907 F.2d 160, 163 (D.C. Cir. 1990) ("[W]hen information services are . . . bundled with leased interexchange lines, the activity is covered by the [AT&T Consent] decree.")

it provides the interLATA telecommunications transmission component of the service either over its own facilities, or by reselling the interLATA telecommunications services of an interexchange provider. This conclusion also comports with MFJ precedent.²⁶⁶

116. USTA contends that BOC provision of interLATA transmission through resale should be permitted because it does not raise improper cost allocation and discrimination concerns.²⁶⁷ This argument, however, does not address the key issue of what is required by the statute. As discussed above, we find that section 601(a) of the 1996 Act indicates that Congress intended the provisions of the 1996 Act to supplant the MFJ.²⁶⁸ Therefore, we conclude that the restrictions imposed by the 1996 Act on BOC provision of interLATA services, like the interLATA restrictions imposed under the MFJ, apply to services provided through resale, as well as to services provided through the BOC's own transmission facilities. Moreover, we decline to adopt PacTel's suggestion that end-user receipt of an "interLATA benefit" should be the test for determining whether an information service is interLATA.²⁶⁹ PacTel's proposed test is inconsistent with MFJ precedent and would be very difficult to administer. Finally, we reject the arguments raised by Sprint and MFS that we should classify all information services as interLATA services because of the difficulties inherent in distinguishing between interLATA and intraLATA information services.²⁷⁰ We conclude that it is possible to distinguish between interLATA and intraLATA information services by applying the rule established by this Order.

117. InterLATA Access. We agree with AT&T and the BOCs that an information service may not be considered interLATA merely because it may be accessed on an interLATA basis by means independently chosen by the customer, such as a presubscribed interexchange carrier. In interpreting the statutory restrictions on BOC provision of interLATA information services, we are concerned not with the manner in which an information service is used, but rather with the components of the service that are provided by the BOC. When a BOC is neither

²⁶⁶ See *United States v. Western Electric*, 907 F.2d at 163 ("We do not agree . . . that a distinction should be drawn between leasing lines, on the one hand, and acquiring or constructing them, on the other. A taxi company, for instance, offers taxi service for hire whether or not it owns or leases its cabs. The critical distinction under the decree, is not whether the BOC owns the interexchange capacity, but whether it 'provide[s]' interexchange service to its customers.")

²⁶⁷ USTA Reply at 17.

²⁶⁸ See *supra* paragraph 31.

²⁶⁹ PacTel at 11-12. PacTel's example of a service that should be classified as an intraLATA information service, because it provides no direct interLATA benefit to the end-user, is a gateway service located in a distant LATA used by a San Francisco end-user to obtain information from San Francisco area libraries. PacTel's example of an information service that provides a direct interLATA benefit to the end-user is an e-mail service that allows exchange of messages between users in different LATAs.

²⁷⁰ Sprint at 17-18; MFS Reply at 12-13 (because major ISPs do not provide intraLATA-only information services, the Commission should declare that all BOC information services are interLATA); see also VoiceTel at 11; ITI/ITAA Reply at 7-8.

providing nor reselling the interLATA transmission component of an information service that may be accessed across LATA boundaries, the statute does not require that service to be provided through a section 272 separate affiliate. We reject MFS's contention that, where an interLATA transmission service is necessary for a customer to obtain access to a particular BOC-provided information service, that information service should be considered interLATA, even if the necessary interLATA transmission component is separately provided by another carrier.²⁷¹ In such circumstances, the BOC is not providing any interLATA services, and therefore is not required by section 272 to provide the information service in question through a separate affiliate.

118. Moreover, as the BOCs point out, if we were to determine that the mere possibility of interLATA access was sufficient to classify an information service as an interLATA service, that rule would render any telecommunications service that carries traffic that originates in one LATA and terminates in another, including local exchange service and exchange access service, an interLATA service.²⁷² Congress clearly did not intend that result.

119. In addition, we agree with the BOCs that classifying information services as interLATA solely because end-users may obtain access to the service across LATA boundaries would represent a significant departure from Commission precedent, as well as from MFJ precedent.²⁷³ BOCs are currently providing a number of information services on an integrated basis pursuant to the Commission's Computer III regulations, and users may obtain access to some, if not all, of these services on an interLATA basis.²⁷⁴ If we were to determine that these services were interLATA services simply because end-users may obtain access across LATA boundaries, BOCs would have to change the manner in which they are providing many of these services, which would likely result in lost efficiency and disruption of services to customers.²⁷⁵ We see no basis in the statute to adopt such an interpretation, as sections 271 and 272 are intended to govern the BOCs' provision of services that they were previously prohibited from providing under the MFJ, not services that they were previously authorized to provide under the MFJ.

120. Bundling. As we concluded above, an interLATA information service incorporates a bundled interLATA telecommunications transmission component. When a customer obtains interLATA transmission service from an interexchange provider that is not affiliated with a BOC,

²⁷¹ See MFS Reply at 9.

²⁷² NYNEX at 43; U S West at 10; Ameritech Reply at 33-34; Bell Atlantic Reply at 15-16.

²⁷³ E.g., Bell Atlantic, Exhibit 1, at 4-5; PacTel at 10-11 (under the MFJ, if a necessary interLATA transmission component of an information service is provided by an interexchange carrier that is not selected by the BOC, the service would not be considered a BOC-provided interLATA information service); see also Ameritech Reply at 33.

²⁷⁴ See BOC CEI Plan Approval Order, 10 FCC Rcd at 13,770-74, app. A.

²⁷⁵ See, e.g., Bell Atlantic, Exhibit 1, at 4-5.

the use of that transmission service in conjunction with an information service provided by a BOC or its affiliate does not make the information service a BOC interLATA service offering. A customer also may obtain an in-region interLATA telecommunications service from a BOC section 272 affiliate that the customer uses in conjunction with an intraLATA information service provided by that affiliate or by the BOC itself. When such telecommunications and information services are provided, purchased, and priced separately, we conclude that they do not collectively constitute an interLATA information service offering by the BOC.²⁷⁶ In such a situation, the BOC would, of course, be required to provide the in-region interLATA transmission service pursuant to section 271 authorization and the section 272 separate affiliate and nondiscrimination requirements. The BOC could choose to provide the separate, intraLATA information service either on an integrated basis, in compliance with the Commission's CEI and ONA requirements, or through a separate affiliate.

121. Remote Databases/Network Efficiency. BOCs may not provide interLATA services in their own regions, either over their own facilities or through resale, before receiving authorization from the Commission under section 271(d). Therefore, we conclude that BOCs may not provide interLATA information services, except for information services covered by section 271(g)(4), in any of their in-region states prior to obtaining section 271 authorization. Section 271(g)(4) designates as an incidental interLATA service the interLATA provision by a BOC or its affiliate of "a service that permits a customer that is located in one LATA to retrieve stored information from, or file information for storage in, information storage facilities of such company that are located in another LATA."²⁷⁷ Because BOCs were able to provide incidental interLATA services immediately upon enactment of the 1996 Act, they may provide interLATA information services that fall within the scope of section 271(g)(4) without receiving section 271(d) authorization from the Commission. Since section 271(g)(4) services are not among the incidental interLATA services exempted from section 272 separate affiliate requirements, however, they must be provided in compliance with those requirements. To the extent that parties have argued in the record that centralized data storage and retrieval services that fall within section 271(g)(4) either are not interLATA information services, or are not subject to the section 272 separate affiliate requirements, we specifically reject these arguments.²⁷⁸

122. We also reject the BOCs' argument that their use of interLATA transmission, outside the control of the end-user and solely to maximize network efficiencies, in connection with the provision of an information service, does not render that information service interLATA

²⁷⁶ We note that even when an information service and interLATA transmission service are ostensibly separately priced, if the BOC offers special discounts or incentives to customers that take both services, this would constitute sufficient evidence of bundling to render the information service an interLATA information service.

²⁷⁷ 47 U.S.C. § 271(g)(4).

²⁷⁸ E.g., Bell Atlantic, Exhibit 1, at 5; see also Ameritech at 67; BellSouth Reply at 23-24.

in nature.²⁷⁹ Whenever interLATA transmission is a component of an information service, that service is an interLATA information service, unless the end-user obtains that interLATA transmission service separately, e.g., from its presubscribed interexchange provider. To the extent that BOCs are allowed to perform certain interLATA call processing functions associated with their provision of telephone exchange service or exchange access service in connection with an intraLATA information service, however, they may continue to do so without transforming that information service into an interLATA information service.²⁸⁰

123. We also reject PacTel's claim that a BOC's use of interLATA transmission solely for its own business convenience in providing an information service falls within the "telecommunications management exception" to "information service."²⁸¹ We disagree with PacTel's assertion that this practice is covered by the "technical management exception," because the BOC would be providing interLATA transmission in connection with the management of an information service, not "the management of a telecommunications service," as specified by section 3(20). Further, as noted above, we believe that the "telecommunications management exception" is analogous to the Commission's classification of certain services as "adjunct-to-basic;" that is, it covers services that may fit within the literal reading of the information services definition, but that are used to facilitate the provision of a basic telecommunications transmission service, without altering the character of that service.²⁸² In other words, the "technical management exception" relates to the classification of services as either telecommunications services or information services; it has no bearing upon the classification of either of these types of services as intraLATA or interLATA. As such, the "telecommunications management exception" provides no safe-harbor-for-interLATA-transmission-services-employed-by-BOCs in connection with the provision of information services.

124. Presumptions Regarding Previously Authorized Information Services. With respect to information services that the BOCs were authorized to provide prior to passage of the 1996 Act, we conclude that as a matter of administrative convenience it is helpful to establish several

²⁷⁹ PacTel at 10-11; PacTel Reply at 6; see also BellSouth at 25; U S West at 10.

²⁸⁰ For example, under the MFJ, BOCs were permitted to use interLATA "Official Services Networks" to perform on a centralized basis certain network functions associated with their provision of exchange and exchange access services, including trunk and switch monitoring and control, call routing, directory assistance, repair calls, and internal business communications. See United States v. Western Electric, 569 F. Supp. 1057, 1097-1101 (D.D.C. 1983). Although BOCs were entitled to provide out-of-band signalling associated with their own exchange services on a centralized basis, the MFJ court denied their request to furnish such signalling to interexchange carriers on a centralized basis, instead requiring them to establish interconnection with their signal transfer points (STPs) in each LATA. See United States v. Western Electric, 131 F.R.D. 647 (D.D.C. 1990), aff'd, 969 F.2d 1231 (D.C. Cir. 1992). Under the 1996 Act, the BOCs are now entitled to provide signaling information associated with both intraLATA services and interLATA services on a centralized basis. See 47 U.S.C. §§ 271(g)(5) and (g)(6).

²⁸¹ PacTel at 10-11 (citing 47 U.S.C. § 153(20)).

²⁸² See supra paragraph 107.

rebuttable presumptions regarding intraLATA or interLATA classification. Thus, we will presume that information services that BOCs were authorized to provide pursuant to CEI plans, without MFJ waivers, are intraLATA information services. Similarly, we will presume that information services for which BOCs were required to obtain MFJ waivers are interLATA information services. We conclude that these presumptions are rebuttable, rather than conclusive, because the BOCs have noted that, for expediency purposes, they sometimes requested and obtained MFJ waivers in order to provide services that were not clearly interLATA in nature.²³³ Thus, a BOC would be able to rebut the presumption that an information service provided pursuant to an MFJ waiver is an interLATA information service by showing that it had obtained a waiver to provide the service on an intraLATA basis prior to 1991. Similarly, the presumption that an information service provided pursuant to a CEI plan is an intraLATA information service may be rebutted by a showing that the information service incorporates a bundled, interLATA telecommunications transmission component, as specified in this Order.

3. BOC-provided Internet Access Services

a. Background

125. On June 6, 1996, the Common Carrier Bureau (Bureau) released an order approving a CEI plan filed by Bell Atlantic for the provision of Internet Access Service.²³⁴ MFS had filed comments opposing Bell Atlantic's plan, arguing, *inter alia*, that Bell Atlantic's Internet access service offering is an interLATA service that Bell Atlantic may only provide through a section 272 affiliate after obtaining section 271 authorization from the Commission.²³⁵ Following release of the Bell Atlantic CEI Plan Order, MFS filed a petition for reconsideration of that Order, raising similar arguments.²³⁶ At about the same time, Southwestern Bell Telephone Company (SWBT) filed a CEI plan for Internet Support Services.²³⁷ On July 25, 1996, one week after the Commission released the Notice in this proceeding, MFS filed with the Commission a petition seeking to consolidate proceedings related to the Bell Atlantic CEI Plan Order

²³³ NYNEX at 45 n.61; Ameritech at 69 (noting that prior to 1991, BOCs required MFJ waivers to provide information services at all, even on an intraLATA basis); PacTel Reply at 6-7.

²³⁴ Bell Atlantic Telephone Companies Offer of Comparably Efficient Interconnection to Providers of Internet Access Services, Order, 11 FCC Rcd 6919 (Com. Car. Bur. 1996) (Bell Atlantic Internet Access CEI Plan Order).

²³⁵ See Bell Atlantic Internet Access CEI Plan Order at ¶ 48 (citing Comments of MFS Communications Company, Inc., at 8 (filed April 12, 1996)).

²³⁶ Petition for Reconsideration of MFS Communications Company, Inc., CCBPol 96-09, at 12-20 (filed July 3, 1996). This petition was subsequently put on public notice by the Bureau. See Pleading Cycle Established on MFS Communications Company Inc.'s Petition for Reconsideration, CCBPol 96-09, Public Notice, DA 96-1102 (rel. Jul. 10, 1996).

²³⁷ See Pleading Cycle Established for Comments on SWBT's Comparably Efficient Interconnection Plan for Internet Support Services, CC Docket Nos. 85-229, 90-623 & 95-20, Public Notice, DA 96-1031 (rel. June 26, 1996).

reconsideration and the SWBT Internet support CEI plan with the instant proceeding, on the grounds that the three proceedings raise similar novel, policy, factual, and legal arguments.²⁸⁸ Although the Notice in the instant proceeding did not specifically seek comment on the proper classification or regulatory treatment of BOC-provided Internet services and Internet access services under the 1996 Act, several parties discussed these matters in their comments, in the course of addressing how we should define "interLATA information services."

b. Comments

126. MFS argues that all Internet services are interLATA services and, hence, Internet services provided by the BOCs are interLATA information services subject to the section 272 separate affiliate requirements.²⁸⁹ In response, the BOCs argue that it is possible for them to provide on an intraLATA basis an Internet access service that allows a customer to connect to an Internet service provider's point of presence (POP) using the traditional local loop, and that such service should be classified as an intraLATA information service.²⁹⁰

c. Discussion

127. The preceding sections of this Order establish a definition of "interLATA information service" that should assist the BOCs and other interested parties in determining the types of information services that the BOCs are statutorily-required to provide through section 272 affiliates. If a BOC's provision of an Internet or Internet access service²⁹¹ (or for that matter, any information service) incorporates a bundled, in-region, interLATA transmission component provided by the BOC over its own facilities or through resale, that service may only be provided through a section 272 affiliate, after the BOC has received in-region interLATA authority under section 271. We believe that this is not the appropriate forum for considering whether the various specific Internet services provided by the BOCs are "interLATA information services" because such determinations must be made on a case-by-case basis. We believe that the lawfulness of the specific Internet services provided by Bell Atlantic and SWBT is more appropriately analyzed in the context of the separate CEI plan proceedings regarding each service that are currently pending before the Bureau, consistent with the rules and policies enunciated in

²⁸⁸ Petition to Consolidate Proceedings by MFS Communications Company, Inc. (filed July 25, 1996).

²⁸⁹ MFS at 7-9, 11-12; MFS Reply at 10-12; see also ITAA at 12 n.31.

²⁹⁰ U S West at 11; Ameritech Reply at 34; PacTel Reply at 7-8; USTA Reply at 17; SBC Reply at 35-36; U S West Reply at 25-26.

²⁹¹ The Internet is an interconnected global network of thousands of interoperable packet-switched networks that use a standard protocol, Transmission Control Protocol/Internet Protocol (TCP/IP), to enable information exchange. See Universal Service Joint Board Recommended Decision at ¶ 457. An end-user may obtain access to the Internet from an Internet service provider, by using dial-up or dedicated access to connect to the Internet service provider's processor. The Internet service provider, in turn, connects the end-user to an Internet backbone provider that carries traffic to and from other Internet host sites.

this rulemaking proceeding. Therefore, we deny MFS's request to consolidate proceedings related to the provision of Internet and Internet access services by Bell Atlantic and SWBT with the instant proceeding.

4. Impact of the 1996 Act on the Computer II, Computer III, and ONA requirements

a. Background

128. In the Notice, we concluded that, because the 1996 Act does not establish regulatory requirements for BOC provision of intraLATA information services, Computer II,²⁹² Computer III,²⁹³ and ONA²⁹⁴ requirements continue to govern BOC provision of these services, to the extent that these requirements are consistent with the 1996 Act.²⁹⁵ We sought comment on which of the Commission's existing requirements were inconsistent with, or had been rendered unnecessary by, the 1996 Act, as well as on the specific provisions of the 1996 Act that supersede the existing requirements.²⁹⁶ We also sought comment on the impact of the statute on our pending Computer III Further Remand Proceedings.²⁹⁷

b. Comments

129. Consistency of Commission's Computer II, Computer III, and ONA Rules with the 1996 Act. Bell Atlantic and NYNEX argue that enactment of the 1996 Act has rendered the Computer II, Computer III, and ONA rules unnecessary and redundant.²⁹⁸ The majority of the BOCs, however, contend that the Commission's existing Computer III and ONA interconnection

²⁹² Amendment of Section 64.702 of the Commission's Rules and Regulations, 77 FCC 2d 384 (1980) (Computer II Final Order), recon., 84 FCC 2d 50 (1980) (Computer II Reconsideration Order), further recon., 88 FCC 2d 512 (1981) (Computer II Further Reconsideration Order), affirmed sub nom. Computer and Communications Industry Ass'n v. FCC, 693 F.2d 198 (D.C. Cir. 1982), cert. denied, 461 U.S. 938 (1983).

²⁹³ See supra note 217 for full citation for Computer III proceeding.

²⁹⁴ See Filing and Review of Open Network Architecture Plans, 4 FCC Rcd 1 (1988) (BOC ONA Order), recon., 5 FCC Rcd 3084 (1990) (BOC ONA Reconsideration Order); 5 FCC Rcd 3103 (1990) (BOC ONA Amendment Order), erratum, 5 FCC Rcd 4045, pets. for review denied, California v. FCC, 4 F.3d 1505 (9th Cir. 1993), recon., 8 FCC Rcd 97 (1993) (BOC ONA Amendment Reconsideration Order); 6 FCC Rcd 7646 (1991) (BOC ONA Further Amendment Order); 8 FCC Rcd 2606 (1993) (BOC ONA Second Further Amendment Order), pet. for review denied, California v. FCC, 4 F.3d 1505 (9th Cir. 1993) (collectively referred to as the ONA Proceeding).

²⁹⁵ Notice at ¶ 48-49.

²⁹⁶ Id. at ¶¶ 49-50.

²⁹⁷ Computer III Further Remand Proceedings, 10 FCC Rcd at 8360.

²⁹⁸ Bell Atlantic, Exhibit 1, at 5-6; NYNEX at 47-48; see also LDDS Worldcom at 12 n.10.

and unbundling requirements are consistent with the 1996 Act and should remain in place to allow them to provide intraLATA information services on an integrated basis.²⁹⁹ Several of the BOCs' potential telecommunications competitors and certain organizations representing ISPs also agree that the Computer III and ONA safeguards should be retained if the Commission continues to permit BOCs to provide intraLATA information services on an unseparated basis.³⁰⁰

130. Requiring section 272 affiliates for intraLATA information services. MCI, ITAA, and CIX argue that, in the interest of regulatory consistency, the Commission should require the BOCs to provide all information services through a section 272 separate affiliate.³⁰¹ Several of the BOCs object to this proposal on the ground that such a requirement would be directly contrary to congressional intent.³⁰²

131. Application of Computer II, Computer III, and ONA requirements to section 272 affiliate activities. Several of the BOCs argue that the Commission should not apply the Computer III and ONA requirements to any BOC information services provided through a section 272 separate affiliate (either interLATA information services, as required by statute, or intraLATA information services, provided on a separate basis by choice).³⁰³ In contrast, ITI and ITAA argue that the Computer III and ONA requirements should be applied to section 272 affiliates, prohibiting such affiliates from bundling equipment or information services with local exchange, exchange access, or interLATA services, until local exchange markets become fully competitive.³⁰⁴

c. Discussion

132. Consistency of Commission's Computer II, Computer III, and ONA Rules with the 1996 Act. We conclude that the Computer II, Computer III, and ONA requirements are consistent with the 1996 Act, and continue to govern BOC provision of intraLATA information services. By its terms, the 1996 Act imposes separate affiliate and nondiscrimination requirements on BOC provision of "interLATA information services," but does not address BOC

²⁹⁹ BellSouth at 27-28; PacTel at 13; SBC at 13-17; U S West at 20; USTA at 15-16; Bell Atlantic Reply at 17; PacTel Reply at 14-15.

³⁰⁰ TRA at 12; MCI at 17, 19-20; Sprint at 18-19; MCI Reply at 13; cf. ATSI at 8-13 (arguing that a minimum set of interconnection points and unbundled elements should be made available to information service providers).

³⁰¹ Compare MCI at 19; ITAA at 11-12; MCI Reply at 14; CIX Reply at 6-7; with U S West at 20-21 (arguing that the Commission should harmonize the Computer III and ONA requirements with the provisions of the 1996 Act, to develop a single regulatory structure for the provision of information services).

³⁰² BellSouth at 26-28; PacTel at 13.

³⁰³ U S West at 20; USTA at 15; SBC Reply at 12-14; YPPA Reply at 5.

³⁰⁴ ITI/ITAA Reply at 11-12.

provision of intraLATA information services.³⁰⁵ We concluded above that, for the purposes of applying sections 271 and 272, interLATA information services must include a bundled interLATA transmission component.³⁰⁶ We further conclude, in light of our definition of interLATA information services, that BOCs are currently providing a number of information services on an intraLATA basis.³⁰⁷ We find that the BOCs may continue to provide such intraLATA information services on an integrated basis, in compliance with the nonstructural safeguards established in Computer III and ONA.³⁰⁸

133. We reject Bell Atlantic's conclusory assertions that the 1996 Act's customer proprietary network information (CPNI), network disclosure, nondiscrimination, and accounting provisions supersede various of the Commission's Computer III nonstructural safeguards.³⁰⁹ We also reject NYNEX's claim that the section 251 interconnection and unbundling requirements render the Commission's Computer III and ONA requirements unnecessary.³¹⁰ Based on our review of the record in this proceeding, we conclude that the pending Computer III Further Remand Proceedings are the appropriate forum in which to examine the necessity of retaining any or all of these individual Computer III and ONA requirements.³¹¹ We therefore plan to issue a Further Notice in that proceeding to determine how to regulate BOC provision of intraLATA information services in light of the 1996 Act.

134. In the interim, the Commission's Computer II, Computer III, and ONA rules are the only regulatory means by which certain independent ISPs are guaranteed nondiscriminatory

³⁰⁵ See 47 U.S.C. § 272(a)(2)(C).

³⁰⁶ See *supra* part III.F.2.

³⁰⁷ See BOC CEI Plan Approval Order, 10 FCC Rcd at 13,770-74, app. A.

³⁰⁸ BOCs currently provide intraLATA information services on an integrated basis pursuant to service-specific CEI plans. See Bell Operating Companies' Joint Petition for Waiver of Computer II Rules, 10 FCC Rcd 1724 (1995) (Interim Waiver Order). Contrary to the assertions of MCI and ITAA (see MCI at 18; ITAA at 11 & n.30), we concluded that California III returned the regulation of information services not to a Computer II structural separation regime, but rather to a Computer III service-specific CEI plan regime. BOC CEI Plan Approval Order, 10 FCC Rcd at 13,762, ¶ 22 (1995).

³⁰⁹ See Bell Atlantic, Exhibit 1, at 6.

³¹⁰ See NYNEX at 47-48.

³¹¹ We have already initiated a proceeding in which we are examining which, if any, of the Commission's CPNI requirements should be retained in light of the CPNI restrictions set forth in section 222. See Implementation of the Telecommunications Act of 1996: Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information, CC Docket No. 96-115, Notice of Proposed Rulemaking, 11 FCC Rcd 12,513 (1996) (CPNI NPRM).

access to BOC local exchange services used in the provision of intraLATA information services.³¹² As noted above, the section 272 nondiscrimination requirements do not apply to BOC provision of intraLATA information services, and ISPs that are not telecommunications carriers cannot obtain interconnection or access to unbundled elements under section 251.³¹³ Thus, we believe that continued enforcement of these safeguards is necessary pending the conclusion of the Computer III Further Remand Proceedings and establishes important protections for small ISPs that are not provided elsewhere in the Act.

135. Requiring section 272 affiliates for intraLATA information services. We decline to require the BOCs to provide intraLATA information services through section 272 affiliates. It is clear that section 272 does not require the BOCs to offer intraLATA information services through a separate affiliate. We further decline to exercise our general rulemaking authority to impose such a requirement. We conclude that the record in this proceeding does not justify a departure from our determination, in Computer III, to allow BOCs to provide intraLATA information services on an integrated basis, subject to appropriate nonstructural safeguards. Some parties in this proceeding argue that we should harmonize our regulatory treatment of intraLATA information services provided by the BOCs with the section 272 requirements imposed by Congress on interLATA information services.³¹⁴ We invite these parties to comment on these matters in response to the Further Notice we intend to issue in the Computer III Further Remand Proceedings.

136. Application of Computer II, Computer III, and ONA requirements to section 272 affiliate activities. We conclude that a BOC that provides interLATA telecommunications services and information services through the same section 272 affiliate may bundle such services without providing comparably efficient interconnection to the basic underlying interLATA telecommunications services.³¹⁵ Under our definition of "interLATA information service," as explained above, such service must include a bundled interLATA telecommunications element. Hence, to prohibit a BOC affiliate from bundling interLATA telecommunications and information services would effectively prevent the BOCs from offering any interLATA information services, a result clearly not contemplated by the statute. Further, we note that the market for information services is fully competitive,³¹⁶ and the market for interLATA telecommunications services is substantially competitive.³¹⁷ Thus, we see no basis for concern that a section 272 affiliate

³¹² CIX Reply at 8.

³¹³ First Interconnection Order at ¶ 995.

³¹⁴ See, e.g., U S West at 20-21.

³¹⁵ See NYNEX at 49.

³¹⁶ See, e.g., Computer II Final Order, 77 FCC 2d at 433, ¶ 128; Computer III Phase I Order, 104 FCC 2d at 1010, ¶ 95.

³¹⁷ See, e.g., Tariff Forbearance Order at ¶¶ 21-22; AT&T Nondominance Order, 11 FCC Rcd at 3278-3279, 3288, ¶¶ 9, 26; First Interexchange Competition Order, 6 FCC Rcd at 5887, ¶ 36.

providing an information service bundled with an interLATA telecommunications service would be able to exercise market power. If, however, a BOC's section 272 affiliate were classified as a facilities-based telecommunications carrier (*i.e.*, it did not provide interLATA telecommunications services solely through resale), the affiliate would be subject to a Computer II obligation to unbundle and tariff the underlying telecommunications services used to furnish any bundled service offering.³¹⁸

137. Under our current regulatory regime, a BOC must comply fully with the Computer II separate subsidiary requirements in providing an information service in order to be relieved of the obligation to file a CEI plan for that service. We decline to adopt NYNEX's proposal that we find that all BOC information services provided through a section 272 separate affiliate satisfy the Computer II separate subsidiary requirements, because we conclude that the record in this proceeding is insufficient to support such a conclusion.³¹⁹ Instead, we intend to examine this issue further in the context of the Computer III Further Remand Proceedings. Further, we reject USTA's argument that ONA reporting requirements do not extend to intraLATA information services provided through a section 272 separate affiliate.³²⁰ BOCs must comply with the ONA requirements regardless of whether they provide information services on a separated or integrated basis.³²¹

G. Information Services Subject to Other Statutory Requirements

1. Electronic Publishing (section 274)

a. Background

138. In the Notice, we observed that, although electronic publishing is specifically identified as an information service, interLATA provision of electronic publishing is exempt from section 272, and is instead subject to section 274.³²² Noting that we had initiated a separate proceeding to clarify and implement, *inter alia*, the requirements of section 274,³²³ we sought comment on how to distinguish information services subject to the section 272 requirements from

³¹⁸ Frame Relay Order, 10 FCC Rcd at 13,719, ¶ 13.

³¹⁹ NYNEX at 48; see also U S West at 20.

³²⁰ USTA at 15.

³²¹ See ONA Remand Order, 5 FCC Rcd at 7719.

³²² Notice at ¶ 51.

³²³ See Implementation of the Telecommunications Act of 1996: Telemessaging, Electronic Publishing, and Alarm Monitoring Services, CC Docket No. 96-152, Notice of Proposed Rulemaking, FCC 96-310 (rel. July 18, 1996) (Electronic Publishing NPRM).

electronic publishing services subject to the section 274 requirements.³²⁴ We also invited parties to comment on whether, in situations involving services that do not clearly fall within either the definition of "electronic publishing" (section 274(h)(1)) or the enumerated exceptions thereto (section 274(h)(2)), we should identify as "electronic publishing" those services for which the carrier controls, or has a financial interest in, the content of information transmitted by the service.³²⁵

b. Comments

139. Several parties assert that the section 274(h)(1) definition of "electronic publishing" needs no further refinement because it is clear, when read in conjunction with the exceptions set forth in section 274(h)(2).³²⁶ Several BOCs argue that the Commission should not develop another rule for classifying ambiguous services, but rather should handle them on a case-by-case basis.³²⁷ Generally, the BOCs also resist the idea of applying a "financial interest or control" test to determine whether ambiguous information services are subject to section 272 or section 274;³²⁸ in contrast, MCI supports adoption of such a test.³²⁹ Several existing and potential competitors to the BOCs suggest that it may not be necessary to distinguish between information services subject to section 272 and electronic publishing services subject to section 274.³³⁰

c. Discussion

140. Upon review of the record and further consideration, we conclude that it is not necessary to adopt the "financial interest or control" test in determining whether a particular BOC service involves the provision of electronic publishing, in addition to the definitions set forth in sections 274(h)(1) and 274(h)(2). Generally speaking, if a particular service does not appear to fit clearly within either the definition of "electronic publishing," set forth in section 274(h)(1), or the exceptions thereto listed in section 274(h)(2), determining the appropriate classification of that service will involve a highly fact-specific analysis that is better performed on a case-by-case

³²⁴ Notice at ¶ 53.

³²⁵ *Id.* This "financial interest or control" test is derived from the MFJ definition of "electronic publishing." See *United States v. Western Electric*, 552 F. Supp. at 178, 181.

³²⁶ See, e.g., Ameritech at 70; USTA at 17-18; Ameritech Reply at 36; cf. MFS at 17.

³²⁷ See e.g., Bell Atlantic, Exhibit 1, at 6; PacTel at 15-16; see also NYNEX at 46 (classification of services as electronic publishing should be done in *Electronic Publishing* proceeding).

³²⁸ PacTel at 14-15; Ameritech at 70-71. But see U S West at 15 (test should be the BOC's ability to control the content of information provided to end-users).

³²⁹ MCI at 21.

³³⁰ ITAA at 15-16; AT&T Reply at 4 n.7.

basis. In the context of such a case-by-case determination, the Commission may consider a number of factors, including whether the BOC controls, or has a financial interest in, the content of information transmitted to end-users.³³¹ We also note that the definition of electronic publishing, as well as specific services encompassed by that definition, may be further refined in the Electronic Publishing proceeding.

141. We also decline to adopt ITAA's suggestion that, because of potential difficulties in distinguishing between information services and electronic publishing services, we should impose substantially the same separate affiliate requirements on both.³³² Such an approach would be directly contrary to the statute.³³³ Congress set forth distinct separate affiliate and nondiscrimination requirements in sections 272 and 274, and specified that the former apply to interLATA information services, while the latter apply to all BOC-provided electronic publishing services. To impose the section 272 requirements on electronic publishing services, or to impose the section 274 requirements on interLATA information services, would be inconsistent with the clear statutory scheme.

142. Moreover, we specifically reject AT&T's contention that electronic publishing services are subject to the section 272 separate affiliate requirements, pursuant to section 272(a)(2)(B), which imposes a separate affiliate requirement on interLATA telecommunications services.³³⁴ Electronic publishing services, however, are specifically included within the statutory definition of information services.³³⁵ Accordingly, electronic publishing services would be subject to section 272(a)(2)(C), which imposes a separate affiliate requirement on interLATA information services, except that section 272(a)(2)(C) specifically exempts "electronic publishing (as defined in section 274(h))."

³³¹ The Commission may also consider whether the BOC has "generated or altered" the content of information provided to end-users, as Ameritech suggests. See Ameritech Reply at 37.

³³² ITAA at 15-16.

³³³ Accord Bell Atlantic Reply at 18-19.

³³⁴ AT&T Reply at 4 n.7.

³³⁵ 47 U.S.C. § 153(20).

2. Telemessaging (section 260)

a. Background

143. In the Notice, we tentatively concluded that "telemessaging" is an information service.³³⁶ We further tentatively concluded that BOC provision of telemessaging on an interLATA basis is subject to the section 272 separate affiliate requirements, in addition to the section 260 safeguards.³³⁷

b. Comments

144. In general, parties agree with our tentative conclusions that telemessaging is an information service, and that when a BOC provides telemessaging on an interLATA basis, it must do so in accordance with the section 272 separate affiliate requirements.³³⁸ Several parties also assert that, with respect to interLATA telemessaging services, it is possible to apply both section 260 and section 272 simultaneously.³³⁹ PacTel, however, disagrees with both of our tentative conclusions, arguing that because "telemessaging" includes live operator services that are not information services, it constitutes a distinct category of service that is subject only to the section 260 requirements.³⁴⁰

c. Discussion

145. Based on our review of the comments and analysis of the statute, we hereby adopt our tentative conclusion that telemessaging is an information service. We reject PacTel's contention that live operator services do not constitute information services. Under the statute,

³³⁶ Notice at ¶ 54. The 1996 Act defines "telemessaging" as "voice mail and voice storage and retrieval services, any live operator services used to record, transcribe, or relay messages (other than telecommunications relay services), and any ancillary services offered in combination with these services." 47 U.S.C. § 260(c). LECs must provide telemessaging services in compliance with section 260, which is the subject of a separate proceeding. See Electronic Publishing NPRM.

³³⁷ Notice at ¶ 54.

³³⁸ Bell Atlantic, Exhibit 1, at 5; BellSouth at 25 n.61; AT&T at 12 n.13, 14-15; Sprint at 16-17 n.12; see also ITAA at 15.

³³⁹ ITAA at 15; see also MCI Reply at 12.

³⁴⁰ PacTel at 16; PacTel Reply at 9; see also MCI at 21-22 (questioning whether live operator services can be considered "information services"). But see MCI Reply at 12 (conceding that live operator services constitute information services).

live operator services "used to record, transcribe, or relay messages" are telemessaging services.³⁴¹ Because these functions plainly provide "the capability for . . . storing . . . or making available information" via telecommunications, we conclude that live operator telemessaging services fall within the statutory definition of information services.³⁴² We also adopt our tentative conclusion that BOCs that provide telemessaging services that meet the definition of interLATA information services must do so in accordance with the section 272 requirements, in addition to the section 260 requirements.³⁴³

IV. STRUCTURAL SEPARATION REQUIREMENTS OF SECTION 272

A. Application of the Section 272(b) Requirements

146. Section 272(b) of the Communications Act establishes five structural and transactional requirements for separate affiliate(s) established pursuant to section 272(a). We address each of the requirements below, with the exception of section 272(b)(2), which we discuss in the Accounting Safeguards Order.³⁴⁴

B. The "Operate Independently" Requirement

1. Background

147. Section 272(b)(1) states that a separate affiliate "shall operate independently from the BOC."³⁴⁵ The Act does not elaborate on the meaning of the phrase "operate independently." We stated in the Notice that under principles of statutory construction, a statute should be interpreted so as to give effect to each of its provisions.³⁴⁶ We therefore tentatively concluded that the section 272(b)(1) "operate independently" provision imposes requirements beyond those contained in subsections 272(b)(2)-(5).

³⁴¹ 47 U.S.C. § 260(c). In general, these services involve live operators that answer calls intended for unavailable end-users, transcribe messages, and relay them to the end-user. Live operator services are often used in health care contexts, where "person-to-person" communication is important. See ATSI at 2.

³⁴² As discussed above at ¶ 103, live operator services do not appear to fall within the Commission's definition of "enhanced" services, because they do not employ "computer processing applications." Thus, they are an example of one area in which the "information service" definition is broader than that of "enhanced services."

³⁴³ One example of an telemessaging service that is an interLATA information service might be a voicemail service that is bundled with a personal 800 number, offered to the customer for a single price. See NYNEX at 44.

³⁴⁴ Accounting Safeguards Order part IV.B.1.c.

³⁴⁵ 47 U.S.C. § 272(b)(1).

³⁴⁶ Notice at ¶ 57.

148. As we observed in the Notice, section 274(b) contains similar language to section 272(b)(1). It states that "[a] separated affiliate or electronic publishing joint venture shall be operated independently from the [BBC]." Subsections 274(b)(1)-(9) list several requirements that govern the relationship of an electronic publishing entity and the BBC with which it is affiliated.³⁴⁷ We sought comment on the relevance of the "operated independently" language of section 274(b) when construing the "operate independently" requirement of section 272(b)(1).³⁴⁸

149. In addition, we sought comment on what rules, if any, we should adopt to implement the requirements of section 272(b)(1).³⁴⁹ Moreover, we asked whether we should impose one or more of the separation requirements established in the Computer II or Competitive Carrier³⁵⁰ proceedings.³⁵¹

150. In the Computer II proceeding, the Commission required AT&T to provide enhanced services through a separate affiliate, a requirement that the Commission extended to the BOCs following divestiture.³⁵² The Commission required the enhanced services subsidiary to "have its own operating, marketing, installation and maintenance personnel for the services and equipment it offer[ed],"³⁵³ to comply with information disclosure requirements, and to maintain its own books of account.³⁵⁴ The Commission prohibited the regulated entity and its enhanced services subsidiary from using in common any leased or owned physical space or property on which transmission equipment or facilities used in basic transmission services were located,³⁵⁵ barred them from sharing computer capacity, and limited the regulated entity's ability to provide software to the affiliate.³⁵⁶ Moreover, the Commission barred the enhanced services subsidiary

³⁴⁷ 47 U.S.C. § 274(b).

³⁴⁸ Notice at ¶ 60.

³⁴⁹ Id. at ¶ 57.

³⁵⁰ Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Thereof, CC Docket No. 79-252, Fifth Report and Order, 98 FCC 2d 1191, 1198 (1984) (Competitive Carrier Fifth Report and Order).

³⁵¹ Notice at ¶ 59.

³⁵² BOC Separations Order, 95 FCC 2d 1117 (1983).

³⁵³ Computer II Final Order, 77 FCC 2d at 477, ¶¶ 238-39.

³⁵⁴ Id. at 476, 480-81, ¶¶ 236, 245-49.

³⁵⁵ Id. at 477-78, ¶ 240.

³⁵⁶ Id. at 478-80, ¶¶ 241-44; Computer II Reconsideration Order, 84 F.C.C.2d at 81, ¶ 91 (requiring affiliate or its outside contractors to perform all software development, other than generic software embodied in equipment sold to any interested purchaser).

from constructing, owning, or operating its own transmission facilities, thereby requiring it to obtain such facilities from a local exchange carrier pursuant to tariff.³⁵⁷

151. In the Competitive Carrier proceeding, the Commission prescribed the separation requirements to which independent LECs must conform to be regulated as nondominant in the provision of domestic, interstate, interexchange services. Specifically, an independent LEC must provide interstate interexchange services through an affiliate that:

1) maintains separate books of account; 2) does not jointly own transmission or switching facilities with its affiliated exchange telephone company; and 3) acquires that exchange telephone company's services at tariffed rates and conditions.³⁵⁸

2. Comments

152. Relationship of Section 272(b)(1) to Section 274(b)(1). Several commenters rely on the rule of statutory construction that similar terms in related parts of an act should be read similarly.³⁵⁹ Two such commenters propose that the requirements listed under both sections 272(b) and 274(b) define the term "operate independently," and, consequently, that the additional prohibitions of subsection 274(b) must be read into subsection 272(b).³⁶⁰ In contrast, several BOCs cite the doctrine of inclusio unius est exclusio alterius, the "inference [applied in statutory construction] that all omissions should be understood as exclusions."³⁶¹ They argue that, because Congress required electronic publishing affiliates and joint ventures to be "operated independently" and then imposed additional restrictions on activities that are not explicitly restricted in section 272(b), those activities cannot be barred by the "operate independently" provision of section 272(b).³⁶² Other commenters focus on the structural differences between the two subsections as evidence that we should construe "operate independently" and "operated independently" differently.³⁶³

³⁵⁷ Computer II Final Order, 77 FCC 2d at 474, ¶ 229.

³⁵⁸ Competitive Carrier Fifth Report and Order, 98 FCC 2d at 1198.

³⁵⁹ ITAA at 17-18 & n.49; MCI at 26-27; PacTel at 21; U S West at 29 n.43.

³⁶⁰ ITAA at 17-18 & n.49; MCI at 26-27. Contra U S West at 29 n.43 (citing same rule of statutory construction to argue that provision is used as summary language in both sections).

³⁶¹ See 2A Norman J. Singer, Statutes and Statutory Construction § 47.23 (5th ed. 1992).

³⁶² E.g., Ameritech Reply at 11; BellSouth at ii, 30; BellSouth Reply at 19; PacTel at 21; see also YPPA Reply at 3-4.

³⁶³ See AT&T Reply at 17 & n.40; SBC Reply at 20 n.33; Letter From David F. Brown, Attorney, SBC, to Regina Keeney, Chief, Common Carrier Bureau, at 4-5 (filed Nov. 14, 1996) (SBC Nov. 14 Ex Parte). Contra U S West at 29 n.43.

153. Defining "operate independently." With the exception of NYNEX, the BOCs and USTA interpret the term "operate independently" to impose a straight-forward, descriptive requirement that needs no further clarification through the rulemaking process.³⁶⁴ They generally contend that the omission of additional structural separation requirements in section 272(b) represents a deliberate congressional choice not to impose such restrictions.³⁶⁵ They particularly oppose adoption of the Computer II structural separation requirements to implement the "operate independently" requirement. Indeed, they assert that adopting such restrictions would be inconsistent with congressional intent, as well as changes in the industry and common carrier regulation since the Computer II proceeding.³⁶⁶ These commenters suggest that imposing additional structural separation requirements would result in a loss of efficiency and economies of scope, decreased innovation, and fewer new services.³⁶⁷

154. The majority of commenters, other than the BOCs, urge us to construe the "operate independently" requirement as imposing additional structural separation requirements.³⁶⁸ For instance, the DOJ contends that additional structural separation requirements are the most effective means of reducing the risks of cross-subsidization.³⁶⁹ Commenters supporting this view argue that the "operate independently" requirement must be read to impose, at a minimum, the structural separation rules established in the Computer II proceeding, including those elements outlined above.³⁷⁰ Among those commenters, several emphasize that a BOC and its affiliate

³⁶⁴ See Ameritech at 38-39 (contending provision raises question of fact best evaluated on a case-by-case basis in the context of section 271 applications to provide in-region interLATA services); Ameritech Reply at 7; Bell Atlantic at 4; BellSouth at 28-30; PacTel at 20 (characterizing provision as "a 'gloss' on the other requirements"); PacTel Reply at 9-10; SBC at 7; U S West at 29; see also SBC Nov. 14 Ex Parte at 2-3 (reading the provision to impose a "qualitative 'piercing the corporate veil' standard"); USTA at 19-20; USTA Reply at 3, 6-7; YPPA at 5-6; YPPA Reply at 3.

³⁶⁵ E.g., Ameritech at 38; Ameritech Reply at 10; Bell Atlantic at 5; BellSouth at 29-30; BellSouth Reply at 18; NYNEX Reply at 17-19; USTA at 18; U S West at 24; YPPA Reply at 2, 5-6.

³⁶⁶ E.g., Ameritech Reply at 8-9 (citing interconnection, unbundling, and collocation obligations); NYNEX at 25; SBC at 12; USTA at 4, 18; USTA Reply at 4-5 (citing price cap regulation); U S West Reply at 6 (citing regime for pricing of interconnection).

³⁶⁷ See, e.g., SBC at 13-17; USTA Reply at 4.

³⁶⁸ E.g., AT&T at 20; CompTel at 13-14 (advocating "complete segregation of affiliate interexchange subsidiary"); Excel at 4-5; IDCMA at 3-4; LDDS WorldCom at 13 n.12; LDDS WorldCom Reply at 7; MCI at 23; MFS at 15-16; Ohio Commission at 8; Sprint at 19-20; Time Warner at 16-17; TRA at 13.

³⁶⁹ DOJ Reply at 10 (providing example that sharing of all personnel should be prohibited).

³⁷⁰ E.g., AT&T at 20-23 (contending that while some of those requirements are expressly mandated by the language of section 272, all of them -- as outlined above -- are necessary elements of operational independence); Excel at 5-7 (advocating all requirements except for requirement that affiliate maintain separate books); IDCMA at 4; ITAA at 18-19; ITI & ITAA Reply at 10-11; Ohio Commission at 9; Ohio Commission Reply at 4-5; Time Warner at 17-18 & n.30; Time Warner Reply at 14; see also TRA at 13 (urging us to use Computer II proceeding

should not be permitted to engage in joint marketing.³⁷¹ Several commenters also propose restrictions that appear to go beyond those adopted in the Computer II proceeding, including a prohibition on shared administrative services,³⁷² a complete prohibition on common use of any leased or owned physical space,³⁷³ a prohibition on jointly owned property,³⁷⁴ and a complete prohibition on joint research and development, including joint equipment design.³⁷⁵

155. Other commenters propose that "the standards for independent operation established in the Competitive Carrier decision are the most appropriate for this section of the Act."³⁷⁶ Suggesting that two of the three requirements are implemented elsewhere in section 272, they generally propose that we read "operate independently" to forbid joint ownership of transmission and switching facilities.³⁷⁷ Other parties advocate that we adopt individual requirements, rather than a particular set of structural separation requirements established in another context, or

as a guide). But see CompTel at 15-16 (proposing safeguards devised by DOJ in response to Ameritech's Customers First Plan, Ameritech's plan to offer in-region interLATA service through an interexchange affiliate).

³⁷¹ E.g., AT&T at 57; MFS at 15-16 (also reading provision to forbid BOC and affiliate to refer customers to one another or to jointly advertise but to require the entities to have "separate logos, distinct names, no shared customer databases or information systems, and separate billing, collections, and ordering processes"); TIA at 22; see also CompTel at 16 (advocating that affiliate be forbidden to use BOC's brand name).

³⁷² E.g., CompTel at 19-20; ITAA at 18-19; MCI Reply at 2 (advocating administrative separation); TIA at 22-23, 25 n.55; TRA at 13-14.

³⁷³ E.g., ITAA at 17 (advocating no sharing of property); MCI at 23; Sprint at 21-23 (advocating prohibition on common use of switches, facilities, buildings, and space); see also CompTel at 16 (advocating prohibition on sharing or co-location of facilities, assets, and personnel, except leasing telecommunication equipment space in same building and sharing power equipment on same terms, rates, and conditions available to nonaffiliated interexchange carriers); IDCMA at 5 (advocating physically separate facilities).

³⁷⁴ E.g., ITAA at 17; ITI & ITAA Reply at 10-11; MCI at 23-24 (advocating prohibition on joint use or ownership of property); Sprint at 21-22.

³⁷⁵ E.g., AT&T at 23 (urging us to preclude joint planning and joint services development); IDCMA at 5-6; MCI at 27; TIA at 22-23; TRA at 13.

³⁷⁶ NYNEX Reply at 17-18; Teleport at 19; see also CompTel at 15 n.44 (proposing these standards as a minimum to be supplemented); Frontier at 4-5 (advocating standards as a minimum); PacTel Reply at 10 (stating that if additional restrictions are necessary, Competitive Carrier requirements are the most appropriate). In contrast, several commenters state that the structural safeguards established in the Competitive Carrier proceeding would be insufficient to protect ratepayers or establish operational independence. E.g., AT&T at 23; IDCMA at 3; ITAA at 18-19 & n.53.

³⁷⁷ E.g., NYNEX Reply at 17-18; Teleport at 19; see also Excel at 8; Frontier at 4-5 (contending that requirement would force BOC affiliates, like competitors, to invest capital and resources in interexchange business).

recommend that we use other proceedings in which structural separation was imposed as a guide.³⁷⁸

3. Discussion

156. We adopt our tentative conclusion that the "operate independently" requirement of section 272(b)(1) imposes requirements beyond those listed in sections 272(b)(2)-(5). This conclusion is based on the principle of statutory construction that a statute should be construed so as to give effect to each of its provisions.³⁷⁹

157. Relationship of Section 272(b)(1) to Section 274(b). Section 274(b) mandates that a separated affiliate or electronic publishing joint venture be "operated independently" and then lists nine specific requirements governing the relationship between a BOC and a separated affiliate. In contrast, section 272(b) imposes five structural and transactional requirements governing the relationship between a BOC and a section 272 affiliate, one of which is that the affiliate "shall operate independently from the [BOC]." The structural differences in the organization of the two sections suggest that the term "operate independently" in section 272(b)(1) should not be interpreted to impose the same obligations on a BOC as section 274(b). In particular, while the enumerated requirements of section 274(b) may be interpreted to define the term "operated independently" in that context, they do not define the term "operate independently" as used in section 272(b).³⁸⁰ We agree with SBC that, because the requirements listed in sections 274(b)(1)-(9) of the Act overlap with the requirements of sections 272(b), (c), and (e), it would be redundant to incorporate all of the section 274(b) requirements into the "operate independently" requirement of section 272(b)(1).³⁸¹

158. Defining "Operate Independently." The requirements that we adopt to implement section 272(b)(1) are intended to prevent a BOC from integrating its local exchange and exchange access operations with its section 272 affiliate's activities to such an extent that the affiliate could not reasonably be found to be operating independently, as required by the statute. In order to protect against the potential for a BOC to discriminate in favor of a section 272 affiliate in a manner that results in the affiliate's competitors' operating less efficiently, we seek to ensure that a section 272 affiliate and its competitors enjoy the same level of access to the BOC's

³⁷⁸ E.g., Excel at 6 (advocating adoption of Computer II and Competitive Carrier requirements as appropriate); Sprint at 20-21 (advocating that we seek guidance in interpreting the provision from the orders pursuant to which GTE Corporation was permitted to acquire Sprint's long distance predecessors in interest and urging us to read the provision to limit a BOC's ability to engage in common activities with a section 272 affiliate through its parent company); TIA at 23-25 (noting that neither the Computer II nor Competitive Carrier proceedings addressed cross-subsidy and discrimination issues associated with BOC entry into manufacturing); TRA at 13.

³⁷⁹ 2A Singer, supra note 362, at § 46.06; see Notice at ¶ 57.

³⁸⁰ See SBC Reply at 20 n.33. We will construe the "operated independently" language of section 274(b) in a separate proceeding and do not purport to do so at this time. See Electronic Publishing NPRM at ¶ 35.

³⁸¹ See SBC Reply at 20 n.33.

transmission and switching facilities. Accordingly, we conclude that operational independence precludes the joint ownership of transmission and switching facilities by a BOC and its section 272 affiliate, as well as the joint ownership of the land and buildings where those facilities are located. Furthermore, operational independence precludes a section 272 affiliate from performing operating, installation, and maintenance functions associated with the BOC's facilities. Likewise, it bars a BOC or any BOC affiliate, other than the section 272 affiliate itself, from performing operating, installation, or maintenance functions associated with the facilities that the section 272 affiliate owns or leases from a provider other than the BOC with which it is affiliated. Consistent with these requirements and those established pursuant to sections 272(b)(5) and 272(c)(1), a section 272 affiliate may negotiate with an affiliated BOC on an arm's length and nondiscriminatory basis to obtain transmission and switching facilities, to arrange for collocation of facilities, and to provide or to obtain services other than those expressly prohibited herein.

159. We agree with several commenters that joint ownership of transmission and switching facilities and the property on which they are located would permit such substantial integration of the BOCs' local operations with their interLATA activities as to preclude independent operation, in violation of section 272(b)(1).³⁸² Imposing a prohibition on such joint ownership also avoids the need to allocate the costs of such transmission and switching facilities between BOC activities and the competitive activities in which a section 272 affiliate may be involved. We agree with the claims of some commenters that, because the costs of wired telephony networks and network premises are largely fixed and largely shared among local, access, and other services, sharing of switching and transmission facilities may provide a significant opportunity for improper allocation of costs between the BOC and its section 272 affiliate.³⁸³

160. By prohibiting joint ownership of transmission and switching facilities, we also reduce the potential for a BOC to discriminate in favor of its section 272 affiliate. Consistent with this purpose, we define transmission and switching facilities broadly to include the facilities used to provide local exchange and exchange access service. The prohibition ensures that a section 272 affiliate must obtain any such facilities pursuant to section 272(b)(5), which requires all transactions between a BOC and its section 272 affiliate to be on an arm's length basis and reduced to writing. Requiring section 272 affiliates to obtain transmission and switching facilities from a BOC on an arm's length basis will increase the transparency of such transactions, thereby facilitating monitoring and enforcement of the section 272 requirements. Moreover, a section 272 affiliate and its interLATA competitors will have to follow the same procedures when obtaining services and facilities from a BOC. As described below, sections 272(c)(1) and (e) require a section 272 affiliate to obtain services and facilities on the same rates, terms, and conditions

³⁸² See, e.g., Frontier at 4-5; ITAA at 17; MCI at 24; Sprint at 21-23; Sprint Reply at 24-25; TRA at 13.

³⁸³ See Letter From Leonard J. Cali, General Attorney, AT&T, to William F. Caton, Acting Secretary, FCC, filed Oct. 4, 1996 (AT&T Oct. 4 Ex Parte); Excel at 5-6; Sprint at 22-23.

available to unaffiliated entities. Contrary to the suggestion of some commenters,³⁸⁴ those nondiscrimination safeguards would offer little protection if a BOC and its section 272 affiliate were permitted to own transmission and switching facilities jointly. To the extent that a section 272 affiliate jointly owned transmission and switching facilities with a BOC, the affiliate would not have to contract with the BOC to obtain such facilities, thereby precluding a comparison of the terms of transactions between a BOC and a section 272 affiliate with the terms of transactions between a BOC and a competitor of the section 272 affiliate. Together, the prohibition on joint ownership of facilities and the nondiscrimination requirements should ensure that competitors can obtain access to transmission and switching facilities equivalent to that which section 272 affiliates receive.

161. The requirement that a BOC and its section 272 affiliate not commonly own the land and buildings where their transmission and switching facilities are located, like the prohibition on joint ownership of facilities, should ensure that a section 272 affiliate and its competitors both receive the best available access to transmission and switching facilities. It does not, however, preclude a section 272 affiliate from collocating its equipment in end offices or on other property owned or controlled by its affiliated BOC. Rather, as IDCMA recognizes, the requirement should ensure that collocation agreements between a BOC and its section 272 affiliate are reached pursuant to arm's length negotiations and that the same collocation opportunities are available to similarly situated non-affiliated entities.³⁸⁵ Moreover, the ban on joint ownership of facilities should protect local exchange competitors that request physical collocation by ensuring that a BOC's section 272 affiliate does not obtain preferential access to the limited available space in the BOC's central office.³⁸⁶

162. We decline to read the "operate independently" requirement to impose a blanket prohibition on joint ownership of property by a BOC and a section 272 affiliate. Rather, we limit the restriction to joint ownership of transmission and switching facilities and the land and buildings where those facilities are located. We conclude that the prohibition we have adopted should ensure that the section 272 affiliate's competitors gain nondiscriminatory access to those transmission and switching facilities that both section 272 affiliates and their competitors may be unable to obtain from other sources. We find that joint ownership of other property, such as office space and equipment used for marketing or the provision of administrative services, may provide economies of scale and scope without creating the same potential for discrimination by

³⁸⁴ See SBC Nov. 14 Ex Parte at 7-8 (arguing that "as long as the BOC affiliate's joint use or sharing of switching, transmission, or computer facilities is nondiscriminatory and otherwise complies with the terms of Section 272, it should be allowed"); USTA Reply at 7.

³⁸⁵ IDCMA at 5 n.11.

³⁸⁶ Section 251(c)(6) of the Act requires a BOC to provide for physical collocation of a requesting carrier's equipment necessary for interconnection unless it can demonstrate "that physical collocation is not practical for technical reasons or because of space limitations." 47 U.S.C. § 251(c)(6); see First Interconnection Order at ¶ 267.

the BOCs. Moreover, we believe that the Commission's accounting rules;³⁸⁷ the separate books, records, and accounts requirement of section 272(b); and the audit requirement of section 272(d) provide adequate protection against the potential for improper cost allocation.

163. We further conclude that allowing the same personnel to perform the operating, installation, and maintenance services associated with a BOC's network and the facilities that a section 272 affiliate owns or leases from a provider other than the BOC would create the opportunity for such substantial integration of operating functions as to preclude independent operation, in violation of section 272(b)(1). Regardless of whether the BOC or the section 272 affiliate were to provide such services, we agree with AT&T that allowing the same individuals to perform such core functions on the facilities of both entities would create substantial opportunities for improper cost allocation, in terms of both the personnel time spent in performing such functions and the equipment utilized.³⁸⁸ We conclude, as we did in the BOC Separations Order, that allowing the sharing of such services would require "excessive, costly and burdensome regulatory involvement in the operation, plans and day-to-day activities of the carrier . . . to audit and monitor the accounting plans necessary for such sharing to take place."³⁸⁹ Accordingly, we read section 272(b)(1) to bar a section 272 affiliate from contracting with a BOC or another entity affiliated with the BOC to obtain operating, installation, and maintenance functions associated with the section 272 affiliate's facilities. As stated above, we believe that a prohibition on joint ownership of transmission and switching facilities is necessary to ensure that a BOC complies with the nondiscrimination requirements of section 272. Consistent with that approach, we further interpret the term "operate independently" to bar a BOC from contracting with a section 272 affiliate to obtain operating, installation, or maintenance functions associated with the BOC's facilities. Allowing a BOC to contract with the section 272 affiliate for operating, installation, and maintenance services would inevitably afford the affiliate access to the BOC's facilities that is superior to that granted to the affiliate's competitors.

164. We clarify that section 272(b)(1) does not preclude a BOC or a section 272 affiliate from providing telecommunications services to one another, so long as each entity performs itself, or obtains from an unaffiliated third party, the operating, installation, and maintenance functions associated with the facilities that it owns or leases from an entity unaffiliated with the BOC. In particular, if a section 272 affiliate obtains unbundled elements from a BOC, that BOC can perform the operating, installation, and maintenance functions associated with those facilities. Moreover, we recognize the need for an exception to the prohibition on shared operating, installation, and maintenance services to allow the BOC to obtain

³⁸⁷ See 47 C.F.R. §§ 32.27, 64.901-64.904.

³⁸⁸ AT&T Oct. 4 Ex Parte.

³⁸⁹ See BOC Separations Order, 95 FCC 2d at 1144, ¶ 70 (rejecting BOCs' argument that their enhanced services and CPE separate subsidiaries should be able to contract with regulated operations for provision of engineering, installation and maintenance, and similar services).

support services for sophisticated equipment purchased from the affiliate on a compensatory basis.³⁹⁰ For instance, the BOC could contract with the section 272 affiliate for the installation, maintenance, or repair of equipment, or the affiliate could train the BOC's personnel to perform such functions. We further note that the limited prohibition on shared services that we adopt is consistent with section 272(e)(4), which states that a BOC or BOC affiliate that is subject to section 251(c) "may provide any interLATA or intraLATA facilities or services to its interLATA affiliate if such services or facilities are made available to all carriers at the same rates and on the same terms and conditions."³⁹¹ As we discuss below, section 272(e)(4) does not grant a BOC the authority to provide particular services to its affiliate, but rather prescribes the manner in which a BOC must provide those services that it is otherwise authorized to provide.³⁹² Thus, section 272(e)(4) does not grant a BOC the authority to provide operating, installation, and maintenance services associated with the facilities that a section 272 affiliate owns or leases from a provider other than the BOC.

165. In imposing these requirements, we reject the contention of some commenters that Congress considered and rejected a prohibition on the joint ownership of telecommunications transmission or switching equipment or other property.³⁹³ Although the House bill contained such a prohibition, the Senate bill did not.³⁹⁴ The Joint Explanatory Statement indicates merely that the conference committee adopted the Senate version of this provision with several modifications and does not offer any specific explanation for the exclusion of the joint ownership restriction.³⁹⁵ In these circumstances, our obligation is to interpret the language of section 272(b)(1) in a manner consistent with its purpose, which is to ensure the operational independence of a section 272 affiliate from its affiliated BOC.³⁹⁶

166. The limited prohibition on shared services that we impose rests on the "operate independently" requirement of section 272(b)(1), rather than the requirement of section 272(b)(3) that a BOC and its section 272 affiliate have "separate officers, directors, and employees."³⁹⁷

³⁹⁰ See Computer II Final Order, 77 FCC 2d at 477, ¶ 239 (adopting a similar exception to a prohibition on shared services).

³⁹¹ 47 U.S.C. § 272(e)(4).

³⁹² See *infra* part VI.D.

³⁹³ U S West Reply at 9 n.25; see also USTA Reply at 7-8.

³⁹⁴ See H.R. 1555, 104th Cong., 1st Sess., § 246 (1995); S. 652, 104th Cong., 1st Sess. § 252 (1995).

³⁹⁵ Joint Explanatory Statement at 152.

³⁹⁶ See, e.g., Mead Corp. v. Tilley, 490 U.S. at 723 (refusing to draw inference from change in committee draft of bill); Rastelli v. Warden, 782 F.2d at 24 n.3 (declining to draw conclusions from ambiguous indications of statutory purpose); Drummond Coal v. Watt, 735 F.2d at 474 (concluding that "[u]nexplained changes made in committee are not reliable indications of congressional intent").

³⁹⁷ 47 U.S.C. § 272(b)(3).

Accordingly, we reject the statutory construction argument advanced by several BOCs, which is predicated on the text of the latter provision. Those BOCs argue that, if a rule against separate employees were sufficient to prevent the sharing of in-house services, Congress would not have prohibited a BOC from engaging in purchasing, installation, maintenance, hiring, training, and research and development for the separated affiliate, in addition to forbidding the BOC and its separated affiliate from having common officers, directors, and employees, in section 274(b).³⁹⁸

167. We believe it is consistent with both the letter and purposes of section 272 to strike an appropriate balance between allowing the BOCs to achieve efficiencies within their corporate structures and protecting ratepayers against improper cost allocation and competitors against discrimination. We decline to impose additional structural separation requirements given the nondiscrimination safeguards, the biennial audit requirement, and other public disclosure requirements imposed by section 272. In combination with the accounting protections established in the Accounting Safeguards Order, we believe the requirements set forth herein will protect against potential anticompetitive behavior.

168. In particular, we decline to read the "operate independently" requirement to impose a prohibition on all shared services.³⁹⁹ We recognize the inherent tension between the "operate independently" requirement and allowing the integration of services. As we discuss further below, however, we believe the economic benefits to consumers from allowing a BOC and its section 272 affiliate to derive the economies of scale and scope inherent in the integration of some services outweigh any potential for competitive harm created thereby.⁴⁰⁰ Therefore, we permit the sharing of administrative and other services.⁴⁰¹ For example, we read section 272(b)(1) not to preclude a BOC and a section 272 affiliate from contracting with one another to provide marketing services.⁴⁰²

169. In construing other provisions of section 272, we address the concerns of those commenters who urge us to interpret section 272(b)(1) to prohibit a BOC and a section 272 affiliate from engaging in various forms of joint research and development.⁴⁰³ As a preliminary matter, we note that the MFJ Court considered equipment design and development to be an

³⁹⁸ E.g., Ameritech at 42; BellSouth at 31 n.79; U S West at 24.

³⁹⁹ We further discuss our reasons for declining to do so in connection with our analysis of section 272(b)(3), below.

⁴⁰⁰ See infra paragraph 179.

⁴⁰¹ See infra part IV.C.

⁴⁰² We further discuss the marketing provisions below in our analysis of section 272(g).

⁴⁰³ E.g., AT&T at 23 ; IDCMA at 5-6; MCI at 27; TIA at 22-23; TRA at 13.

integral part of "manufacturing," as the term was used in the MFJ.⁴⁰⁴ We emphasize that to the extent that research and development is a part of manufacturing, it must be conducted through a section 272 affiliate, pursuant to section 272(a).⁴⁰⁵ To the extent that a BOC seeks to develop services for or with its section 272 affiliate, the BOC must develop services on a nondiscriminatory basis for or with other entities, pursuant to section 272(c)(1).⁴⁰⁶

170. Finally, although a number of commenters support a Computer II-type prohibition on a section 272 affiliate's ability to construct, own, or operate its own local exchange facilities,⁴⁰⁷ we conclude that such a prohibition is not required by the language of section 272(b)(1). As several BOCs suggest, limiting a section 272 affiliate to resale would not necessarily increase the affiliate's operational independence, particularly if the affiliate had to acquire facilities from its affiliated BOC as a result of the requirement.⁴⁰⁸

C. Section 272(b)(3) and Shared Services

1. Background

171. In the Notice, we tentatively concluded that the section 272(b)(3) requirement that a BOC and its section 272 affiliate have "separate officers, directors, and employees"⁴⁰⁹ prohibits the sharing of in-house functions, including operating, installation, and maintenance, as well as administrative services.⁴¹⁰ We noted that, pursuant to the Computer II proceeding, the Commission allowed AT&T and its enhanced services subsidiaries to share certain administrative services -- accounting, auditing, legal services, personnel recruitment and management, finance, tax, insurance, and pension services⁴¹¹ -- on a cost reimbursable basis, but required the subsidiary to have its own operating, marketing, installation, and maintenance personnel for the services and

⁴⁰⁴ See, e.g., United States v. Western Elec. Co., 675 F. Supp. 655, 662-63, 667-68 (D.D.C. 1987), aff'd 894 F.2d 1387 (D.C. Cir. 1990).

⁴⁰⁵ We will address the scope of the BOC's authority to engage in manufacturing activities further in our proceeding to implement section 273 of the Act. See Manufacturing NPRM.

⁴⁰⁶ See infra part V.B.

⁴⁰⁷ E.g., AT&T at 20-22; Time Warner at 17-18.

⁴⁰⁸ See Ameritech Reply at 10; BellSouth Reply at 19.

⁴⁰⁹ 47 U.S.C. § 272(b)(3).

⁴¹⁰ Notice at ¶ 62.

⁴¹¹ Computer II Reconsideration Order, 84 FCC 2d at 84-85, ¶ 102.

equipment it offered.⁴¹² We sought comment on whether section 272(b)(3) forbids the sharing of outside services or other types of personnel sharing.⁴¹³

172. In the context of our discussion of section 272(g), we sought comment on the related question of whether a section 272 affiliate must purchase marketing services from an affiliated BOC on an arm's length basis, pursuant to section 272(b)(5). Moreover, we sought comment on whether it is necessary to require a BOC and its section 272 affiliate to contract jointly with an outside marketing entity for joint marketing of interLATA and local exchange services in order to comply with section 272(b)(3). Finally, we invited parties to comment on the corporate and financial arrangements that are necessary to comply with sections 272(g)(2), 272(b)(3), and 272(b)(5).⁴¹⁴

2. Comments

173. Sharing of Services. The BOCs, USTA, and the Yellow Pages Publishers Association argue that section 272(b)(3) does not preclude the sharing of "in-house" services, those services provided by a BOC or its separate affiliate.⁴¹⁵ Similarly, they assert that section 272(b)(3) does not prohibit BOC employees from performing marketing services on behalf of a section 272 affiliate.⁴¹⁶

174. In response, a majority of commenters contend that section 272(b)(3) supports a broad prohibition on the sharing of services.⁴¹⁷ For instance, AT&T argues that BOC personnel should not be involved in any way in the activities of the section 272 affiliate, and vice versa.⁴¹⁸ MFS urges us to construe section 272(b)(3) to mean that employees may provide services only

⁴¹² Computer II Final Order, 77 FCC 2d at 477, ¶ 239.

⁴¹³ Notice at ¶ 62.

⁴¹⁴ Id. at ¶ 92.

⁴¹⁵ E.g. Ameritech at 41; Bell Atlantic Reply at 3-4; Bell Atlantic at 6-7; BellSouth at 31; PacTel at 21-22; U S West at 22-24; USTA at 21; YPPA at 7-8.

⁴¹⁶ E.g. Ameritech at 51; Ameritech Reply at 26-27; BellSouth at 10 & n.17; U S West at 27-28.

⁴¹⁷ E.g. DOJ Reply at 10; Florida Commission Reply at 3-5 (urging us to read section 272(b)(3), in concert with section 272(b)(1), to preclude sharing of administrative services, as well as sharing of operating, installation and maintenance personnel, research and development activities, and marketing); ITAA at 19; MCI at 27-28 (arguing that allowing a BOC to provide services for a section 272 affiliate that would otherwise have been performed by the affiliate's own employees would undermine the separate employees requirement); MCI Reply at 2; Teleport at 20; TIA at 27; Time Warner at 18-19; TRA at 13-14.

⁴¹⁸ AT&T at 24.

for the BOC or its section 272 affiliate, not both.⁴¹⁹ In particular, interexchange carriers construe section 272(b)(3) as imposing a variety of restrictions on joint marketing activities. AT&T contends that a BOC and its affiliate may each jointly market exchange and interexchange services, but may not integrate their marketing operations or their product design and development.⁴²⁰ Whereas, MCI argues that joint marketing must be conducted either by the BOC or its section 272 affiliate, but not both.⁴²¹ Finally, Sprint maintains that BOC employees may not market the section 272 affiliate's services, because they are not employed by the BOC affiliate.⁴²²

175. Services Provided by an Outside Entity. The BOCs and USTA argue that neither the statute nor legislative history can be read to prohibit a BOC and its section 272 affiliate from obtaining services from the same outside provider.⁴²³ Sprint does not object to such sharing "provided that each [party] pays fair market value in writing for those services."⁴²⁴ Other commenters contend, however, that sharing a common outside provider creates the same opportunity for improper cost allocation as the sharing of in-house services.⁴²⁵ Several commenters suggest that we place specific limits on outside contracting.⁴²⁶

176. Sprint and Time Warner argue that we should require a BOC and its section 272 affiliate to contract with an outside firm for the provision of joint marketing and advertising

⁴¹⁹ MFS Reply at 19-20.

⁴²⁰ AT&T Reply at 31.

⁴²¹ MCI at 48.

⁴²² Sprint Reply at 27-28.

⁴²³ E.g., Ameritech at 40; Bell Atlantic at 7; BellSouth at 31; PacTel at 23; SBC Reply at 8-9; USTA at 20-21.

⁴²⁴ Sprint at 26 n.19.

⁴²⁵ E.g., AT&T at 25; see also CompTel at 18-20; TIA at 23, 27 (arguing that together with the "operate independently" requirement, section 272(b)(3) forbids such sharing); TIA Reply at 9; TRA at 14.

⁴²⁶ MCI at 28 (urging us to allow outsourcing only for "those services and functions that the BOC outsourced prior to the date of passage of the 1996 Act" and to require any sharing of outside services to be performed in accordance with requirements of section 272(b)(5)); Time Warner at 19-20 (suggesting we should allow such sharing only "where that third party actively provides services to other firms at large" and, in any event, prohibit it in the context of accounting and auditing).

services.⁴²⁷ The BOCs and the Citizens for a Sound Economy Foundation object to the proposed requirement on the grounds that it would be contrary to the statute.⁴²⁸

177. Other Activities. AT&T argues that we "should prohibit the BOCs from using any compensation system that directly or indirectly bases any part of the compensation of BOC officers, directors, or employees on the performance of the affiliate, or vice versa."⁴²⁹ The BOCs generally reply that there is no statutory basis for such a requirement, which would "deny the RBOC the ability to utilize stock-based compensation plans (e.g., stock options), a common compensation mechanism" and "powerful recruiting tool" used in the industry.⁴³⁰

3. Discussion

178. Sharing of Services. Based on the record before us, we decline to prohibit the sharing of services other than operating, installation, and maintenance services, as described above.⁴³¹ We clarify that "sharing of services" means the provision of services by the BOC to its section 272 affiliate, or vice versa. In response to our tentative conclusion on this issue in the Notice, the BOCs have argued persuasively that such a prohibition is neither required as a matter of law, nor desirable as a matter of policy. We note that section 272(b)(3) on its face is silent on the issue of shared services. We are persuaded by the arguments of the BOCs that the section 272(b)(3) requirement that a BOC and a section 272 affiliate have separate officers, directors, and employees simply dictates that the same person may not simultaneously serve as an officer, director, or employee of both a BOC and its section 272 affiliate.⁴³² Thus, as MFS asserts, an

⁴²⁷ Time Warner at 25; Sprint at 49 (asserting that although the statute does not require such a restriction, it would facilitate monitoring of such joint activities); Sprint Reply at 28; see also Florida Commission Reply at 4-5 (seeking a requirement that "an independent third party" provide such services, to the extent they are provided by a single entity). But see AT&T at 57 (concluding it may be possible for a BOC and its section 272 affiliate to contract with the same outside marketing entity for any joint marketing of interLATA and local exchange service, provided that the contract does not extend beyond marketing to joint services and development and planning).

⁴²⁸ E.g., Ameritech at 51-52; BellSouth at 10; Citizens for a Sound Economy Foundation Reply at 4; NYNEX Reply at 16; PacTel at 41; PacTel Reply at 25.

⁴²⁹ AT&T at 26; see also CompTel at 15-16 (advocating a similar requirement pursuant to section 272(b)(1)).

⁴³⁰ See, e.g., Ameritech Reply at 12-13; see also U S West Reply at 12 n.36.

⁴³¹ See part IV.B.

⁴³² See, e.g., Ameritech at 41; BellSouth at 31; YPPA at 7-8; see also SBC Nov. 14 *Ex Parte* at 3 (reading the "operate independently" requirement to mandate that a section 272 affiliate have a separate board of directors, chief executive officer, chief financial officer, and operating personnel, each of whom is not also an officer, director, or employee of the affiliated BOC). Although AT&T cites the legislative history of section 272 for the proposition that Congress intended to achieve "fully separate operations" between a BOC and its section 272 affiliate, the carrier cites to language from the House Report regarding the House bill. See AT&T at 24; see also H.R. 1555, 104th

individual may not be on the payroll of both a BOC and a section 272 affiliate.⁴³³ As discussed below, to the extent that a BOC provides services to its section 272 affiliate, it must provide them to other entities on the same rates, terms, and conditions, pursuant to section 272(c)(1).⁴³⁴

179. We also decline to impose a prohibition on the sharing of services other than operating, installation, and maintenance services, on policy grounds. We find that, if we were to prohibit the sharing of services, other than those restricted pursuant to section 272(b)(1), a BOC and a section 272 affiliate would be unable to achieve the economies of scale and scope inherent in offering an array of services.⁴³⁵ We do not believe that the competitive benefits of allowing a BOC and a section 272 affiliate to achieve such efficiencies are outweighed by a BOC's potential to engage in discrimination or improper cost allocation. As we have noted, the Commission permitted the sharing of administrative services in the Computer II Final Order, on the grounds that "[w]ith an appropriate accounting system, whatever administrative efficiencies may exist are preserved."⁴³⁶ We reject the arguments of some parties that, because of changes in the telecommunications marketplace and the language of the 1996 Act, a different outcome is warranted in this case.⁴³⁷

180. We recognize that allowing the sharing of in-house services will require a BOC to allocate the costs of such services between the operating company and its section 272 affiliate and provide opportunities for improper cost allocation, exchanges of information, and discriminatory treatment that may not be revealed in a subsequent audit.⁴³⁸ Indeed, in the Computer II proceeding, the Commission indicated that a major reason for prohibiting the sharing of particular services, such as marketing services, was its desire to eliminate "the inherent

Cong., 1st Sess., § 246 (1995). As discussed above, the section 272 requirements were taken from the Senate bill with several modifications. Joint Explanatory Statement at 152.

⁴³³ MFS Reply at 20.

⁴³⁴ See infra part V.B.

⁴³⁵ See, e.g., Ameritech at 43-45; Bell Atlantic at 7; Bell Atlantic Comments, Exhibit 2 at 3-4 (predicting prohibition on shared administrative services would increase costs by as much as 15 percent); USTA at 22; USTA Reply, Haussman Affidavit at 9 (stating that "[a]dministrative services are a classic example of a situation where common costs are an important component of overall costs"); see also Sprint Reply Comments at 24 (stating that the "operate independently" requirement should not be interpreted to prevent the parent holding company of a BOC and its section 272 affiliate to provide various services and perform various functions for both entities).

⁴³⁶ Computer II Final Order, 77 FCC 2d at 484; see, e.g., Bell Atlantic Reply at 3-4; PacTel at 21-22; USTA at 21-22; USTA Reply at 9-10.

⁴³⁷ See, e.g., CompTel at 19-20; MCI Reply at 19.

⁴³⁸ E.g., AT&T at 24-25; AT&T Reply at 19; DOJ Reply at 10; Florida Commission Reply at 4; Teleport at 20; Time Warner at 18-19; Time Warner Reply at 15-16, 20; see CompTel at 18-20.

difficulties in allocating joint and common costs."⁴³⁹ For these reasons, we conclude that a BOC and a section 272 affiliate may share in-house services with each other only to the extent that such sharing is consistent with sections 272(b)(1), 272(b)(5), and 272(c)(1) of the Act.⁴⁴⁰

181. Consistent with section 272(b)(1), a BOC and its section 272 affiliate may not share operating, installation, and maintenance services, as discussed above.⁴⁴¹ In addition, as we conclude in the Accounting Safeguards Order, an agreement to provide in-house services by a BOC to its section 272 affiliate (or vice versa) constitutes a transaction between that BOC and its section 272 affiliate, so that the requirements of section 272(b)(5) govern.⁴⁴² Accordingly, such transactions must be conducted on an arm's length basis, reduced to writing, and made available for public inspection. Moreover, such transactions must be consistent with the affiliate transaction rules, as modified in the Accounting Safeguards Order.⁴⁴³ In addition, the section 272 requirements that a BOC and its section 272 affiliate maintain separate books, records, and accounts, and be subject to an audit every two years should strengthen the ability of competitors and regulators to detect any inequities in cost allocation for shared services. We agree with commenters who contend that, in any event, federal price cap regulation reduces a BOC's incentives to allocate costs improperly.⁴⁴⁴ Finally, section 272(c)(1) ensures that to the extent that a BOC provides services to its section 272 affiliate, it must make them available to the affiliate's competitors on the same rates, terms, and conditions.⁴⁴⁵

182. We further conclude that section 272(b)(3) does not preclude the parent company of the BOC and the section 272 affiliate from performing functions for both the BOC and the section 272 affiliate, subject to the requirements of section 272(b)(1). Similarly, an affiliate of the BOC, such as a services affiliate, could provide services to both a BOC and a section 272 affiliate. We are not persuaded by claims that the sharing of services provided to a BOC and its section 272 affiliate by a parent company or another BOC affiliate would allow the BOC and the

⁴³⁹ Computer II Final Order, 77 FCC 2d at 477, ¶ 238.

⁴⁴⁰ 47 U.S.C. §§ 272(b)(1) and (b)(5).

⁴⁴¹ See *infra* part IV.B.

⁴⁴² See, e.g., Letter from Celia Nogales, Ameritech, to William F. Caton, Acting Secretary, FCC, Attachment at 3 (filed Sept. 19, 1996) (stating that sharing of services would be subject to section 272(b)(5) and the Part 64 rules); PacTel Reply at 11 (stating that a BOC would charge affiliates for any services it provides pursuant to the affiliate transaction rules); Letter from Gina Harrison, Director of Federal Regulatory Relations, to William F. Caton, Acting Secretary, FCC, Attachment at 14 (filed Sept. 26, 1996) (PacTel Sept. 27 *Ex Parte*); see also AT&T at 57; MCI at 48; TRA at 19-20.

⁴⁴³ Accounting Safeguards Order part IV.B.1.

⁴⁴⁴ See, e.g., Ameritech Reply at 13-14; Bell Atlantic Reply at 3-4; USTA Reply at 9.

⁴⁴⁵ See *infra* part V.B.

section 272 affiliate to achieve an unacceptable level of integration.⁴⁴⁶ Instead, we agree with the view that the section 272(b)(3) separate employees requirement extends only to the relationship between a BOC and its section 272 affiliate.⁴⁴⁷ To the extent that the BOC contracts with an unregulated affiliate, it is subject to the affiliate transaction rules.⁴⁴⁸ Moreover, a parent company or a BOC affiliate that performs services for both a BOC and its section 272 affiliate must fully document and properly apportion the costs incurred in furnishing such services.⁴⁴⁹

183. Consistent with our conclusions, we decline to read section 272(b)(3) to preclude the sharing of marketing services.⁴⁵⁰ Given that section 272(g) expressly contemplates that the each entity may market or sell the services of the other, we conclude that a BOC and its section 272 affiliate may provide marketing services for each other.⁴⁵¹ We agree with those commenters that assert that the entities must provide such services pursuant to arm's length transactions, consistent with the requirements of section 272(b)(5).⁴⁵² Moreover, the parent of a BOC and its section 272 affiliate or another BOC affiliate may perform marketing functions for both entities.

184. Services Provided By an Outside Entity. We further conclude that section 272(b)(3) does not prohibit a BOC and its section 272 affiliate from obtaining services from the same outside supplier. Indeed, we find no statutory support for limiting permissible outsourcing, as proposed by MCI or Time Warner.⁴⁵³

⁴⁴⁶ E.g., AT&T at 25; AT&T Reply at 18; Teleport Reply at 5; Time Warner at 19. But see Florida Commission Reply at 5-6 (suggesting that "[a]dministrative and other activities . . . [should] only be performed by a holding company on a consolidated, limited basis and should be subject to review and approval by federal and state commissions").

⁴⁴⁷ E.g., Ameritech at 40; Ameritech Reply at 13; Bell Atlantic at 5-6; BellSouth at 30-31; NYNEX at 23; PacTel at 17-18; SBC at 7; Sprint at 24; USTA Reply at 9; YPPA at 10-11.

⁴⁴⁸ Separation of Costs of Regulated Telephone Service From Costs of Nonregulated Activities, CC Docket No. 86-111, Report and Order, 2 FCC Rcd 1298, 1334-37, ¶¶ 284-301; recon., 2 FCC Rcd 6283 (1987); further recon., 3 FCC Rcd 6701 (1988).

⁴⁴⁹ See 47 C.F.R. §§ 64.901-64.904; see also Sprint at 26.

⁴⁵⁰ Moreover, as discussed above, section 272(b)(1) does not preclude joint marketing.

⁴⁵¹ See, e.g., NYNEX at 15; PacTel at 41; SBC at 11; U S West at 26.

⁴⁵² See, e.g., Ameritech at 50-51; PacTel at 15, 41; PacTel Reply at 11, 25; USTA at 30; USTA Reply at 14; U S West at 27; see also Ameritech Sept. 19 Ex Parte, Attachment at 3; PacTel Sept. 27 Ex Parte, Attachment at 14. Several BOC competitors argue that, to the extent joint marketing is consistent with other provisions of section 272, a separate affiliate must, at a minimum, purchase joint marketing services from the BOC on an arm's length basis. E.g. AT&T at 57; MCI at 48; TRA at 19.

⁴⁵³ See MCI at 28; Time Warner at 20.

185. Nor do we construe section 272(b)(3), when read in light of section 272(b)(1), to require a BOC and a section 272 affiliate to contract with outside entities to perform their joint marketing services. We agree with the Citizens for a Sound Economy Foundation that such a requirement would reduce the BOCs' ability to serve consumers without providing additional protection against anticompetitive behavior.⁴⁵⁴ Each entity, however, must pay its full share of any outsourced services that it receives.

186. Other activities. We reject AT&T's request that we interpret section 272(b)(3) to prohibit compensation schemes that base the level of remuneration of BOC officers, directors, and employees on the performance of the section 272 affiliate, or vice versa. We conclude that tying the compensation of an employee of a section 272 affiliate to the performance of a Regional Holding Company and all of its enterprises as a whole, including the performance of the BOC, does not make that individual an employee of the BOC.⁴⁵⁵ Similarly, tying the compensation of a BOC employee to the performance of a Regional Holding Company and all of its enterprises as a whole, including the performance of the section 272 affiliate, does not make that individual an employee of the section 272 affiliate.

E. Section 272(b)(4)

1. Background

187. Section 272(b)(4) states that a section 272 affiliate "may not obtain credit under any arrangement that would permit a creditor, upon default, to have recourse to the assets of the [BOC]."⁴⁵⁶ In the Notice, we tentatively concluded "that a BOC may not co-sign a contract or any other instrument with a separate affiliate that would allow the affiliate to obtain credit in a manner that violates" this section. We sought comment on what other types of activities section 272(b)(4) prohibits, whether the Commission should establish specific requirements regarding those activities, and the relative costs and benefits of such regulation.⁴⁵⁷

2. Comments

188. Commenters generally agree with our tentative conclusion that section 272(b)(4) prohibits a BOC from signing a contract or other instrument with an affiliate that allows a

⁴⁵⁴ Citizens for a Sound Economy Foundation Reply at 4.

⁴⁵⁵ See Ameritech Reply at 12-13.

⁴⁵⁶ 47 U.S.C. § 272(b)(4).

⁴⁵⁷ Notice at ¶ 63.

creditor, upon default, to have recourse to the BOC's assets.⁴⁵⁸ Time Warner and others contend that no regulations are necessary to implement this provision.⁴⁵⁹ In contrast, TIA urges us to adopt regulations precluding all arrangements that would result in the BOC having direct or indirect responsibility for the financial obligations of the separate affiliate.⁴⁶⁰ AT&T and Teleport further suggest that we should preclude a BOC affiliate from obtaining credit under any arrangement that would permit a creditor, upon default, to have recourse to the assets of any parent of the BOC.⁴⁶¹

3. Discussion

189. As we stated in the Notice, the intent of this provision is to protect ratepayers from shouldering the cost of a default by a section 272 affiliate.⁴⁶² We adopt our tentative conclusion that section 272(b)(4) prohibits a BOC from co-signing a contract or any other instrument with a section 272 affiliate that would allow the affiliate to obtain credit in a manner that grants the creditor recourse to the BOC's assets in the event of default by the section 272 affiliate. Moreover, because the provision precludes the section 272 affiliate from obtaining credit under "any arrangement that would permit a creditor, upon default, to have recourse to the assets of the [BOC]," we find that section 272(b)(4) likewise prohibits the parent of a BOC or any non-272 affiliate from co-signing a contract or any other arrangement with the BOC's section 272 affiliate that would allow the creditor to obtain such recourse to the BOC's assets in the event of default by the section 272 affiliate. Indeed, we conclude that section 272(b)(4) prohibits a section 272 affiliate from entering into any arrangement to obtain credit that permits the lender recourse to the BOC in the event of default.

190. While preventing the affiliate from jeopardizing ratepayer assets, we conclude that section 272(b)(4) does not forbid a section 272 affiliate from using assets other than its own as collateral when seeking credit. To impose such a restriction where, as here, it is not needed to protect ratepayer assets, would force section 272 affiliates to operate inefficiently, to the detriment

⁴⁵⁸ *E.g.* AT&T at 26-27 (urging us to require "that any contract or other document in which an affiliate obtains credit contain a provision expressly stating that the creditor, upon default by the affiliate, has no recourse to the assets of the BOC"); Bell Atlantic, Exhibit 1 at 6-7; MCI at 29; Ohio Commission at 9; Sprint at 27; TIA at 28; TRA at 14.

⁴⁵⁹ Bell Atlantic, Exhibit 1 at 6-7; NYNEX Reply at 20; Time Warner at 18; USTA at 22.

⁴⁶⁰ TIA at 28-29 (urging us to forbid "any reference to the [affiliated] BOC in debentures, reference to the BOC in any equity instruments, use of the same underwriting facilities, or other arrangements" that shift responsibility for cost, debt, equity, or business risk to the BOC away from the affiliate); *see also* CompTel at 18 (urging us to prohibit all credit arrangements between BOCs and their affiliates).

⁴⁶¹ AT&T at 27 n.27; Teleport at 20-21. *But see* NYNEX Reply at 20-21 (countering that section 272(b)(4) cannot be read to extend to the assets of a BOC's parent); Bell Atlantic Reply at 5.

⁴⁶² Notice at ¶ 63.

of consumers and competition. In particular, we agree with MCI and Sprint that a BOC's parent could secure credit, whether through the issuance of bonds or otherwise, for the benefit of the section 272 affiliate, provided that BOC assets are not at risk.⁴⁶³

F. Section 272(b)(5)

1. Background

191. Section 272(b)(5) states that an affiliate "shall conduct all transactions with the [BOC] of which it is an affiliate on an arm's length basis with any such transactions reduced to writing and available for public inspection."⁴⁶⁴ In the Notice, we sought comment on whether this provision necessitates the adoption of any non-accounting safeguards.⁴⁶⁵

2. Comments

192. Several parties contend that we need not adopt additional non-accounting safeguards, stating that other provisions of section 272(b) and accounting regulations should suffice to implement section 272(b)(5).⁴⁶⁶ Other commenters propose that we adopt a broad definition of "transaction" to prevent improper cost allocation and to facilitate monitoring of the BOCs' compliance with the nondiscrimination requirements.⁴⁶⁷ CompTel urges us to use this provision to impose several of the requirements established in the Ameritech Customers First Plan, Ameritech's plan to offer in-region interLATA service through an interexchange affiliate, including annual reporting and audit requirements, information disclosure requirements, and a requirement that an interexchange subsidiary "purchase any inputs or data from the BOC local exchange operations on the same rates, terms, and conditions" that are available to unaffiliated carriers.⁴⁶⁸

3. Discussion

193. We conclude that we need not adopt additional non-accounting safeguards to implement section 272(b)(5). In the Accounting Safeguards Order, we address the definition of

⁴⁶³ See, e.g., MCI at 29; Sprint at 28.

⁴⁶⁴ 47 U.S.C. § 272(b)(5).

⁴⁶⁵ Notice at ¶ 64.

⁴⁶⁶ E.g., PacTel at 23-24; Teleport at 21; USTA at 22-23. Other commenters do not advocate particular safeguards but view the provision as supplementing or reinforcing other provisions of section 272. E.g., MCI at 29-30; Sprint at 28-29 (advocating interpretation similar to "operate independently" requirement); TIA at 30.

⁴⁶⁷ E.g., AT&T at 27-29; ITAA at 19-20.

⁴⁶⁸ CompTel at 17.

"transactions" and consider the provision's requirement that all transactions be "reduced to writing and available for public inspection."⁴⁶⁹ Moreover, in our discussion of sections 272(b)(1) and (b)(3), we make clear that "transactions" include the provision of services and transmission and switching facilities by the BOC and its affiliate to one another. We reject CompTel's proposal to adopt additional requirements, which are addressed generally in other parts of this Order and the companion Accounting Safeguards Order.⁴⁷⁰

V. NONDISCRIMINATION SAFEGUARDS

194. As we observed in the Notice, after a BOC enters a competitive market, such as long distance, it may have an incentive to use its control of local exchange facilities to discriminate against its affiliate's rivals. Section 272(c) of the Act responds to these competitive concerns by establishing nondiscrimination safeguards that apply to the BOCs' provision of manufacturing, interLATA telecommunications, and interLATA information services. We address the requirements of this section below.⁴⁷¹

A. Relationship of Section 272(c)(1) and Pre-existing Nondiscrimination Requirements

1. Background

195. Section 272(c)(1) states that "[i]n its dealings with its affiliate described in subsection (a), a [BOC] (1) may not discriminate between that company or affiliate and any other entity in the provision or procurement of goods, services, facilities, and information, or in the establishment of standards."⁴⁷² In the Notice, we sought comment on the relationship between the nondiscrimination obligations imposed by sections 272(c)(1) and the Commission's pre-existing nondiscrimination obligations in sections 201 and 202.⁴⁷³ In particular, we sought comment on whether the flat prohibition against discrimination in section 272(c)(1) imposes a stricter standard for compliance than the "unjust and unreasonable" standard in section 202.⁴⁷⁴

⁴⁶⁹ Accounting Safeguards Order part IV.B.1.e.

⁴⁷⁰ In particular, see our rejection of additional reporting requirements in part IX and our discussion of sections 272(c) and (e). We agree with Ameritech that in proposing an annual audit requirement, CompTel ignores the biannual audit requirement of section 272(d) of the Act. See Ameritech Reply Comments at 5 n.9; CompTel at 17.

⁴⁷¹ We note that the nondiscrimination requirement of section 272(c)(2) is an accounting safeguard that is addressed in the Accounting Safeguards Order.

⁴⁷² 47 U.S.C. § 272(c)(1).

⁴⁷³ Notice at ¶ 69.

⁴⁷⁴ Id. at ¶ 72.

2. Comments

196. Many BOCs assert that Congress did not intend to impose a stricter nondiscrimination standard in section 272(c)(1) than that contained in section 202.⁴⁷⁵ For example, BellSouth, U S West, and USTA claim that the term "discriminate" in section 272(c)(1) includes unjust and unreasonable discrimination and, therefore, is not materially different from the standard of section 202.⁴⁷⁶ Potential competitors and various trade associations, in contrast, assert that the flat prohibition in section 272(c)(1) was clearly intended to be more stringent than the general ban on "unjust and unreasonable" discrimination in section 202.⁴⁷⁷ These commenters argue, therefore, that the unqualified prohibition against discrimination in section 272(c)(1) should be construed as stringently as similarly unqualified language in section 251(c)(2) was in the First Interconnection Order.⁴⁷⁸

3. Discussion

197. We find that section 272(c)(1) establishes an unqualified prohibition against discrimination by a BOC in its dealings with its section 272 affiliate and unaffiliated entities. Section 202(a), by contrast, prohibits "any unjust or unreasonable discrimination . . . , or . . . any undue or unreasonable preference or advantage."⁴⁷⁹ Because the text of the section 272(c)(1) nondiscrimination bar differs from the section 202(a) prohibition, we conclude that Congress did not intend section 272's prohibition against discrimination in the 1996 Act to be synonymous with the "unjust and unreasonable" discrimination language used in the 1934 Act, but rather, intended a more stringent standard. We therefore reject the arguments of those who argue that the section 272(c)(1) standard is not materially different from the standard in section 202.⁴⁸⁰

⁴⁷⁵ Bell Atlantic, Exhibit 1 at 7; BellSouth at 3-4; PacTel at 29; PacTel Reply at 12-13; U S West at 32; USTA at 25; YPAA at 12.

⁴⁷⁶ BellSouth at 32; U S West at 32; USTA at 25.

⁴⁷⁷ AT&T Reply at 24; CIX Reply at 5-6; CompTel at 22; IDCMA at 6; ISA at 2; ITI and ITAA Reply at 14; LDDS at 13, n.13; LDDS Reply at 7-8; MCI at 34; Sprint at 39-40; TIA at 37; TIA Reply at 4-5; Time Warner at 21-22; TRA at 15; Voice-Tel at 13-14.

⁴⁷⁸ AT&T Reply at 23-24; CompTel at 22; ISA at 2; LDDS Reply at 7-8; MCI at 34; MCI Reply at 23; TIA Reply at 10-12; Time Warner at 21-22; Time Warner Reply at 20-22.

⁴⁷⁹ 47 U.S.C. § 202(a).

⁴⁸⁰ We note that this conclusion is consistent with the Commission's recent interpretation of similar language in section 251(c)(2). See First Interconnection Order at ¶ 217.

B. Meaning of Discrimination in Section 272(c)(1)**1. Background**

198. We tentatively concluded in the Notice that the prohibition against discrimination in section 272(c)(1) means, at a minimum, that BOCs must treat all other entities in the same manner as they treat their section 272 affiliates, and must provide and procure goods, services, facilities, and information to and from these other entities under the same terms, conditions, and rates.⁴⁸¹ We noted, however, that a requesting entity may have equipment with different technical specifications than the equipment of the BOC section 272 affiliate. We sought comment, therefore, on whether the terms of section 272(c)(1) could be construed to require a BOC to provide a requesting entity with a quality of service or "functional outcome" identical to that provided to its affiliate even if this would require the BOC to provide goods, facilities, services, or information to a requesting entity that are different from those provided to the affiliate.⁴⁸²

2. Comments

199. Both BOCs and potential competitors agree with our tentative conclusion that section 272(c)(1) requires a BOC to treat all other entities in the same manner as it treats its section 272 affiliate.⁴⁸³ LDDS asserts that, if the BOC affiliate is required to obtain local exchange service in the same fashion as competitors, it is much more likely that the BOC will provide local exchange service on a nondiscriminatory basis, at nondiscriminatory prices, and with adequate operational support.⁴⁸⁴

200. BOCs claim, however, that this section does not require a BOC to provide a requesting entity with a quality of service or a functional outcome identical to the section 272 affiliate in order to offset differences in technical design, architecture, software or performance specifications between the affiliate's network and that of the requesting carrier.⁴⁸⁵ They assert

⁴⁸¹ Notice at ¶ 73.

⁴⁸² Notice at ¶ 67. We suggested, for example, that such disparate treatment may be justified by differences in the unaffiliated entity's network architecture. *Id.* at ¶ 73.

⁴⁸³ See, e.g., Ameritech at 54, U S West at 34-35; see also Frontier at 5-6; IDCMA at 6; ISA at 2-3; LDDS at 14-15; LDDS Reply at 6 (BOCs cannot take any action in regards to its affiliate without offering the very same deal to any other competing entity); MCI at 36; MFS Reply at 20-21; Sprint at 39; Teleport at 14; TIA at 38-39; Time Warner at 22; Voice-Tel at 14 (all services and facilities provided by a BOC to its affiliate should be pursuant to tariff). Some BOCs maintain, however, that section 272(c)(1) does not require identical treatment between a BOC affiliate and an unaffiliated entity in the provision of administrative and "corporate governance" services, and non-telecommunications facilities or goods. We will discuss this issue below. See *infra* part V.C.

⁴⁸⁴ LDDS at 15.

⁴⁸⁵ See, e.g., BellSouth at 32; NYNEX Reply at 22.

that unlawful discrimination occurs only when similarly situated entities are treated differently; it is not unlawfully discriminatory under section 272(c)(1) for a BOC to treat differently unaffiliated companies whose capabilities or requirements vary from those of the BOC's affiliate.⁴⁸⁶

201. Potential competitors, on the other hand, argue that a BOC should be required to provide different goods, services, and facilities to other entities than it provides to its own affiliate in order to provide "functional equality" or service of equal quality.⁴⁸⁷ Sprint concedes that different treatment is permissible if required by variations in network architecture between the section 272 affiliate and the unaffiliated entity and if the prices charged to different entities receiving disparate treatment are based on costs.⁴⁸⁸ AT&T points out that, if nondiscrimination in section 272(c)(1) means only that a BOC has to provide the goods, services, facilities, and information to an unaffiliated entity that it provides to its own affiliate, the options available to competitors would be confined entirely to those the BOC affiliate finds useful.⁴⁸⁹ This, some commenters claim, may give BOCs an incentive to design interfaces that work optimally only with its affiliate's specifications and not the specifications of other entities⁴⁹⁰ or to discriminate against unaffiliated entities by anticompetitively cooperating in the development of new services with its affiliate.⁴⁹¹

3. Discussion

202. We affirm our tentative conclusion that BOCs must treat all other entities in the same manner as they treat their section 272 affiliates. We conclude therefore that, pursuant to section 272(c)(1), a BOC must provide to unaffiliated entities the same goods, services, facilities, and information that it provides to its section 272 affiliate at the same rates, terms, and conditions.⁴⁹² We decline, as some commenters suggest, to interpret section 272(c)(1) more

⁴⁸⁶ See Ameritech at 55-56; BellSouth at 32; NYNEX Reply at 22; U S West at 33.

⁴⁸⁷ See, e.g., AT&T at 31; MCI at 31; Sprint Reply at 15; TRA at 16.

⁴⁸⁸ Sprint at 39; Sprint Reply at 15; see also Time Warner at 22-23; Time Warner Reply at 22 (allowing prices to reflect underlying costs of providing a good, service, or facility does not demonstrate that discrimination is just and reasonable, rather it allows BOCs to demonstrate that no discrimination is present because the price accurately reflects the cost of provision).

⁴⁸⁹ AT&T Reply at 21; see also AT&T at 32 (if an unaffiliated entity requests new access arrangements that will allow new or more cost effective long distance services, the Commission should not permit a BOC to deny the request on the ground that everyone is receiving the same access at the same price).

⁴⁹⁰ AT&T at 31; MCI Reply at 22; Sprint Reply at 15.

⁴⁹¹ AT&T Reply at 21-22; see also AT&T at 32.

⁴⁹² The BOCs' obligations with respect to procurement under section 272(c)(1) are discussed below. See *infra* part V.E.

broadly to conclude that a BOC must provide unaffiliated entities different goods, services, facilities, and information than it provides to its section 272 affiliate in order to ensure that it is providing the same quality of service or functional outcome to both its affiliate and unaffiliated entities. To do so would, in effect, be interpreting this section the same way we interpreted section 251(c)(2) in the First Interconnection Order. We believe that to interpret the nondiscrimination requirement of section 272(c)(1) in this manner would be inappropriate as a matter of statutory construction, inconsistent with its legislative purpose, and unenforceable.

203. As a matter of statutory construction, we find that the nondiscrimination provision of section 272(c)(1), by its terms, is much narrower in scope than the requirement in section 251(c)(2). Section 251(c)(2) imposes on incumbent LECs "the duty to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier's network . . . that is at least equal in quality to that provided by the [LEC] to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection."⁴⁹³ In the First Interconnection Order, we interpreted the term "equal in quality" as requiring an incumbent LEC to provide interconnection to its network at a level of quality that is at least indistinguishable from that which the incumbent LEC provides itself. Further, we found that, to the extent a carrier requests interconnection that is of a superior or lesser quality than the incumbent LEC currently provides, the incumbent LEC is obligated to provide the requested interconnection to the extent technically feasible.⁴⁹⁴

204. The language of section 272(c)(1), in contrast, contains no such "equal in quality" requirement; it simply requires that unaffiliated entities receive the same treatment as the BOC gives to its section 272 affiliate. Unlike section 251, therefore, section 272(c) is not a vehicle by which requesting entities can require a BOC to provide goods, facilities, services, or information that are different from those that the BOC provides to itself or to its affiliates.⁴⁹⁵ Nor is it, as some commenters suggest, designed to prevent a BOC from discriminating between unaffiliated competitors.⁴⁹⁶

205. Our reading of the statutory language of sections 251 and 272 is consistent with the differing underlying purposes of those provisions. The section 251 requirements are designed to ensure that incumbent LECs do not discriminate in opening their bottleneck facilities to competitors. As we stated in the First Interconnection Order, "[u]nder section 251, incumbent

⁴⁹³ 47 U.S.C. § 251(c)(2).

⁴⁹⁴ First Interconnection Order at ¶¶ 224-25, 314.

⁴⁹⁵ Ameritech at 56; see also Ameritech Reply at 28 (to obligate a BOC to provide a different service to an unaffiliated entity at the same price that it is charging an affiliate for another service, even though the costs are different, is at odds with the section 252(d) cost-based pricing requirements for interconnection, unbundled elements, and reciprocal compensation arrangements.)

⁴⁹⁶ See, e.g., MCI at 51-52.

[LECs], including [BOCs], are mandated to take several steps to open their network to competition, including providing interconnection, offering access to unbundled elements to their networks, and making their retail services available at wholesale rates so that they can be resold."⁴⁹⁷ In implementing section 251, therefore, we adopted rules to open one of the last monopoly bottleneck strongholds in telecommunications -- the local exchange and exchange access market.⁴⁹⁸

206. In adopting rules in this proceeding, however, our goal is to ensure that BOCs do not use their control over local exchange bottlenecks to undermine competition in the new markets they are entering -- interLATA services and manufacturing. The section 272 safeguards, among other things, are intended to protect competition in these markets from the BOCs' ability to use their existing market power in local exchange services to obtain an anticompetitive advantage. We find that when viewed in this context, the section 272(c)(1) nondiscrimination provision is designed to provide the BOC an incentive to provide efficient service to rivals of its section 272 affiliate, by requiring that potential competitors do not receive less favorable prices or terms, or less advantageous services from the BOC than its separate affiliate receives.

207. We find that interpreting section 272 to require "functional equality" between a BOC section 272 affiliate and any unaffiliated entity would not only be impractical, but unenforceable. The "functional equality" standard would require a BOC to provide additional services or functions to other entities that it does not provide to its own affiliate.⁴⁹⁹ Because section 272, unlike section 251, contains no requirement that a BOC must provide goods, services, facilities, and information to the extent "technically feasible," it would be extremely difficult, as a practical matter, to limit the types of goods, services, and facilities that a BOC would be obligated to provide to requesting entities. Further, the terms "functional outcome" or "functional equality" are likely to mean different things to different entities. Because the meaning of these terms is likely to depend on the particular characteristics of each requesting entity, the Commission would be required to apply this standard to a myriad of factual circumstances on a case-by-case basis. As one commenter observes, ensuring this type of equality would be impossible to do, as well as impossible to enforce.⁵⁰⁰

208. We reject the argument that, because our interpretation of section 272(c)(1) effectively limits competitors to those options that the BOC affiliate finds "useful," a BOC will be able to design network interfaces that work optimally only with its section 272 affiliate's specifications and not with the specifications of other entities. Section 272(c)(1) prohibits a BOC from discriminating in the establishment of standards. As we conclude below, a BOC's adoption

⁴⁹⁷ First Interconnection Order at ¶ 4.

⁴⁹⁸ See id.

⁴⁹⁹ See USTA at 23-24; USTA Reply at 12.

⁵⁰⁰ PacTel Reply at 12.

of a network interface that favors its section 272 affiliate and disadvantages an unaffiliated entity will establish a *prima facie* case of discrimination under section 272(c)(1).⁵⁰¹ Further, section 272(c)(1) prohibits a BOC from discriminating in the provision of facilities or information, and section 251(c)(5) imposes upon BOCs certain network disclosure requirements.⁵⁰² As mentioned above, section 251(c)(5) requires incumbent LECs to provide reasonable public notice of network changes affecting competing service providers' performance or ability to provide telecommunications services, as well as changes that would affect the incumbent LEC's interoperability with other service providers. In the Second Interconnection Order, we interpreted this provision to require incumbent LECs to disclose changes subject to this requirement at the "make/buy" point.⁵⁰³ In light of the requirements of sections 272(c)(1) and 251(c)(5), we decline at this time to impose additional obligations on the BOCs to ensure that they structure their own networks to achieve the same level of interoperability that the section 272 affiliate receives from the BOC.

209. We also decline to adopt MCI's suggested presumption that the specifications requested by an unaffiliated entity are the appropriate ones for a truly separate and independent affiliate and that any different specifications needed by the BOC's section 272 affiliate reflect a lack of proper physical and operational separation from the BOC.⁵⁰⁴ We recognize that there may be circumstances, such as the adoption of a new and innovative technology by the BOC section 272 affiliate, where differences in technical specifications between a section 272 affiliate and an unaffiliated entity do not evidence a lack of structural separation between the BOC and its section 272 affiliate.

210. As discussed below, we conclude that the protection of section 272(c)(1) extends to any good, service, facility, or information that a BOC provides to its section 272 affiliate.⁵⁰⁵ We therefore agree with AT&T that to the extent a BOC develops new services for or with its section 272 affiliate, it must develop new services for or with unaffiliated entities in the same manner. That is, we find that the development of new services, including the development of new transmission offerings, is the provision of service under section 272(c)(1) that, once provided by the BOC to its section 272 affiliate, must be provided to unaffiliated entities in a nondiscriminatory manner. In the Notice, we recognized the potential for competitive harm in

⁵⁰¹ See *infra* paragraph 229.

⁵⁰² We conclude below that the information required to be disclosed under section 251(c)(5) is included within the definition of "information" under section 272(c)(1). See *infra* at paragraph 222.

⁵⁰³ See Second Interconnection Order at ¶¶ 216-217 for a discussion of the "make/buy" point; see also *id.* at ¶ 224 (incumbent LECs should not make preferential disclosure to selected entities prior to disclosure at the make/buy point).

⁵⁰⁴ See MCI at 31-32 (if the BOC section 272 affiliate is truly separate it should not require services or facilities that are technically different than those required by its competitors)

⁵⁰⁵ See *infra* part V.C.

a situation in which a BOC failed to cooperate with an interLATA carrier that is introducing an innovative new service until the BOC's section 272 affiliate is ready to initiate the same service.⁵⁰⁶ Similarly, AT&T asserts that the section 272(c)(1) nondiscrimination requirement should be interpreted to prevent BOCs from denying a competitor's request for a new or more cost effective access arrangement on the ground that all entities, including its section 272 affiliate, are receiving the same access service at the same price.⁵⁰⁷ We find that the BOC, under section 272(c)(1), is obligated to work with competitors to develop new services if it cooperates in such a manner with its section 272 affiliate.

211. We agree with AT&T therefore that if, as we outlined in our Notice, a BOC purposely delayed the implementation of an innovative new service by denying a competitor's reasonable request for interstate exchange access until the BOC section 272 affiliate was ready to provide competing service, such conduct may constitute unlawful discrimination under the Act. Moreover, as we observed in the Notice, although the 1996 Act imposes specific nondiscrimination obligations on the BOCs and their section 272 affiliates, the Communications Act imposed certain pre-existing nondiscrimination requirements on common carriers providing interstate communications service. Among them, section 201 provides that all common carriers have a duty "to establish physical connections with other carriers," and to furnish telecommunications services "upon reasonable request therefor."⁵⁰⁸ We conclude, therefore, that if a BOC were to engage in strategic behavior to benefit its section 272 affiliate, in the manner suggested by AT&T, such action may not only violate section 272(c)(1), but would also violate sections 201(a) of the Act.⁵⁰⁹

212. Finally, we conclude that a complainant will be found to have established a prima facie case of unlawful discrimination under section 272(c)(1) if it can demonstrate that a BOC has not provided unaffiliated entities the same goods, services, facilities, and information that it provides to its section 272 affiliate at the same rates, terms, and conditions. To rebut the complainant's case, the BOC may demonstrate, among other things, that rate differentials between the section 272 affiliate and unaffiliated entity reflect differences in cost or that the unaffiliated entity expressly requested superior or less favorable treatment in exchange for paying

⁵⁰⁶ Notice at ¶ 139 n.266.

⁵⁰⁷ AT&T at 32.

⁵⁰⁸ 47 U.S.C. § 201(a).

⁵⁰⁹ We also note such anticompetitive behavior regarding the provision of intrastate services would be unlawful under various state provisions. See, e.g., Mich. Comp. Laws Ann. § 484.2305(1)(g) (West 1996) (a provider of basic local exchange service shall not refuse or delay access service or be unreasonable in connecting another provider to the local exchange whose product or service requires novel or specialized access service requirements); N.Y. Pub. Serv. § 91 (McKinney 1996); N.D. Cent. Code § 49-21-07 (1995).

a higher or lower price to the BOC.⁵¹⁰ We recognize, as Sprint and Time Warner suggest, there will be some instances where the costs of providing certain goods, services, or facilities to its affiliate and to an unaffiliated entity differ.⁵¹¹ As we stated in the First Interconnection Order, where costs differ, rate differences that accurately reflect those differences are not unlawfully discriminatory.⁵¹² Strict application of the section 272(c)(1) prohibition on discrimination would itself be discriminatory if the costs of supplying customers are different.⁵¹³ Similarly, we also conclude, as we did in the First Interconnection Order, that "price differences, such as volume and term discounts, when based upon legitimate variations in costs, are permissible under the 1996 Act when justified."⁵¹⁴

C. Definition of "Goods, Services, Facilities and Information" in Section 272(c)(1)

1. Background

213. In the Notice we sought comment on the interplay among the definitions of the terms "services," "facilities," and "information" in various subsections of 272, and between section 272 and section 251(c). We also sought comment on what regulations, if any, are necessary to clarify the types or categories of services, facilities, or information that must be made available under section 272(c)(1). We asked parties to comment on whether further defining the terms "goods," "services," "facilities," and "information" would enable competing providers to detect violations of this section by enabling them to compare more accurately a BOC's treatment of its affiliate with a BOC's treatment of unaffiliated competing providers.⁵¹⁵

⁵¹⁰ See AT&T at 33 (Commission should make explicit that any difference in treatment between BOC affiliates and their competitors is unlawful unless it results from a competitor's deliberate choice to receive different or less favorable treatment in exchange for lower prices); PacTel Reply at 12-13 (if an unaffiliated entity wants something different than the BOC affiliate, the other entity should request something different, instead of requiring BOC to figure out what entity needs to get the same end result as affiliate).

⁵¹¹ Sprint at 39-40; Time Warner at 22.

⁵¹² First Interconnection Order at ¶ 860.

⁵¹³ See BellSouth at 32 (a blanket prohibition on discrimination when justified by differences in cost would be anticompetitive); see also *id.* ("Strict application of the term 'nondiscriminatory' . . . would itself be discriminatory according to the economic definition of price discrimination. If the 1996 Act is read to allow no price distinctions between companies that impose very different . . . costs on LECs, competition for all competitors, including small companies, could be impaired.").

⁵¹⁴ First Interconnection Order at ¶ 860.

⁵¹⁵ Notice at ¶ 67.

2. Comments

214. PacTel, U S West, and NYNEX urge the Commission to exclude administrative and support services from the scope of the term "services" in section 272(c)(1).⁵¹⁶ Similarly, U S West maintains that a BOC should not be required to provide non-telecommunications goods, services, facilities, and information.⁵¹⁷ TIA urges the Commission to construe the terms "goods" and "services" to encompass, at a minimum, all types of telecommunications equipment, CPE, and related software and services.⁵¹⁸ Sprint asserts that the term "service" in section 272(c)(1) should encompass at least telecommunications and information services, and that the term "facilities" should include all unbundled elements required under section 251(c)(3).⁵¹⁹ CIX maintains that, because the terms in section 272(c)(1) are not conditioned or qualified in any manner, "facilities, services and information" should be interpreted to encompass the meaning of those terms as used in section 251(c).⁵²⁰

215. Sprint argues that, because the term "information" in section 272(e)(2) is limited to information "concerning [a BOC's] provision of exchange access," the Commission should place no limit on the meaning of "information" as used in section 272(c)(1).⁵²¹ Several commenters disagree on whether the term "information" under section 272(c)(1) includes CPNI. PacTel and U S West contend that, because the Act includes a separate provision covering CPNI,⁵²² the term information in section 272(c)(1) must exclude CPNI.⁵²³ They argue, therefore, that section 272(c)(1) does not require a BOC to provide CPNI to other entities when the BOC provides it to its section 272 affiliate. AT&T and MCI, in contrast, argue that section 272(c)(1) should include CPNI to ensure that a BOC will not use, disclose, or permit access to CPNI of

⁵¹⁶ NYNEX at 34-35; PacTel at 30; U S West at 36-37 (BOCs have no monopoly over the provision of administrative and support services so if these are withheld from competitors, this will not force those competitors from the market). But see Frontier at 6 (Commission should interpret the phrase "facilities, services, or information" to include not only tariffed access elements, but also the provision of non-tariffed services and information such as business office services, computing services, customer information, and the like).

⁵¹⁷ U S West at 37; see also PacTel Reply at 17 (section 272(c)(1) is limited to regulating goods and services that are part of a common carrier service).

⁵¹⁸ TIA at 33.

⁵¹⁹ Sprint at 32-34; see also id. at 34 n.23 ("facilities" under section 272 may include not only section 251(c)(2) "facilities" but also the "network equipment" referred to in section 251(c)(2)).

⁵²⁰ CIX Reply at 6.

⁵²¹ Sprint at 34-35.

⁵²² 47 U.S.C. § 222; see CPNI NPRM.

⁵²³ PacTel Reply at 16; U S West at 38; U S West Reply at 15.

BOC customers for the benefit of its separate affiliate unless the CPNI is made available to all competing carriers.⁵²⁴

3. Discussion

216. We conclude that any attempt to define exhaustively the terms "goods, services, facilities, and information" in section 272(c)(1) may unnecessarily limit the scope of this section's otherwise unqualified nondiscrimination requirement.⁵²⁵ At the same time, however, we disagree with ITAA that the Commission should refrain from attempting to clarify the meaning of these terms.⁵²⁶ We find instead that clarifying the types of activities these terms encompass will provide useful guidance to potential competitors that seek to avail themselves of the protections of section 272(c)(1). In enforcing the nondiscrimination requirement of section 272(c)(1), we intend to construe these terms broadly to prevent BOCs from discriminating unlawfully in favor of their section 272 affiliates.⁵²⁷

217. We find that neither the terms of section 272(c)(1), nor the legislative history of this provision, indicates that the terms "goods, services, facilities, and information" should be limited in the manner suggested by some commenters. We therefore decline to interpret the terms in section 272(c)(1) as including only telecommunications-related or, even more specifically, common carrier-related "goods, services, facilities, and information."⁵²⁸ Similarly, we reject arguments set forth by NYNEX, PacTel, and U S West that the term "services" should exclude administrative and support services. Although NYNEX contends that, as a practical matter, unaffiliated entities are unlikely to avail themselves of such services,⁵²⁹ we find that there are certain administrative services, such as billing and collection services, that unaffiliated entities

⁵²⁴ AT&T at 34; AT&T Reply at 24-25; MCI at 38 (section 272(c)(1) should apply to CPNI to ensure that BOCs do not impose more demanding requirements on unaffiliated entities than they impose on their affiliates).

⁵²⁵ See ITAA at 21. As U S West observes, in interpreting section 272(c)(1), we are determining the scope of the goods, services, facilities, and information that are subject to the nondiscrimination requirement. U S West at 32; see also ISA at 3 (maintaining that section 272(c)(1) should be interpreted to ensure that a BOC does not provide or procure any good, service, facility, or information in a manner that could adversely affect competition on the information services industry).

⁵²⁶ See ITAA at 21.

⁵²⁷ See id.

⁵²⁸ See, e.g., U S West at 37 (contending that section 272 cannot logically be read as requiring a BOC to provide non-telecommunications-related items, over which it has no monopoly, to an unaffiliated entity simply because it has provided that item to a separate affiliate); PacTel Reply at 17 (arguing that the terms of section 272(c)(1) should be limited to goods and services that are part of a common carrier service regulated under Title II of the Act).

⁵²⁹ NYNEX at 34.

may find useful.⁵³⁰ Further, as discussed above, we construe the term "services" to encompass any service the BOC provides to its section 272 affiliate, including the development of new service offerings.⁵³¹

218. We conclude therefore that the protection of section 272(c)(1) extends to any good, service, facility, or information that a BOC provides to its section 272 affiliate. For example, we find that if a BOC were to decide to transfer ownership of a unique facility, such as its Official Services network, to its section 272 affiliate, it must ensure that the transfer takes place in an open and nondiscriminatory manner.⁵³² That is, pursuant to the nondiscrimination requirement of section 272(c)(1), the BOC must ensure that the section 272 affiliate and unaffiliated entities have an equal opportunity to obtain ownership of this facility.

219. We also conclude that the terms "services," "facilities," and "information" in section 272 should be interpreted to include, among other things, the meaning of these terms under section 251(c). The term "facilities," therefore, includes but is not limited to the seven unbundled network elements described in the First Interconnection Order.⁵³³ We decline to limit the scope of these terms to their meaning in section 251 because section 272 encompasses a broader range of activities than does section 251. We also emphasize that in contrast to section 251, where an incumbent LEC is prohibited from discriminating against any requesting telecommunications carrier, section 272(c)(1) prohibits BOCs from discriminating against "any other entity." Because section 272 does not define the term "entity," we interpret this unqualified term broadly to ensure that all competitors may benefit from the protections of section 272(c)(1). Thus, we agree with Sprint that this term should include the definition of the term "entity" as set forth in the electronic publishing section of the Act;⁵³⁴ however, we also find it appropriate to include within the meaning of "entity" the providers of the activities encompassed by section 272. We conclude, therefore, that the term "entity" includes telecommunications carriers, ISPs, and manufacturers.

220. We disagree with ATSI and CIX, however, that by interpreting "any other entity" to include information service providers and by concluding that the term "facilities" in section 272(c)(1) encompasses the meaning of that term as it is used in section 251(c), ISPs acquire the

⁵³⁰ See ISA at 3 (stating that the discriminatory provision of billing and collection services could adversely affect competition in the information services market).

⁵³¹ See supra at paragraph 210.

⁵³² See discussion of Official Services network infra part VI.D.

⁵³³ These include the local loop, the network interface device, switching capability, interoffice transmission facilities, signalling networks and call-related databases, operations support system functions, and operator services and directory assistance. See First Interconnection Order, Appendix B, at 20-24.

⁵³⁴ Sprint at 37. Section 274 provides that "the term 'entity' means any organization, and includes corporations, partnerships, sole proprietorships, associations, and joint ventures." 47 U.S.C. § 274(i)(6).

right to obtain unbundled access to the local loop and other network elements whenever BOCs provide their section 272 affiliates with such access.⁵³⁵ Pursuant to section 251(c)(3), only telecommunications carriers providing a telecommunications service are entitled to obtain access to unbundled network elements. Because ISPs may only obtain access to unbundled elements pursuant to section 251 to the extent they are providing telecommunications services,⁵³⁶ we conclude that they may not attempt to circumvent the limitations of section 251 by virtue of their rights under section 272(c)(1). This conclusion is consistent with our finding in the Second Interconnection Order that the inclusion of information services in the definition of "services" under section 251(c)(5) "does not vest information service providers with substantive rights under other provisions of section 251, except to the extent that they are also operating as telecommunications carriers."⁵³⁷ To the extent, however, that a BOC chooses voluntarily to provide facilities, including network elements, to a section 272 affiliate that is solely providing information services (and thus does not qualify as a telecommunications carrier under section 251), we conclude that a BOC must, pursuant to section 272(c)(1), provide such facilities to other requesting ISPs.

221. We therefore agree with MFS that, if a BOC chooses to allow its information service affiliate to collocate routers, servers, or other equipment, section 272(c)(1) requires that the same accommodations be extended, on a nondiscriminatory basis, to competing ISPs.⁵³⁸ Collocation is a means of achieving interconnection and access to unbundled network elements that incumbent LECs, including BOCs, must provide to requesting carriers under section 251.⁵³⁹ Although section 251 does not require incumbent LECs to permit entities other than telecommunications carriers to collocate equipment on an incumbent LEC's premises,⁵⁴⁰ sections 251 and 272 do not prohibit BOCs from voluntarily allowing ISPs to collocate equipment on their premises. Thus, we find that, if a BOC permits its section 272 affiliate to collocate facilities used to provide information services, the BOC must permit collocation, under section 272(c)(1), by similarly situated entities. If the BOC's section 272 affiliate qualifies as a "telecommunications carrier," the BOC need only permit other telecommunications carriers to collocate their equipment. If, however, the BOC's section 272 affiliate only provides information services, the BOC must permit similarly situated ISPs to collocate equipment at the BOCs premises, even if such entities do not qualify as telecommunications carriers.

⁵³⁵ ATSI at 8-9; CIX Reply at 6.

⁵³⁶ See First Interconnection Order at ¶ 992.

⁵³⁷ Second Interconnection Order at ¶ 176.

⁵³⁸ MFS Reply at 20-21.

⁵³⁹ See First Interconnection Order at ¶¶ 542-617 (discussing collocation).

⁵⁴⁰ First Interconnection Order at ¶ 581.

222. As Sprint points out, the term "information" in section 272(c)(1) is not limited as it is in section 272(e)(2) to information "concerning [the BOC's] provision of exchange access."⁵⁴¹ In fact, as noted above, we find no limitation in the statutory language on the type of information that is subject to the section 272(c)(1) nondiscrimination requirement. For this reason, we reject U S West's assertion that section 272(c)(1) only governs that information which may give a separate affiliate an "unfair advantage."⁵⁴² We conclude, however, that the term "information" includes, but is not limited to, CPNI and network disclosure information.⁵⁴³ We therefore reject arguments made by some BOCs that the nondiscrimination provision of section 272(c)(1) does not govern the BOCs use of CPNI. With respect to CPNI, we conclude that BOCs must comply with the requirements of both sections 222 and 272(c)(1). We decline to address parties' arguments raised in this proceeding regarding the interplay between section 272(c)(1) and section 222 to avoid prejudging CPNI issues that will be addressed in a separate proceeding.⁵⁴⁴

D. Establishment of Standards

1. Background

223. Section 272(c)(1) prohibits a BOC from discriminating between its section 272 affiliate and other entities in the "establishment of standards." In the Notice we sought comment on what "standards" are encompassed by this provision. We observed that a BOC may act anticompetitively by creating standards that require or favor equipment designs that are proprietary to its section 272 affiliate. We sought comment on what procedures, if any, we should implement to ensure that a BOC does not discriminate between its affiliate and other entities in setting standards. We asked parties to comment, for example, on whether BOCs should be required to participate in standard-setting bodies in the development of standards covered by section 272(c)(1).⁵⁴⁵

⁵⁴¹ See 47 U.S.C. § 272(e)(2). Similarly, we note that the term "facilities" in section 272(c)(1) is not limited as it is in section 272(e)(4) to "interLATA or intraLATA facilities." See 47 U.S.C. § 272(e)(4).

⁵⁴² U S West at 37-38 (arguing that, if the information cannot give an unfair advantage to a separate affiliate, there is no reason under the 1996 Act to interfere with its flow between the BOC and its affiliate).

⁵⁴³ See, e.g., 47 U.S.C. §§ 222, 251(c)(5).

⁵⁴⁴ See CPNI NPRM. Several BOCs assert that there are certain instances under section 222 where it would be unlawful for them to distribute CPNI to other entities. See Ameritech Reply at 29, NYNEX Reply at 13-14; PacTel Reply at 16-17; U S West Reply at 14-15.

⁵⁴⁵ Notice at ¶ 78.

2. Comments

224. Although we received only a few comments on the meaning of the term "standards" in section 272(c)(1),⁵⁴⁶ many parties expressed views on the need for the adoption of procedures to ensure nondiscrimination in the establishment of standards, the need for mandatory BOC participation in standard-setting, and whether the failure of BOC participation in standard-setting should be considered discrimination. Bellcore, ITAA, and PacTel argue it is unnecessary to adopt procedures to ensure the nondiscriminatory establishment of standards.⁵⁴⁷ For example, Bellcore and PacTel maintain that nondiscriminatory standards-setting need not be addressed in the context of section 272(c)(1) because it is already addressed by sections 273(d)(4)⁵⁴⁸ and 273(d)(5).⁵⁴⁹ These provisions, they state, establish "reasonable and nondiscriminatory" procedures for Bellcore and non-accredited standards development organizations to follow in creating industry-wide standards and generic requirements for telecommunications equipment and CPE.⁵⁵⁰ Congress, Bellcore asserts, did not purposefully create a process under section 273(d)(4) only to prevent BOCs from using the fruits of that process in section 272.⁵⁵¹

225. AT&T asserts that, in appropriate cases, the Commission should involve itself in the standard-setting process.⁵⁵² Similarly, MCI proposes that the Commission act as or appoint an arbitrator to resolve disputes that arise in the public standards-setting process.⁵⁵³ USTA and U S West, on the other hand, argue that industry consensus rather than Commission involvement

⁵⁴⁶ MCI at 39 (the term "standards" should encompass any that affect interconnection and interoperability between two or more public network operators); Sprint at 42 (there is nothing to suggest that the term "standards" means something other than its commonly understood dictionary definition); TIA at 44 (the term "standards" should encompass all activities undertaken in connection with a BOC's efforts to establish technical specifications for BOC network operation and interconnection of equipment and services to a BOC network).

⁵⁴⁷ Bellcore Reply at 2-3; ITAA at 21 (arguing that the nondiscrimination language of section 272(c)(1) is absolute); PacTel Reply at 18.

⁵⁴⁸ Section 273(d)(4) prescribes procedures that are intended to open to all interested parties the process for setting and establishing industry-wide standards and generic requirements for telecommunication equipment and CPE. See Manufacturing NPRM.

⁵⁴⁹ Section 273(d)(5) requires that the Commission prescribe a dispute resolution process to be used if all parties cannot agree on a dispute resolution process when establishing and publishing any industry-wide standard or generic requirement. See Implementation of the Section 273(d)(5) of the Telecommunications Act of 1996, Dispute Resolution Regarding Equipment Standards, GC Docket No. 96-42, Report and Order, FCC No. 96-205 (rel. May 7, 1996) (Dispute Resolution Order).

⁵⁵⁰ See Bellcore Reply at 2-3; PacTel Reply at 18.

⁵⁵¹ Bellcore Reply at 3.

⁵⁵² AT&T at 35.

⁵⁵³ MCI at 40.

is required in the development of standards.⁵⁵⁴ MCI contends that, as a matter of policy, BOCs should be required to participate in all public fora that are developing interconnection or interoperability standards concerning their current or foreseeable services and that all technical standards involving the BOCs or their affiliates should be developed in open, nondiscriminatory public standard-setting bodies and fora.⁵⁵⁵ PacTel and Sprint, in contrast, assert that participation in standard-setting bodies should not be required.⁵⁵⁶

226. Sprint argues, however, that a BOC's failure to participate or its refusal to abide by the standards selected may be evidence of its intent to discriminate in the "establishment of standards."⁵⁵⁷ Similarly, AT&T maintains that the Commission should treat the adoption of a standard that favors a BOC affiliate and harms unaffiliated entities as establishment of a *prima facie* case of discrimination under section 272(c)(1).⁵⁵⁸ In addition, MCI argues that the Commission should refuse to recognize standards not established in an open, nondiscriminatory forum for purposes of resolving discrimination claims.⁵⁵⁹

3. Discussion

227. We conclude that the term "standards" in section 272(c)(1) includes the meaning of this term as it is used in section 273. In the Manufacturing NPRM, we sought comment on how the term "standards" should be defined "for purposes of implementation of the 1996 Act to ensure that standards processes are open and accessible to the public."⁵⁶⁰ We note, however, that unlike the use of the term "standards" in sections 273(d)(4) and 273(d)(5), the term "standards" in section 272(c)(1) is not limited by the term "industry-wide." We conclude, therefore, that

⁵⁵⁴ USTA Reply at 12-13 (in an era of open competition where BOCs compete against each other, BOCs have no incentive to collaborate with other BOCs in setting standards); U S West Reply at 14 (asserting that the Commission's complaint procedures should address any abuse of this process).

⁵⁵⁵ MCI at 39; see also ITI and ITAA Reply at 14 (Commission should require BOCs to establish fair and nondiscriminatory network performance, interconnection, and equipment interoperability standards); TIA at 43 (BOCs should be strongly encouraged, if not required, to participate in standard-setting activities of accredited standard-setting groups.)

⁵⁵⁶ PacTel at 35; PacTel Reply at 18; Sprint at 43 n.31.

⁵⁵⁷ Sprint at 43 n.31.

⁵⁵⁸ AT&T at 35.

⁵⁵⁹ MCI at 39.

⁵⁶⁰ Manufacturing NPRM at ¶ 34.

section 272(c)(1) prohibits discrimination in the establishment of any standard, not only those that are "industry-wide."⁵⁶¹

228. As we observed in the Manufacturing NPRM, the process by which standards are established may present opportunities for anticompetitive behavior by the BOCs.⁵⁶² We decline, however, to implement additional procedures, beyond those outlined in section 273, to ensure that BOCs do not discriminate between their section 272 affiliates and other entities in establishing industry-wide standards. Rather, we agree with Bellcore and PacTel that the procedures for the establishment of industry-wide standards and generic requirements for telecommunications equipment and CPE appear at this time to be adequately addressed by the requirements contained in section 273(d)(4). For example, in response to MCI, we note that section 273(d)(4) already provides for an open standards-setting process whereby all interested parties have the opportunity to fund and participate in the development of industry-wide standards or generic requirements on a "reasonable and nondiscriminatory" basis.⁵⁶³ We find no basis in the record for concluding that the requirements established by section 273, and any regulations adopted thereunder, will not be sufficient to deter discrimination in the establishment of industry-wide standards.

229. Although we decline at this time to establish additional procedures beyond those required in section 273(d)(4), we recognize that there is a distinct potential competitive danger that a BOC will use standards in its own and its section 272 affiliate's network that are not "industry-wide" (that is, not employed by "at least 30 percent of all access lines") or established by an accredited standards development organization,⁵⁶⁴ but rather specifically tailored to meet its own needs or those of its section 272 affiliate. Because such standards may not be developed in an open and nondiscriminatory process, such as the one required for the establishment of industry-wide standards in section 273(d)(4), we find that those standards may place unaffiliated entities at a competitive disadvantage. For example, if a BOC adopts a particular non-accredited or non-industry-wide protocol or network interface, it may, by virtue of its substantial size and market share, effectively force competing entities to alter their specifications in order to maintain the same level of interoperability with the BOC or the BOC affiliate. We conclude, therefore, that the adoption of any standard that has the effect of favoring the BOC's section 272 affiliate and disadvantaging an unaffiliated entity will establish a prima facie violation of section 272(c)(1).

⁵⁶¹ The term "industry-wide" as defined in section 273 means "activities funded by or performed on behalf of local exchange carriers for use in providing wireline telephone exchange service whose combined total of deployed access lines in the United States constitutes at least 30 percent of all access lines deployed by telecommunications carriers in the United States" as of February 8, 1996. See 47 U.S.C. § 273(d)(8)(C).

⁵⁶² Manufacturing NPRM at ¶ 31.

⁵⁶³ See 47 U.S.C. § 273(d)(4)(A)(ii).

⁵⁶⁴ An "accredited standards development organization" is an entity composed of industry members that has been accredited by an institution vested with the responsibility for standards accreditation by the industry. See 47 U.S.C. § 273(d)(8)(E).

230. We also conclude, on the basis of the record before us, that it is not necessary as a matter of law, nor desirable as a matter of policy, to require BOC participation in the standards-setting process. The language of section 272(c)(1) cannot be read as requiring such participation; moreover, BOCs have an interest in participating voluntarily in standard-setting organizations because standards that are ultimately adopted may materially impact the BOCs' competitive position.⁵⁶⁵ Further, we decline to become involved at this time in the standard-setting process, as suggested by AT&T, in order to accomplish the purposes of section 272(c)(1). Unlike section 256, which, among other things, permits the Commission to participate in the development of public telecommunications network interconnectivity standards that promote access, section 272(c)(1) does not contemplate Commission involvement.⁵⁶⁶ Moreover, we reject MCI's proposal that we insert ourselves into the dispute resolution process to accomplish the purposes of section 272(c)(1). Section 273(d)(5) requires the Commission to prescribe a dispute resolution process to address the anticompetitive harms that may result from the establishment of industry-wide standards under section 273(d)(4) and expressly prohibits the Commission from becoming a party to this process.⁵⁶⁷ As to disputes that may arise in the context of other public standard-setting processes, we find, on the basis of the record before us, that Commission involvement beyond its existing role in the section 208 complaint process is unnecessary.⁵⁶⁸

E. Procurement Procedures

1. Background

231. Section 272(c)(1) also prohibits the BOCs from discriminating between their section 272 affiliates and other entities in their procurement of goods, services, facilities, and information. In the Notice, we observed that this provision prohibits a BOC from purchasing manufactured network equipment solely from its affiliate, purchasing the equipment from the affiliate at inflated prices, or giving any preference to the affiliate's equipment in the procurement process and thereby excluding rivals from the market in the BOC's service area. We sought comment on how the BOCs could establish nondiscriminatory procurement procedures designed to ensure that other entities are treated on the same terms and conditions as a BOC affiliate. We

⁵⁶⁵ Cf. PacTel at 35.

⁵⁶⁶ See 47 U.S.C. § 256. We note that the Commission has asked its federal advisory committee, the Network Reliability and Interoperability Council, for recommendations on how the Commission should implement section 265. These recommendations will provide the basis for a notice of proposed rulemaking that will consider, among other things, Commission rules and policies dealing with telecommunications standards-setting activities, including Commission involvement.

⁵⁶⁷ See 47 U.S.C. § 273(d)(5); Dispute Resolution Order.

⁵⁶⁸ See U S West Reply at 14 (if process is abused, Commission's complaint procedures are available to address the problem).

invited comment, specifically, on the nature and extent of rules necessary to ensure that such procedures are implemented.⁵⁶⁹

2. Comments

232. PacTel and U S West maintain that, in light of the procurement standards set forth in sections 273(e)(1) and 273(e)(2), it is unnecessary to adopt additional procurement procedures to implement the nondiscrimination requirement of section 272(c)(1).⁵⁷⁰ ITAA asserts that, because the section 272(c)(1) language is absolute, it is unnecessary to prescribe procurement procedures to ensure that BOCs do not discriminate.⁵⁷¹ TIA, in contrast, contends that section 272(c)(1) requires BOCs to establish specific procurement procedures.⁵⁷² According to TIA, each BOC should specify the standards that it uses to make procurement decisions and file these with the Commission.⁵⁷³ TIA also suggests that the Commission adopt a classification scheme that identifies discrete categories of products and related services procured by BOCs.⁵⁷⁴

3. Discussion

233. As stated above, we find that section 272(c)(1) establishes an unqualified prohibition against discrimination by a BOC in its dealings with its section 272 affiliate and unaffiliated entities.⁵⁷⁵ We conclude, therefore, that any discrimination with respect to a BOC's procurement of goods, services, facilities, or information between its section 272 affiliate and an unaffiliated entity establishes a prima facie case of discrimination under section 272(c)(1). For example, consistent with our observations in the Notice, we find that a prima facie case of discrimination under section 272(c)(1) may be established if a BOC purchases manufactured network equipment solely from its section 272 affiliate, purchases such equipment from its affiliate at inflated prices, or gives any preference to the affiliate's equipment in the procurement process, thereby excluding rivals from the market in the BOC's service area.

234. Insofar as section 272(c)(1) governs a BOC's procurement of manufacturing services, we find that BOC procurement of telecommunications equipment should be performed in a manner consistent with the manufacturing requirements of section 273. We conclude,

⁵⁶⁹ Notice at ¶ 77.

⁵⁷⁰ PacTel at 35; PacTel Reply at 17; U S West at 36 n.58.

⁵⁷¹ ITAA at 21.

⁵⁷² TIA at 46.

⁵⁷³ Id. at 41-42.

⁵⁷⁴ Id. at 34 n.74 (noting that its own "Buyer's Guide" may be useful in this process).

⁵⁷⁵ See supra at paragraph 197.

therefore, that section 272(c)(1) requires a BOC to adhere to the nondiscrimination and procurement standards governing the procurement of telecommunications equipment set forth in sections 273(e)(1) and 273(e)(2) of the Act.⁵⁷⁶ We therefore defer consideration of detailed procurement procedures with respect to telecommunications equipment to the Manufacturing NPRM, which specifically addresses the requirements of these sections. We conclude, however, that the BOCs must, at a minimum, comply with any and all regulations adopted to implement the standards of sections 273(e)(1) and 273(e)(2); failure to do so may be evidence of discrimination under section 272(c)(1).

235. We recognize, however, that the nondiscrimination requirement of section 272(c)(1) encompasses a broader range of activities than those described in sections 273(e)(1) and 273(e)(2). Nevertheless, because the record is largely silent on the nature and extent of rules necessary to ensure that BOCs do not discriminate in their procurement of goods, services, facilities, and information under section 272(c)(1), we decline, at this time, to adopt rules to implement this requirement. In response to TIA's concerns, therefore, we conclude that the record in this proceeding does not support adoption of any concrete procurement procedures beyond those already mandated by sections 273(e)(1) and 273(e)(2). Although we decline to issue rules, we caution BOCs that allegations of discrimination in their procurement of goods, services, facilities, and information under section 272(c)(1) will be evaluated in light of that section's unqualified prohibition on discrimination. Further, we note that allegations of discrimination may more easily be rebutted by demonstrated compliance with pre-existing, publicly available procedures for procurement.

F. Enforcement of Section 272(c)(1)

236. In the Notice, we observed that the Commission previously adopted a regulatory scheme to ensure that the BOCs do not discriminate in the provision of basic services used to provide enhanced services or in disclosing changes in the network that are relevant for the competitive manufacture of CPE. We sought comment on whether any of the reporting and other requirements that the Commission applied to the BOCs in the Computer III and ONA proceedings, which were adopted in lieu of the structural separation requirements of Computer II, are sufficient to implement section 272(c)(1) and provide protection against the type of BOC behavior that section 272(c)(1) seeks to curtail.⁵⁷⁷ We address this issue, as well as the

⁵⁷⁶ Section 273(e)(1), entitled "Nondiscrimination Standards for Manufacturing" requires, *inter alia*, that "[i]n the procurement or awarding of supply contracts for telecommunications equipment, a [BOC], or any entity acting on its behalf . . . may not discriminate in favor of equipment produced or supplied by an affiliate or related person. Section 273(e)(2), entitled "Procurement Standards," provides that each BOC or entity acting on its behalf shall "make procurement decisions and award all supply contracts for equipment, services, and software on the basis of an objective assessment of price, quality, delivery, and other commercial factors." 47 U.S.C. §§ 273(e)(1)(B), (e)(2).

⁵⁷⁷ Notice at ¶ 75.

requirements and mechanisms necessary to facilitate the detection and adjudications of section 272 violations, below.⁵⁷⁸

VI. FULFILLMENT OF CERTAIN REQUESTS PURSUANT TO SECTION 272(e)

A. Section 272(e)(1)

1. Background

237. Section 272(e)(1) states that a BOC and a BOC affiliate subject to section 251(c) "shall fulfill any requests from an unaffiliated entity for telephone exchange service and exchange access within a period no longer than the period in which it provides such telephone exchange service and exchange access to itself or to its affiliates."⁵⁷⁹ In the Notice, we tentatively concluded that the term "unaffiliated entity" includes "any entity, regardless of line of business, that is not affiliated with a BOC" as defined under section 153(1) of the Act.⁵⁸⁰ We sought comment on the scope of the term "requests" and on whether it included, *inter alia*, "initial installation requests, as well as any subsequent requests for improvement, upgrades or modifications of service, or repair and maintenance of . . . services."⁵⁸¹ We tentatively concluded that section 272(e)(1) requires the BOCs to treat unaffiliated entities on a nondiscriminatory basis in completing orders for telephone exchange service and exchange access, but does not grant unaffiliated entities any additional rights beyond those otherwise granted by the Communications Act or Commission rules.⁵⁸² We also sought comment regarding how to implement section 272(e)(1) and specifically inquired whether reporting requirements for service intervals analogous to those imposed by Computer III and ONA would be sufficient.⁵⁸³

⁵⁷⁸ See *infra* part IX.

⁵⁷⁹ 47 U.S.C. § 272(e)(1). Section 272(e) applies to a BOC or a BOC affiliate subject to section 251(c). 47 U.S.C. § 272(e). An affiliate subject to section 251(c) is an incumbent LECs as defined in section 251(h). *Id.* §§ 251(c), 251(h).

⁵⁸⁰ Notice at ¶ 82.

⁵⁸¹ *Id.* at ¶ 83.

⁵⁸² *Id.* at ¶ 84.

⁵⁸³ *Id.* at ¶ 85.

2. Comments

238. Commenters generally support the Notice's analysis regarding the scope and purpose of section 272(e)(1).⁵⁸⁴ AT&T, Sprint, MCI, TRA, Teleport, and ITAA support the imposition of reporting requirements to implement section 272(e)(1),⁵⁸⁵ while BOCs generally oppose the imposition of reporting requirements.⁵⁸⁶ Several parties question the utility of reporting that follows the format of Computer III and ONA reporting.⁵⁸⁷ In an ex parte letter filed after the official pleading cycle closed, AT&T suggests an alternative format for reporting based on measures it currently uses to monitor the quality of access services provided to it by various LECs.⁵⁸⁸

3. Discussion

239. Based on our analysis of the record, we adopt our tentative conclusion that the term "unaffiliated entity" includes "any entity, regardless of line of business, that is not affiliated with a BOC" as defined under section 153(1) of the Act.⁵⁸⁹ Also based on the record, we conclude that section 272(e)(1) requires the BOCs to treat unaffiliated entities on a nondiscriminatory basis in completing orders for telephone exchange service and exchange access, but does not grant unaffiliated entities any additional rights to make requests beyond those granted by the Communications Act or Commission rules.⁵⁹⁰ We conclude that the term "requests" should be interpreted broadly, and that it includes, but is not limited to, initial

⁵⁸⁴ E.g., AT&T at 37; MCI at 41-42; Sprint at 43-44; TRA at 17; ITAA at 23; TIA at 45; PacTel at 36.

⁵⁸⁵ AT&T at 37; MCI at 42; Sprint at 44 & n.32; TRA at 17-18; Teleport at 13-15; ITAA at 23.

⁵⁸⁶ E.g., Ameritech Reply at 30; Bell Atlantic Reply at 11-12; NYNEX Reply at 23 & n.72; SBC at 13-17; U S West Reply at 16; PacTel Reply at 18-19. NYNEX and Ameritech specifically argue that reporting is not needed because their internal procedures are automated and designed to be nondiscriminatory, and that therefore, discrimination would require expensive coordination by the BOCs. Letter from Suzanne Guyer, Executive Director, Federal Regulatory Policy Issues, NYNEX to William F. Caton, Acting Secretary, FCC at 5 (filed Oct. 23, 1996) (NYNEX Oct. 23 Ex Parte); Letter from Gary L. Phillips, Director of Legal Affairs, Washington Office, Ameritech to William F. Caton, Acting Secretary, FCC, Attachment (filed Oct. 23, 1996) (Ameritech Oct. 23 Ex Parte).

⁵⁸⁷ AT&T at 36-37; PacTel at 37; Time Warner at 23.

⁵⁸⁸ Letter from Charles E. Griffin, Government Affairs Regulatory Director, AT&T to William F. Caton, Acting Secretary, FCC at 3-5 (filed Oct. 3, 1996) (AT&T Oct. 3 Ex Parte). This proposal is discussed more fully infra in part XI.

⁵⁸⁹ E.g., Sprint at 36-37; TRA at 17; TIA at 45.

⁵⁹⁰ E.g., PacTel at 36; Sprint at 43-44.

installation requests, subsequent requests for improvement, upgrades or modifications of service, or repair and maintenance of these services.⁵⁹¹

240. Section 272(e)(1) unambiguously states that a BOC must fulfill requests from unaffiliated entities at least as quickly as it fulfills its own or its affiliates' requests. To implement this statutory directive, we conclude that, for equivalent requests, the response time a BOC provides to unaffiliated entities should be no greater than the response time it provides to itself or its affiliates.⁵⁹² We are not persuaded by the BOCs' argument that variations among individual requests make any comparison between requests meaningless, and thus make such a standard unachievable.⁵⁹³ The BOC must fulfill equivalent requests within equivalent intervals. Thus, for example, an unaffiliated entity's request of a certain size, level of complexity, or in a specific geographic location must be fulfilled within a period of time that is no longer than the period of time in which a BOC responds to an equivalent request from itself or its affiliates. Because we anticipate that the facts relating to each request will vary, we believe it is appropriate to determine whether requests are equivalent on a case-by-case basis.

241. Section 272(e)(1) requires a BOC to fulfill the requests of unaffiliated entities within a period no longer than the period in which it fulfills its own or its affiliates requests. Because the statute does not mandate that a BOC follow a particular procedure in meeting this requirement, we decline to adopt the proposals of AT&T and Teleport to require the BOCs to use electronic order processing systems or to use the identical systems that the BOCs use to process their own service requests.⁵⁹⁴ We emphasize, however, regardless of the procedures that a BOC employs to process service orders from unaffiliated entities, it must be able to demonstrate that those procedures meet the statutory standard. Under current industry practice, BOCs and interexchange carriers use electronic mechanisms to implement PIC changes;⁵⁹⁵ exchange billing information; and, in some instances, provide ordering, repair, and trouble administration information.⁵⁹⁶ We believe that these current mechanisms, and the requirement that incumbent LECs provide nondiscriminatory access to operation support systems functions pursuant to

⁵⁹¹ AT&T at 37; MCI at 41-42; Sprint at 43-44; TRA at 17; ITAA at 23.

⁵⁹² AT&T at 36-38. Contra Bell Atlantic Reply at 11; Ameritech Reply at 30.

⁵⁹³ Ameritech Reply at 30; Bell Atlantic Reply at 11-12; NYNEX Reply at 23; U S West Reply at 16.

⁵⁹⁴ AT&T at 38; Teleport at 13.

⁵⁹⁵ A PIC change is a change in a customer's selection of her presubscribed interexchange carrier. At one time the term "PIC" referred to "primary" or "preferred interexchange carrier." Although we have retained the acronym "PIC," we now define it as any toll carrier for purposes of our presubscription rules under the Second Interconnection Order. Second Interconnection Order at ¶ 5, n.15.

⁵⁹⁶ See First Interconnection Order at ¶¶ 507, 511-512, 520 (describing the use of automated PIC changes, electronic ordering and repair and trouble administration information, the Customer Account Record Exchange (CARE) system, and the Billing Name and Address (BNA) database).

sections 251(c)(3) and 251(c)(4) of the Act, will promote the use of electronic interfaces between unaffiliated entities and the BOCs.⁵⁹⁷

242. We also conclude that the BOCs must make available to unaffiliated entities information regarding the service intervals in which the BOCs provide service to themselves or their affiliates. The statute imposes a specific performance standard on the BOCs in section 272(e)(1), and we conclude that, absent Commission action, the information necessary to detect violations of this requirement will be unavailable to unaffiliated entities. Unlike the information necessary to ensure compliance with other subsections of section 272, there is no requirement that the information necessary to verify compliance with section 272(e)(1) must be disclosed under other provisions of the Act or Commission rules. Without the disclosure requirements imposed here, parties will be unable readily to ascertain how long it takes a BOC to fulfill its own or its affiliates' requests for service. Section 272(b)(5), which requires that all transactions between a BOC and its section 272 affiliate be reduced to writing and made available for public inspection, does not provide parties an adequate mechanism to obtain information necessary to evaluate compliance with section 272(e)(1) because section 272(b)(5) is necessarily prospective in nature. The information disclosed pursuant to section 272(b)(5) will allow unaffiliated entities to determine that a BOC and its section 272 affiliate have reached an agreement and the relevant terms and conditions of that agreement, but the document produced to satisfy section 272(b)(5) will not allow parties to determine the time it actually takes for a BOC to fulfill its own or its affiliates' requests. Section 272(e)(1) governs actual BOC performance, not contractual arrangements. Moreover, section 272(b)(5) by itself is insufficient to implement section 272(e)(1) because it will only make information available about transactions between a BOC and its section 272 affiliate; section 272(e)(1), in contrast, governs requests by the BOC itself and all of the BOC's affiliates. We also conclude that, in order to provide meaningful enforcement of section 272(e)(1), interval response times must be disclosed more frequently than the biennial audit required by section 272(d). Finally, a disclosure obligation will allow all entities to compare, in a timely fashion, their own service intervals with those provided to the BOC or its affiliates.⁵⁹⁸ Contrary to the contentions of some BOCs, vendor management programs similar to the one utilized by AT&T would not provide this information.⁵⁹⁹ These vendor management programs provide information to a BOC customer about the service intervals the BOC provides to that customer, but do not provide comparative data about the service intervals provided to other entities, such as BOC affiliates.

⁵⁹⁷ First Interconnection Order at ¶¶ 312, 516-528.

⁵⁹⁸ As we indicate below, we are seeking additional comment before adopting the specific requirements of the disclosure obligation we impose in this Order.

⁵⁹⁹ Ses. 2, 3, Letter from Cyndie Eby, Executive Director, Federal Regulatory, U S West to Cheryl Leanza, Policy and Program Planning Division, Common Carrier Bureau, FCC at 2 (filed Nov. 19, 1996) (U S West Nov. 19 Ex Parte); Bell Atlantic Oct. 16 Ex Parte at 1-2.

243. We do not agree with PacTel that the absence of discrimination found in ONA reports indicates that disclosure requirements are of little value in enforcing section 272(e)(1).⁶⁰⁰ Disclosure requirements are valuable because they promote compliance and give aggrieved competitors a basis for seeking a remedy directly from a BOC. If competitors can easily obtain data about a BOC's compliance with section 272(e)(1), this increases the likelihood that potential discrimination can be detected and penalized; this, in turn, decreases the danger that discrimination will occur in the first place. Disclosure requirements also minimize the burden on the Commission's enforcement process because entities will have the information needed to resolve disputes informally prior to submitting a complaint to the Commission. We also are not persuaded by NYNEX and Ameritech that the automation and nondiscriminatory design of their provisioning and maintenance procedures obviate the need for disclosure requirements.⁶⁰¹ Although the BOCs' use of nondiscriminatory, automated order processing systems is important for meeting the requirements of section 272(e)(1), the existence of these systems does not guarantee that requests placed via these systems are actually completed within the requisite period of time. Finally, we are not persuaded by the arguments of U S West and PacTel that, because parties are able to incorporate information disclosure requirements into agreements negotiated under sections 251 and 252 of the Act, a separate information disclosure requirement is unnecessary.⁶⁰² Section 272(e)(1) and section 251 do not govern similar activities. Section 251 provides a framework that requires incumbent LECs to provide, inter alia, interconnection, unbundled network elements, and wholesale services to requesting telecommunications carriers. In contrast, section 272(e)(1) requires BOCs to fulfill requests for telephone exchange service and exchange access from unaffiliated entities on a nondiscriminatory basis. To link compliance with section 272(e)(1) to the outcome of individual negotiations would not adequately implement section 272(e)(1), particularly because the class of entities entitled to nondiscriminatory treatment under section 272(e)(1) is much broader than the class of entities who may make requests under section 251.

244. In response to the comments raised in the record, we conclude that we should seek further comment on the specific information disclosure requirements proposed by AT&T in an ex parte letter filed after the official pleading cycle closed.⁶⁰³ In the Notice, we sought comment on whether reporting requirements analogous to the Computer III and ONA reporting requirements would be sufficient to implement section 272(e)(1). The parties are divided about the usefulness of service interval reporting similar to ONA reporting for implementing section 272(e)(1)⁶⁰⁴ and on the merits of AT&T's proposal.⁶⁰⁵ We agree with NYNEX that we should

⁶⁰⁰ PacTel at 37.

⁶⁰¹ NYNEX Oct. 23 Ex Parte at 5; Ameritech Oct. 23 Ex Parte, Attachment.

⁶⁰² U S West Nov. 19 Ex Parte at 2-3; PacTel Oct. 18 Ex Parte at 4.

⁶⁰³ AT&T October 3 Ex Parte at 3-6.

⁶⁰⁴ See supra note 588.

provide an additional opportunity for parties to comment on the specific aspects of the disclosure requirements needed to implement section 272(e)(1); therefore, we include a Further Notice of Proposed Rulemaking infra in Part XI of this Order.⁶⁰⁶

245. We reject at this time, however, AT&T's more expansive proposal to require BOCs to submit to the Commission the underlying data for the information they must make publicly available.⁶⁰⁷ The submission of data necessary to meet this requirement -- including, for example, every trouble report submitted to a BOC for a given period -- would impose a substantial administrative burden on the BOCs, and possibly on the Commission as well, and is unnecessary to enforce section 272(e)(1). We also decline to order the BOCs to publicize the response times for all entities, as suggested by AT&T and Teleport, because the standard established by section 272(e)(1) is the response time given to the BOC itself and its affiliates.⁶⁰⁸

B. Section 272(e)(2)

1. Background

246. Section 272(e)(2) states that a BOC and a BOC affiliate that is subject to section 251(c) "shall not provide any facilities, services, or information concerning its provision of exchange access to [a section 272(a) affiliate] unless such facilities, services, or information are made available to other providers of interLATA services in that market on the same terms and conditions."⁶⁰⁹ In the Notice, we sought comment on the scope of the term "facilities, services, or information concerning its provision of exchange access" and the term "other providers of

⁶⁰⁵ A number of other parties have also submitted Ex Parte letters in response to AT&T's proposal. Letter from Teresa Marrero, Regulatory Affairs, Teleport Communications Group to Regina Keeney, Chief, Common Carrier Bureau, FCC (filed Oct. 8, 1996) (Teleport Oct. 8 Ex Parte); Letter from Edward Shakin, Regulatory Council, Bell Atlantic to Cheryl A. Leanza, Policy and Program Planning Division, Common Carrier Bureau, FCC (filed October 16, 1996) (Bell Atlantic Oct. 16 Ex Parte); Letter from Gina Harrison, Director, Federal Regulatory Relations, Pacific Telesis Group Washington to William F. Caton, Acting Secretary, FCC (filed Oct. 18, 1996) (PacTel Oct. 18 Ex Parte); Ameritech Oct. 23 Ex Parte; NYNEX Oct. 23 Ex Parte; Letter from Gina Harrison, Director, Federal Regulatory Relations, Pacific Telesis Group Washington to William F. Caton, Acting Secretary, FCC (filed Oct. 23, 1996) (PacTel Oct. 23 Ex Parte); Letter from Teresa Marrero, Regulatory Affairs, Teleport Communications Group to Regina Keeney, Chief, Common Carrier Bureau, FCC (filed Oct. 24, 1996) (Teleport Oct. 24 Ex Parte); Letter from Charles E. Griffin, Government Affairs Regulatory Director, AT&T to William F. Caton, Acting Secretary, FCC (filed Oct. 24, 1996) (AT&T Oct. 24 Ex Parte).

⁶⁰⁶ NYNEX Oct. 23 Ex Parte at 6.

⁶⁰⁷ AT&T at 37; AT&T Oct. 3 Ex Parte at 6.

⁶⁰⁸ See AT&T Oct. 3 Ex Parte at 6; Teleport Oct. 8 Ex Parte at 8. Ameritech supports disclosures regarding the service intervals provided to BOC affiliates rather than to individual competing carriers. Ameritech Oct. 23 Ex Parte, Attachment.

⁶⁰⁹ 47 U.S.C. § 272(e)(2); see supra note 580.

interLATA services in that market."⁶¹⁰ We also sought comment on the relevance of the MFJ and prior Commission proceedings, including our equal access rules, in implementing this provision.⁶¹¹

2. Comments

247. Several parties suggest that the nondiscrimination obligation imposed on a BOC by section 272(e)(2) extends to ISPs.⁶¹² U S West indicates that the term "in that market" implies a geographic limitation coextensive with the geographic territory served by a BOC affiliate.⁶¹³ BOCs generally argue that implementing regulations under section 272(e)(2) are unnecessary.⁶¹⁴ AT&T, on the other hand, favors specific public disclosure requirements to implement section 272(e)(2).⁶¹⁵ Parties also disagree over the relevance of MFJ and Commission precedent when interpreting this provision.⁶¹⁶

3. Discussion

248. Definitional issues. We conclude that section 272(e)(2) does not require a BOC to provide facilities, services, or information concerning its provision of exchange access to ISPs, as suggested by ITAA and MFS.⁶¹⁷ Although ISPs are included within the term "other providers of interLATA services,"⁶¹⁸ ISPs do not use exchange access as it is defined by the Act, and, therefore, section 272(e)(2)'s requirement that BOCs provide exchange access on a

⁶¹⁰ Notice at ¶ 86.

⁶¹¹ Notice at ¶¶ 86-87 & n.160.

⁶¹² ITAA at 24-25; MFS at 27-28. Contra U S West at 40-41.

⁶¹³ U S West at 41.

⁶¹⁴ USTA at 31-33.; Ameritech Reply at 30-31; PacTel at 31.

⁶¹⁵ AT&T at 39. Contra Sprint at 41 (network disclosure rules under section 251(c)(5) are sufficient). See also IDCMA at 6-7 (requesting rules for manufacturers).

⁶¹⁶ Compare MCI at 42-43 (supporting the use of MFJ precedent) with U S West at 41-42 (arguing the Commission should consider its own precedent in this area, but should not consider the relevance of the MFJ).

⁶¹⁷ ITAA at 24-25 (arguing that the Commission must apply section 272(e) to information services providers because section 272(f)(2) applies to information services and specifically exempts section 272(e), thus implying that section 272(e) protects information services providers); MFS at 27-28 (section 272(e)(2) extends the requirements of section 251, including physical collocation, to ISPs because section 272(e)(2) requires nondiscriminatory treatment of "other providers of interLATA services"). Contra U S West at 40 (because section 272(e)(2) applies only to exchange access it seems logical that section 272(e)(2) requires nondiscriminatory treatment of the "providers of interLATA services" who are most affected by the terms and conditions of exchange access).

⁶¹⁸ See supra part III.A.1.

nondiscriminatory basis is not applicable to ISPs. "Exchange access" is defined as "the offering of access to telephone exchange services or facilities for the purpose of the origination or termination of telephone toll services."⁶¹⁹ "Telephone toll service" is defined, in turn, as "telephone service between stations in different exchange areas for which there is made a separate charge not included in contracts with subscribers for exchange service."⁶²⁰ This definition makes clear that "telephone toll service" is a "telecommunications service." Therefore, by definition, an entity that uses "exchange access" is a telecommunications carrier.⁶²¹ Because ISPs do not provide telephone toll services, and therefore are not telecommunications carriers, they are not eligible to obtain exchange access pursuant to section 272(e)(2).⁶²²

249. We are not persuaded by ITAA's argument that, because section 272(f)(2) states that the requirements of section 272 cease to apply with respect to interLATA information services at sunset, but exempts section 272(e) from the sunset requirement, section 272(e), including section 272(e)(2), must apply to ISPs. Section 272(f)(2) cannot be read to extend the application of section 272(e)(2) beyond its express terms. Similarly, we reject MFS's argument that we should use section 272(e)(2) to grant ISPs rights under section 251 because, as we articulated above, this would expand the scope of section 251 beyond its express limitations.⁶²³

250. We agree with U S West that the term "in that market" is intended to ensure that, to benefit from section 272(e)(2), an interLATA provider must be operating in the same geographic area as the relevant BOC affiliate. Therefore, we conclude that the term "providers of interLATA services in that market" means any interLATA services provider authorized to provide interLATA service in the same state where the relevant section 272 affiliate is providing service. We have designated a state as the relevant geographic area for purposes of section 272(e)(2) because the BOCs will obtain authorization to provide interLATA services on a state-by-state basis.

⁶¹⁹ 47 U.S.C. § 153(16).

⁶²⁰ *Id.* § 153(43).

⁶²¹ See 47 U.S.C. § 153(44) (defining "telecommunications carrier" as, *inter alia*, a provider of telecommunications services). Our conclusion that ISPs do not use exchange access is consistent with the MFJ, which recognized a difference between "exchange access" and "information access." MFJ §§ IV(F), IV(I) in *United States v. Western Elec. Co.*, 552 F. Supp. at 228-29 (exchange access is used in connection with interexchange telecommunications while information access is used in connection with information services). Because the requirement that the BOCs provide ISPs with "information access" under the MFJ is preserved under section 251(g), ISPs will continue to be able to obtain the services they require on a nondiscriminatory basis. 47 U.S.C. § 251(g). For more detail regarding section 251(g), see *infra* paragraph 251 and note 626.

⁶²² As we explain above, interLATA information service providers use telecommunications to provide interLATA information services, but they do not use telecommunications services. See *supra* part III.A.1.

⁶²³ See *supra* paragraph 220.

251. Implementation of section 272(e)(2). In light of the protections imposed in other portions of the Act and our rules, we conclude that we do not need to adopt rules to implement section 272(e)(2) at this time. In our First Interconnection Order and Second Interconnection Order, we adopted rules implementing section 251 of the Act, which address, *inter alia*, the provision of exchange access and network disclosure requirements under the Act.⁶²⁴ In addition, section 251(g) of the Act preserves the equal access requirements in place prior to the passage of the 1996 Act, including obligations imposed by the MFJ and any Commission rules.⁶²⁵ If, in the future, it appears that additional rules are necessary to enforce the requirements of section 272(e)(2), we will take action at that time.

252. We conclude that a separate disclosure requirement under section 272(e)(2) is not warranted.⁶²⁶ Section 272(b)(5) requires that all transactions between a BOC and its section 272 affiliate be reduced to writing and made available for public inspection.⁶²⁷ Parties will be able to determine the specific services and facilities that a BOC provides to its section 272 affiliate by inspecting the documentation that must be maintained pursuant to section 272(b)(5). In addition, information about a BOC's provision of exchange access to itself or to its affiliates will be available through the information disclosure requirement we are imposing pursuant to section 272(e)(1).⁶²⁸ Accordingly, we reject AT&T's suggestion that the Commission require the BOCs

⁶²⁴ First Interconnection Order at ¶¶ 186-191, 342-365 (concluding that a requesting carrier may obtain interconnection to originate and terminate interexchange traffic under section 251(c)(2) only if it is offering exchange access to others, not for the purpose of originating and terminating its own traffic, but that a requesting carrier may request unbundled elements under section 251(c)(3) in order to provide itself with exchange access); Second Interconnection Order at ¶¶ 165-240 (imposing network disclosure requirements).

⁶²⁵ 47 U.S.C. § 251(g). Under the MFJ the BOCs were required to "provide to all interexchange carriers and information service providers exchange access, information access and exchange services for such access on an unbundled, tariffed basis, that is equal in type, quality, and price to that provided to AT&T and its affiliates." MFJ § II(A), in United States v. Western Elec. Co., 552 F. Supp. at 227. Equal access included the nondiscriminatory provision of exchange access services, dialing parity, and presubscription of interexchange carriers. MFJ § IV(F), app. B in United States v. Western Elec. Co., 552 F. Supp. at 228, 233. Exchange access services included, but were not limited to, "provision of network control signalling, answer supervision, automatic calling number identification, carrier access codes, directory services, testing and maintenance of facilities, and the provision of information necessary to bill customers." *Id.* GTE became subject to similar restrictions in 1984, United States v. GTE Corp., 603 F. Supp. 730 (D.D.C. 1984), and, in 1985 the Commission imposed restrictions on independent LECs similar to those imposed on GTE. MTS and WATS Market Structure Phase III, CC Docket No. 78-72, Report and Order, 100 FCC 2d 860, 874-878, ¶¶ 47-60 (1983) (subsequent history omitted); see also Michael K. Kellogg et al., Federal Telecommunications Law 275-77, § 5.5.1 (1992); First Interconnection Order at ¶ 362.

⁶²⁶ Ameritech Reply at 30-31.

⁶²⁷ 47 U.S.C. § 272(b)(5).

⁶²⁸ See *supra* paragraph 242.

to disclose publicly all exchange access services and facilities used by their interLATA affiliates and to update these disclosures whenever upgrades are made.⁶²⁹

253. We conclude that our current network disclosure rules are sufficient to meet the requirement of section 272(e)(2) that BOCs disclose any "information concerning . . . exchange access" on a nondiscriminatory basis.⁶³⁰ Therefore, we conclude that AT&T's suggestion that the Commission mandate additional technical disclosure requirements is unnecessary.⁶³¹ Section 251(c)(5) imposes on incumbent LECs "[t]he duty to provide reasonable public notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier's facilities or networks, as well as of any other changes that would affect the interoperability of those facilities and networks."⁶³² We have adopted detailed rules specifying how this requirement is to be implemented.⁶³³ Further, the Commission's prior network disclosure requirements are still in place, including the Computer II "all carrier rule"⁶³⁴ and the Computer III network disclosure requirements.⁶³⁵ We emphasize that if a BOC preferentially disclosed information to its section 272 affiliate or withheld information from competing providers of interLATA services, that BOC would be in violation of section 272(e)(2). Our rules implementing section 251(c)(5) explicitly prohibit this behavior: they require LECs to make network disclosures according to a specific timetable, and prohibit preferential disclosures in advance of that timetable.⁶³⁶ We do not address IDCMA's concerns regarding information

⁶²⁹ AT&T at 38-39.

⁶³⁰ Sprint at 41. These rules are cited infra at notes 633-637.

⁶³¹ AT&T at 39 (arguing that the Commission should prohibit the BOCs from making any technical information available to their affiliates unless it is provided in written materials or technical references that are simultaneously provided to competitors).

⁶³² 47 U.S.C. § 251(c)(5).

⁶³³ Second Interconnection Order at ¶¶ 165-240.

⁶³⁴ 47 C.F.R. § 64.702.

⁶³⁵ Computer III Phase II Reconsideration Order, 3 FCC Rcd at 1164, ¶ 116 (1988). Although the Ninth Circuit vacated this order, the Commission reimposed the network disclosure requirements on remand. BOC Safeguards Order, 6 FCC Rcd at 7602-7604 ¶¶ 68-70.

⁶³⁶ In general, public notice is required under section 251(c)(5) at the "make/buy" point, but at a minimum of 12 months prior to implementation; if the planned changes can be implemented within 12 months of the make/buy point, public notice must be given at least six months prior to implementation. Second Interconnection Order at ¶¶ 214, 224.

disclosures for manufacturers because section 273 addresses the needs of manufacturers in detail, and we are addressing the implementation of section 273 in a separate proceeding.⁶³⁷

C. Section 272(e)(3)

1. Background

254. Section 272(e)(3) provides that a BOC and a BOC affiliate that is subject to the requirements of section 251(c) "shall charge [a section 272(a) affiliate], or impute to itself (if using the access for its provision of its own services), an amount for access to its telephone exchange service and exchange access that is no less than the amount charged to any unaffiliated interexchange carriers for such service."⁶³⁸ In the Notice, we tentatively concluded that a section 272 affiliate's purchase of telephone exchange service and exchange access at tariffed rates, or imputation of tariffed rates to the BOC, would be sufficient to implement section 272(e)(3). We additionally sought comment regarding the appropriate mechanism to enforce this provision in the absence of tariffed rates.⁶³⁹

2. Comments

255. Commenters overwhelmingly support our tentative conclusion.⁶⁴⁰ Several commenters indicate that the purchase of interconnection or unbundled elements at prices that are available on a nondiscriminatory basis from an agreement negotiated pursuant to sections 252, 251(c)(2) and (c)(3) would also satisfy section 272(e)(3).⁶⁴¹ Several parties suggest additional safeguards in addition to the use of tariffed rates.⁶⁴² MCI argues that, because access charges do not reflect costs, the requirements of section 272(e)(3) are meaningless if BOC affiliates are

⁶³⁷ See IDCMA at 6-7 (arguing that current network disclosure rules are insufficient for manufacturers); Manufacturing NPRM.

⁶³⁸ 47 U.S.C. § 272(e)(3); see supra note 580.

⁶³⁹ Notice at ¶ 88. We also sought comment regarding the accounting safeguards necessary to implement this provision in our companion Accounting Safeguards NPRM, 11 FCC Rcd at 9091, ¶ 79, and address those requirements in the Accounting Safeguards Order at parts III.B.2.c and IV.B.1.b.

⁶⁴⁰ E.g., Ameritech Reply at 31; Bell Atlantic, Exhibit 1 at 8-9; PacTel Reply at 20; USTA at 26-27; Sprint at 45; TRA at 18. Some parties support the Commission's tentative conclusion, but also argue additional regulations are necessary. E.g., AT&T 39-40; MCI at 43; ITAA at 26.

⁶⁴¹ ITAA at 26; Voice-Tel at 15-16; Ameritech Reply at 31-32.

⁶⁴² AT&T at 40; ALTS at 5-6; MCI at 43-44.

allowed to price interLATA services below the price of access.⁶⁴³ BOCs oppose these additional safeguards and reject MCI's argument.⁶⁴⁴

3. Discussion

256. We adopt our tentative conclusion that a section 272 affiliate's purchase of ~~telephone exchange service and exchange access at tariffed rates~~, or a BOC's imputation of tariffed rates, will ensure compliance with section 272(e)(3). If a section 272 affiliate purchases telephone exchange service or exchange access at the highest price that is available on a nondiscriminatory basis under tariff, section 272(e)(3)'s requirement that a BOC must charge its section 272 affiliate an amount for access to its telephone exchange service and exchange access that is no less than the amount charged to any unaffiliated interexchange carrier will be fulfilled. In addition, we conclude that other mechanisms are available under the Act to ensure that BOCs charge nondiscriminatory prices in accordance with section 272(e)(3). If a section 272 affiliate were to acquire services or unbundled elements from a BOC at prices that are available on a nondiscriminatory basis under section 251, the terms of section 272(e)(3) would be met.⁶⁴⁵ To the extent that a statement of generally available terms filed pursuant to section 271(c)(1)(B) would include prices that are available on a nondiscriminatory basis in a manner similar to tariffing, and a BOC's section 272 affiliate obtains access or interconnection at a price set forth in the statement, this would also demonstrate compliance with section 272(e)(3).⁶⁴⁶ We address the appropriate allocation and valuation of these transactions for accounting purposes in our companion Accounting Safeguards Order.⁶⁴⁷

257. We further conclude that section 272(e)(3) requires that a BOC must make volume and term discounts available on a nondiscriminatory basis to all unaffiliated interexchange carriers. We do not agree, however, with those parties that suggest that additional requirements are necessary to implement section 272(e)(3). AT&T, for example, proposes that a BOC or section 272 affiliate pay "a price per unit of traffic that reflects the highest unit price that any

⁶⁴³ MCI at 43-44.

⁶⁴⁴ See e.g., Ameritech Reply at 31; Bell Atlantic Reply at 12-15; PacTel Reply at 20; U S West Reply at 16-17.

⁶⁴⁵ ITAA at 26; Voice-Tel at 16; Ameritech Reply at 31-32. The Commission's pricing rules and interpretation of section 252(i) are currently under stay by the 8th Circuit Court of Appeals. Iowa Utilities Board v. FCC, No. 96-3321 (8th Cir. Oct. 15, 1996) (order granting stay pending judicial review).

⁶⁴⁶ See First Interconnection Order at ¶¶ 130-132 (concluding that the Commission's rules under section 251 should be equally applicable to statements of generally available terms under section 271(c)(2)(B)). The Commission's pricing rules are currently under stay by the 8th Circuit Court of Appeals. Iowa Utilities Board v. FCC.

⁶⁴⁷ See Accounting Safeguards Order parts III.B.2.c and IV.B.1.b.

interexchange carrier pays for a like exchange or exchange access service."⁶⁴⁸ We agree with the BOCs that AT&T's suggested rule would unfairly disadvantage BOC affiliates by preventing them from receiving volume discounts that other interexchange carriers with similar access traffic volumes would receive.⁶⁴⁹ We agree with Ameritech that, because the provision of services that fall under section 272(e)(3) must either be tariffed or made publicly available under section 252(h), unaffiliated interexchange carriers will be able to detect discriminatory arrangements.⁶⁵⁰ We recognize that a BOC may have an incentive to offer tariffs that, while available on a nondiscriminatory basis, are in fact tailored to its affiliate's specific size, expansion plans, or other needs. Our enforcement authority under section 271(d)(6) and section 208 are available to address this and other forms of potential discrimination by a BOC.

258. We reject MCI's proposal that the Commission review the BOC section 272 affiliates' prices, or profits, or both, to ensure that the section 272 affiliates' prices cover their access charges and all other costs.⁶⁵¹ MCI's contention that access charges are excessive is more appropriately addressed in the Commission's forthcoming proceeding on access charge reform.⁶⁵² We also note that the ability of competing carriers to acquire access through the purchase of unbundled elements (if those unbundled elements are properly priced) will increase pressure on the BOCs to decrease access charges, and will give competing carriers the opportunity to charge retail prices that reflect the lower cost of unbundled elements.⁶⁵³ We interpret section 272(e)(3) to require the BOCs to charge nondiscriminatory prices, as indicated above, and to allocate properly the costs of exchange access according to our affiliate transaction and joint cost rules, as modified by our companion Accounting Safeguards Order.⁶⁵⁴ We conclude that further rules addressing predatory pricing by BOC section 272 affiliates are not necessary because adequate mechanisms are available to address this potential problem. A BOC section 272 affiliate that charges a rate for interstate services below its incremental cost of providing such services would be in violation of sections 201 and 202 of the Act.⁶⁵⁵ Federal antitrust law also would apply to

⁶⁴⁸ AT&T at 40 (in the alternative favoring a rule that any tariff that has the effect of giving a BOC or BOC affiliate a lower charge per unit of traffic than other interexchange carriers is presumptively invalid); cf. ALTS at 5 (arguing the Commission should require the BOCs to show that non-affiliates purchase at least 10% of a given tariff).

⁶⁴⁹ Ameritech Reply at 31; Bell Atlantic Reply at 12; PacTel Reply at 20; U S West Reply at 16-17.

⁶⁵⁰ Ameritech Reply at 31-32.

⁶⁵¹ MCI at 43-44.

⁶⁵² Access Charge Reform NPRM; see First Interconnection Order at ¶¶ 716-732.

⁶⁵³ See 47 U.S.C. § 252(d)(1)(A)(i). The Commission's pricing rules interpreting section 252(d)(1)(A)(i) are currently under stay by the 8th Circuit Court of Appeals. Iowa Utilities Board v. FCC.

⁶⁵⁴ See Accounting Safeguards Order parts III.B.2.c and IV.B.1.b.

⁶⁵⁵ See USTA Reply, Haussman Statement at 10.

the predatory pricing of interstate and intrastate services; and the pricing of intrastate services can also be addressed at the state level.⁶⁵⁶ Further, as we indicated in the Notice, the danger of successful predation by BOCs in the interexchange market is small.⁶⁵⁷ We also reject MCI's proposal because, as the BOCs argue and MCI concedes, Commission review of affiliates' retail prices would place an enormous administrative burden on the Commission.⁶⁵⁸ Such a review would also discourage BOC section 272 affiliates from competing on the basis of service prices.⁶⁵⁹ Because we find that adequate remedies exist to address anticompetitive pricing by BOC section 272 affiliates, we believe that regulation of these new interLATA providers' retail prices pursuant to section 272(e)(3) would not conform with the deregulatory, pro-competitive goals of the 1996 Act.

D. Section 272(e)(4)

1. Background

259. Section 272(e)(4) states that a BOC and a BOC affiliate that is subject to section 251(c) "may provide any interLATA or intraLATA facilities or services to its interLATA affiliate if such services or facilities are made available to all carriers at the same rates and on the same terms and conditions, and so long as the costs are appropriately allocated."⁶⁶⁰ In the Notice, we sought comment regarding the scope of the term "interLATA or intraLATA facilities or services" including, for example, whether it included "information services and all facilities used in the delivery of such services."⁶⁶¹

2. Comments

260. Parties are divided on the significance of section 272(e)(4). Several BOCs argue that section 272(e)(4) should be construed as a grant of authority specifying the facilities and services that a BOC may provide to its section 272 affiliate.⁶⁶² NYNEX argues that there is no basis on which to limit the scope of "interLATA or intraLATA facilities or services" that a BOC

⁶⁵⁶ We emphasize that these pricing limitations should not be interpreted to preclude the section 272 affiliates from offering innovative service packages and pricing plans.

⁶⁵⁷ Notice at ¶ 137.

⁶⁵⁸ MCI at 44; NYNEX Reply at 25.

⁶⁵⁹ See Bell Atlantic Reply at 12.

⁶⁶⁰ 47 U.S.C. § 272(e)(4).

⁶⁶¹ Notice at ¶ 89.

⁶⁶² Bell Atlantic Reply at 14; NYNEX Reply at 25-26; PacTel Reply at 21-22; U S West Reply at 17-18.

can make available to its affiliate.⁶⁶³ AT&T, supported by Ameritech and MCI, argues that section 272(e)(4) applies only to services and facilities that the BOC is separately authorized to provide.⁶⁶⁴ PacTel argues, in the alternative, that if section 272(e)(4) is not a grant of authority, the definition of "telecommunications services" indicates that a BOC may provide wholesale, "carrier to carrier" interLATA services directly, rather than through the section 272 affiliate.⁶⁶⁵ Parties disagree over whether, and under what circumstances, a BOC could be allowed to utilize capacity on its local network or its Official Services network to offer interLATA service to the public through its affiliate.⁶⁶⁶ Finally, parties dispute the extent to which section 272(e)(4) applies to ISPs.⁶⁶⁷

3. Discussion

261. We conclude that section 272(e)(4) does not alter the requirements of sections 271 and 272(a). Section 272(e)(4) is not a grant of authority for BOCs to provide "interLATA or intraLATA facilities or services" in contravention of the scheme governing BOC provision of in-region interLATA services in section 271 or the requirement that these services must be provided through a separate affiliate in section 272(a).⁶⁶⁸ Section 272(e)(4) is intended to ensure the nondiscriminatory provision of services that the BOCs are authorized to offer directly, and not through an affiliate, such as those services exempted from section 271 prior to the sunset of the separate affiliate requirement.⁶⁶⁹ Like the other subsections of section 272, section 272(e)(4)

⁶⁶³ NYNEX at 36.

⁶⁶⁴ AT&T at 44; Ameritech Reply at 32; MCI Reply at n.67; MCI Nov. I Ex Parte at 1-2.

⁶⁶⁵ Letter from Michael Yourshaw, Wiley, Rein & Fielding to William F. Caton, Acting Secretary, FCC, Attachment at 1-2 (filed Nov. 27, 1996) (PacTel Nov. 27 Ex Parte).

⁶⁶⁶ See, e.g., AT&T at 44; ALTS at 1-5; Bell Atlantic Reply at 14; NYNEX Reply at 25-26; PacTel Reply at 20-22; U S West Reply at 17-18. Under the MFJ, the BOCs were authorized to maintain interLATA networks that are used to manage the operation of local exchange services; these services are commonly known as "Official Services." See generally United States v. Western Elec. Co., 569 F. Supp. at 1097-1101 (D.D.C. 1983) (determining that the RBOCs, and not AT&T, should own the Official Services networks) (subsequent history omitted). These networks perform various support functions, such as connecting directory assistance operators in different LATAs with customers and monitoring and controlling trunks and switches. Id. at n.179.

⁶⁶⁷ Two BOCs argue that the definition of interLATA service precludes including information services within the scope of "interLATA or intraLATA facilities or services." PacTel at 38; U S West at 42. ITAA and Sprint believe that section 272(e)(4) applies to ISPs. ITAA at 24-25; Sprint at 45.

⁶⁶⁸ AT&T at 42-44. We note that the record supports the Commission's tentative conclusion that section 272(e)(1) is not a grant of authority. See supra paragraph 239.

⁶⁶⁹ For example, section 272(e)(4) requires BOCs to provide on a nondiscriminatory basis "network control signalling," which is an incidental service exempted from the section 271 approval process under section 271(b)(3). 47 U.S.C. §§ 271(b)(3), (g)(6).

prescribes the manner in which a BOC must offer services and facilities it is authorized to provide.⁶⁷⁰

262. We find no basis in the 1996 Act for the BOCs' argument that section 272(e)(4) is a grant of authority for the BOCs to provide interLATA services and facilities.⁶⁷¹ By its terms, section 272(e)(4) contains no reference to the provisions of section 271 governing BOC entry into in-region interLATA services. Therefore, interpreting section 272(e)(4) as an immediate and independent grant of authority that allows BOCs to provide "interLATA or intraLATA facilities or services,"⁶⁷² even where such provision is prohibited by other sections of the statute, would contravene the requirement of section 271 that BOCs receive Commission approval prior to providing these services.⁶⁷³

263. We are also unpersuaded by PacTel's alternative argument that section 272(e)(4) is not a grant of authority, but that section 272 allows the BOCs to provide wholesale, "carrier to carrier" interLATA services directly, rather than through the section 272 affiliate.⁶⁷⁴ PacTel states that section 271 requires BOCs to obtain authorization from the Commission before providing "interLATA services," but, in contrast, section 272(a)(2)(B) only requires BOCs to offer interLATA "telecommunications service" through a separate affiliate. PacTel also states that the definition of "interLATA service" is broad and makes no distinction between retail and wholesale offerings,⁶⁷⁵ but that "telecommunications service" is defined as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used."⁶⁷⁶ PacTel therefore argues that only interLATA telecommunications services offered "directly to the public" must be offered through a separate affiliate.⁶⁷⁷ PacTel contends that retail services are services offered "directly to the public" that must be offered through a section 272 affiliate, but that wholesale services may

⁶⁷⁰ We note that, by its terms, section 272(e)(4) applies only to services and facilities that a BOC provides to its section 272 affiliate.

⁶⁷¹ Bell Atlantic Reply at 14; NYNEX Reply at 25-26; PacTel Reply at 21-22; U-S West Reply at 17-18; Bell Atlantic Sept. 27 Ex Parte at 2; PacTel October 18 Ex Parte.

⁶⁷² 47 U.S.C. § 272(e)(4) (emphasis added).

⁶⁷³ 47 U.S.C. § 271(d).

⁶⁷⁴ PacTel Nov. 27 Ex Parte at 1-2.

⁶⁷⁵ "InterLATA services" are defined as "telecommunications" between a point located in LATA and a point outside that LATA. 47 U.S.C. § 153(21). "Telecommunications" is defined as the "transmission between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." Id. at 153(43).

⁶⁷⁶ Id. at § 153(46).

⁶⁷⁷ PacTel Nov. 27 Ex Parte at 2.

be offered from the BOC because they are not "telecommunications services."⁶⁷⁸ We reject PacTel's argument because it is inconsistent with language of section 251(c)(4) and because the legislative history indicates that the definition of telecommunications services is intended to clarify that telecommunications services are common carrier services, which include wholesale services to other carriers.

264. A comparison between the definitions relied upon by PacTel and the language of section 251(c)(4) leads us to conclude that wholesale services are not excluded from the definition of "telecommunications service." Unlike the definition of telecommunications service, section 251(c)(4) explicitly uses the terms "retail" and "wholesale." Section 251(c)(4) states that incumbent LECs must offer, "at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers . . ."⁶⁷⁹ This language implicitly recognizes that some telecommunications services are wholesale services. If this were not the case, the qualifying phrase "that the carrier provides at retail" would be superfluous.

265. The legislative history and the definition of common carriage further support this conclusion. The Joint Explanatory Statement states that the definition of telecommunications service "recognize[s] the distinction between common carrier offerings that are provided to the public . . . and private services."⁶⁸⁰ Therefore, the term "telecommunications service" was not intended to create a retail/wholesale distinction, but rather a distinction between common and private carriage. Common carrier services include services offered to other carriers. For example, exchange access service is offered on a common carrier basis, but is offered primarily to other carriers.⁶⁸¹ In addition, both the Commission's rules and the common law have held that offering a service to the public is an element of common carriage. The Commission's rules define a "communication common carrier" as "any person engaged in rendering communication for hire to the public,"⁶⁸² and the courts have held that the indiscriminate offering of a service to the public is an essential element of common carriage.⁶⁸³ Neither the Commission nor the courts, however, has construed "the public" as limited to end-users of a service. In NARUC I, the Court of Appeals for the D.C. Circuit held that an entity may qualify as a common carrier even if "the nature of the service rendered is sufficiently specialized as to be of possible use to only a fraction

⁶⁷⁸ Id.

⁶⁷⁹ 47 U.S.C. § 251(c)(4).

⁶⁸⁰ Joint Explanatory Statement at 115.

⁶⁸¹ See 47 C.F.R. § 69; see generally MTS and WATS Market Structure, Phase I, CC Docket 78-72, Third Report and Order, 93 FCC 2d 241, ¶¶ 13, 23 (1982) (access charges are regulated services and include "carrier's carrier" services).

⁶⁸² 47 C.F.R. § 21.2.

⁶⁸³ NARUC v. FCC, 525 F.2d 630, 641 (D.C. Cir. 1976) (NARUC I) (citing Semon v. Royal Indemnity Co., 279 F.2d 737, 739 (5th Cir. 1960)).

of the total population."⁶⁸⁴ In light of the statutory language of section 251(c)(4), legislative history, Commission precedent, and the common law; we decline to limit the definition of telecommunications services to retail services.

266. If a BOC wishes to utilize the capacity on its Official Services network to provide interLATA services to other carriers or to end-users, it must do so in accordance with the requirements of the 1996 Act and our rules. Specifically, the BOC must provide in-region, interLATA services through a section 272 affiliate as required by section 272(a). If a BOC, therefore, seeks to transfer ownership of its Official Services network to its section 272 affiliate, it must ensure that the transfer takes place in a nondiscriminatory manner, as explained *supra* in part V.C, and must comport with our affiliate transaction rules.⁶⁸⁵

267. Finally, although the term "interLATA services" includes both interLATA information services and interLATA telecommunications services,⁶⁸⁶ we conclude that ISPs are not entitled to nondiscriminatory treatment under section 272(e)(4). The definitional sections of the Act make clear that the term "carriers" is synonymous with the term "common carriers," which does not include ISPs.⁶⁸⁷ Therefore, the requirement that the BOCs provide interLATA or intraLATA facilities or services to "all carriers" on a nondiscriminatory basis does not extend to ISPs under section 272(e)(4).⁶⁸⁸

E. Sunset of Subsections 272(e)(2) and (4)

1. Background

268. The Notice sought comment regarding how to reconcile an apparent conflict between sections 272(e) and 272(f). We noted that subsections 272(e)(2) and (e)(4) establish standards that refer to BOC affiliates.⁶⁸⁹ On the one hand, those sections could be interpreted as

⁶⁸⁴ *NARUC I*, 525 F.2d at 641. See also *Southwestern Bell Telephone Company v. FCC*, 19 F.3d 1475, 1480-81 (D.C. Cir. 1994) (describing the test for common carriage).

⁶⁸⁵ 47 C.F.R. § 32.27(b). See also *infra* part VIII.B for a discussion of the limitations on a BOC's transfer of local bottleneck facilities.

⁶⁸⁶ See *supra* note 668. We discuss the definition of interLATA services *supra* at part III.A.1.

⁶⁸⁷ See 47 U.S.C. § 153(10).

⁶⁸⁸ But cf. ITAA at 24-25 (arguing that, as in section 272(e)(2), section 272(f) demonstrates that all subsections of 272(e) apply to ISPs).

⁶⁸⁹ Section 272(e)(2) states that the BOC and its affiliate subject to section 251(c) "shall not provide any facilities, services, or information concerning its provision of exchange access to the affiliate described in subsection (a) . . . unless such facilities, services, or information are made available to other providers of interLATA services in that market on the same terms and conditions." 47 U.S.C. § 272(e)(2) (emphasis added). Section 272(e)(4) states

subject to sunset because they depend on the existence of a separate affiliate. On the other hand, section 272(f) specifically exempts section 272(e) from the sunset requirements.⁶⁹⁰ We sought comment regarding whether Congress intended to eliminate the requirements of sections 272(e)(2) and (e)(4) once the BOCs were no longer required to maintain separate affiliates under section 272(a).⁶⁹¹

2. Comments

269. Several BOCs contend that sections 272(e)(2) and (e)(4) cease to have meaning once the separate affiliate requirements of section 272 expire.⁶⁹² In contrast, Teleport and ITAA argue that the language of section 272(f) makes clear that Congress intended to exempt section 272(e) in its entirety from the sunset requirements.⁶⁹³ MCI and TRA argue that subsections (e)(2) and (e)(4) could be applied as long as a BOC utilized an affiliate to offer interLATA services.⁶⁹⁴

3. Discussion

270. We find that the plain language of the statute compels us to conclude that sections 272(e)(2) and 272(e)(4) can be applied to a BOC after sunset only if that BOC retains a separate affiliate. The nondiscrimination obligations imposed by subsections (e)(2) and (e)(4) are framed in reference to a BOC's treatment of its affiliates. In contrast, the nondiscrimination obligations imposed by subsections (e)(1) and (e)(3) are framed in reference to the BOC "itself" as well as the BOC affiliate. If a BOC does not maintain a separate affiliate, subsections (e)(2) and (e)(4) cannot be applied because there will be no frame of reference for the BOC's conduct. Section 272(f), however, exempts section 272(e) from sunset without qualification. In order to give meaning to section 272(f), we conclude that subsections (e)(2) and (e)(4) will apply to a BOC's

the BOC or its affiliate subject to section 251(c) "may provide any interLATA or intraLATA facilities or services to its interLATA affiliate if such services or facilities are made available to all carriers at the same rates and on the same terms and conditions, and so long as the costs are appropriately allocated." *Id.* § 272(e)(4) (emphasis added).

⁶⁹⁰ Section 272(f)(1) states: "The provisions of this section (other than subsection (e)) shall cease to apply with respect to manufacturing activities or the interLATA telecommunications services of a [BOC] 3 years after the date such [BOC] or any [BOC] affiliate is authorized to provide interLATA telecommunications services under section 271(d), unless the Commission extends such 3-year period by rule or order." 47 U.S.C. § 272(f)(1) (emphasis added). Section 272(f)(2) contains similar language regarding section 272(e) in relation to the four-year sunset period for information services. *Id.* § 272(f)(2).

⁶⁹¹ Notice at ¶ 80.

⁶⁹² Bell Atlantic, Exhibit 1 at 8; PacTel at 35-36; SBC at 10; USTA at 25-26.

⁶⁹³ Teleport at 17-18; ITAA at 25.

⁶⁹⁴ MCI at 41; TRA at 17.

conduct so long as that BOC maintains a separate affiliate.⁶⁹⁵ Subsections (e)(1) and (e)(3) will continue to apply in all events.

271. A number of safeguards will be available to prevent discriminatory behavior by BOCs after the separate affiliate requirements of section 272 cease to apply. As we explain in detail above, section 251(c)(5), section 251(g), and the Commission's rules imposing network disclosure and equal access requirements oblige BOCs to provide exchange access on a nondiscriminatory basis.⁶⁹⁶ In addition, intraLATA services and facilities must be provided on a nondiscriminatory basis under section 251(c)(3), and the provision of interLATA services and facilities will continue to be governed by the nondiscrimination provisions of sections 201 and 202 of the Act. In addition, once local competition develops, it will provide a check on the BOCs' discriminatory behavior because competitors of the BOC affiliates will be able to turn to other carriers for local exchange service and exchange access.

VII. JOINT MARKETING

A. Joint Marketing Under Section 271(e)

1. Background

272. Section 271(e)(1) limits the ability of certain interexchange carriers to market interLATA services jointly with BOC local services purchased for resale. Specifically, the statute states that:

Until a Bell operating company is authorized pursuant to [section 271(d)] to provide interLATA services in an in-region State, or until 36 months have passed since the date of enactment of the Telecommunications Act of 1996, whichever is earlier, a telecommunications carrier that serves greater than 5 percent of the Nation's presubscribed access lines may not jointly market in such State telephone exchange service obtained from such company pursuant to section 251(c)(4) with interLATA services offered by that telecommunications carrier.

In the Notice, we sought comment on whether we should interpret section 271(e) to prohibit, for example, promoting the availability of interLATA services and local exchange services in the same advertisement, making these services available from a single source, or providing bundling discounts for the purchase of both services.⁶⁹⁷ We also observed that the clear language of the

⁶⁹⁵ Accord MCI at 41; TRA at 17.

⁶⁹⁶ See *supra* part VI.B.

⁶⁹⁷ Notice at ¶ 91.

statute only restricts covered interexchange carriers (*i.e.*, those carriers that fall within the scope of section 271(e) of the Act) from joint marketing interLATA services and BOC local services purchased for resale.⁶⁹⁸ Thus, section 271(e) does not preclude these interexchange carriers from jointly marketing local exchange services provided over their own facilities, or through the purchase of unbundled network elements pursuant to section 251(c)(3).⁶⁹⁹ Nor does section 271(e) prohibit those interexchange carriers from "marketing" BOC resold local exchange services. Rather, the prohibition is limited to "jointly marketing" BOC resold local services with interLATA services.

2. Comments

273. Most commenters agree that bundling local and interLATA services constitutes the type of joint marketing that is prohibited by section 271(e).⁷⁰⁰ MCI argues, however, that the scope of "joint marketing" includes only those activities that involve the combining of two categories of services in a package for a bundled price or a package that constitutes a single product.⁷⁰¹ Thus, according to MCI, the other restrictions proposed in the Notice -- *i.e.*, promoting the availability of interLATA services and local exchange services in the same advertisement and making such services available from a single source -- are not prohibited.⁷⁰² The BOCs and USTA oppose MCI's interpretation of section 271(e).⁷⁰³ They argue that allowing a covered interexchange carrier to produce joint advertisements and to sell both local and interLATA service from a single source would render section 271(e) meaningless.⁷⁰⁴

274. AT&T further contends that "marketing" should only encompass efforts by a firm to persuade a potential customer to purchase or subscribe to its services, and not "customer care" that occurs after the customer has signed up.⁷⁰⁵ Such an interpretation would enable an interexchange carrier subject to section 271(e) to deal jointly with existing customers who have

⁶⁹⁸ *Id.* Only three interexchange carriers are covered by section 271(e) -- AT&T, MCI, and Sprint. *See* Federal Communications Commission, CCB, Industry Analysis Division, Long Distance Market Shares: Fourth Quarter 1995, Tbl. 4 (March 1996).

⁶⁹⁹ *Id.*

⁷⁰⁰ *See, e.g.*, MCI at 46-47; Ameritech at 48-49; PacTel at 40; TRA at 18-19; Bell Atlantic Reply at 10-11.

⁷⁰¹ MCI Reply at 27.

⁷⁰² *Id.* at 26-27.

⁷⁰³ *See, e.g.*, SBC Reply at 19 n.31; NYNEX at 13-14; USTA Reply at 15-16; PacTel Reply at 24 n.26; Ameritech Reply at 27; Bell Atlantic Reply at 10.

⁷⁰⁴ *Id.*

⁷⁰⁵ AT&T at 53-54.

purchased both services by providing a single bill, or establishing a single point-of-contact to respond to maintenance and other customer inquiries.⁷⁰⁶ The BOCs and USTA, on the other hand, contend that AT&T's proposal deliberately ignores the reality of telecommunications marketing.⁷⁰⁷ They argue that telecommunications providers must constantly engage in marketing activities, even to existing subscribers, in order to win business for new services and to maintain goodwill.⁷⁰⁸

275. Most commenters agree with our observation in the Notice that section 271(e) only restricts joint marketing of interLATA services and local exchange services that covered interexchange carriers purchase for resale pursuant to section 251(c)(4).⁷⁰⁹ USTA argues, however, that interexchange carriers should also be prohibited from jointly marketing local exchange services provided through the purchase of unbundled network elements pursuant to section 251(c)(3), because the purchase of such elements from a BOC is the equivalent of purchasing a BOC's local exchange services for resale.⁷¹⁰ Ameritech agrees that the section 271(e) joint-marketing prohibition only applies to BOC services purchased for resale under section 251(c)(4), but argues that the Commission should clarify that interexchange carriers may jointly market local and interLATA services only to the extent that their joint marketing campaign does not reach any customers to whom they provide BOC resold local exchange services.⁷¹¹

3. Discussion

276. Scope of section 271(e). We agree with the consensus of the commenters that the language in section 271(e) is clear -- the joint marketing prohibition applies only to the marketing of interLATA services together with BOC local exchange services purchased for resale pursuant to section 251(c)(4).⁷¹² We refer to the latter services in the balance of this discussion as "BOC resold local services." In the First Interconnection Order, we stated that the terms of section 271(e) do not prevent affected interexchange carriers from marketing interLATA services jointly with local exchange services provided through the use of unbundled network elements obtained

⁷⁰⁶ Id.

⁷⁰⁷ SBC Reply at 18-19; see also USTA Reply at 15-16; PacTel Reply at 24 n.26; Ameritech Reply at 27; Bell Atlantic Reply at 10-11.

⁷⁰⁸ SBC Reply at 18-19.

⁷⁰⁹ See, e.g., AT&T at 53; Sprint at 47-48; MCI Reply at 29-30.

⁷¹⁰ USTA at 29.

⁷¹¹ Ameritech at 49-50.

⁷¹² See e.g., AT&T at 53; Sprint at 47-48; MCI at 45-46; Ameritech at 49-50.

pursuant to section 251(c)(3).⁷¹³ We affirm that conclusion and, accordingly, reject USTA's suggestion that we extend the section 271(e) restriction to apply to the joint marketing of such services.⁷¹⁴ We find that the express text of the statute limits the prohibition to BOC resold local services obtained pursuant to section 251(c)(4) and we decline to extend the restriction beyond the limits mandated by Congress. We further conclude, for the same reason, that the joint marketing restriction does not apply if the covered interexchange carrier provides local service over its own facilities, or by reselling local exchange services purchased from a local exchange carrier that is not a BOC.

277. Specific Joint Marketing Restrictions. We conclude that Congress adopted the joint marketing restriction in section 271(e) in order to limit the ability of covered interexchange carriers to provide "one-stop-shopping" of certain services until the BOC is authorized to provide interLATA service in the same territory.⁷¹⁵ We agree with the majority of commenters that bundling BOC resold local services and interLATA services (including interLATA telecommunications and interLATA information services⁷¹⁶) into a package that can be sold in a single transaction constitutes the type of joint marketing that Congress intended to restrict by enacting section 271(e).⁷¹⁷ We define "bundling" to mean offering BOC resold local exchange services and interLATA services as a package under an integrated pricing schedule.⁷¹⁸ Thus, we find that section 271(e) restricts covered interexchange carriers from, among other things, providing a discount if a customer purchases both interLATA services and BOC resold local services, conditioning the purchase of one type of service on the purchase of the other, and offering both interLATA services and BOC resold local services as a single combined product.⁷¹⁹ This restriction applies until the BOC receives authorization under section 271 to offer interLATA service in an in-region state, or February 8, 1999, whichever comes first.

⁷¹³ First Interconnection Order at ¶ 335.

⁷¹⁴ USTA at 29.

⁷¹⁵ See, e.g., S. Rep. No. 104-23 104th Cong., 1st Sess. 43 (1995) (stating that the Committee intends [section 271(e)] to provide parity between the Bell operating companies and other telecommunications carriers in their ability to offer 'one stop shopping' for telecommunications services).

⁷¹⁶ See supra part III.A.1 (defining "interLATA services" to include interLATA telecommunications and interLATA information services).

⁷¹⁷ As the Senate Commerce Committee observed, "the ability to bundle [a variety of telecommunications services] into a single package to create "one-stop-shopping" will be a significant competitive marketing tool." S. Rep. No. 104-23 at 22-23. See MCI at 46-47; Ameritech at 48-49; PacTel at 40; TRA at 18-19; Bell Atlantic Reply at 10-11.

⁷¹⁸ See generally Computer II Final Order, 77 FCC 2d at 442; 47 C.F.R. § 64.702(e).

⁷¹⁹ See, e.g., MCI at 46-47.

278. We also conclude that section 271(e) bars covered interexchange carriers from marketing interLATA services and BOC resold local services to consumers through a single transaction. We define a "single transaction" to include, at a minimum, the use of the same sales agent to market both products to the same customer during a single communication. Although requiring separate transactions for different types of services might preclude interexchange carriers from taking advantage of economies of scale,⁷²⁰ we agree with those commenters who argue that such a restriction is an essential element of the joint marketing prohibition in section 271(e) during the period the limitation remains in effect.⁷²¹ We reject the suggestion of some BOCs that the section 271(e) restriction requires covered interexchange carriers to establish separate sales forces for marketing interLATA services and BOC resold local services.⁷²² We agree with the commenting parties that claim neither the statute nor the legislative history indicates that Congress intended to impose such a requirement.⁷²³ Moreover, in our view, requiring a separate sales force is not necessary to accomplish the primary congressional objective of barring the affected interexchange carrier from offering "one-stop shopping" for interLATA and BOC resold local services. Thus, a single agent is permitted to market interLATA services in the context of one communication, and to market BOC resold local services to the same potential customer in the context of a separate communication.

279. The application of the section 271(e) joint marketing restriction to advertising implicates constitutional issues. We are aware of our obligation under Supreme Court precedent to construe the statute "where fairly possible so as to avoid substantial constitutional questions."⁷²⁴ In the advertising context, the Supreme Court has held that the First Amendment protects "the dissemination of truthful and nonmisleading commercial messages about lawful products and services."⁷²⁵ We must be careful, therefore, not to construe section 271(e) as imposing an advertising restriction that is overly broad. The fact that section 271(e) permits a covered interexchange carrier to offer and market separately both interLATA services and BOC resold services and also permits such carriers to offer and market jointly interLATA services and local

⁷²⁰ Id.

⁷²¹ See generally SBC Reply at 19 n.31; NYNEX at 13-14; USTA Reply at 15-16; Ameritech Reply at 27; Bell Atlantic Reply at 10.

⁷²² See, e.g., Letter from Michael Kellogg, Counsel for Bell Atlantic, to Christopher Wright, Deputy General Counsel, FCC at 4 (filed Dec. 9, 1996) (Bell Atlantic Dec. 9 Ex Parte); Letter from Robert Pettit, Counsel for Pacific Telesis Group, to Christopher Wright, Deputy General Counsel, FCC at 6 (filed Dec. 9, 1996) (PacTel Dec. 9 Ex Parte).

⁷²³ See, e.g., Letter from Frank W. Krogh, MCI, to Christopher Wright, Deputy General Counsel, FCC at 1-2 (filed Dec. 13, 1996) (MCI Dec. 13 Ex Parte); Letter from E. E. Estey, Government Affairs Vice President, AT&T, to William F. Caton, Acting Secretary, FCC at 4 (filed Dec. 13, 1996) (AT&T Dec. 13 Ex Parte).

⁷²⁴ United States v. X-Citement Video, 115 S.Ct. 464, 467, 469 (1994).

⁷²⁵ See 44 Liquormart, Inc. v. Rhode Island, 116 S.Ct. 1495, 1504 (1996).

services provided through means other than BOC resold local services (e.g., through the use of unbundled network elements, over its own facilities, or by reselling local exchange services purchased from a local exchange carrier that is not a BOC) makes the task of crafting an effective advertising restriction particularly difficult. For example, we see no lawful basis for restricting a covered interexchange carrier's right to advertise a combined offering of local and long distance services, if it provides local service through means other than reselling BOC local exchange service.⁷²⁶ In addition, we cannot adopt a blanket rule that prohibits interexchange carriers from publicizing in one advertisement that they offer interLATA services and publicizing in a separate advertisement that they offer BOC resold local services. As MCI points out, the statute permits interexchange carriers to offer both types of services through the same corporate entity and under the same brand name.⁷²⁷ Thus, such advertisements would be truthful statements about lawful activities.

280. A closer question is whether we may ban a covered interexchange carrier from claiming in a single advertisement that it offers both interLATA services and local services in instances where the carrier intends to furnish the latter through BOC resold local services, which it is authorized to market only on a stand-alone basis. On the one hand, such an advertisement would contain truthful statements about services that the interexchange carrier is authorized to provide. On the other hand, such an advertisement may be inconsistent with the section 271(e) prohibition against jointly marketing the two types of services. As some BOCs appear to recognize, however, the principal concern with the promotion of both services in a single advertisement is that it may suggest "to consumers that the services are available jointly as a package when in fact they are not."⁷²⁸ We agree with these commenters that the First Amendment does not confer the right to deceive the public. Indeed, the Supreme Court has emphasized that the First Amendment does not prevent the government from regulating commercial speech to avoid such deceptions.⁷²⁹ Further, the Court has held that the government "may require commercial messages to appear in such a form, or include such additional information, warnings and disclaimers, as are necessary to prevent its being deceptive."⁷³⁰ Consistent with this precedent, we conclude that a covered interexchange carrier may advertise the availability of interLATA services and BOC resold local services in a single advertisement, but such carrier may not mislead the public by stating or implying that it may offer bundled packages of interLATA service and BOC resold service, or that it can provide "one-stop shopping" of both services through a single transaction. As discussed above, both activities are prohibited under section 271(e).

⁷²⁶ See paragraph 276, *supra*.

⁷²⁷ MCI at 46.

⁷²⁸ Bell Atlantic Dec. 9 *Ex Parte* at 4.

⁷²⁹ *44 Liquormart*, 116 S.Ct. at 1505 n.7, 1506.

⁷³⁰ *Id.* at 1506 (internal quotation marks omitted).

281. We further conclude that the joint marketing restriction in section 271(e) applies only to activities that take place prior to the customer's decision to subscribe. We agree with AT&T that, after a potential customer subscribes to both interLATA and BOC resold local services from a covered interexchange carrier, that carrier should be permitted to provide joint "customer care" (i.e., a single bill for both BOC resold local services and interLATA services, and a single point-of-contact for maintenance and repairs).⁷³¹ Such activities are post-marketing activities. To impose additional prohibitions on post-marketing activities would add additional burdens not required by the statute. Furthermore, a rule that would require a customer to send separate payments to the same corporate entity would be confusing and burdensome, and therefore would not serve the public interest. Customers should also be permitted to make a single phone call for complaints and repairs about both local and long distance services once they have ordered both services. Because we interpret section 271(e) to apply only to activities that take place prior to a customer's decision to subscribe, we conclude that, once a customer subscribes to both local exchange and interLATA services from a carrier that is subject to the restrictions of 271(e), that carrier may market new services to an existing subscriber.

282. We recognize that the principles we have adopted to implement the requirements of section 271(e) may not address all of the possible marketing strategies that a covered interexchange carrier might initiate to sell BOC resold local services and interLATA services to the public. We emphasize, however, that in enforcing this statutory section, we intend to examine the specific facts closely to ensure that covered interexchange carriers are not contravening the letter and spirit of the congressional prohibition on joint marketing by conveying the appearance of "one-stop shopping" BOC resold local services and interLATA services to potential customers.

B. Section 272(g)

1. Marketing Restrictions on BOC Section 272 Affiliates

a. Background

283. Section 272(g)(1) provides that a BOC affiliate may not market or sell telephone exchange services provided by the BOC "unless that company permits other entities offering the same or similar service to market and sell its telephone exchange services." In the Notice, we requested comment on what regulations, if any, are necessary to implement this provision.⁷³²

⁷³¹ AT&T at 53-54.

⁷³² Notice at ¶ 90.

b. Comments

284. The BOCs, USTA, and Citizens for a Sound Economy argue that 272(g)(1) is clear on its face, and thus no implementing regulations are necessary.⁷³³ According to PacTel, it will be apparent when a section 272 affiliate is marketing and selling its affiliated BOC's services because those activities will be conducted publicly.⁷³⁴ Also, PacTel argues that the public disclosure requirements of section 272(b)(5) will ensure that others will know what BOC services the section 272 affiliate is marketing and selling and the applicable terms and conditions.⁷³⁵

285. AT&T, on the other hand, proposes that the Commission adopt a requirement that the BOC announce the availability and terms of any joint marketing arrangement with a BOC affiliate at least three months prior to implementing it, so that any such joint marketing opportunity is made available to affiliated and unaffiliated providers on a truly nondiscriminatory basis.⁷³⁶ Sprint asserts that the term "same or similar service" in section 272(g)(1) means not only the interLATA services of the affiliate, but information services as well.⁷³⁷ Thus, the joint marketing by a BOC affiliate of information service and telephone exchange service would not be permitted unless other information service providers may jointly market those services as well.⁷³⁸ MCI also requests that we clarify that the joint marketing provisions of section 272(g)(1) apply to the international sphere, "because BOCs already have a variety of relationships with foreign carriers that would make it possible for a BOC interLATA affiliate to market BOC special features available only from the BOC's local exchange platform to foreign end users through a switch in the foreign country."⁷³⁹

c. Discussion

286. We agree with the BOCs that no regulations are necessary to implement section 272(g)(1).⁷⁴⁰ We do not adopt the three-month advance notice period proposed by AT&T,

⁷³³ See, e.g., Ameritech at 46; PacTel at 39; BellSouth Reply at i; U S West Reply at 4; USTA Reply at i; Citizens for a Sound Economy Reply at 3-4.

⁷³⁴ PacTel at 39.

⁷³⁵ Id.

⁷³⁶ AT&T at 55; see also Teleport Reply at 6.

⁷³⁷ Sprint at 47.

⁷³⁸ Id.

⁷³⁹ MCI at 45.

⁷⁴⁰ See, e.g., Ameritech at 46; PacTel at 39; BellSouth Reply at i; U S West Reply at 4; USTA Reply at i; Citizens for a Sound Economy Reply at 3-4.

because it is not required by the statute.⁷⁴¹ Nor do we believe that such a notice period is necessary in order for other carriers to receive nondiscriminatory treatment. As PacTel notes, any agreement between a BOC and its affiliate that enables the affiliate to market or sell BOC services must be conducted on an arm's length basis, reduced to writing, and made publicly available as required by section 272(b)(5).⁷⁴² Thus, under section 272(g)(1), other entities offering services that are the same or similar to services offered by the BOC affiliate would have the same opportunity to market or sell the BOC's telephone exchange service under the same conditions as the BOC affiliate.

287. We also agree with Sprint that the term "same or similar service" in section 272(g)(1) encompasses information services.⁷⁴³ Thus, a section 272 affiliate may not market or sell information services and BOC telephone exchange services unless the BOC permits other information service providers to market and sell telephone exchange services. Finally, we decline to adopt MCI's requested clarification that 272(g)(1) applies to the international sphere.⁷⁴⁴ MCI appears to be concerned about a BOC's discriminatory provision of exchange access to foreign carriers. We conclude, however, that section 272(g)(1) applies only to the provision of "telephone exchange" service, not to the provision of "exchange access."⁷⁴⁵ Section 202 bars a BOC from unreasonable discrimination in the provision of exchange access services used to originate and terminate domestic interstate and international toll traffic.⁷⁴⁶

2. Marketing Restrictions on BOCs

a. Background

288. Section 272(g)(2) states that "[a BOC] may not market or sell interLATA service provided by an affiliate required by this section within any of its in-region States until such company is authorized to provide interLATA services in such State under section 271(d)." In the Notice, we sought comment on whether section 272(g)(2) imposes the same types of restrictions on the BOCs that section 271(e) imposes on the interexchange carriers.⁷⁴⁷

⁷⁴¹ AT&T at 55; see also Teleport Reply at 4.

⁷⁴² PacTel at 41.

⁷⁴³ Sprint at 47.

⁷⁴⁴ MCI at 45.

⁷⁴⁵ 47 U.S.C. §§ 272(g)(1).

⁷⁴⁶ Id. at § 202.

⁷⁴⁷ Notice at ¶ 91.

b. Comments

289. With respect to section 272(g)(2), the BOCs argue that no implementing regulations are necessary.⁷⁴⁸ They state that, once they have received interLATA authority under section 271, the BOC and its section 272 affiliate should be able to engage in all marketing and sales activities that other service providers are permitted to engage in, including advertising the availability of interLATA services combined with local exchange services, making these services available from a single source, and providing discounts for the bundled purchase of both services.⁷⁴⁹ In addition, they request that the Commission clarify that section 272(g) applies only to the relationship between a BOC and its section 272 affiliate.⁷⁵⁰ Thus, the BOCs assert that they are not prohibited from aligning -- also known as "teaming"-- with a non-affiliate that provides interLATA services and marketing their respective services to the same customers prior to receiving interLATA authority under section 271.⁷⁵¹

290. Other commenters argue that some marketing restrictions should be placed on the BOCs after section 271 authorization because of their status as incumbent local exchange carriers.⁷⁵² For example, MCI contends that BOCs should not be permitted to condition the availability of one category of service on the other, and that a discount should not be so great that it compels the customer to purchase both services.⁷⁵³ Various other commenters argue that, when a customer calls a BOC to place an order for local service or to request a primary interexchange carrier, the BOC should be prohibited from turning such "inbound" communications into marketing opportunities for its long-distance affiliate.⁷⁵⁴

⁷⁴⁸ See, e.g., BellSouth at 7; Bell Atlantic Reply at 5-6.

⁷⁴⁹ See, e.g., PacTel at 40; BellSouth at 7.

⁷⁵⁰ See, e.g., NYNEX Reply at 15-16; U S West Reply at 18.

⁷⁵¹ See, e.g., NYNEX Reply at 15-16.

⁷⁵² See, e.g., CompTel at 24-25; Time Warner Reply at 18-19; AT&T Reply at 30-31; MCI Reply at 3-4; NCTA Reply at 3.

⁷⁵³ MCI Reply at 30; see also LDDS at 16-17; USTA Reply, Haussman Statement at 10 (opposing MCI's suggestion).

⁷⁵⁴ AT&T at 58; CompTel at 24; MCI Reply at 49; Sprint Reply at 28; see also NCTA at 4-6 (stating that the Commission should prohibit the BOC from conducting inbound telemarketing or referrals of its video services unless it provides the same marketing services to all cable operators and other providers of video programming in the same area).

c. Discussion

291. We agree with the BOCs that no regulations are necessary to implement section 272(g)(2).⁷⁵⁵ The statute clearly states that BOCs are prohibited from either selling or marketing in-region interLATA services provided by a section 272 affiliate until they have received approval from the Commission under section 271.⁷⁵⁶ We note, however, that section 272 does not prohibit a BOC that provides out-of-region interLATA services, or intraLATA toll service, from marketing or selling those services in combination with local exchange services. If such advertisements reach in-region customers, however, the BOC must make it clear to those customers that the advertisements do not apply to in-region interLATA services.⁷⁵⁷ This obligation is similar to the obligation discussed above, which requires covered interexchange carriers to disclose to consumers receiving BOC resold local service that bundled packages are not available to them.⁷⁵⁸ After a BOC receives authorization under section 271, the restriction in section 272(g)(2) is no longer applicable, and the BOC will be permitted to engage in the same type of marketing activities as other service providers.

292. Inbound Marketing. We conclude that BOCs must continue to inform new local exchange customers of their right to select the interLATA carrier of their choice and take the customer's order for the interLATA carrier the customer selects. The obligation to continue to provide such nondiscriminatory treatment stems from section 251(g) of the Act, because we have not adopted any regulations to supersede these existing requirements.⁷⁵⁹ Specifically, the BOCs must provide any customer who orders new local exchange service with the names and, if requested, the telephone numbers of all of the carriers offering interexchange services in its service area.⁷⁶⁰ A customer orders "new service" when the customer either receives service from the BOC for the first time, or moves to another location within the BOC's in-region territory.⁷⁶¹ As part of this requirement, a BOC must ensure that the names of the interexchange carriers are provided in random order.⁷⁶² We decline to adopt NCTA's request that we extend this obligation

⁷⁵⁵ See, e.g., BellSouth at 8-9; Ameritech Reply at 22-25; U S West Reply at 4.

⁷⁵⁶ 47 U.S.C. § 272(g)(2).

⁷⁵⁷ See e.g., LDDS at 15-16 (stating that section 272(g) ensures that the operating company would not be able to create a self-fulfilling prophecy through premature advertising and marketing activities).

⁷⁵⁸ See *supra* part VII.A.

⁷⁵⁹ See, e.g., PacTel Reply at 24-25; NYNEX Oct. 23 *Ex Parte* at 2-3.

⁷⁶⁰ See *Investigation of Access and Divestiture Related Tariffs*, CC Docket No. 83-1145, 101 FCC 2d 935, 950 (1985); see also 47 U.S.C. § 251(g).

⁷⁶¹ *United States v. Western Elec. Co.*, 578 F.Supp 668, 676-77 (D.D.C. 1983).

⁷⁶² See *Investigation of Access and Divestiture Related Tariffs*, 101 FCC 2d at 950.

to require that BOCs inform inbound callers of other cable operators and providers of video services in the area,⁷⁶³ however, because no such obligation currently exists, and no new requirement is imposed by the statute. We further conclude that the continuing obligation to advise new customers of other interLATA options is not incompatible with the BOCs' right to market and sell the services of their section 272 affiliates under section 272(g).⁷⁶⁴ Thus, a BOC may market its affiliate's interLATA services to inbound callers, provided that the BOC also informs such customers of their right to select the interLATA carrier of their choice.⁷⁶⁵

293. Teaming. We conclude that section 272(g) is silent with respect to the question of whether a BOC may align itself with an unaffiliated entity to provide interLATA services prior to receiving section 271 approval. We agree with the BOCs that the language of section 272(g) only restricts the BOC's ability to market or sell interLATA services "provided by an affiliate required by [section 272]."⁷⁶⁶ We note, however, that any equal access requirements pertaining to "teaming" activities that were imposed by the MFJ remain in effect until the BOC receives section 271 authorization. Thus, to the extent that BOCs align with non-affiliates, they must continue to do so on a nondiscriminatory basis.

3. Section 272(g)(3)

a. Background

294. Section 272(g)(3) states that "[t]he joint marketing and sale of services permitted under this subsection shall not be considered to violate the nondiscrimination provisions of subsection [272](c)."⁷⁶⁷

b. Comments

295. During the course of this proceeding, various commenters suggested types of marketing activities that fall within the scope of section 272(g)(3)⁷⁶⁸ and, therefore, would not be subject to the nondiscrimination requirements in section 272(c). For example, NYNEX states that marketing activities encompassed by section 272(g) should include: sales activities (the use of sales channels to make customer referrals, to act as a sales agent, and to resell services);

⁷⁶³ NCTA at 4-6.

⁷⁶⁴ NYNEX Oct. 23 Ex Parte at 3.

⁷⁶⁵ Id.

⁷⁶⁶ 47 U.S.C. § 272(g)(2).

⁷⁶⁷ 47 U.S.C. § 272(g)(3).

⁷⁶⁸ See, e.g., NYNEX at 13-14; Letter from Robert Blau, Vice President, Executive and Federal Regulatory Affairs, BellSouth, to William Caton, Acting Secretary, FCC at attachment 3 (BellSouth Nov. 14 Ex Parte).

advertising and promotion activities; and other marketing activities (such as product development, product management, market management, channel management, market research, and product pricing).⁷⁶⁹ NYNEX also suggests that the following activities do not fall within the definition of marketing: strategic planning and resource allocation, as well as the corporate responsibility for coordination and oversight of all corporate functions and activities, including marketing.⁷⁷⁰

c. Discussion

296. Some of the activities identified by the parties appear to fall clearly within the scope of section 272(g)(3) and hence would be excluded from the section 272(c) nondiscrimination requirements. For example, activities such as customer inquiries, sales functions, and ordering, appear to involve only the marketing and sale of a section 272 affiliate's services, as permitted by section 272(g). Other activities identified by the parties, however, appear to be beyond the scope of section 272(g), because they may involve BOC participation in the planning, design, and development of a section 272 affiliate's offerings. In our view, such activities are not covered by the section 272(g) exception to the BOC's nondiscrimination obligations. We see no point to attempt at this time to compile an exhaustive list of the specific BOC activities that would be covered by section 272(g). We recognize that such determinations are fact specific and will need to be made on a case-by-case basis.

C. Interplay Between Sections 271(e), 272(g) and Other Provisions of the Statute

1. Background

297. In the Notice, we sought comment on whether the affiliate may purchase marketing services from the BOC on an arm's length basis pursuant to section 272(b)(5), or whether a BOC and its affiliate should be required to contract jointly with an outside marketing entity for joint marketing of interLATA and local exchange service in order to comply with section 272(b)(3).⁷⁷¹ We also sought comment on the interplay between the marketing restrictions in sections 271 and 272 and the CPNI provisions set forth in section 222 that are the subject of a separate proceeding.⁷⁷² In addition, we requested comment on whether the joint marketing provision in section 274(c) has any bearing on how we should apply the joint marketing provisions in sections 271 and 272.⁷⁷³

⁷⁶⁹ NYNEX at 13-14.

⁷⁷⁰ *Id.* at n.13.

⁷⁷¹ Notice at ¶ 92.

⁷⁷² *Id.* at ¶ 93.

⁷⁷³ *Id.*

2. Comments

298. The BOCs oppose any proposal that would require them to obtain joint marketing services from an unaffiliated entity.⁷⁷⁴ They argue that such a requirement would directly contravene rights granted to them under section 272(g) and, therefore, would violate the Act.⁷⁷⁵ They contend that section 272(b)(5) merely requires that all transactions between a BOC and its section 272 affiliate, including the provision of marketing services, be on an "arms-length basis," in writing, and made available for public inspection.⁷⁷⁶ Sprint asserts that, while the statute does not require that an outside entity be used, such a requirement would make it easier for the Commission and the public to ensure that neither competition nor monopoly local ratepayers are harmed by such joint activities.⁷⁷⁷

299. With respect to CPNI, NYNEX argues that a BOC should be allowed to use a customer's local exchange CPNI to sell its affiliate's interLATA services to the same customer, or to transfer a customer's local exchange CPNI to its affiliate under a referral arrangement, provided the customer orally consents to such use of information during the call.⁷⁷⁸ AT&T and Time Warner assert that CPNI may be made available to a BOC affiliate only on nondiscriminatory terms, in accordance with section 272(c)(1).⁷⁷⁹ PacTel and Time Warner assert that the joint marketing provisions in section 272(g) do not modify the statutory provisions concerning CPNI.⁷⁸⁰ Consequently, they argue that BOCs that engage in joint marketing activities are required to comply with rules that the Commission adopts in CC Docket No. 96-115 to implement section 222 of the 1996 Act.⁷⁸¹ With respect to the interplay between sections 272(g) and 274(c), PacTel and the Yellow Pages Publishers Association argue that section 272(g) has no bearing on section 274(c) because Congress intended to create separate requirements for electronic publishing.⁷⁸²

⁷⁷⁴ See, e.g., Ameritech at 50; Bell Atlantic at 9; NYNEX at 14-17; PacTel at 41.

⁷⁷⁵ *Id.*

⁷⁷⁶ See, e.g., Bell Atlantic at 9.

⁷⁷⁷ Sprint at 49.

⁷⁷⁸ NYNEX at 19.

⁷⁷⁹ AT&T at 59-60; Time Warner at 26.

⁷⁸⁰ PacTel at 41; Time Warner at 26.

⁷⁸¹ *Id.*

⁷⁸² PacTel at 41; YPPA at 10.

3. Discussion

300. As discussed above in Part IV.C, we conclude that a BOC and its affiliate are not required to contract jointly with an outside entity in order to comply with section 272(b)(3). Thus, a BOC and its affiliate may provide marketing services for each other, provided that such services are conducted pursuant to an arm's-length transaction, consistent with the requirements of section 272(b)(5).⁷⁸³ We decline to address parties' arguments raised in this proceeding regarding the interplay between section 272(g) and either section 222 or section 274(c) to avoid prejudging issues in our pending CPNI proceeding, CC Docket No. 96-115, or our electronic publishing proceeding, CC Docket No. 96-152. We emphasize that, if a BOC markets or sells the services of its section 272 affiliate pursuant to section 272(g), it must comply with the statutory requirements of section 222 and any rules promulgated thereunder.

VIII. PROVISION OF LOCAL EXCHANGE AND EXCHANGE ACCESS BY BOC AFFILIATES

A. Background

301. In the Notice, we expressed concern that a BOC might attempt to circumvent the section 272 safeguards by transferring local exchange and exchange access facilities and capabilities to one of its affiliates.⁷⁸⁴ We requested comment on whether we should prohibit all transfers of network capabilities from a BOC to an affiliate.⁷⁸⁵ Alternatively, we sought comment on whether a BOC transfer of network capabilities to an affiliate would make that affiliate a successor or assign of the BOC pursuant to section 3(4)(B) of the Act and, consequently, subject the affiliate to the nondiscrimination requirements of section 272(c)(1) and 272(e).⁷⁸⁶

302. We also requested comment on whether, if a BOC were permitted to transfer local exchange and exchange access capabilities to an affiliate, we should exercise our general rulemaking authority to adopt regulations to prevent such an affiliate from engaging in discriminatory practices, or whether existing statutory prohibitions on discrimination are sufficient.⁷⁸⁷ For example, we noted that BOC affiliates that provide interstate interLATA telecommunications services already would be subject to the requirements of sections 201 and

⁷⁸³ For further discussion of section 272(b)(5), *see supra* part IV.F.

⁷⁸⁴ Notice at ¶ 70. We note that such a transfer could occur between a BOC and any of its affiliates, not just a section 272 affiliate.

⁷⁸⁵ *Id.*

⁷⁸⁶ *Id.*

⁷⁸⁷ *Id.* at ¶ 71.

202, which are applicable to all common carriers.⁷⁸⁸ Those obligations would not apply to information services affiliates and manufacturing affiliates, however, because they are not "common carriers" under the Act.⁷⁸⁹ As an additional matter, we tentatively concluded that a BOC affiliate that is classified as an incumbent LEC would also be subject to the nondiscrimination requirements of section 272(c).⁷⁹⁰

B. Comments

303. Interexchange carriers and other potential local exchange competitors argue that either a BOC should be prohibited from transferring any of its local exchange and exchange access facilities or capabilities to an affiliate, or, if any transfer occurs, the affiliate should be considered a successor or assign that is subject to the requirements of section 272.⁷⁹¹ BOCs, on the other hand, argue that an absolute prohibition on the transfer of network capabilities is overly broad.⁷⁹² They further assert that a BOC affiliate should not be considered a successor or assign of the BOC merely because a transfer of network capabilities has occurred between a BOC and an affiliate. Rather, such affiliate should only become a successor or assign if it "substantially take[s] the place of the BOC in the operation of one of the BOC's core businesses."⁷⁹³ Because, in their view, only substantial transfers should affect a BOC affiliate's status as a successor or assign, the BOCs contend that the real issue is what constitutes a "substantial transfer of network capabilities."⁷⁹⁴

304. In addition, the BOCs assert that, based on the plain language of the statute, the section 272(c) safeguards only apply to the BOC or an affiliate that is a "successor or assign" of the BOC.⁷⁹⁵ They argue that, unlike sections 272(a) and (e), section 272(c) does not apply to BOC affiliates merely because they qualify as incumbent LECs that are subject to the

⁷⁸⁸ Id.

⁷⁸⁹ Id.

⁷⁹⁰ Id. at ¶ 79.

⁷⁹¹ See, e.g., Letter from Jeffrey Sinsheimer and Lesla Lehtonen, California Cable Television Association, to William F. Caton, Acting Secretary, FCC, at 2 (filed Oct. 15, 1996) (CCTA Oct. 15 Ex Parte) (stating that, at a bare minimum, the FCC must act to ensure that the BOCs are not permitted to transfer hard assets -- such as switches or subscribers -- or intangible assets -- such as intellectual property -- to unregulated affiliates).

⁷⁹² See, e.g., Ameritech at 59-60.

⁷⁹³ Ameritech at 60; see also BellSouth at 33-34; PacTel at 24-25.

⁷⁹⁴ See, e.g., PacTel at 25-26.

⁷⁹⁵ See, e.g., Ameritech at 60-61.

requirements of section 251(c).⁷⁹⁶ Ameritech also requests that we clarify that a BOC affiliate will not be regulated as an incumbent LEC solely because it offers local exchange and exchange access services.⁷⁹⁷ According to Ameritech, section 251(c) only applies to entities that meet the definition of incumbent LEC under section 251(h).⁷⁹⁸ Thus, if an affiliate provides local exchange service through its own facilities or by reselling the BOC's local exchange service, it would not necessarily be classified as an incumbent LEC.⁷⁹⁹

305. Through comments and *ex parte* presentations, several potential local competitors argue that BOCs also might be able to circumvent the separation requirements of section 272 by creating an integrated affiliate that offers a combination of local, intraLATA, and interLATA services.⁸⁰⁰ These parties assert that several BOCs have already submitted applications to state regulatory commissions seeking authority to provide both local exchange services and interLATA services through the same affiliate.⁸⁰¹ According to Teleport, if such integrated affiliates are permitted, the development of effective competition in the local exchange market will be jeopardized.⁸⁰² One of Teleport's concerns is that the BOC or its parent may choose to upgrade the section 272 affiliate's network rather than the incumbent LEC network in order to avoid the obligation imposed by section 251(c) of the Act to offer such facilities, and the new services they are capable of providing, to their competitors.⁸⁰³ Thus, potential local competitors urge us either to clarify that the Act prohibits a BOC from creating such an integrated affiliate or, in the alternative, to use our discretionary authority to prevent such activities.⁸⁰⁴

306. The BOCs, on the other hand, argue that section 272(g) and section 251 specifically allow them to create a section 272 affiliate that offers both local exchange and interLATA services, and that section 272(a) of the 1996 Act does not prohibit a section 272

⁷⁹⁶ *Id.*

⁷⁹⁷ Notice at ¶ 79; Ameritech at 58 n.68.

⁷⁹⁸ *Id.*

⁷⁹⁹ *Id.*

⁸⁰⁰ *See, e.g.*, Teleport Oct. 8 *Ex Parte* at 2; CCTA Oct. 15 *Ex Parte* at 1-2.

⁸⁰¹ *Id.* The Ohio and Michigan commissions confirm in their comments that they have already received requests from BOC 272 affiliates for authorization to offer local exchange services in conjunction with interLATA services. Michigan Commission at 4-6; Ohio Commission at 6-8.

⁸⁰² Teleport Oct. 8 *Ex Parte* at 5.

⁸⁰³ Teleport at 5; *see also* AT&T at 21-22.

⁸⁰⁴ *E.g.*, Teleport at 7-13; NCTA at 10; Time Warner Reply at 19; CCTA Oct. 15 *Ex Parte* at 1-2 (stating that, although the 1996 Act does not address the provision of local service -- either on a resale or facilities basis -- by a BOC section 272 affiliate, the Commission should adopt a prohibition against such activities as a policy matter).

affiliate from providing local exchange service -- either by reselling BOC local service or through the purchase of unbundled elements.⁸⁰⁵ They also assert that, as a policy matter, allowing the section 272 affiliate to provide service through unbundled elements on the same terms and conditions as other local providers will promote competition and encourage the section 272 affiliate to provide innovative new services.⁸⁰⁶

307. In response to the BOCs, CCTA argues that there is no statutory basis for allowing a section 272 affiliate to provide local exchange services. According to CCTA, section 272(g)(1) does not permit section 272 affiliates to provide both local and interLATA services; rather, it only grants them the authority to market such services jointly.⁸⁰⁷ CCTA further argues that section 272 affiliates should be prohibited from offering local exchange service, because "the Senate stated unequivocally that the long distance operations of the BOCs must be structurally separate from 'any entities' providing local exchange services."⁸⁰⁸ In addition, CCTA asserts that section 251 cannot be relied upon as a basis for allowing section 272 affiliates to provide local exchange services, because the Act does not treat RBOCs or their affiliates as new entrants or telecommunications carriers that are entitled to request nondiscriminatory access to unbundled elements pursuant to section 251.⁸⁰⁹

308. AT&T and MCI, on the other hand, argue that section 272(g)(1) allows section 272 affiliates to resell the BOC's local services, but does not permit section 272 affiliates to purchase unbundled network elements from the BOC.⁸¹⁰ According to AT&T, section 272 affiliates will be able to avoid paying access charges if they are permitted to provide local exchange services using unbundled elements, which will also enable such affiliates to avoid the imputation requirements of section 272(e)(3).⁸¹¹ AT&T further argues that, to the extent that a section 272 affiliate is able to avoid the imputation requirements of section 272(e), the BOC would have perverse incentives to maintain access charges at rates above those for unbundled network elements.⁸¹² MCI asserts that opportunities for discrimination and cross-subsidy are substantially

⁸⁰⁵ E.g., Ameritech Reply at 17-19; NYNEX Reply at 9 n.23; PacTel Reply at 22; U S West at 57.

⁸⁰⁶ See, e.g., Ameritech Sept. 19 Ex Parte at 3.

⁸⁰⁷ Letter from Alan J. Gardner, Vice President Regulatory & Legal Affairs, CCTA to John Nakahata, Senior Legal Advisor to Chairman Reed Hundt, FCC at 3 (filed Dec. 2, 1996) (CCTA Dec. 2 Ex Parte).

⁸⁰⁸ Id. at 4.

⁸⁰⁹ Memorandum from Alan Gardner, Glenn Semow, and Peter Casciato, CCTA to Linda Kinney, Policy and Program Planning Division, Common Carrier Bureau, FCC at 1-2 (filed Dec. 12, 1996) (CCTA Dec. 12 Ex Parte).

⁸¹⁰ See MCI Nov. 1 Ex Parte at 2-3; AT&T Oct. 15 Ex Parte at 2; see also Time Warner Reply at 19.

⁸¹¹ AT&T Oct. 15 Ex Parte at 2.

⁸¹² Id.

greater when a BOC provides network elements to its affiliate than when it offers retail services at a standard wholesale discount.⁸¹³

C. Discussion

309. Transfer of local exchange and exchange access capabilities. We conclude that a BOC cannot circumvent the section 272 requirements by transferring local exchange and exchange access facilities and capabilities to an affiliate. As we discussed above, all goods, services, facilities, and information that the BOC provides to its section 272 affiliate are subject to the section 272(c)(1) nondiscrimination requirement.⁸¹⁴ Application of section 272(c)(1) to the BOC's provision of such items should address to a large extent concerns about the BOC "migrating" or "transferring" key local exchange and exchange access services and facilities to the 272 affiliate. We note, however, that there are still legitimate concerns that a BOC could potentially evade the section 272 or 251 requirements by, for example, first transferring facilities to another affiliate or the BOC's parent company, which would then transfer the facilities to the section 272 affiliate. To address this problem, we conclude that, if a BOC transfers to an affiliated entity ownership of any network elements that must be provided on an unbundled basis pursuant to section 251(c)(3), we will deem such entity to be an "assign" of the BOC under section 3(4) of the Act with respect to those network elements. Any successor or assign of the BOC is subject to the section 272 requirements in the same manner as the BOC.⁸¹⁵ We also note that, based on the plain language of the statute, section 272(c) only applies to the BOC or an affiliate that is a "successor or assign" of the BOC. We agree with Ameritech that, unlike sections 272(a) and (e), section 272(c) does not apply to BOC affiliates merely because they qualify as incumbent LECs.⁸¹⁶

310. We decline to adopt an absolute prohibition on a BOC's ability to transfer local exchange and exchange access facilities and capabilities to an affiliate, because we conclude based on the record before us that such a restriction would be overly broad and exceed the requirements of the Act.⁸¹⁷ We note, however, that our determination does not preclude a state from prohibiting a BOC's transfer of local exchange facilities under its regulatory framework for incumbent LECs.

⁸¹³ MCI Nov. 1 Ex Parte at 3.

⁸¹⁴ See supra part V.C.

⁸¹⁵ See 47 U.S.C. § 153(4)(B) (defining a "BOC" to include any successor or assign of any BOC that provides wireline telephone exchange service). Thus, the interLATA and manufacturing operations contemplated by section 272 would need to occur in an affiliate other than the one to which the local exchange and exchange access facilities have been transferred.

⁸¹⁶ See Ameritech at 60-61.

⁸¹⁷ See, e.g., Ameritech at 57; see also USTA at 24.

311. In view of our decision to treat a BOC affiliate as a "successor or assign" of the BOC if the BOC transfers network elements to the affiliate, we find it unnecessary at this time to adopt additional nondiscrimination regulations applicable to section 272 affiliates. A section 272 affiliate that is not deemed a "successor or assign" of a BOC would nevertheless be subject to the obligations imposed by section 202 -- which prohibits common carriers from, among other things, engaging in "unjust and unreasonable" practices with respect to the provision of interstate services. Moreover, BOC interLATA services affiliates that offer intrastate interLATA telecommunications services would be subject to corresponding nondiscrimination obligations that state statutes and regulations typically impose on common carriers. We conclude based on the current record that these existing requirements should be adequate to protect competition and consumers against anticompetitive conduct by a BOC section 272 affiliate.

312. Integrated affiliates. Numerous commenters also request that we address whether the separate affiliate safeguards imposed by section 272 prohibit a section 272 affiliate from offering local exchange service through the same corporate entity. Based on our analysis of the record and the applicable statutory provisions, we conclude that section 272 does not prohibit a section 272 affiliate from providing local exchange services in addition to interLATA services, nor can such a prohibition be read into this section.⁸¹⁸ Specifically, section 272(a)(1) states that--

A Bell operating company (including any affiliate) which is a local exchange carrier that is subject to the requirements of section 251(c) may not provide any service described in [section 272(a)(2)] unless it provides that service through one or more affiliates that . . . are separate from any operating company entity that is subject to the requirements of section 251(c) . . .

We find that the statutory language is clear on its face -- a BOC section 272 affiliate is not precluded under section 272 from providing local exchange service, provided that the affiliate does not qualify as an incumbent LEC subject to the requirements of section 251(c). Because the text and the purpose of the statute are clear, there is no need, as CCTA suggests,⁸¹⁹ to resort to legislative history.⁸²⁰ We also agree with Ameritech that a BOC affiliate should not be deemed an incumbent LEC subject to the requirements of section 251(c) solely because it offers local exchange services; rather, section 251(c) applies only to entities that meet the definition of an incumbent LEC under section 251(h).⁸²¹ Section 251(h)(1) defines an incumbent LEC as, inter alia, a local exchange carrier that: (1) on the date of enactment of the Telecommunications Act of 1996, provided telephone exchange service, and (2) was a member of the National Exchange

⁸¹⁸ See, e.g., PacTel Oct. 23 Ex Parte at 1.

⁸¹⁹ CCTA Dec. 2 Ex Parte at 4.

⁸²⁰ See, e.g., Darby v. Cisneros, 113 S.Ct. 2539, 2545 (1993); Connecticut Nat'l Bank v. Germain, 112 S.Ct. 1146, 1149 (1992).

⁸²¹ Ameritech at 58 n.68.

Carrier Association (NECA) or becomes a successor or assign of such a member.⁸²² Because no BOC affiliate was a member of NECA when the 1996 Act was enacted, such affiliates may be classified as incumbent LECs under this statutory provision only if they are successors or assigns of their affiliated BOCs. Alternatively, under section 251(h)(2), if the Commission determines that a carrier occupies a position in the market for telephone exchange service within an area that is comparable to the position occupied by the incumbent LEC, and such carrier has substantially replaced an incumbent LEC, such carrier may be treated by rule as an incumbent LEC for purposes of section 251.⁸²³ We find no basis in the record of this proceeding to find that a BOC affiliate must be classified as an incumbent LEC under section 251(h)(2) merely because it is engaged in local exchange activities. Absent such a finding, BOC affiliates that are neither one of the Bell operating companies listed under 153(4)(A), nor a successor or assign of any such company, are not subject to the separation requirements of section 272.

313. Furthermore, we conclude that section 251 does not preclude section 272 affiliates from obtaining resold local exchange service pursuant to section 251(c)(4) and unbundled elements pursuant to section 251(c)(3), because the statute does not place any restrictions on the types of telecommunications carriers that may qualify as "requesting carriers." We disagree with CCTA's assertion that section 272 affiliates cannot be treated as requesting carriers, because such affiliates are "part of the standard for determining nondiscriminatory interconnection by the [incumbent LEC] for all other telecommunications carriers."⁸²⁴ The fact that a determination of whether an incumbent LEC provides nondiscriminatory access may be based on a comparison of the access that the incumbent LEC provides itself or its affiliate does not preclude such affiliate from being a "requesting carrier" under section 251. There is nothing inconsistent with both requiring nondiscriminatory access and at the same time allowing an affiliate to be a requesting carrier. Moreover, we find nothing in the statute or in the First Interconnection Order that limits the definition of "requesting carrier" to non-affiliates. Thus, section 272 affiliates cannot be precluded under section 251 from qualifying as "requesting carriers" that are entitled to purchase unbundled elements or retail services at wholesale rates from the BOC.

314. We further conclude that section 272(g)(1) cannot be read as imposing a limitation on the ability of section 272 affiliates to exercise their rights under section 251(c)(3). We are not persuaded by AT&T's argument that, because section 272(g)(1) sets forth limited conditions under which section 272 affiliates may "market or sell" local exchange services, allowing those affiliates to purchase unbundled elements is inconsistent with the Act.⁸²⁵ Rather, we agree with CCTA that section 272(g)(1) speaks only to marketing issues, and does not address the conditions

⁸²² See 47 U.S.C. § 251(h)(1).

⁸²³ 47 U.S.C. § 251(h)(2); see also First Interconnection Order at ¶ 1248.

⁸²⁴ CCTA Dec. 12 Ex Parte at 2.

⁸²⁵ AT&T at 22. AT&T also argues this prohibition is part of the operate independently requirement of section 272(b)(1). Id. We address the meaning of that term supra in part IV.B.

under which a section 272 affiliate may provide local exchange services.⁸²⁶ Furthermore, we find AT&T's claim that allowing section 272 affiliates to provide local exchange service through unbundled elements will "artificially and decisively slant [the] playing field in the BOC's favor" unpersuasive,⁸²⁷ because other telecommunications carriers will be able to provide local exchange service through unbundled elements on the same terms and conditions. AT&T's concern that the affiliate will be able to avoid access charges by obtaining the unbundled elements appears to be premised on the view that access charges are currently too high.⁸²⁸ The issue of reforming access charges will, however, be addressed in a separate proceeding.⁸²⁹ Moreover, we conclude that MCI's argument -- that opportunities for discrimination and cross-subsidy are greater when the BOC provides network elements to its affiliate than when it provides resold services -- is speculative.⁸³⁰ To the extent that concerns over discrimination arise, there are safeguards in sections 251 and 252 to address such concerns.⁸³¹ We therefore decline to distinguish between a section 272 affiliate's ability to provide local service by reselling BOC local exchange service and its ability to offer such service by purchasing unbundled elements from the BOC.

315. We also conclude as a matter of policy that regulations prohibiting BOC section 272 affiliates from offering local exchange service do not serve the public interest. The goal of the 1996 Act is to encourage competition and innovation in the telecommunications market. We agree with the BOCs that the increased flexibility resulting from the ability to provide both interLATA and local services from the same entity serves the public interest, because such flexibility will encourage section 272 affiliates to provide innovative new services.⁸³² To the extent that there are concerns that the BOCs will unlawfully subsidize their affiliates or accord them preferential treatment,⁸³³ we reiterate that improper cost allocation and discrimination are prohibited by existing Commission rules and sections 251, 252, and 272 of the 1996 Act, and that predatory pricing is prohibited by the antitrust laws. Our affiliate transaction rules, as modified by our companion Accounting Safeguards Order, address the BOCs' ability to engage in improper cost allocation. The rules in this Order and our rules in our First Interconnection Order and our Second Interconnection Order ensure that BOCs may not favor their affiliates. In sum, we find no basis in the record for concluding that competition in the local market would be harmed if a

⁸²⁶ CCTA Dec. 2 Ex Parte at 3.

⁸²⁷ See AT&T Oct. 15 Ex Parte at 2.

⁸²⁸ Id.

⁸²⁹ See Access Charge Reform NPRM.

⁸³⁰ MCI Nov. 1 Ex Parte at 2.

⁸³¹ See, e.g., Ameritech Sept. 19 Ex Parte at 3.

⁸³² See, e.g., PacTel Oct. 23 Ex Parte at 1-2; Ameritech Sept. 19 Ex Parte at 2-3.

⁸³³ NCTA at 10; CCTA at 7, 10; Teleport at 3-5, 8-9; Ohio Commission at 7.

section 272 affiliate offers local exchange service to the public that is similar to local exchange service offered by the BOC.

316. Although we conclude that the 1996 Act authorizes section 272 affiliates to purchase unbundled elements, we emphasize that BOC facilities and services provided to section 272 affiliates must be made available to others on the same terms, conditions, and prices provided to the BOC affiliate pursuant to the nondiscrimination requirements of sections 272 and 251(c)(3).⁸³⁴ Thus, if a BOC affiliate is a requesting carrier under section 251, the BOC is required to treat unaffiliated requesting carriers in the same manner that the BOC treats its affiliate, unless the unaffiliated entity has requested different treatment.⁸³⁵ For example, if a BOC were to provide its section 272 affiliate with access to operational support systems (OSS) functions via a different method or system than it provides to requesting carriers under section 251, we would regard such discriminatory treatment as a violation of section 251(c)(3).⁸³⁶ We believe such nondiscrimination requirements will prevent BOCs from providing special treatment to their affiliates.

317. State regulation. As mentioned above, several BOCs have already submitted applications to state regulatory commissions seeking authority to provide both local exchange services and interLATA services from the same affiliate.⁸³⁷ Although we conclude that the 1996 Act permits section 272 affiliates to offer local exchange service in addition to interLATA service, we recognize that individual states may regulate such integrated affiliates differently than other carriers.⁸³⁸

⁸³⁴ Section 251(c)(3) requires incumbent LECs to provide access to network elements on rates, terms and conditions that are just, reasonable, and nondiscriminatory. 47 U.S.C. § 251(c)(3). See also First Interconnection Order at ¶¶ 298-316.

⁸³⁵ See AT&T at 32-33.

⁸³⁶ First Interconnection Order at ¶¶ 504-528. Therefore, if BOCs are providing access to pre-ordering, ordering, provisioning, maintenance and repair, and billing functions to competing providers of local service through a separate system or "gateway" than they provide for themselves internally, then the BOC affiliate must use the same separate system or "gateway" in order to obtain access to these OSS functions.

⁸³⁷ Teleport at 5. The Ohio and Michigan commissions confirm in their comments that they have already received requests from BOC 272 affiliates for authorization to offer local exchange services in conjunction with interLATA services. Michigan Commission at 4-6; Ohio Commission at 6-8. See also CCTA Dec. 2 Ex Parte at 2 (asserting that PB COM has filed for authority in California to provide local exchange services, interLATA and intraLATA services, and discretionary services on both a facilities and resale basis).

⁸³⁸ See, e.g., Ohio Commission at 6 n.6.

IX. ENFORCEMENT

A. Reporting Requirements under Section 272

1. Background

318. BOCs are required under Computer III to provide information to third parties regarding changes to the network and new network services and to report periodically on the quality and timeliness of installation and maintenance.⁸³⁹ We sought comment in the Notice on what requirements or mechanisms were necessary to facilitate the detection of violations of the separate affiliate and nondiscrimination requirements of section 272.⁸⁴⁰ We asked parties to comment on whether we should impose reporting and other requirements on BOCs analogous to those requirements imposed in the Computer III and subsequent ONA proceedings to ensure compliance with section 272 requirements.⁸⁴¹ We specifically requested comment on whether these requirements are sufficient to implement the section 272(c)(1) nondiscrimination requirement.⁸⁴²

2. Comments

319. BOCs and USTA generally argue against the imposition of additional reporting requirements in addition to those required in the 1996 Act to facilitate detection and adjudication of violations of section 272 requirements.⁸⁴³ To the extent the Commission does impose additional requirements, several parties maintain, it should model them after Computer III/ONA requirements.⁸⁴⁴ Many commenters, including BOC competitors, argue that additional reporting requirements are needed to ensure BOC compliance with the requirements of section 272.⁸⁴⁵ TIA

⁸³⁹ See, e.g., Computer III Phase II Order, 2 FCC Rcd at 3091; BOC ONA Reconsideration Order, 5 FCC Rcd at 3093.

⁸⁴⁰ Notice at ¶ 94.

⁸⁴¹ Id. at ¶ 95.

⁸⁴² Id. at ¶ 75.

⁸⁴³ Bell Atlantic at 9; NYNEX at 63; PacTel at 46-47; SBC at 8-9; U S West at 60; USTA at 32-33.

⁸⁴⁴ PacTel at 46-47; U S West Reply at 30; USTA Reply at 20.

⁸⁴⁵ AT&T at 48; DOJ Reply at 12 (recommending two specific reporting requirements, one to detect cost misallocations and another to detect discrimination in the quantity, quality, and time of service between BOCs and their 272 affiliates); ITAA at 27-28; MCI at 50; Teleport at 15-17 (suggesting quarterly reporting on objective performance standards); TIA at 47-49; TRA at 16-17; Voice-Tel at 5.

contends that if reporting requirements are inadequate, the section 272 safeguards will be rendered ineffective.⁸⁴⁶

320. On the specific issue of whether the reporting and other requirements of Computer III/ONA are sufficient to implement section 272(c)(1), commenters generally advance three alternative views. They argue that: (1) no rules or reporting requirements are necessary to implement section 272(c)(1);⁸⁴⁷ (2) no rules are needed but that if the Commission were to adopt rules, it should extend the existing Computer III reporting and other requirements;⁸⁴⁸ or (3) although the extension of Computer III requirements is necessary, these requirements are insufficient to implement section 272(c)(1) and additional reporting requirements should be imposed.⁸⁴⁹

3. Discussion

321. We conclude that none of the reporting or other requirements of Computer III/ONA is necessary to implement the requirements of section 272(c)(1) at this time. For the same reasons, we further conclude that (with the exception of section 272(e)(1)),⁸⁵⁰ no reporting requirements are needed to facilitate the detection and adjudication of violations of the separate affiliate and nondiscrimination requirements of section 272.⁸⁵¹ As many commenters observe, reporting requirements serve two primary purposes. First, they act to deter potential anticompetitive behavior by requiring BOCs to provide objective proof of their compliance with

⁸⁴⁶ TIA at 47.

⁸⁴⁷ Some parties maintain that no rules are necessary because other statutory provisions developed by Congress (e.g., sections 251(c)(5), 272(b)(5), and 272(d)(2)) are sufficient to protect against discriminatory behavior. Bell Atlantic at 8-9; ITAA at 21; ITI and ITAA Reply at 6 (section 272(c)(1)'s absolute prohibition on discrimination makes detailed regulation unnecessary); USTA at 25; USTA Reply at 13-14. Others argue that no rules are necessary because claims of discrimination are best resolved on a case-by-case basis. Ameritech at 53; NYNEX at 36; NYNEX Reply at 21-22; Sprint at 38.

⁸⁴⁸ PacTel at 32; PacTel Reply at 14; see also SBC at 13-14; cf. Ohio Commission at 9 (supports application of Computer II provisions to prevent discrimination because these require structural separation).

⁸⁴⁹ AT&T at 33 (Computer III rules not fashioned to require equal treatment between a BOC affiliate and its competitor); MCI at 37-38; MCI Reply at 21-22; MFS Reply at 20-21 (section 272(c)(1) goes further than Computer III requirements); Teleport at 14; Time Warner at 23; TIA at 39-40 (existing Computer III rules do not guarantee equal treatment in the use of information between a BOC affiliate and unaffiliated entities); TRA at 17.

⁸⁵⁰ See supra part VI.A; see also infra part XI.

⁸⁵¹ We note that our conclusion is consistent with the Commission's policy to eliminate or reduce reporting requirements wherever possible. See Revision of Filing Requirements, Report and Order, CC Docket No. 96-23, DA 96-1873 (Com. Car. Bur. rel. Nov. 13, 1996) (eliminating thirteen reporting requirements imposed on communications carriers by the Commission's rules and policies and reducing frequency of filing obligations for four other reporting requirements imposed pursuant to Commission orders).

the separate affiliate and nondiscrimination requirements. Second, they enable competitors, as well as the Commission, to detect any potential violations of these requirements. We believe, however, that sufficient mechanisms already exist within the 1996 Act both to deter anticompetitive behavior and to facilitate the detection of potential violations of section 272 requirements.⁸⁵² Nevertheless, we intend to monitor compliance with section 272 requirements and, of course, reserve the ability to undertake appropriate measures in the event that future developments warrant.

322. The requirements of section 272(b), as discussed above, discourage anticompetitive behavior by the BOC by requiring the BOC and its section 272 affiliate to adhere to certain structural and transactional requirements, including the requirement to "operate independently." We therefore conclude that it is unnecessary to impose the Computer III/ONA reporting requirements in order to implement the separate affiliate and nondiscrimination requirements of section 272. Further, we note that even some commenters that support imposing Computer III/ONA reporting requirements on BOCs admit that they do not seem useful or practical.⁸⁵³

323. We find, instead, that several of the disclosure requirements established in the 1996 Act will facilitate the detection of anticompetitive behavior. Section 272(d), for example, requires that a BOC obtain and pay for a biennial joint federal/state audit to determine whether it has "complied with [section 272] and the regulations promulgated under this section. . . ."⁸⁵⁴ We conclude that this broad audit requirement is intended to verify BOC compliance with the accounting and non-accounting requirements of section 272, as implemented.⁸⁵⁵ In addition, we note that, pursuant to section 271(d)(3)(B), a BOC may not receive authorization to provide in-region interLATA services until it shows, among other things, that the "requested authorization will be carried out in accordance the requirements of section 272."⁸⁵⁶ In view of these requirements, we reject ITAA's suggestion that BOCs should submit to the Commission section 272 compliance plans, and periodic reports regarding their implementation of those plans, as unnecessarily burdensome.⁸⁵⁷

⁸⁵² Our discussion will be primarily focused on the non-accounting mechanisms that already exist in the Act. Accounting requirements imposed by the Act are discussed in the Accounting Safeguards Order.

⁸⁵³ See AT&T at 33-34, 37; PacTel at 37; PacTel Reply at 15 (citing Commission finding that Computer III/ONA nondiscrimination reports have not disclosed any discrimination in the BOC provision of CPE or resulted in the filing of any formal complaints); Sprint at 41 n.29; Time Warner at 23.

⁸⁵⁴ See 47 U.S.C. § 272(d). This requirement is addressed in the Accounting Safeguards Order.

⁸⁵⁵ See Florida Commission at 5 (a joint audit, if performed according to the guidelines suggested by NARUC, will facilitate detection of separate affiliate and nondiscrimination requirements of section 272).

⁸⁵⁶ 47 U.S.C. § 271(d)(3)(B).

⁸⁵⁷ ITAA at 27-28.

324. In addition, the section 272(b)(5) requirement that all transactions between a BOC and its section 272 affiliate be reduced to writing and made publicly available should serve as a powerful mechanism both to detect violations of the section 272 requirements and to deter anticompetitive behavior. Similarly, we find that our interpretation of section 272(c)(1) as a flat prohibition against discrimination will work in conjunction with the section 272(b)(5) disclosure requirement to deter anticompetitive behavior. Under section 272(c)(1), any difference between the goods, services, and facilities given to a section 272 affiliate and those given to an unaffiliated entity may give rise to a claim of discrimination. Some commenters argue that the requirement of section 272(b)(5) should be extended to encompass not only transactions between a BOC and its section 272 affiliate, but also transactions between a BOC and unaffiliated entities.⁸⁵⁸ We find, however, that section 272(b)(5), by its terms, applies only to the transactions between the BOC and its section 272 affiliate. Extending such a requirement to transactions between a BOC and unaffiliated entities would expand the scope of this section beyond the statutory requirements and is not necessary to detect the type of discrimination that section 272 is intended to prevent. As discussed below, parties may make a request for such reporting requirements in the context of their interconnection negotiations with BOCs. Presented with such a request, the BOC will have the obligation to negotiate this proposal in good faith pursuant to section 251(c)(1).⁸⁵⁹

325. In addition to the requirements of section 272, the Act also imposes other disclosure requirements on the BOCs that, in our view, largely address the concerns cited by parties arguing for additional reporting requirements. For example, section 251(c)(5) requires all incumbent LECs, including BOCs, to disclose publicly information about network changes that will affect a competing service provider's performance or ability to provide service or will affect the incumbent LEC's interoperability with other service providers.⁸⁶⁰ In implementing this requirement in our Second Interconnection Order, we found that this disclosure about network changes "promotes open and vigorous competition" and provides "sufficient disclosure to insure against anticompetitive acts."⁸⁶¹ Similarly, section 273(c)(1) requires BOCs to maintain and file with the Commission full and complete information of the protocols and technical requirements used for network connection, and section 273(c)(4) requires BOCs to provide "to interconnecting carriers providing telephone exchange service, timely information on the planned deployment of telecommunications equipment."⁸⁶²

⁸⁵⁸ DOJ Reply at 12 (Commission should require reporting of costs arising from transactions between third parties and the BOC or its section 272 affiliate); MCI at 50-51; TIA at 48, n.104.

⁸⁵⁹ 47 U.S.C. § 251(c)(1).

⁸⁶⁰ *Id.* § 251(c)(5). For further discussion of this requirement, see Second Interconnection Order at ¶¶ 165-260.

⁸⁶¹ Second Interconnection Order at ¶¶ 171, 173.

⁸⁶² See 47 U.S.C. §§ 273(c)(1), (c)(4). These requirements are addressed in the Manufacturing NPRM.

326. We also find that, beyond the reporting requirements mandated under the 1996 Act, there are other avenues by which a telecommunications carrier may obtain information relevant to detecting anticompetitive BOC conduct. For example, competitive telecommunications carriers, on their own initiative, could seek to incorporate certain performance and quality standards into their negotiated or arbitrated interconnection agreements to ensure that BOCs satisfy their obligation to provide service in a nondiscriminatory manner.⁸⁶³ As noted above, BOCs, like any other incumbent LEC, are obligated to negotiate such requests in good faith pursuant to section 251(c)(1).⁸⁶⁴ Through this process, competitive carriers will be able to tailor the interconnection agreement to include only those reporting requirements that they deem necessary or find to be most useful.⁸⁶⁵ Further, pursuant to section 252(a), BOCs must file all interconnection agreements with the appropriate state commission and under section 252(h) these agreements must be made publicly available; the terms and conditions of these interconnection agreements, therefore, are on public record and available to competitors.⁸⁶⁶ We also note that there are several state utility commissions that, pursuant to state administrative code, require LECs to conform to certain service standards and make service quality reports publicly available.⁸⁶⁷ New York and Virginia, for example, require all LECs to file periodic service quality or standard of service reports.

327. We believe that the reporting requirements required by the 1996 Act, those required under state law, and those that may be incorporated into interconnection agreements negotiated in good faith between BOCs and competing carriers will collectively minimize the potential for anticompetitive conduct by the BOC in its interexchange operations. In addition to deterring potential anticompetitive behavior, these information disclosures will also facilitate detection of potential violations of the section 272 requirements. We, therefore, agree with those parties who argue that there is no need to impose additional reporting requirements at this time. Further, we note that even several parties who advocate the imposition of additional reporting

⁸⁶³ See 47 U.S.C. § 252. We also note that competing carriers, in order to ensure they have a recourse for anticompetitive behavior by BOCs, may seek to include liquidated damage clauses, dispute resolution mechanisms, and other common commercial arrangements into their negotiated or arbitrated agreements.

⁸⁶⁴ 47 U.S.C. § 251(c)(1).

⁸⁶⁵ See, e.g., Letter from Todd F. Silbergeld, Director, Federal Regulatory, SBC to William F. Caton, Acting Secretary, FCC at 2 (filed Nov. 6, 1996) (SBC Nov. 6 *Ex Parte*) (stating that requesting carriers have been sufficiently concerned about service quality and performance levels to have negotiated specific performance standards into interconnection agreements with SWBT).

⁸⁶⁶ 47 U.S.C. §§ 252 (a), (h), (i).

⁸⁶⁷ See, e.g., 83 Ill. Admin. Code tit. 83, § 730 (1996); NJ Admin Code tit. 14, § 10-1-1.10 (1996), NY Comp. Codes R. & Regs. tit. 16, § 603 (1996), Or. Admin R. 860-23-055 (1995); Mo. Code Regs. Ann. tit. 4 § 240-32.070 (1996); Va. Admin. Code tit. 20, § 5-400-100 (1996).

requirements recognize the inherent difficulty of identifying and preventing every type of discrimination through regulatory measures.⁸⁶⁸

328. Finally, we believe that the complaint process will bring violations of section 272 to the attention of the Commission. Congress has established a mechanism in section 271(d) to facilitate the enforcement of the requirements of section 272. Further, as discussed below, if the information necessary to prove a complainant's claim is not publicly-available, the complainant has the opportunity to obtain the necessary documentation from the BOC in the context of an enforcement proceeding.⁸⁶⁹ We expect that BOC competitors will be vigilant in detecting BOC deficiencies and will avail themselves of the expedited complaint process established by section 271(d)(6).⁸⁷⁰

B. Section 271(d)(6) Enforcement Provisions

329. As discussed in the Notice, section 271(d)(6) of the Communications Act gives the Commission specific authority to enforce the conditions that a BOC is required to meet in order to obtain Commission authorization to provide in-region interLATA services. Specifically, section 271(d)(6) states:

(A) COMMISSION AUTHORITY. -If at any time after the approval of an application under [section 271(d)(3)], the Commission determines that a [BOC] has ceased to meet any of the conditions required for such approval, the Commission may, after notice and opportunity for a hearing-

- (i) issue an order to such company to correct the deficiency;
- (ii) impose a penalty on such company pursuant to title V; or
- (iii) suspend or revoke such approval.

(B) RECEIPT AND REVIEW OF COMPLAINTS.-The Commission shall establish procedures for the review of complaints concerning failures by [BOCs] to meet conditions required for approval under [section 271(d)(3)]. Unless the parties otherwise agree, the Commission shall act on such complaint within 90 days.⁸⁷¹

⁸⁶⁸ See, e.g., DOJ Reply at 13; MCI at 50; Letter from Charles E. Griffin, Government Affairs Director, AT&T to William F. Caton, Acting Secretary, FCC at 1 (filed Oct. 3, 1996) (AT&T Oct. 3 Ex Parte).

⁸⁶⁹ See infra part IX.B.4 (discussing burden-shifting).

⁸⁷⁰ See U S West at 61; USTA at 31-33.

⁸⁷¹ We recently initiated a separate proceeding addressing the expedited complaint procedures mandated by this subsection as well as those mandated by other provisions of the 1996 Act. See Amendment of Rules Governing Procedures to be Followed When Formal Complaints are Filed Against Common Carriers, CC Docket No. 96-238,

1. Commission's Enforcement Authority under Section 271(d)(6)

a. Background

330. In the Notice, we sought to clarify the relationship between the Commission's authority under section 271(d)(6) and the Commission's existing enforcement authority under sections 206-209 of the Communications Act.⁸⁷² We tentatively concluded that, in the context of "complaints concerning failures by [BOCs] to meet the conditions required for approval under [section 271(d)(3)]," section 271(d)(6) generally augments the Commission's existing enforcement authority. We sought comment on whether, in a situation where a complaint alleges that a BOC has ceased to meet the conditions for approval to provide in-region interLATA telecommunications services and seeks damages as a result of the underlying alleged unlawful conduct, a Commission determination that the BOC has ceased to meet the conditions and the imposition of a section 271(d)(6)(A) sanction would fulfill the Commission's duty to "act on such complaint within 90 days."⁸⁷³

331. In order to approve a BOC's application to provide in-region interLATA services pursuant to section 271(d)(3), the Commission must determine that the BOC: meets the requirements of section 271(c)(1); satisfies the competitive checklist in section 271(c)(2)(B); complies with the requirements of section 272; and demonstrates that the approval of its application is consistent with the public interest, convenience, and necessity.⁸⁷⁴ Section 271(d)(6)(A) sets forth various actions the Commission may take at any time after the approval of an application, and after notice and opportunity for a hearing, if it determines that a BOC has ceased to meet any of these conditions. In the Notice, we stated that the Commission may determine that a BOC has ceased to meet the conditions of its approval under section 271(d)(3) either via the resolution of an expedited complaint proceeding pursuant to section 271(d)(6)(B) or in a proceeding commenced on its own motion.

Notice of Proposed Rulemaking, FCC 96-460, (rel. Nov. 27, 1996) (Enforcement NPRM).

⁸⁷² Section 206 provides that "any common carrier" found to be in violation of the Communications Act shall "be liable to the person or persons injured thereby for the full amount of damages sustained in consequence of any such violation." Section 207 of the Communications Act permits any person "damaged" by the actions of any common carrier to bring suit for the recovery of these damages. Section 208(a) authorizes complaints by any person "complaining of anything done or omitted to be done by any common carrier" subject to the Communications Act or its provisions. Section 209 specifies that the Commission will "make an order directing the carrier to pay to the complainant" any damages amount a complainant successfully establishes. 47 U.S.C. §§ 206-209.

⁸⁷³ Notice at ¶ 97.

⁸⁷⁴ See 47 U.S.C. § 271(d)(3).

b. Comments

332. Nearly all the commenters agree with our tentative conclusion that section 271(d)(6) generally augments the Commission's existing enforcement authority.⁸⁷⁵ Commenters also agree that, where a complainant seeks damages or other relief that is not available under section 271(d)(6), the Commission need not decide the question of additional relief in order to "act on" the complaint within 90 days.⁸⁷⁶ In addition, all parties agree that the Commission may determine whether a BOC has ceased to meet the conditions for entry either on its own motion or in the context of a complaint proceeding.⁸⁷⁷

c. Discussion

333. We affirm our tentative conclusion that section 271(d)(6) augments the Commission's existing enforcement authority. We reject both NYNEX's contention that the specific remedies of section 271(d)(6)(A) supersede the general sanctions contained in sections 206-209 of the Act as well as SBC's assertion that there is no statutory basis for applying the provisions of section 206-209 when a violation of section 271(d)(3) has been alleged. As AT&T observes, there is no support in the statute or its legislative history for the assertion that Congress intended to eliminate the damages remedy that applies to all other violations of Title II for violations of sections 271 and 272, especially in light of the competitive concerns that underlie the 1996 Act.⁸⁷⁸ We also conclude that, where a complainant seeks damages as a result of the underlying alleged violative conduct, a Commission determination on whether the BOC has ceased to meet the conditions and the imposition of a section 271(d)(6)(A) sanction, where appropriate, would fulfill the Commission's statutory duty to "act on such complaint within 90 days." Completion of this statutory obligation, however, would not preclude the complainant from filing a supplemental complaint to determine the actual amount of damages.⁸⁷⁹

334. With respect to imposition of a Title V penalty (e.g., forfeiture and fines) pursuant to section 271(d)(6)(A)(ii), we note that Title V provides for a separate process that is initiated

⁸⁷⁵ AT&T at 49; CompTel at 26; Excel at 14; LDDS at 29-30; MCI at 52; PacTel at 47; Sprint at 55, n.35; Teleport at 22; TIA at 49; TRA at 20; U S West at 59; USTA at 33. But see NYNEX at 64-65; SBC Reply at 32-33.

⁸⁷⁶ See, e.g., Sprint at 55 n.35; USTA at 34 n.14.

⁸⁷⁷ AT&T at 50; BellSouth at 35; CompTel at 28; Excel at 14 n.41; LDDS at 31; MCI at 53; Sprint at 58; TRA at 21.

⁸⁷⁸ AT&T Reply at 28 n.62 (stating that the suggestion that Congress would have chosen to reduce incentives for BOC compliance and leave injured parties uncompensated is absurd).

⁸⁷⁹ See 47 C.F.R. § 1.722.

by the issuance of a notice of apparent liability.⁸⁸⁰ We find, therefore, that the Commission's obligation under section 271(d)(6) is satisfied with respect to Title V penalties if, within 90 days (or longer if parties agree) of receiving a complaint, the Commission, upon finding a BOC liable for unlawful conduct, issues a notice of apparent liability pursuant to section 503.⁸⁸¹ Finally, we affirm our tentative conclusion that the Commission may make a determination that a BOC has ceased to meet the conditions for entry either in a proceeding commenced on its own motion or via the resolution of a complaint proceeding. We further find, as most commenters suggest, that the Commission is not bound by the 90-day time constraint when it initiates a proceeding on its own motion.

2. Legal and Evidentiary Standards

a. Background and Comments

335. We sought comment in the Notice on the legal and evidentiary standards necessary to establish that a BOC has ceased to meet the conditions required for its approval to provide interLATA service.⁸⁸² The majority of commenters assert that prescribing the elements of every claim that could conceivably be brought before the Commission would, at this point, be a fruitless exercise.⁸⁸³ USTA maintains that, in order to invoke section 271(d)(6), the complainant's allegations and supporting proof must be of such character that, had it been presented prior to entry, the Commission would not have approved the BOC's application.⁸⁸⁴ Similarly, MCI contends that a complainant seeking section 271(d)(6) relief should state that the defendant BOC is no longer meeting the conditions for entry, cite the specific requirements the BOC is violating, and describe how it is violating them.⁸⁸⁵

b. Discussion

336. MCI and USTA correctly point out that section 271(d)(6) cannot be invoked unless the complainant alleges that the BOC has failed to meet the conditions of entry under section 271(d)(3). We conclude, however, that the procedural aspects of this showing are best addressed

⁸⁸⁰ See also *infra* at paragraph 355.

⁸⁸¹ 47 U.S.C. § 503(b); 47 C.F.R. § 1.80 *et seq*; see also NYNEX at 74-75.

⁸⁸² Notice at ¶ 99.

⁸⁸³ Ameritech at 73; CompTel at 30; cf. Sprint at 57 n.38 (stating that it is not possible at this point to determine legal and evidentiary standards for the imposition of sanctions).

⁸⁸⁴ USTA at 34.

⁸⁸⁵ MCI at 53.

in our pending proceeding to adopt expedited complaint procedures.³³⁶ We agree with the majority of commenters and conclude that, beyond the duties and obligations discussed elsewhere in this Order, we need not establish at this time substantive rules that would define the specific legal elements of a claim that a BOC has failed or ceased to meet the conditions for entry under section 271(d)(3). Although we recognize that the establishment of substantive standards or "bright line" tests could assist in expediting the ultimate disposition of complaints invoking the 90-day statutory resolution deadline under section 271(d)(6), the conditions for entry include not only compliance with the section 272 requirements, but also satisfaction of the requirements of the competitive checklist in section 271(c)(2)(B), as well as a demonstration that the BOC application is consistent with the public interest, convenience, and necessity. Given the widely varying circumstances that may arise in the context of complaints alleging failure to meet the conditions of entry, we conclude that it is best to determine a BOC's compliance or noncompliance with these requirements on the basis of concrete facts presented in particular cases, rather than by substantive rule in this notice-and-comment proceeding.³³⁷

337. For these same reasons, we agree with a majority of the commenters that it would be impractical to prescribe specific evidentiary standards for establishing violations of all of the substantive requirements contained in the competitive checklist. Just as the circumstances that arise in the context of 271(d)(6) complaints are likely to vary from case to case, so too will the information necessary to prove or disprove allegations that the BOC has ceased to meet the conditions of entry. We note as a general matter that, consistent with the requirements of the APA, the Commission's practice in formal complaint proceedings pursuant to section 208 has been to determine compliance or noncompliance with the Act or the Commission's rules and orders according to a "preponderance of the evidence" standard of proof.³³⁸ Neither section 271 nor its legislative history prescribe a different standard of proof for establishing a BOC's failure to meet the conditions required for entry; we conclude, therefore, that this evidentiary standard applies equally to section 271(d)(6) complaints. In the paragraphs that follow, we address related

³³⁶ See Enforcement NPRM.

³³⁷ We expect to give content to the substantive requirements of the competitive checklist, for example, in the context of adjudicatory proceedings pursuant to section 271.

³³⁸ See, e.g., General Plumbing Corp. v. New York Telephone Co. and MCI, Memorandum Opinion and Order, DA 96-966 (Com. Car. Bur. rel. June 20, 1996). Proof by a preponderance of the evidence is applicable in most administrative and civil proceedings unless otherwise prescribed by statute or where other countervailing factors warrant a higher standard. See Sea Island Broadcasting Corp. v. FCC, 627 F.2d 240, 242 (D.C. Cir. 1980) ("The use of the 'preponderance of evidence' standard is the traditional standard in civil and administrative proceedings. It is the one contemplated by the APA, 5 U.S.C. § 556(d).", cert. denied, 449 U.S. 834 (1980); see also Grogan v. Garner, 498 U.S. 279, 285 (1991) (because the "preponderance of the evidence" standard results in roughly equal allocation of risks of error between litigants, the Supreme Court presumes that such a standard is applicable in civil actions between private litigants unless particularly important individual interests or rights are at stake). Generally, preponderance of the evidence means the "greater weight of evidence, evidence which is more convincing than the evidence which is offered in opposition to it." Hale v. Department of Transportation, 772 F.2d 882, 885 (Fed. Cir. 1985).

issues regarding what constitutes a prima facie showing that a BOC has ceased to meet one or more of the conditions for interLATA entry and whether the burden of proof should shift to the defendant BOC once the complainant makes such a showing. Notwithstanding the existence of a prima facie showing or any shift in the burden of production, as discussed below, to the extent that a complainant and defendant BOC differ over the material facts underlying a section 271(d)(6) complaint, the preponderance of evidence standard will guide our ultimate disposition of the complaint.

3. Prima Facie Standard

a. Background

338. We sought comment in the Notice on what constitutes a prima facie showing that a BOC has ceased to meet one or more of the conditions for interLATA entry. We asked parties to comment on whether it is enough for complainants invoking the expedited complaint procedures under section 271(d)(6)(B) to plead, along with proper supporting evidence, "facts which, if true, are sufficient to constitute a violation of the Act or Commission order or regulation" in order to establish a prima facie showing that the BOC has ceased to meet the conditions for approval in section 271(d)(3).⁸⁸⁹

b. Comments

339. Bell Atlantic, CompTel, LDDS, Sprint, Time Warner, and TRA all agree that a prima facie case can be made by pleading facts that are sufficient to constitute a violation of the Act, Commission order, or regulation.⁸⁹⁰ Bell Atlantic and Sprint observe, however, that, because a prima facie case will vary with each factual context, it is not possible to go further and define all the requirements for a prima facie case under various factual circumstances. NYNEX argues that simply permitting a complainant to allege facts without requiring the submission of "proper supporting evidence" constitutes a "serious denial of due process."⁸⁹¹ AT&T and MCI propose specific examples of BOC behavior that should be deemed sufficient to constitute prima facie showings that a BOC has ceased to meet the section 272 requirements.⁸⁹²

⁸⁸⁹ Notice at ¶ 100.

⁸⁹⁰ Bell Atlantic at 10 n.26; CompTel at 29; LDDS at 30; Sprint at 55-56; Sprint Reply at 36; Time Warner at 36-37; TRA at 21.

⁸⁹¹ NYNEX at 65-66; see also PacTel at 45; SBC Reply at 34.

⁸⁹² AT&T at 31, 35; MCI at 53-55.

c. Discussion

340. We conclude that complainants invoking the expedited complaint procedures of section 271(d)(6)(B) must plead, along with proper supporting evidence, facts which, if true, are sufficient to constitute a violation of the Act or Commission order or regulation in order to establish a prima facie showing that a BOC has ceased to meet the conditions for entry. Contrary to the suggestion of NYNEX and others, we did not propose in our Notice that it would be sufficient for a complainant to establish a prima facie case without the submission of "proper supporting evidence."⁸⁹³ Such a showing is not permissible under either our present pleading requirements or under the rules we propose in the Enforcement NPRM on expedited complaint procedures. Under our present rules, a formal complaint is required to include certain categories of information, including specific facts and legal authorities upon which the complaint is based.⁸⁹⁴ In addition, a formal complaint must identify or describe specifically and in detail the carrier conduct that forms the basis for the complaint as well as the nature of injury sustained.⁸⁹⁵ Further, in our Enforcement NPRM, we recently proposed to augment these requirements by requiring that a formal complaint include facts supported by relevant documentation or affidavits.⁸⁹⁶ Under our proposed rules, a complainant that fails to meet these pleading requirements may face either a dismissal of the complaint or a summary denial of the relief sought.⁸⁹⁷ Thus, in light of the pleading requirements that presently exist, as well as those proposed in the Enforcement NPRM, we reject allegations by some commenters that the prima facie standard we are adopting in this Order will violate the defendant's procedural rights, allow a complainant to file only a "bare notice-type complaint," or invite a flood of frivolous suits designed to harass the BOCs.⁸⁹⁸

341. We reject the recommendations of AT&T and MCI that we adopt specific criteria the complainant must demonstrate in order to establish a prima facie showing. As we stated above, beyond the legal and evidentiary standards established in this proceeding, it would be imprudent for us, at this time, to attempt to propose a comprehensive list of the showings that complainants will be required to make in order to demonstrate violations of the conditions of entry. Rather, we find it more appropriate to establish a generally applicable prima facie standard that is suitable for all complaints invoking section 271(d)(6), not just those alleging specific violations of the section 272 requirements.

⁸⁹³ See Notice at ¶ 100.

⁸⁹⁴ See 47 C.F.R. § 1.721.

⁸⁹⁵ 47 C.F.R. § 1.721(a)(6).

⁸⁹⁶ Enforcement NPRM at ¶¶ 37.

⁸⁹⁷ Id. at ¶ 85.

⁸⁹⁸ See NYNEX at 66; PacTel at 45; SBC Reply at 34.

4. Burden-Shifting and Presumption of Reasonableness

a. Background

342. In the Notice, we sought comment on whether the pro-competitive goals of the Act are advanced by shifting the ultimate burden of proof from the complainant to a defendant BOC, not just in complaints alleging discrimination under section 202(a), but in all complaints alleging that a BOC has ceased to meet any of the conditions for its approval to provide interLATA services under section 271(d)(3). We sought comment specifically on whether the burden should shift to the defendant BOC once the complainant makes a prima facie showing that a BOC has ceased to meet the conditions of section 271(d)(3).⁸⁹⁹

343. We also observed in the Notice that in complaints challenging the rates, terms, and conditions of non-dominant carrier service offerings under sections 201(b) and 202(a), the Commission has effectively established a rebuttable presumption that such rates and practices are lawful.⁹⁰⁰ We tentatively concluded that, in the context of complaints alleging that a BOC has ceased to meet the conditions required for the provision of in-region interLATA services, we will not employ a presumption of reasonableness in favor of the BOC or BOC affiliate, regardless of whether the BOC or BOC affiliate is regulated as a dominant or non-dominant carrier.⁹⁰¹

b. Comments

344. All BOCs and USTA oppose shifting the ultimate burden of proof to the defendant BOC after the complainant has established a prima facie case that the BOC has ceased to meet the conditions of entry.⁹⁰² BOCs assert, among other things, that shifting the burden of proof would violate due process and the APA, result in the filing of frivolous, anticompetitive complaints, and require them to prove a negative by continually demonstrating that they are not violating the conditions of entry. Some BOCs, however, support the idea of shifting the burden of producing evidence.⁹⁰³ All other commenters, including potential competitors, trade associations and DOJ, support shifting the burden of proof.⁹⁰⁴ In addition, most commenters,

⁸⁹⁹ Notice at ¶ 102.

⁹⁰⁰ See, e.g., Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor, CC Docket No. 79-252, First Report and Order, 85 FCC 2d 1, 31-33 (1980).

⁹⁰¹ Notice at ¶ 104.

⁹⁰² Ameritech at 74-75; Bell Atlantic at 10-11; BellSouth at 36-37; NYNEX at 70-72; PacTel at 42; SBC Reply at 34; U S West at 62; USTA at 36.

⁹⁰³ NYNEX at 66; PacTel Reply at 37-38; SBC Reply at 34.

⁹⁰⁴ See, e.g., AT&T at 50-51, CompTel at 29; DOJ Reply at 13-14; Excel at 14; ITAA at 28; LDDS at 30; MCI at 55; Sprint at 55-56; Teleport at 22; Time Warner at 37; TRA at 21.

including DOJ, agree with our tentative conclusion that the Commission should not employ a presumption of reasonableness in favor of the BOC or BOC affiliate in complaints alleging that a BOC has ceased to meet the conditions of entry.⁹⁰⁵

c. Discussion

345. For the reasons and in the manner discussed below, we conclude that the burden of production with respect to an issue should shift to the BOC after the complainant has demonstrated a prima facie case that a defendant BOC has ceased to meet the conditions of entry. As an initial matter, we note that the term "burden of proof" has historically been used to describe two separate but related concepts. First, it has been used to describe the burden of persuasion with respect to a particular issue which, under the traditional view, never shifts from one party to the other at any stage in the proceeding. Second, it has been used to describe the burden of going forward with evidence necessary to avoid an adverse decision on that issue. This burden may shift back and forth between the parties.⁹⁰⁶ Under the approach we adopt today, the burden of production or coming forward with evidence will shift to the defendant BOC once the complainant has established a prima facie case that the conditions of interLATA entry have been violated. In other words, the defendant BOC will have an affirmative obligation to produce evidence and arguments necessary to rebut the complainant's prima facie case or risk an adverse ruling. The complainant, however, will have the ultimate burden of persuasion throughout the proceeding; that is, to show that the "preponderance of the evidence" produced in the proceeding weighs in its favor. As explained more fully below, shifting the burden of production to the defendant BOC once a prima facie case has been made will require the party most likely to have relevant information in its possession to produce the information at an early stage in the proceeding.

346. Currently, in a typical complaint proceeding, the complainant has the burden of establishing that a common carrier has violated the Communications Act or a Commission rule or order.⁹⁰⁷ This burden of persuasion does not shift to the defendant carrier at any time in the proceeding.⁹⁰⁸ As Sprint observes, however, in view of the statutory mandate to resolve section

⁹⁰⁵ CompTel at 30; DOJ Reply at 15; LDDS at 30-31; MCI at 56; NYNEX Reply at 37 n.113; Teleport at 22; TRA at 22. But see PacTel at 46; SBC Reply at 34.

⁹⁰⁶ See Black's Law Dictionary 136 (Abridged 6th ed. 1991).

⁹⁰⁷ See generally, Amendment of Rules Governing Procedures to be Followed When Formal Complaints Are Filed Against Common Carriers, CC Docket No. 92-26, Report and Order, 8 FCC Rcd 2614 (1993) (1993 Enforcement Order); 47 C.F.R. §§ 1.721 - 1.735.

⁹⁰⁸ In any complaint proceeding initiated under Section 208 of the Communications Act, the Commission, and the staff pursuant to delegated authority, may exercise discretion to require a defendant carrier to come forward with information or evidence determined to be in the sole possession or control of the carrier. See, e.g., General Services Admin. v. AT&T, 2 FCC Rcd 3574, 3576 n.31 (1987). In such cases, however, the burden of establishing a violation remains with the complainant.

271(d)(3) complaints in 90 days, the Commission must balance the need for expeditious resolution of the complaint against the need to develop a full record.⁹⁰⁹ We recognize, as do many commenters, that, even though some information may be publicly available, in many cases the BOC will be the sole possessor of certain information relevant to the disposition of the complainant's case. Our primary goal, as we expressed in the Notice, is to give full force and effect to the pro-competitive policies underlying section 271(d)(6) by ensuring the full and fair resolution of complaints challenging a BOC's compliance with the conditions for interLATA entry within the statutory 90-day period. We find that shifting the burden of production to the defendant BOC after a prima facie showing has been made by the complainant will facilitate our ability to reach this goal.

347. Further, as we observed in the Notice, effective enforcement of the conditions of interLATA entry, including the separate affiliate and nondiscrimination requirements of section 272, is critical to ensuring the full development of competition in the local and interexchange telecommunications markets. Many commenters argue that prompt enforcement of these conditions is essential not only to ensure the advent of true competition, but also to ensure that the BOCs take the conditions of entry seriously, particularly after they enter the in-region interLATA market. We conclude that shifting the burden of production to the BOC will facilitate the detection of anticompetitive behavior by the BOC and will enable us to adjudicate expeditiously complaints alleging violations of section 271(d)(3). Further, as mentioned above, in the context of a complaint proceeding, BOCs will have an affirmative obligation to produce all relevant evidence in their possession to rebut the complainant's claim or face an adverse ruling. Shifting the burden of production, therefore, may ultimately reduce the number of complaints filed against the BOCs by encouraging them to divulge exculpatory evidence before enforcement proceedings begin.

348. Many commenters that support shifting the burden of proof do not specify whether they advocate shifting the burden of persuasion or the burden of production. It is evident from the context of some comments, however, that a few commenters support a shift in the burden of persuasion, rather than a shift in the burden of production.⁹¹⁰ In response to these commenters, we find that most of the competitive concerns they raise in support of shifting the burden of persuasion are more than adequately addressed by shifting the burden of production.⁹¹¹ For example, some parties that advocate shifting the burden of persuasion argue that complainants frequently will require specific information that is within the exclusive possession of the BOC in order to substantiate their claim. These parties contend that requiring the complainant to

⁹⁰⁹ Sprint Reply at 31.

⁹¹⁰ See CompTel at 29; DOJ Reply at 13; LDDS at 30; MCI Reply at 32-33; Time Warner at 37; TRA at 21; see also Sprint at 55-57 (there is no way, absent discovery, to require a BOC to produce relevant evidence that is harmful to its case).

⁹¹¹ But see Sprint Reply at 34 (stating that it is unclear whether Commission means shift in burden of going forward or shift in burden of ultimate persuasion).

maintain the burden of proof would result in needless, extensive discovery, and shifting the burden will give BOCs the incentive to produce information necessary to resolve the complaint. We conclude that these concerns, as well as our goal of facilitating the full and fair resolution of claims alleging violations of the conditions of entry within the statutory 90-day period, are satisfied without requiring BOCs to prove a negative in order to avoid liability, i.e., to prove, by a preponderance of the evidence, that they did not violate the conditions of entry. Further, we find it unnecessary to address most of the BOCs' arguments against burden-shifting because they are directed against shifting the ultimate burden of persuasion rather than the burden of production.

349. We do find it necessary, however, to respond to Ameritech's argument that informational asymmetry between the complainant and defendant is best addressed in the context of the discovery process.⁹¹² Ameritech maintains that, if the Commission's discovery processes are too cumbersome, they ought to be reformed rather than replaced with burden-shifting.⁹¹³ Similarly, other commenters propose various procedural requirements that we might impose to enable us to resolve complaints within the 90-day statutory window.⁹¹⁴ Moreover, a few commenters suggest that Alternative Dispute Resolution may be another mechanism by which to facilitate resolution of complaints alleging a violation of section 271(d)(3).⁹¹⁵

350. In response to these arguments, we note that purpose of the Enforcement NPRM is to streamline our current procedures and pleading requirements so that we may expedite the processing of all formal complaints and resolve complaints within the deadlines imposed by the 1996 Act. We therefore find that it would be inadvisable to attempt to establish any new procedural rules in this proceeding. Moreover, as PacTel points out, we do not have an adequate record on which to base any such rules.⁹¹⁶ In response to Ameritech, we note that in the Enforcement NPRM we specifically proposed to reform our discovery process. Specifically, we sought comment on a range of options to eliminate or modify the discovery process, including prohibiting discovery as a matter of right, limiting the amount or scope of discovery, and allowing the state to set timetables for completion of discovery on an individual case basis.⁹¹⁷ By shifting the burden of production to the BOC after a prima facie showing has been made by the complainant, we are ensuring that information relevant to the complainant's claim is disclosed

⁹¹² Ameritech at 74-75.

⁹¹³ Id. at 74.

⁹¹⁴ See, e.g., AT&T at 51-52; New Jersey Division of Ratepayer Advocate at 4-5; NYNEX at 76; USTA Reply at 21-22.

⁹¹⁵ ATSI at 15-16; NYNEX at 76; PacTel Reply at 38. But see AT&T at 52-53 n.44 (Commission may not adopt any procedures that would delay its decision beyond 90 days).

⁹¹⁶ PacTel Reply at 38.

⁹¹⁷ Enforcement NPRM at ¶¶ 48-56.

early in the process, and thereby providing the Commission a sufficient record on which to make a decision, even in the potential absence of traditional discovery.

351. Finally, we affirm our tentative conclusion that, in the context of complaints alleging that a BOC has ceased to meet the conditions required for the provision of in-region interLATA services, we will not employ a presumption of reasonableness in favor of the BOC or BOC affiliate, regardless of whether the BOC or BOC affiliate is regulated as a dominant or non-dominant carrier. The presumption of lawfulness given to nondominant carrier rates and practices is employed in the context of complaints alleging violations of sections 201(b) and 202(b), where the complaint must demonstrate that the defendant's rates and practices are "unjust and unreasonable." We agree with MCI that a presumption of reasonableness is an irrelevant concept in the context of complaints alleging violations of the conditions of interLATA approval in section 271(d)(3), particularly given our interpretation of section 272(c)(1) as an unqualified prohibition on discrimination.⁹¹⁸

5. Enforcement Measures under Section 271(d)(6)(A)

a. Background

352. Section 271(d)(6)(A) provides that if, at any time after approval of a BOC application, the Commission determines that the BOC has ceased to meet any of the conditions of its approval to provide interLATA services, the Commission may, after notice and opportunity for a hearing: (1) issue an order to the BOC to "correct the deficiency;" (2) impose a penalty pursuant to Title V;⁹¹⁹ or (3) suspend and revoke the BOC's approval to provide in-region interLATA services.⁹²⁰

353. In the Notice, we tentatively concluded that we will follow the procedures set forth in Title V to impose Title V penalties, including forfeitures, under section 271(d)(6)(A). As to the non-forfeiture enforcement measures, we sought comment on whether the Commission should exercise its enforcement discretion and impose these sanctions on an individual case basis, or whether we should establish specific legal and evidentiary standards for each type of sanction. Further, we sought comment on the appropriate "notice and opportunity for a hearing" for the

⁹¹⁸ See MCI at 56.

⁹¹⁹ Pursuant to section 503(b)(1)(B), a person who "willfully or repeatedly" fails to comply with any of the provisions of the Communications Act or any rule, regulation, or order issued by the Commission under the Communications Act, is liable to the United States for a forfeiture penalty. Section 503(b)(2)(B) authorizes the Commission to assess forfeitures against common carriers of up to one hundred thousand dollars for each violation, or each day of a continuing violation, up to a statutory maximum of one million dollars for a single act or failure to act. In exercising such authority, the Commission is required to take into account "the nature, circumstances, extent, and gravity of the violation and, with the respect to the violator, the degree of culpability, any history of prior offenses, ability to pay, and such other matters as justice may require." 47 U.S.C. §§ 503(b)(1)(B), (b)(2)(B).

⁹²⁰ 47 U.S.C. § 271(d)(6)(A).

imposition of these non-forfeiture sanctions, both in the context of a complaint proceeding and on the Commission's own motion. We interpreted "opportunity for hearing" not to require a trial-type hearing before an Administrative Law Judge (ALJ).⁹²¹ We also tentatively concluded that Congress, by imposing a 90-day deadline for complaints, did not intend to afford the BOC trial-type hearings in enforcement proceedings pursuant to section 271(d).⁹²²

b. Comments

354. All commenters agree with our tentative conclusion to follow the Title V procedures to impose Title V penalties in enforcement actions alleging violations of the conditions of entry under section 271(d)(3). Commenters also agree that we should exercise our enforcement discretion and impose non-forfeiture sanctions on an individual case basis and should not attempt to establish specific legal and evidentiary standards for each type of sanction.⁹²³ AT&T proposes, however, that any sanction must ensure that the penalty for the misconduct exceeds any competitive benefit the BOC may have received as a result of the violation and that the BOC not be permitted to continue to provide long distance until it has corrected its violation.⁹²⁴ Commenters were generally split on the issue of whether "opportunity for hearing" requires a trial-type hearing before an ALJ prior to the imposition of a non-forfeiture sanction.⁹²⁵

c. Discussion

355. We affirm our tentative conclusion that we will follow the procedures set forth in Title V to impose Title V penalties in enforcement actions alleging violations of the conditions of entry under section 271(d)(3). As to non-forfeiture enforcement measures, we conclude that it is impractical, at this point in time, to prescribe the specific elements and factors that would warrant issuance of an order to "correct the deficiency" or an order suspending or revoking a BOC's approval to provide in-region interLATA service. We agree with AT&T that to do so would limit our remedial flexibility.⁹²⁶ Nor do we find it appropriate to establish specific evidentiary standards; rather, our determination of which non-forfeiture measure to impose will

⁹²¹ See 5 U.S.C. §§ 554, 556, 557.

⁹²² Notice at ¶ 106.

⁹²³ AT&T at 51; NYNEX Reply at 38 n.118; Sprint at 57 n.38.

⁹²⁴ AT&T at 51.

⁹²⁵ PacTel and USTA argue that a trial-type hearing for section 271(d)(3) violations will afford parties full due process rights and help resolve highly technical, complex matters. PacTel at 45; USTA at 37. AT&T, Excel, MCI, and Sprint agree that no trial-type hearings before an ALJ are required prior to imposition of non-forfeiture sanctions. AT&T at 50; Excel at 13 n.37; MCI at 57; Sprint at 56 n.37.

⁹²⁶ AT&T at 51.

depend on the specific facts and circumstances presented in a particular case. We find, nevertheless, that a BOC will have a full and fair opportunity to submit evidence and arguments challenging the imposition of a prescribed sanction within the statutory 90-day period.

356. We conclude that the phrase "opportunity for hearing" in section 271(d)(6)(A) does not require a trial-type hearing before an ALJ prior to the imposition of non-forfeiture enforcement measures. Although we recognize, as PacTel and USTA suggest, that hearings may be necessary to resolve material questions of fact, such as when oral testimony or cross-examination is required, we do not agree that trial-type hearings before an ALJ are required before the Commission imposes any non-forfeiture sanction.⁹²⁷ We find instead that, regardless of whether the Commission is imposing a non-forfeiture sanction in a proceeding commenced on its own motion or in the context of a complaint proceeding, the Commission can satisfy the hearing requirement of section 271(d)(6)(A) through written submissions rather than oral testimony.⁹²⁸ Finally, we affirm our tentative conclusion that Congress, by imposing a 90-day deadline for complaints, did not intend to afford BOCs trial-type hearings in all enforcement proceedings pursuant to section 271(d)(6)(B).

X. FINAL REGULATORY FLEXIBILITY CERTIFICATION

357. The Commission certified in the Notice that the proposed rules would not have a significant economic impact on a substantial number of small entities because the proposed rules did not pertain to small entities.⁹²⁹ Written public comment was requested on this proposed certification, and only one comment was received.⁹³⁰ For the reasons stated below, we certify that the rules adopted herein will not have a significant economic impact on a substantial number of small entities. This certification conforms to the Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).⁹³¹

358. The RFA incorporates the definition of small business concerns set forth in 15 U.S.C. § 632 (small business concerns are independently owned and operated, not dominant in their field of operations, and meet any additional criteria established by the Small Business Administration (SBA)). The rules we adopt in this Order implement the non-accounting separate affiliate and nondiscrimination provisions of sections 271 and 272 of the Act, and will apply to

⁹²⁷ See 1993 Enforcement Order, 8 FCC Rcd at 2625-2626, ¶ 65; see also, e.g., Elehew Kawika Freemon and Lucille K. Freemon v. AT&T, Hearing Designation Order, 9 FCC Rcd 4032 (1994).

⁹²⁸ See AT&T at 50.

⁹²⁹ Notice at ¶ 165 (citing 5 U.S.C. § 605(b)).

⁹³⁰ National Telephone Cooperative Association Comments at 5-6.

⁹³¹ 5 U.S.C. § 601 *et seq.* SBREFA was enacted as Subtitle II of the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996).

the BOCs when they enter previously restricted markets. The Notice stated that, because BOCs are dominant in their field of operations, they are by definition not small entities and therefore no regulatory flexibility analysis is required.⁹³² We now note as well that none of the BOCs is a small entity because each BOC is an affiliate of a Regional Holding Company (RHC), and all of the BOCs or their RHCs have more than 1,500 employees.⁹³³ The order also clarifies the joint marketing restrictions that will apply to the nation's largest interexchange carriers for an interim period pursuant to section 271.⁹³⁴ The most recent data shows that only AT&T, MCI, and Sprint meet the statutory threshold.⁹³⁵ Moreover, these carriers are not small entities under the SBA definition because each has more than 1,500 employees.⁹³⁶

359. NTCA contends that small incumbent LECs should be considered small entities under the SBA's definition, and therefore, the basis of the proposed certification was incorrect.⁹³⁷ The certification contained in the Notice applied both to our proposed rules implementing sections 271 and 272 and to our proposed rules addressing LEC interexchange services. This Order implements only sections 271 and 272, and, as we have indicated, affects only the BOCs, AT&T, MCI and Sprint. NTCA's arguments concerning small incumbent LECs are not relevant to this Order, therefore, and will be addressed in a separate Order in this docket.

360. We therefore certify, pursuant to section 605(b) of the RFA, that the rules adopted in this order do not have a significant economic impact on a substantial number of small entities. The Commission shall provide a copy of this certification to the Chief Counsel for Advocacy of the SBA, and include it in the report to Congress pursuant to the SBREFA.⁹³⁸ The certification will also be published in the Federal Register.⁹³⁹

⁹³² Notice at ¶ 165.

⁹³³ Federal Communications Commission, CCB, Industry Analysis Division, Preliminary Domestic Information From Statistics of Communications Common Carriers, Tbl. 1.1 (July 1996).

⁹³⁴ Specifically, the Order implements the joint marketing restrictions of section 271(e), which apply to interexchange carriers that serve "greater than 5 percent of the nation's presubscribed access lines." See 47 U.S.C. § 271(e).

⁹³⁵ Federal Communications Commission, CCB, Industry Analysis Division, Long Distance Market Shares: Second Quarter, 1996, Tbl. 4 (Sept. 1996).

⁹³⁶ SBA regulations, 13 C.F.R. § 121.201, define small telecommunications entities in SIC Code 4813 (Telephone Communications Except Radiotelephone) as entities with fewer than 1,500 employees.

⁹³⁷ NTCA Comments at 5-6.

⁹³⁸ 5 U.S.C. § 801(a)(1)(A).

⁹³⁹ 5 U.S.C. § 605(b).

361. Report to Congress. The Commission shall send a copy of this FRFA, along with this Order, in a report to Congress pursuant to the SBREFA, 5 U.S.C. § 801(a)(1)(A). A copy of this FRFA will also be published in the Federal Register.

XI. FURTHER NOTICE OF PROPOSED RULEMAKING

A. Information Disclosure Requirements under Section 272(e)(1)

1. Background

362. Section 272(e)(1) states that BOCs "shall fulfill any requests from an unaffiliated entity for telephone exchange service and exchange access within a period no longer than the period in which it provides such telephone exchange service and exchange access to itself or to its affiliates."⁹⁴⁰ In the Notice, we sought comment on how to implement section 272(e)(1) and specifically inquired whether reporting requirements for service intervals analogous to those imposed by Computer III and ONA would be sufficient.⁹⁴¹ We concluded above, in Part VI.A, that specific public disclosure requirements are necessary to implement section 272(e)(1) effectively. We also noted that the record does not provide sufficient detail for us to determine whether the current ONA disclosure requirements are suitable for assessing compliance with section 272(e)(1), or whether another proposal, such as AT&T's proposed reporting requirements, would be a better approach.

2. Comments

363. AT&T, Teleport, and MCI support the imposition of reporting requirements to implement section 272(e)(1) and argue that the existing ONA installation and maintenance reporting requirements are insufficient.⁹⁴² AT&T suggests, for example, that the service interval reporting requirements established in the ONA proceeding measure average response times, and would not provide an adequate mechanism for determining whether a BOC is complying with section 272(e)(1).⁹⁴³

⁹⁴⁰ 47 U.S.C. § 272(e)(1).

⁹⁴¹ Notice at ¶ 85.

⁹⁴² AT&T at 36-37; Teleport Oct. 8 Ex Parte at 1; Letter from Frank W. Krogh, Appellate Counsel, Regulatory Law, MCI to William F. Caton, Acting Secretary, FCC at 1 (MCI Nov. 1 Reporting Ex Parte). Other parties also express dissatisfaction with ONA reporting. See e.g., Time Warner at 23.

⁹⁴³ AT&T at 36-37. According to AT&T, reliance on average response times allows a BOC to respond quickly to urgent requests of its affiliate and slowly to the less important requests of its affiliate, while doing the reverse for unaffiliated entities, thereby maintaining identical average response times for both entities, but discriminating against unaffiliated entities. Id.

364. AT&T proposes a reporting scheme that is based on measures it currently uses to monitor the quality of access services provided to it by LECs.⁹⁴⁴ AT&T proposes that the BOCs report data in eleven categories, most of which are broken down into subcategories according to the type of access service provided. AT&T's proposal includes relatively specific units of measure for these categories, such as, for example, the percentage of circuits installed within each successive twenty-four hour period, until a ninety-five percent installation level is reached.⁹⁴⁵ According to AT&T, LECs currently track information in these categories to monitor the service they provide to AT&T.⁹⁴⁶ Teleport proposes a reporting format that includes eight service categories for both installation and service performance.⁹⁴⁷ MCI proposes categories based on those used in Automated Reporting Management Information Systems (ARMIS), including additional categories for billing disputes and payment intervals.⁹⁴⁸ MCI proposes quarterly reporting broken down among the BOC, its affiliate, and all other unaffiliated entities.⁹⁴⁹

365. The BOCs oppose AT&T's proposal. Bell Atlantic, for instance, states that some of the categories in AT&T's proposal ask for information beyond the information AT&T currently requests from the BOCs.⁹⁵⁰ Bell Atlantic further argues that AT&T improperly proposes that the BOCs report on intermediate checkpoints that do not provide information on the ultimate timeliness of the BOCs' provision of service.⁹⁵¹ Several BOCs argue that the information AT&T seeks is already available in existing ARMIS reports.⁹⁵² Ameritech opposes the monthly updates proposed by AT&T, favoring quarterly updates instead.⁹⁵³ Ameritech opposes reporting that would provide detail below a BOC's total service region.⁹⁵⁴ Ameritech favors consolidating AT&T's DS0 subcategories into a single DS0 category.⁹⁵⁵ PacTel argues that the disclosure of

⁹⁴⁴ AT&T Oct. 3 Ex Parte at 5.

⁹⁴⁵ Id.

⁹⁴⁶ Id. at 2.

⁹⁴⁷ Teleport Oct. 24 Ex Parte, Attachments 1 and 2.

⁹⁴⁸ MCI Nov. 1 Reporting Ex Parte at 2-3.

⁹⁴⁹ Id.

⁹⁵⁰ Bell Atlantic Oct. 16 Ex Parte at 2 n.1.

⁹⁵¹ Id. at 2.

⁹⁵² BellSouth Oct. 29 Ex Parte at 2; PacTel Oct. 18 Ex Parte at 4.

⁹⁵³ Ameritech Oct. 23 Ex Parte, Attachment.

⁹⁵⁴ Id.

⁹⁵⁵ Id.

the absolute number of requests placed by its affiliate would reveal competitively sensitive information, and that disclosure of relative data, such as the percentage of missed appointments and average time intervals, would provide sufficient information to monitor BOC behavior.⁹⁵⁶

366. BOCs also oppose Teleport's proposal. PacTel disagrees with Teleport's suggestion that BOCs provide data for each exchange area in their territory.⁹⁵⁷ PacTel also indicates that reporting on DS0 as a separate category would unfairly disadvantage the one interexchange carrier that dominates the DS0 market.⁹⁵⁸

367. While the BOCs generally oppose reporting requirements, they state that, if the Commission imposes a reporting requirement, the ONA format should be utilized because it is currently in place and is well-understood.⁹⁵⁹ PacTel provides an example of a modified ONA report that reflects the services provided to interLATA telecommunications providers.⁹⁶⁰ Ameritech indicates that it would not oppose a reporting requirement that compares data for BOC affiliates with aggregated data for all unaffiliated carriers.⁹⁶¹

3. Discussion

368. In order to implement section 272(e)(1) effectively, we concluded that the BOCs must make publicly available the intervals within which they provide service to their affiliates. We concluded that, without this requirement, competitors will not have the information they require to evaluate whether the BOCs are fulfilling their requests for telephone exchange service and exchange access in compliance with section 272(e)(1).⁹⁶²

369. Method of information disclosure. In requiring the BOCs to disclose information regarding the service intervals within which they provide telephone exchange service and exchange access, we seek to avoid imposing any unnecessary administrative burdens on the BOCs, unaffiliated entities, and the Commission. Consequently, we tentatively conclude that the BOCs need not submit directly to the Commission the data that must be disclosed under section 272(e)(1). Instead, we tentatively conclude that, upon receiving permission to provide interLATA services pursuant to section 271, each BOC must submit a signed affidavit stating: 1) the BOC

⁹⁵⁶ PacTel Oct. 18 Ex Parte at 4.

⁹⁵⁷ PacTel Oct. 23 Ex Parte at 4.

⁹⁵⁸ Id. at 3.

⁹⁵⁹ E.g., PacTel at 37; USTA at 26; Bell Atlantic Oct. 15 Ex Parte at 2; NYNEX Oct. 23 Ex Parte at 4.

⁹⁶⁰ PacTel Oct. 18 Ex Parte at 4, Attachment 6.

⁹⁶¹ Ameritech Oct. 23 Ex Parte, Attachment.

⁹⁶² See supra paragraph 242.

will maintain the required information in a standardized format; 2) the information will be updated in compliance with our rules; 3) the information will be maintained accurately; and 4) how the public will be able to access the information. We tentatively conclude that, if a BOC makes any material change in the manner in which the information covered by the affidavit is made available to the public, it must submit an updated affidavit within 30 days of the change. Further, we tentatively conclude that each BOC must submit an annual affidavit each year thereafter, affirming that the BOC has complied with the four requirements set out above during the preceding year. We note that, in order to address potential complaints alleging discrimination pursuant to section 272(e)(1), the BOCs are likely to maintain information regarding the service they provide to their affiliates and to unaffiliated entities, regardless of whether they must disseminate such information publicly or file it with the Commission. Therefore, we tentatively conclude that maintaining this information for public dissemination will not impose a significant additional burden on the BOCs. We seek comment on the foregoing tentative conclusions.

370. We tentatively conclude that the BOCs must make such information available to the public in at least one of their business offices during regular business hours, and must include this information in their annual affidavits. We seek comment on this tentative conclusion. We seek comment on whether this information should also be available electronically. For example, we seek comment on whether the BOCs should make this information available on the Internet, or whether the information should be available through another electronic mechanism. We also seek comment on other methods to facilitate the access and use of this information by unaffiliated entities, including small entities.

371. Service categories and units of measure. We seek comment on whether the BOCs should maintain the information described below in a standardized format, and seek comment on whether the format in Appendix C would be appropriate. Parties favoring an alternative format should submit examples of their proposals.

372. We seek comment on whether we should require the BOCs to maintain information in the following service categories: 1) successful completion according to desired due date, measured in a percentage; 2) time from the BOC-promised due date to circuit being placed in service, measured in terms of the percentage installed within each successive twenty-four hour period until ninety-five percent complete; 3) time to firm order confirmation, measured in terms of the percentage received within each successive twenty-four hour period until ninety-five percent complete; 4) time from PIC change requests to implementation, measured in terms of percentage implemented within each successive six hour period until ninety-five percent complete; 5) time to restore and trouble duration, measured in terms of the percentage restored within each successive one hour interval until ninety-five percent of incidents are resolved; 6) time to restore PIC after trouble incident, measured by percentage restored within each successive one hour interval until ninety-five percent restored; and 7) mean time to clear network and the average

duration of trouble, measured in hours. We seek comment on whether any additional categories proposed by commenters should be included.⁹⁶³

373. We have sought comment on whether the BOCs should disclose the interval between the due date promised by the BOC and the time a circuit is actually placed in service, measured in terms of the percentage of circuits installed within each successive twenty-four hour period.⁹⁶⁴ We have sought comment on a category that differs from AT&T's proposed category, which would measure a BOC's response time in relation to a customer's desired due date, because we recognize that the BOCs have no control over a customer's requested due date.⁹⁶⁵ We have proposed this category because the BOCs have control over the due date they promise at the time an order is placed. Further, the amount of delay in installing a circuit, and not just whether a due date was missed, may be a significant source of difficulty to a customer.⁹⁶⁶ Because our service category differs from the service category proposed by AT&T, we seek comment on whether any corresponding changes to the unit of measure are warranted.

374. We seek comment on whether we should require the BOCs to disclose the BOC-promised due date itself, *i.e.*, the length of the interval promised by the BOCs to their affiliates at the time an order is placed. Parties favoring such a disclosure should provide a detailed description of the appropriate unit of measure and level of aggregation for these disclosures.

375. We seek comment on whether our proposed service categories and units of measure for these categories are more appropriate to implement section 272(e)(1) than the categories currently included in the ONA installation and maintenance reports or than PacTel's proposed modification of ONA installation and maintenance reports.⁹⁶⁷ Our proposal addresses the provision of exchange access to interLATA service providers, unlike ONA reports, which address the provision of ONA unbundled elements to enhanced service providers.⁹⁶⁸ The units of measure

⁹⁶³ See AT&T Oct. 3 Ex Parte at 5; Teleport Oct. 24 Ex Parte, Attachment 1; MCI Nov. 1 Reporting Ex Parte, Attachment.

⁹⁶⁴ The date promised by a BOC is sometimes referred to as the "FOC date." See Teleport Oct. 24 Ex Parte, Attachment 2 at 1.

⁹⁶⁵ See Bell Atlantic Oct. 16 Ex Parte at 2; NYNEX Oct. 23 Ex Parte at 6, n.10; Ameritech Oct. 23 Ex Parte, Attachment.

⁹⁶⁶ For example, if a BOC misses a due date by several hours, this will probably cause less harm to a competitor than if the BOC misses a due date by several days. See Teleport Oct. 8 Ex Parte at 7 (indicating that reporting a BOC's total repair time provides more complete information regarding the service interval provided by the BOC than reporting only whether a due date has been met).

⁹⁶⁷ PacTel Oct. 18 Ex Parte, Attachment 6.

⁹⁶⁸ In the BOC ONA Reconsideration Order, the Commission determined that the ONA installation and maintenance reporting requirements should include 49 service categories presented in a standardized format. Filing and Review of Open Network Architecture Plans, CC Docket No. 88-2, Memorandum Opinion and Order on

in our proposal are more precise than the ONA intervals. We therefore seek comment on whether these measures will provide a better guide for unaffiliated entities and the Commission to determine whether the BOCs are complying with section 272(e)(1).

376. We recognize that our proposal is patterned after arrangements regarding the provision of access between interexchange carriers and LECs. We seek comment on whether these categories will also provide sufficient information to ISPs, and whether our proposal is sufficient to implement the nondiscriminatory provision of telephone exchange service in accordance with section 272(e)(1).

377. We do not believe that the requirements proposed here will impose a significant additional administrative burden on the BOCs, particularly because under our existing price cap rules, the BOCs must track service intervals for end-users as part of their service quality reporting requirements.⁹⁶⁹ Nevertheless, we seek comment on whether, and to what extent, the industry or state regulators currently collect data using the service categories and units of measure included in our proposal, and the need for the BOCs to modify their current tracking systems to comply with our proposal.⁹⁷⁰

378. Several BOCs argue that extensive reporting of their affiliates' requests could cause competitive harm to their affiliates.⁹⁷¹ Specifically, PacTel argues that relative data such as the percentage of missed appointments and average time intervals provide sufficient information to monitor BOC behavior, and that the disclosure of absolute figures for the number of orders placed by an affiliate would reveal competitively sensitive proprietary information.⁹⁷² We seek comment on whether our proposal, which uses percentages and averages and does not require disclosure of the absolute number of BOC affiliate requests, adequately protects the competitive interests of BOC affiliates. Any party favoring other levels of aggregation should provide a specific alternative proposal and explain why that alternative proposal is sufficient to implement section 272(e)(1). The party should also explain how its alternative proposal addresses commenters' concerns regarding the inadequacy of ONA installation and maintenance reporting requirements.⁹⁷³

Reconsideration, 5 FCC Rcd 3084, 3093, ¶¶ 76-79 and app. B (1990) (subsequent history omitted).

⁹⁶⁹ See generally, Policy and Rules Concerning Rates for Dominant Carriers, AAD 92-47, Memorandum Opinion and Order, 8 FCC Rcd 7474 (1993) (modifying the service quality and other reporting requirements imposed after the imposition of price cap regulation).

⁹⁷⁰ Compare AT&T Oct. 3 Ex Parte at 2 with Bell Atlantic Oct. 16 Ex Parte at 2 n.1.

⁹⁷¹ NYNEX Reply at 23 & n.72; PacTel Reply at 18-19; Bell Atlantic Sept. 27 Ex Parte at 1-2; BellSouth Oct. 29 Ex Parte at 3.

⁹⁷² PacTel Oct. 18 Ex Parte at 4.

⁹⁷³ See e.g., AT&T at 36-38.

379. Frequency of Updates and Length of Retention. We seek comment on how often the BOCs should be required to update the data that they must maintain.⁹⁷⁴ For example, we seek comment on whether the BOCs should update the data quarterly or monthly. Parties should substantiate their positions by comparing the amount of underlying data used to produce ONA reports or other reports that are prepared on a quarterly basis, with the amount of data that will be used to produce the information in our proposal. We also seek comment on how long the BOCs must retain the data that they must maintain.

380. Levels of Aggregation. Because section 272(e)(1) states that the BOCs must fulfill requests for unaffiliated entities in the period of time that the BOCs provide service to "itself or to its affiliates," we seek comment on whether the BOCs should aggregate their own requests and the requests of all of their affiliates for each service category, or whether they should maintain data for each affiliate and themselves separately.⁹⁷⁵ We seek comment on whether the BOCs should maintain separate data for each state in their service regions. Parties favoring other levels of aggregation, such as by BOC region, or by exchange area, should provide detailed support for their proposals.⁹⁷⁶

381. We seek comment on whether the BOCs should provide the information required in service categories four and six, described above in paragraph 372, by carrier identification code (CIC). We seek comment on whether the BOCs should provide the information required by service category seven in two subcategories: DS1 Non-Channelized and DS0. We seek comment on whether information in all other service categories should be broken down into three subcategories: DS3, DS1, and DS0. We also seek comment on whether, in the alternative, we should further divide the DS0 subcategory into DS0 Voice Grade and DS0 Digital, as suggested by AT&T.⁹⁷⁷

382. Consistency with other reporting requirements. We seek comment on the extent of overlap, if any, between the disclosure requirements we propose in this Further Notice and reporting currently required by state commissions.⁹⁷⁸ We also seek comment on whether the information provided under ARMIS form 43-05 provides sufficient information to implement section 272(e)(1), as several BOCs suggest,⁹⁷⁹ or whether further disaggregation of the ARMIS

⁹⁷⁴ Ameritech Oct. 23 Ex Parte, Attachment; MCI Nov. 1 Reporting Ex Parte at 1-2.

⁹⁷⁵ 47 U.S.C. § 272(e)(1).

⁹⁷⁶ See e.g., Teleport Oct. 24 Ex Parte; Ameritech Oct. 23 Ex Parte at 1.

⁹⁷⁷ AT&T Oct. 3 Ex Parte at 5. Contra Ameritech Oct. 23 Ex Parte, Attachment.

⁹⁷⁸ See e.g., SBC Oct. 8 Ex Parte, Attachments; PacTel Oct. 18 Ex Parte, Attachments 1 and 1; SBC Nov. 6 Ex Parte at 2-3; U S West Nov. 19 Ex Parte at 2.

⁹⁷⁹ PacTel Oct. 18 Ex Parte at 4; BellSouth Oct. 29 Ex Parte at 2-3; U S West Nov. 19 Ex Parte at 2.

service categories is necessary, as MCI suggests.⁹⁸⁰ Parties that favor relying on ARMIS data alone, rather than imposing an information disclosure requirement under section 272(e)(1), should explain why ARMIS reports are sufficient, given that ARMIS reports must be filed on an annual basis and that they focus on services provided to the end-user, rather than services provided between carriers.⁹⁸¹ Any parties contending that sufficient information to enforce section 272(e)(1) is available from other sources should explain, in detail, the categories and units of measure included in these alternative sources as compared with our proposal. Finally, we note that much of Teleport's proposal appears directed toward the implementation of local competition by incumbent LECs, and therefore does not address service intervals provided by the BOCs. Teleport has raised many of these same proposals in its petition for reconsideration of the First Interconnection Order.⁹⁸² We tentatively conclude, therefore, that we should limit the scope of the proposals considered in this docket to requirements necessary to implement the service interval requirements of section 272(e)(1).⁹⁸³ We seek comment on this tentative conclusion.

B. Procedural Matters

1. Ex Parte Presentations

383. This is a non-restricted notice-and-comment rulemaking proceeding. Ex parte presentations are permitted, in accordance with the Commission's rules, provided that they are disclosed as required.⁹⁸⁴

2. Regulatory Flexibility Analysis

384. Section 603 of the Regulatory Flexibility Act, (RFA) as amended,⁹⁸⁵ requires an initial regulatory flexibility analysis in notice-and-comment rulemaking proceedings, unless we

⁹⁸⁰ MCI Nov. 1 Reporting Ex Parte.

⁹⁸¹ The 1996 Act requires ARMIS reports to be filed annually. 1996 Act, 110 Stat. 56, 129, sec. 402(B)(2)(b) (to be codified at a note following 47 U.S.C. § 214); see generally, Policy and Rules Concerning Rates for Dominant Carriers, AAD 92-47, Memorandum Opinion and Order, 8 FCC Rcd 7474 (1993) (modifying service quality and other reporting requirements).

⁹⁸² See Teleport Communications Group, Inc., Petition for Reconsideration of the First Interconnection Order, CC Docket No. 96-98 at 5-6 (Sept. 30, 1996); Letter from J. Manning Lee, Vice President Regulatory Affairs, Teleport Communications Group, Inc., to William F. Caton, Secretary, FCC, Oct. 14, 1996, CC Docket No. 96-98, Attachments 1 and 2.

⁹⁸³ See also SBC Nov. 6 Ex Parte at 1, 3 (arguing that AT&T's proposal contains reporting requirements relating to the provision of unbundled network elements).

⁹⁸⁴ See generally 47 C.F.R. §§ 1.1200, 1.1202, 1.1204, 1.1206.

⁹⁸⁵ 5 U.S.C. § 603.

certify that "the rule will not, if promulgated, have a significant economic impact on a significant number of small entities."⁹⁸⁶ A "small entity" is an entity that is "independently owned and operated, . . . not dominant in its field of operation," and meets any additional criteria established by the Small Business Administration (SBA).⁹⁸⁷ SBA regulations define small telecommunications entities in SIC code 4813 (Telephone Companies Except Radio Telephone) as entities with fewer than 1,500 employees.⁹⁸⁸ This proceeding pertains to the BOCs which, because they are dominant in their field of operation and have more than 1,500 employees, do not qualify as small entities under the RFA.⁹⁸⁹ We now note as well that none of the BOCs is a small entity because each BOC is an affiliate of a Regional Holding Company (RHC), and all of the BOCs or their RHCs have more than 1,500 employees.⁹⁹⁰ We therefore certify, pursuant to section 605(b) of the RFA, that the rules, if promulgated, will not have a significant economic impact on a substantial number of small entities. The Secretary shall send a copy of this Further Notice, including this certification and statement, to the Chief Counsel for Advocacy of the Small Business Administration.⁹⁹¹ A copy of this certification will also be published in the Federal Register.

3. Initial Paperwork Reduction Act of 1995 Analysis

385. This Further Notice contains either a proposed or modified information collection. As part of its continuing effort to reduce paperwork burdens, we invite the general public and the Office of Management and Budget (OMB) to take this opportunity to comment on the information collections contained in this Further Notice, as required by the Paperwork Reduction Act of 1995, Pub. L. No. 104-13. Public and agency comments are due at the same time as other comments on this Further Notice; OMB comments are due 60 days from date of publication of this Notice in the Federal Register. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

⁹⁸⁶ Id. § 605(b).

⁹⁸⁷ The RFA incorporates the definition of small business concerns set forth in 15 U.S.C. § 632. 5 U.S.C. § 601(3).

⁹⁸⁸ 13 C.F.R. § 121.20.

⁹⁸⁹ Federal Communications Commission, CCB, Industry Analysis Division, Preliminary Domestic Information From Statistics of Communications Common Carriers table 1.1 (July 1996).

⁹⁹⁰ Id.

⁹⁹¹ 5 U.S.C. § 605(b).

4. Comment Filing Procedures

386. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before February 19, 1997, and reply comments on or before March 21, 1997. To file formally in this proceeding, you must file an original and six copies of all comments, reply comments, and supporting comments. If you want each Commissioner to receive a personal copy of your comments, you must file an original and eleven copies. Comments and reply comments should be sent to Office of the Secretary, Federal Communications Commission, 1919 M Street, N.W., Room 222, Washington, D.C., 20554, with a copy to Janice Myles of the Common Carrier Bureau, 1919 M Street, N.W., Room 544, Washington, D.C., 20554. Parties should also file one copy of any documents filed in this docket with the Commission's copy contractor, International Transcription Services, Inc., 2100 M Street, N.W., Suite 140, Washington, D.C., 20037. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center, 1919 M Street, N.W., Room 239, Washington, D.C., 20554.

387. Comments and reply comments must include a short and concise summary of the substantive arguments raised in the pleading. Comments and reply comments must also comply with Section 1.49 and all other applicable sections of the Commission's Rules.⁹⁹² We also direct all interested parties to include the name of the filing party and the date of the filing on each page of their comments and reply comments. All parties are encouraged to utilize a table of contents, regardless of the length of their submission. Parties may not file more than a total of ten (10) pages of ex parte submissions, excluding cover letters. This 10 page limit does not include: (1) written ex parte filings made solely to disclose an oral ex parte contact; (2) written material submitted at the time of an oral presentation to Commission staff that provides a brief outline of the presentation; or (3) written materials filed in response to direct requests from Commission staff. Ex parte filings in excess of this limit will not be considered as part of the record in this proceeding.

388. Parties are also asked to submit comments and reply comments on diskette. Such diskette submissions would be in addition to and not a substitute for the formal filing requirements addressed above. Parties submitting diskettes should submit them to Janice Myles of the Common Carrier Bureau, 1919 M Street, N.W., Room 544, Washington, D.C., 20554. Such a submission should be on a 3.5 inch diskette formatted in an IBM compatible form using MS DOS 5.0 and WordPerfect 5.1 software. The diskette should be submitted in "read only" mode. The diskette should be clearly labelled with the party's name, proceeding, type of pleading (comment or reply comments) and date of submission. The diskette should be accompanied by a cover letter.

⁹⁹² See 47 C.F.R. § 1.49. However, we require here that a summary be included with all comments and reply comments, regardless of length. This summary may be paginated separately from the rest of the pleading (e.g., as "i, ii").

389. Written comments by the public on the proposed and/or modified information collections are due February 19, 1997, and reply comments must be submitted not later than March 21, 1997. Written comments must be submitted by the OMB on the proposed and/or modified information collections on or before 60 days after date of publication in the Federal Register. In addition to filing comments with the Secretary, a copy of any comments on the information collections contained herein should be submitted to Dorothy Conway, Federal Communications Commission, Room 234, 1919 M Street, N.W., Washington, D.C., 20554, or via the Internet to dconway@fcc.gov and to Timothy Fain, OMB Desk Officer, 10236 NEOB, 725 - 17th Street, N.W., Washington, D.C., 20503 or via the Internet to fain_t@al.eop.gov.

XII. ORDERING CLAUSES

390. Accordingly, IT IS ORDERED that pursuant to sections 1, 2, 4, 201-205, 215, 218, 220, 271, 272, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154, 201-205, 215, 218, 220, 271, 272, and 303(r) the REPORT AND ORDER IS ADOPTED, effective 30 days after publication of a summary in the Federal Register. The collections of information contained within are contingent upon approval by the Office of Management and Budget.

391. IT IS FURTHER ORDERED that pursuant to sections 1, 2, 4, 201-205, 215, 218, 220, 271, 272, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154, 201-205, 215, 218, 220, 271, 272, and 303(r) the FURTHER NOTICE OF PROPOSED RULEMAKING IS ADOPTED.

392. IT IS FURTHER ORDERED that the Secretary shall send a copy of this FURTHER NOTICE OF PROPOSED RULEMAKING, including the regulatory flexibility certification, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with paragraph 603(a) of the Regulatory Flexibility Act, 5 U.S.C. §§ 601 *et seq.*

393. IT IS FURTHER ORDERED that the MFS Petition to Consolidate Proceedings in CC Docket Nos. 96-149, 85-229, 90-623, 95-20, and CCBPol 96-09 filed on July 25, 1996 is DENIED.

394. IT IS FURTHER ORDERED that Part 53 of the Commission's Rules, 47 C.F.R. § 53 is ADDED as set forth in Appendix B attached hereto.

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton
Acting Secretary

22089

Common Carrier, Interconnection
Tariff, Rejection of

AT&T's application for Section 214 authority to offer Basic Packet Switching Service (BPSS) granted, with conditions attached to authorization.

-Basic Packet Switching Service

FCC 83-221

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

In re Application of

AMERICAN TELEPHONE AND TELEGRAPH
COMPANY

File No. W-P-C-
4841

For Authority under Section 214 of the Communications Act of 1934, as amended, to Install and Operate Packet Switches at Specified Telephone Company Locations in the United States.

MEMORANDUM OPINION, ORDER AND AUTHORIZATION

(Adopted: May 12, 1983; Released May 26, 1983)

BY THE COMMISSION: COMMISSIONER JONES CONCURRING IN THE
RESULT.

I. Introduction

1. Before the Commission is an application for authorization pursuant to Section 214 of the Communications Act, 47 U.S.C. § 214, filed by the American Telephone and Telegraph Company (AT&T) to install and operate "packet facilities" at specified telephone company locations in the United States.¹ The facilities would be employed

¹ A petition seeking denial of AT&T's § 214 application has been filed by the Computer and Business Equipment Manufacturers Association (CBEMA). Tymnet, Inc. (Tymnet) has submitted a petition to deny or, alternatively, to condition the authorization. A late filed petition to deny also was filed by GTE Telenet Communications Corporation (Telenet). The Independent Data Communications Manufacturing Association, Inc. (IDCMA) filed comments regarding AT&T's request which relate to the Commission's Registration Program (47 C.F.R. Part 68). Satellite Business Systems (SBS) filed limited comments concerning Tariff FCC Nos. 267 and 268. Finally, the International Business Machine Corporation (IBM) filed comments. Also before the Commission are reply comments filed by AT&T and the Association of Data Processing Service Organizations, Inc. (ADAPSO), and a letter from IDCMA commenting on information exchange procedures between American Bell Inc. (ABI) and AT&T. In addition, on January

in a new service offering of packet switch facility capacity for use by customers in the construction of private packet networks. AT&T identifies the offering as the Basic Packet Switching Service (BPSS). Also filed with AT&T's Section 214 authorization request were three illustrative tariffs. The first of the tariff filings would revise Tariff FCC No. 270 by setting out initial rates and regulations for BPSS. A second would revise Tariff FCC No. 267 to provide for the connection of AT&T's 56 kbps and 9.6 kbps Dataphone Digital Service (DSS) to BPSS. Finally, revisions to Tariff FCC No. 268 and the 19 Bell Operating Companies (BOC) tariffs would provide for a new offering of a 56 kbps. Digital Central Office Connecting Facility. This facility would be provided between an other common carrier (OCC) terminal location and a telephone company central office for connection to BPSS. Also before the Commission is a petition, filed by the Computer and Business Equipment Manufacturers Association (CBEMA), for limited reconsideration and clarification of the Commission's decision to reject AT&T's March, 1982 offering of BPSS (BPSS decision).² On balance, we believe that the public interest would be served by BPSS, and, accordingly, we approve AT&T's request for authorization for this service as discussed below.

II. Background

2. The nature of the proposed service and its development are summarized in the BPSS decision. Briefly, in 1978, AT&T sought authority from this Commission to offer the Advanced Communications Service (ACS), an integrated end-to-end service that included packet transport for the carriage of digitized information.³ The application was later withdrawn so that the service could be redeveloped into separated basic and enhanced offerings according to the guidelines established in our *Second Computer Inquiry* (*Computer II*).⁴ The *Computer II* decisions held, *inter alia*, that AT&T could provide basic services but could only offer enhanced services

27, 1983, CBEMA filed further reply comments in response to AT&T's reply. These late filed pleadings will be considered as informal comments. Cf. 47 C.F.R. § 21.30(b). On March 18, 1983 CBEMA also filed a petition to institute a proceeding to establish that packet switching services should be offered in the competitive marketplace as enhanced services under *Computer II*. CBEMA states that such a proceeding will allow the Commission to develop additional factual or policy bases that may be necessary to confirm this decision. Because instituting a proceeding inviting additional public comment on packet switching in general will unreasonably delay Commission action on AT&T's BPSS application, we will not institute the requested proceeding. Accordingly, CBEMA's petition is denied. However, we have considered the points raised in that petition as informal comments.

² American Telephone and Telegraph Company, Bell Packet Switching Service, 91 FCC 2d 1 (1982).

³ See Advanced Communications Service, Docket CC79-117.

⁴ Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), 77 FCC 2d 384 (1980) (Final Decision), *reconsideration*, 84 FCC 2d 50 (1980), *further reconsideration*, 88 FCC 2d 512 (1981), *aff'd sub nom.* CCIA v.

through a separate subsidiary. On June 10, 1982, the Commission approved the establishment of AT&T's separate subsidiary, American Bell, Inc. (ABI). ABI has since announced that it will provide the enhanced portion of the earlier proposed ACS, now termed Advanced Information Systems (AIS), and that it will interconnect its nodes with the packet transmission services offered by common carriers. On March 1, 1982, AT&T filed proposed revisions to Tariffs FCC Nos. 267 and 268, and a new Tariff FCC No. 270.⁵ In its cost support data for Tariff 270, AT&T described the Bell Packet Switching Service (BPSS) as an offering of a dedicated facility, located on AT&T premises, that, when interconnected with other equivalent packet facilities using 56 kbps transmission channels, could provide a private packet transmission network. Access connections to the packet facility ports from users' premises and interconnection between the packet trunk ports could be provided, according to AT&T's filing, by any common carrier through a Digital Central Office Connecting Facility provided by AT&T. Additionally, the revisions to Tariffs 267 and 268 provided for interconnecting DDS transmission facilities suitable for that purpose. In its filing, AT&T noted that ABI was its only customer for BPSS.

3. In the BPSS decision, we rejected AT&T's proposed tariff revisions on the grounds that BPSS, as offered, could create channels of communications and therefore required certification pursuant to Section 214 of the Communications Act, 47 U.S.C. § 214.⁶ We also expressed our concern that the BPSS offering appeared to be primarily tailored for the separate subsidiary, as it appeared that BPSS allowed ABI the exclusive use of computer facilities located on AT&T's premises. The decision made it clear, however, that the Commission "continue(s) to support the addition of new and innovative improvements in the basic network" and that "we are not . . . preventing AT&T from providing a basic packet switching service under tariff." BPSS decision at 4. Rather, the decision requested AT&T to readjust its offering in response to the Commission's

FCC, 693 F.2d 198 (D.C. Cir. 1982), *petition for cert. filed*, 51 U.S.L.W. 3676 (U.S. Feb. 9, 10, 1983) (Nos. 82-1331, 82-1352).

⁵ Tariff FCC No. 270, which contains rates and regulations for services other than BPSS, became effective on March 17, 1983, when the Common Carrier Bureau, acting under delegated authority allowed AT&T's Terrestrial Digital Circuits, filing to take effect. In the Matter of American Telephone and Telegraph Company, Terrestrial Digital Circuits, Memorandum Opinion and Order, FCC 83-___ Mimeo No. 43s, released May ___, 1983.

⁶ Section 214 provides, in pertinent part, that:

No carrier shall undertake the construction of a new line or of an extension of any line, . . . or shall engage in transmission over or by means of such additional or extended line, unless and until there shall first have obtained from the Commission a certificate that the present or future public convenience and necessity require or will require the construction, or operation

concerns when it sought the appropriate certification pursuant to Section 214 of the Communications Act.⁷

4. On November 16, 1982, AT&T filed a "Request for Special Temporary Authority to Test the Bell Packet Switching Service" (STA).⁸ AT&T requested that it be allowed to temporarily interconnect, for the purpose of limited joint testing, the ABI premises located in New York, New York and Somerset, New Jersey with packet facilities owned by AT&T. Interconnection of the network would also require eight DDS 56 kbps circuits. Telenet filed comments in opposition to the request. On December 1, 1982, the Commission rejected Telenet's arguments and granted the requested STA, finding that testing at AT&T's own risk would permit the detection and solution of technical problems.⁹

5. In the current filing, AT&T states it has made several changes to BPSS including (1) renaming the service "Basic" Packet Switching Service (BPSS); (2) allowing shared use of BPSS facilities by unrelated users although all ports (access or trunk) are dedicated to a single user; and (3) making available 9.6 kbps ports in addition to the previously offered 56 kbps ports. AT&T also revised its tariffs to revise the rates for AT&T and OCC interconnection to BPSS using DDS facilities and to correct other defects noted by the Commission in its BPSS decision.¹⁰

III. Summary of Pleadings

6. By and large, Telenet, Tymnet and CBEMA's arguments restate positions similar to those filed in response to AT&T's March 1982 application. Generally, the parties argue that BPSS does not comply with principles set forth in the Commission's *Computer II* decisions, in that, as proposed, it is either an enhanced service or an offering of Customer Premises Equipment (CPE). In either case, they urge, AT&T must offer BPSS through its separate subsidiary, ABI. They also argue that BPSS is not a basic common carrier service because it does not contain basic transmission facilities, nor is it offered in a manner that would make it attractive to other than large and heavy users of communications. Telenet, Tymnet and CBEMA also argue that BPSS continues to favor ABI in its tariff construction and general network design. AT&T, in response, claims that the Commission in its BPSS decision has already made an

⁷ 91 FCC 2d at 15.

⁸ Letter to William J. Tricarico, Secretary, FCC from R.K. Jacobsen, VP, Network Engineering, AT&T (November 16, 1982).

⁹ Letter to R.K. Jacobsen from Chief, Common Carrier Bureau (December 1, 1982).

¹⁰ With its application AT&T also included a "Memorandum of Law" in which it argues that BPSS does not create new channels of communication within the meaning of Section 214 of the Act. Because we have already decided that issue in the BPSS decision, we will not further consider AT&T's "Memorandum" here.

explicit and well-founded determination that BPSS is a permissible network service.¹¹ It argues that petitioners are confusing terms, and notes that under *Computer II*, AT&T, as a regulated entity, is restricted to providing basic services, but that basic services are not so restricted as to involve only those with transmission facilities. AT&T characterizes BPSS facilities not as CPE, but as equipment that could be owned by itself or its fully separated subsidiary. Further, AT&T argues that the fact that ABI will be a major BPSS customer is simply not a reason to prevent AT&T from offering the service.

7. With regard to petitioners' arguments that BPSS is an enhanced service, both Telenet and Tymnet allege that dissimilar terminals will be able to communicate when interconnected by a BPSS network. Both argue that the communications protocol incorporated in BPSS will allow computers supplied by different manufacturers, installed at different points in time, utilizing different electrical levels, transmission speeds and error control procedures to communicate with each other. Telenet offers examples showing that terminals initially built to communicate only with other terminals using special communication protocols, such as Binary Synchronous Communications (BSC) protocol or High Data Level Communications (HDLC)¹² protocol, could now communicate with each other through a BPSS network. Telenet further claims that BPSS is an enhanced service because it allows user options associated with the delivery and control of messages through the network, and because BPSS ports can be either 9.6 kbps or 56 kbps, thereby allowing communication between terminals of dissimilar speed. AT&T responds that differing port speeds at either end of the network does not constitute, of itself, an enhanced service, since speed conversion is fundamental to basic service in the performance of network multiplexing functions. AT&T notes that Telenet compares BPSS to its own packet service and argues that there are material differences between Telenet's service and BPSS. AT&T further states that BPSS complies only with the 1980 CCITT X.25 Recommendation as published in Vol. VIII of the CCITT yellow books¹³ and as explicated in AT&T's Technical Reference PUB54010, whereas Telenet's service goes beyond that recommendation. Unlike

¹¹ AT&T's Reply, at paragraph 9.

¹² BSC and HDLC are two industry accepted protocols that enable digital terminals to communicate with each other. Each protocol defines different elements and procedures necessary for communication. Both protocols achieve the same purpose but are normally incompatible with each other.

¹³ CCITT is part of the International Telecommunications Union (ITU) based in Geneva, Switzerland, and is generally recognized as the premier international organization for establishing telecommunications network and operating standards. The standards applicable for the period 1980-84 were published in 1980 and bound in yellow covers. Other periods are bound in different colors, i.e., orange for 1976-80.

BPSS, Telenet's service is said to support device dependent interfaces, carry out protocol conversions and allow for communications between incompatible terminals.

8. A number of petitioners, anticipating that the Commission might approve AT&T's request, propose specific language and conditions that should be included in our authorization. Tymnet proposes that the authorization be conditioned to prevent ABI from using BPSS for a period of 18 months. Tymnet argues that this would equalize ABI's advantage gained in obtaining early information from AT&T about the service. Similarly, Telenet proposes that any subsequent Section 214 authorization contain conditions to prevent packet switches from being shared by the BOCs and AT&T. Telenet also proposes that the authorization be conditioned to require that a publically accepted interface standard be adopted to facilitate non-AT&T packet networks connecting to a BPSS network. AT&T responds that Tymnet's concerns about ABI gaining any information advantage are unfounded because AT&T, when it released Technical Reference PUB54010 in September 1981, provided information that allowed enhanced service providers sufficient lead time to accommodate network developments into their service plans. AT&T also contends that Telenet's proposed interconnection condition is premature and should be resolved in the context of network-to-network service arrangements at the time such services are offered. Similarly, AT&T states that because AT&T will not share packet switches with the BOCs, there is no need for Telenet's proposed condition.

9. IBM proposes that our authorization permit the use of BPSS facilities to provide only those services described in AT&T's request. IBM argues that an imprecise grant of the application might cause AT&T to assert that it has "carte blanche" authority to provide any service using the BPSS facilities that it later chooses to offer. Both IBM and CBEMA propose that the language in the authorization should not foreclose Commission jurisdiction over similar future services. The petitioners suggest that this would allow the Commission to review, on an ongoing basis, policy issues where other uses of this type of service may occur. AT&T disagrees and alternatively argues that future policy issues arising in this regard could be adequately handled by the Commission's normal regulatory procedures.

10. Finally, IDCMA in its comments notes that BPSS will increase the use of DDS, which in turn will exacerbate the anti-competitive offering of the Channel Service Unit (CSU), presently part of AT&T's DDS service offering. IDCMA notes that in a separate proceeding (Docket No. 81-216), it takes the position that these units should be provided by the general trade.¹⁴ AT&T

¹⁴ General trade refers to manufactures of telephone facilities unaffiliated with telephone companies.

responds that the outcome of Docket No. 81-216 will not impact the BPSS offering.

IV. Discussion

A. Public Interest Considerations

11. In our *Computer II* decisions, we have sought to establish a rational and enduring demarcation between basic and enhanced services. We also have sought, as an important public interest objective, to ensure that innovation and improvements will continue to occur in the regulated basic network, and that broadly available basic services will continue to evolve as technology evolves. See *Final Decision*, 77 FCC 2d at 423 ("[the definition of enhanced service] allows the provider of these basic services to integrate technological advances conducive to the more efficient transmission of information through the network . . ."); *Reconsideration*, 84 FCC 2d at 77 ("the benefits of any improvements introduced into AT&T's transmission facilities to accommodate the needs of the subsidiary would become available to all users of the underlying facility.")

12. BPSS as now proposed appears to satisfy this objective. It offers, on a broadly available tariffed basis, a service for the transmission of digital signals utilizing packet switching technology. Much of our concern that as originally proposed BPSS appeared excessively tailored to the needs of AT&T's separate affiliate, 91 FCC 2d at 16-17, has been resolved by the substantial changes made. In our view, the end result is a BPSS offering which appears to comport with our *Computer II* policies, and with our overriding statutory mandates to promote the availability "to all the people of the United States a rapid, efficient, Nation-wide, and world-wide . . . service with adequate facilities at reasonable charges," 47 U.S.C. § 151, and that "the benefits of new inventions and developments may be made available to the people of the United States," 47 U.S.C. § 218.¹⁵ The packet switching technology in certain circumstances may be a more efficient means of transmitting digital signals than has previously been utilized by AT&T, and in our view should be permitted to be introduced in AT&T's facilities.

13. Furthermore, while a number of entities have offered digital transmission services in the past using packet switching technology (e.g., Telenet and Tymnet), their offerings have often been enhanced offerings, in that they support communications among incompatible terminals (and perform code, format and protocol conversion to support this service within their facilities). BPSS as proposed does not do so. If the current pattern continues for the future, the marketplace will require such conversions to support communications among disparate terminals. BPSS can serve as a "building

¹⁵ See also 47 U.S.C. § 303(g).

block" for desirable enhanced service offerings by a variety of service providers, including but not limited to AT&T's affiliate, and on a fair basis subject to the regulatory constraints of the Act. We conclude that this is a desirable result.

14. In sum, we conclude that the public interest is served by the offering by AT&T of BPSS as proposed. As is detailed below, we have carefully considered arguments to the contrary made in comments filed in this proceeding, and we have concluded that the comments raise no substantial and material questions.¹⁶

B. Basic vs. Enhanced Issues

15. In our BPSS decision, we described the operation of AT&T's BPSS system. 91 FCC 2d at 5-6 and 13-14. Briefly, subscriber messages are segmented into packets of predetermined bit lengths, and the packets are transmitted over packet switched networks in "bursts" of bits. The transmission of each packet is controlled by capabilities residing in the terminals and in each BPSS network node. In the decision, we considered a number of comments which claimed that the control procedures associated with transmission of the packets, and options which were to be made available to subscribers of BPSS, constituted an offering of enhanced service within the meaning of Section 64.702(a) of our rules. We concluded that "there is no question that *Computer II* permits AT&T to offer a packet switching service such as BPSS in the network as basic service." *Id.* at 15. This conclusion is challenged on three grounds in this proceeding.

16. First, it is claimed that AT&T's BPSS will support communications between terminals utilizing disparate communications protocols, and that in so doing the service will be enhanced within the meaning of Section 64.702(a) of the rules. The definition of enhanced service includes, *inter alia*, "computer processing applications that act on the . . . protocol . . . of the subscriber's transmitted information." As indicated above, Telenet alleges that certain link control protocols, HDLC and BSC, are required to be supported simultaneously in a packet-switched network which conforms to CCITT Recommendation X.25, even if the two protocols are used at different ends of the same communication, which would imply that the network would be performing protocol conversion. While it is

¹⁶ AT&T contemplates that BPSS would be available only if the customer also obtains either a DDS line or a Digital Central Office Connecting Facility, another type of line, from AT&T. Because BPSS would be available only in conjunction with such a line, it is apparent that the service constitutes more than a simple offering of CPE. Thus, although the Commission does not regulate as common carriers the lessors of switching equipment (e.g. PBXs) or stand-alone multiplexing equipment, it does regulate communications, i.e., transmission services, such as MTS, that incorporate switching and multiplexing functions. See Sections 2(a), 3(a) of the Communications Act.

true that predecessor versions of the CCITT X.25 specification supported two sets of control protocols (and Telenet's own packet-switched network supports both), the current version of X.25, to which BPSS conforms, clearly supports only the HDLC protocol. See Section 2.1.2. No reference is made to the alternative BSC protocol, thus it is clear that AT&T has not proposed to support both, or to perform a protocol conversion between the two protocols as part of BPSS.

17. Similarly, Telenet argues that BPSS will support two sets of link access procedures (i.e., sets of protocols) LAP and LAPB, simultaneously, which also in Telenet's view would allow unsimilar terminals to communicate if the two procedures were used at different ends of the same communication. We do not reach this argument here because it is factually incorrect. LAP and LAPB both continue to be specified in the current version of X.25, Section 2.1.1, however, AT&T has not proposed to support both in BPSS. Rather, it has proposed to support only the LAPB protocol. PUB54010, Section 4.2.¹⁷

18. Second, it is argued that subscribers to BPSS will have certain service subscription options available to them, i.e., the ability to select service to a closed user group, incoming virtual calls only, outgoing virtual calls only, flow control parameters and fast select capability, and that the availability of these options renders BPSS an enhanced service. There is no basis for this claim. Subscribers of basic common carrier services often have service options available to them (pricing options, restricted service options, private line versus switched services, etc.), and the options involved in BPSS are no different from these. Significantly, Telenet does not relate any of these options specifically to the definition of enhanced services in Section 64.702(a) of our rules, and in our view, they cannot do so. None of these represents the type of processing of, or changes to, subscriber information which is reached by the definition.

19. Third, it is argued that although BPSS as currently proposed to be offered may not invoke the definition of enhanced service, the actual processors to be used in BPSS are capable of supporting

¹⁷ A related argument is made by Telenet and Tymnet that in supporting communications at both 9.6 kbps and 56 kbps, which could involve a speed conversion in the BPSS facilities if terminals operating at the two speeds were at different ends of the same communication, BPSS is an enhanced service. In *Computer II*, we acknowledged that intermediate network storage of information during the course of its transmission, to facilitate the transmission, is permissible in a basic service, see 77 FCC 2d at 420 and 84 FCC 2d at 55-59. *Computer II* did not preclude a basic network from converting to different transmission speeds. Speed conversion alone, unaccompanied by changes in the format, content, code and protocol, is implemented in principle by the use of such intermediate network storage, and does not involve subscriber "interaction" with stored information. In sum, the speed conversion which may be implicit in the offering of 9.6 and 56 kbps ports in BPSS does not alter the classification of BPSS as basic.

broader capabilities. Because of the possibility that these facilities *might* support enhanced services in the future, it is argued that we should determine that the currently proposed offering is enhanced. We are not persuaded by this argument. Indeed, many electronic central offices today are capable of supporting enhanced services, and on this theory they should not be permitted to provide basic MTS.¹⁸ As is discussed below, we are persuaded by the related argument that evolution of BPSS should be carefully scrutinized to ensure that it is not transmuted in the future into an offering of enhanced service, and for this reason we are specifically conditioning our authorizations herein accordingly.¹⁹

20. In sum, in our earlier BPSS decision, we examined carefully the contentions of various parties that BPSS, as proposed to be offered, was an enhanced service, and we concluded on the basis of information before us that the proposed offering would be basic. Several parties have filed comments which, in essence, seek reconsideration of that determination. We have carefully analyzed each of their specific arguments and found that they are incorrect, in large measure because they are based on the view that while BPSS as currently proposed to be offered may be basic, it might evolve in the future toward an enhanced service. As noted, this possibility is present in virtually all current basic service offerings inasmuch as they are increasingly implemented through the use of relatively agile stored-program controlled facilities which are capable of being reprogrammed to support the offering of enhanced services. Indeed, it is clear that even the electronic central office facilities which support the offering of conventional telephone service are capable of doing so. We have already acknowledged this potential, and have demonstrated that we will carefully examine new offerings proposed to be made over existing stored-program controlled facilities to ensure that they are not impermissible enhanced service offerings.²⁰

¹⁸ See American Telephone and Telegraph Co. (Custom Calling Services II), 88 FCC 2d 1 (1981).

¹⁹ See para. 38, *infra*.

²⁰ In September 1982, CBEMA filed a petition for limited reconsideration and clarification of our BPSS decision. CBEMA asks that we reconsider our finding that BPSS packet switches are basic service transmission facilities subject to Section 214 of the Act, or, in the alternative, that we interpret and reaffirm our decision in light of Computer II. To that end, CBEMA urges that our grant make it clear that the Commission is in no way modifying any of the Computer II criteria for defining basic services. CBEMA argues that (1) the BPSS offering does not involve any code or protocol conversion of subscriber data, but rather, the subscriber's information must be packetized prior to delivery to the carrier according to prescribed X.25 protocol standards; (2) in designing BPSS, AT&T has chosen a specific subset of those protocols in attempting to make its service basic; (3) any user negotiated options are chosen by the subscriber and do not involve the carrier in any conversions between originating and terminating subscriber facilities; and (4) the BPSS facility is fully transparent to the subscriber except as

C. Computer II Separation Rules Concerns

21. In the BPSS decision, we said that AT&T's Section 214 filing should focus upon and clear up several concerns raised in the pleadings with respect to *Computer II*.²¹ Specifically, we asked AT&T to buttress its claims that BPSS would have general utility, and is not an offering primarily tailored for its separate subsidiary. While we noted that *Computer II* permits AT&T to employ packet transmission technology in the provision of a basic service, we cautioned that because a packet switch is a sophisticated computer facility, when AT&T provides such facilities to its enhanced services subsidiary, it must be careful to comply with the "separation" rules established in *Computer II*. Most of our concern about the BPSS filing centered around the *Computer II* prohibitions against allowing the subsidiary to use in common with AT&T any physical space or property on which transmission equipment or facilities used to provide basic service is located, and allowing the subsidiary to share computer facilities with its parent.²² We raised these concerns because BPSS, as then structured, appeared to allow ABI exclusive access to computer facilities located in AT&T's central offices to provide ABI's enhanced services. Indications of this included that (1) BPSS was developed for use with AIS; (2) the vague nature of certain tariff provisions suggesting that BPSS was not a service offering directed at customers other than ABI; and (3) multiple parties could not use a single BPSS switch, and thus it would be located in AT&T's central offices and dedicated for the sole use of the separate subsidiary.²³ We asked AT&T to provide in its Section 214 filing additional support for the claim that BPSS was an open service with value and utility to users other than ABI. We noted that if it was not, BPSS could bring about the very problems the Commission sought to avoid when it adopted its separation requirements.²⁴ For example, AT&T could impose rates for BPSS use of DDS lines that favor ABI over its competitors who secure their own packet switches and also use DDS lines to connect those switches. In addition, cross-subsidization could occur if AT&T were to underprice BPSS, thereby lowering the cost to ABI of providing AIS, and then make up this deficit through other regulated services.

22. In order to address the concerns raised in the Commission's BPSS decision, AT&T has made a number of significant changes to Tariff 270 and to the service itself. The revisions to Tariff 270 alleviate the problems we pointed out that potential customers, who

necessary to establish the interface to the service. In light of the foregoing discussion, this petition is moot.

²¹ 91 FCC 2d at 15.

²² *Id.*

²³ *Id.*

²⁴ *Id.* at 16.

would likely be ABI's competitors, would be faced with in ordering service from AT&T.²⁵ In addition to removing or revising tariff provisions which could discourage potential customers other than ABI, AT&T has made certain changes to the service itself which should make it more attractive to other customers, and thus a more general offering. One such change is that AT&T would now allow unrelated users to share a BPSS facility rather than requiring, as before, a single user to subscribe to an entire device. Tariff 270 now permits a BPSS subscriber to lease as few or as many ports on a BPSS facility as it requires.²⁶ A second change in BPSS is that 9.6 kbps ports will now be available to subscribers, in addition to previously proposed 56 kbps ports. Through these changes in the BPSS offering, AT&T has lowered the entry threshold for users and broadened the base of appeal for this service. We find these changes to be significant improvements responsive to the concerns raised in the BPSS decision.

23. Another problem raised in our BPSS decision was that AT&T's use of DDS transmission facilities could favor ABI over its competitors who secure their own packet switches and also use DDS lines to connect those switches.²⁷ Under that scheme, when a DDS customer terminated a DDS line at the premises of a customer, user or OCC, the DDS customer was to be charged \$908.00 per month. On the other hand, the charge to terminate a DDS line at an AT&T central office for the purpose of connecting to BPSS would be only \$180.00 per month. We determined in the BPSS decision that this rate structure could result in significantly lower overall charges to ABI for DDS connections in its packet network than its competitors

²⁵ For example, AT&T deleted the provision which allowed it discretion to establish an installation date on a service by service basis, and by which it disclaimed responsibility to the customer if such date was not met. AT&T also removed the provision which afforded it discretion to accommodate customers' requests for special service features and arrangements. The final provision which gave us concern was Section 2.5.6 of the proposed tariff, which gave AT&T the right to require very large deposits as a guarantee that charges would be paid by the customer. While deposit provisions are standard in AT&T tariffs, we noted in the BPSS decision that the deposit could be required where the customer intended to take service only for a "limited period," and that in such cases the deposit could be applied as an advance payment of the customer's bill. These latter provisions did not comport with standard tariff practice. For one, no definition was given for the term "limited time," so the customer would not know the exact meaning of this provision. For another, deposits are not synonymous with advance payments, and making them so could deprive a customer of its rightful interest on the deposit. AT&T has corrected these problems in Tariff 270. In Section 2.6.6, AT&T has deleted the phrase "limited time," and now specifies the advance payment. In addition, AT&T has treated advance payments and deposits as two separate charges in two separate provisions.

²⁶ Although AT&T does propose a minimum usage charge, the charge does not appear to be of sufficient magnitude to discourage entry on the part of medium-sized customers.

²⁷ 91 FCC 2d at 16.

would pay for DDS connections to their own packet switches. In so doing, we referred to a letter from the Chief, Tariff Division, Common Carrier Bureau, dated March 10, 1982 on this same subject.²⁸ AT&T in this filing has eliminated any rate differences for DDS access lines by charging \$908.00 per month for all 56 kbps DDS lines.²⁹ Thus, it has sought to ensure that charges to ABI for DDS connections will be in line with charges ABI's competitors must pay for DDS connections to their own packet switches.

24. In view of the changes to BPSS discussed above, AT&T has moved the BPSS service toward the Commission goal of having a packet service with general utility for the network, rather than an offering with utility only for ABI. As the service matures we are hopeful that it will evolve even further as a general offering.

25. AT&T has not publicly announced plans to develop BPSS into a switched common user offering and we are not requiring it to do so at this time. However, we believe that no technological reasons exist to prevent AT&T from providing a more common user oriented packet switching service without the leasing of dedicated transmission lines. Some carriers already offer similar services and the communications industry is continuing to develop ways to reduce the user's entry threshold for X.25 networks. For example, there are presently proposals under consideration to allow "dial up" access from the MTS network. In addition, manufacturers have recently announced end user terminal component attachments that will interface directly into X.25 networks. We recognize, though, that the economic justification for a common user service might arise from first fulfilling the more specialized needs of large users. However, we believe it not unlikely that in the future, as the service matures, smaller users will find it increasingly attractive. We expect that AT&T will respond to such market demands by adopting tariff changes which would accommodate such smaller users. For example, as already suggested, one way to make BPSS a more generally useful service offering would be to develop it into a fully implemented common user service that could be tarified on a message use basis. To monitor developments, we order AT&T to report on any expected or proposed changes in BPSS forecast for the coming year. This report must be submitted no less than 60 days in advance of any

²⁸ In this letter, it was noted that the Commission's decision in Docket No. 20288, relating to DDS, required that the rate structures which applied to Tariff 260 services also apply to DDS.

²⁹ This \$908.00 per month charge is the rate for a DDS access line currently in effect in Tariff 267. AT&T, in this filing, has proposed to apply this rate, rather than the \$180.00 rate initially proposed, to DDS terminations in its central offices for purposes of connecting to BPSS.

proposed change. AT&T may either file this report separately or include it in its yearly Section 214 blanket authorization filing.³⁰ However, any proposed change included in AT&T's blanket authorization filing may not take effect less than 60 days from the date of that filing. The staff shall instruct AT&T as to the format and content requirements of this report.

26. In response to the petitioners' claims that BPSS is not a common carrier service, but instead is an offering of customer premises equipment (CPE), AT&T argues that such finding would preclude AT&T's provision of commonly accepted basic services such as Common Control Switching Arrangement (CCSA), Enhanced Private Switched Communications Service (EPSCS), Switched Circuit Automatic Network (SCAN) and Central Office Centrex. We agree with AT&T that BPSS is not CPE, but rather, as in the case of the other services mentioned above, part of the network.³¹ (See note 16, *supra*, for additional discussion).

D. Tariff Concerns

27. While AT&T has corrected the tariff problems we identified in our BPSS decision, AT&T's revised and modified filing contains certain new tariff provisions which raise a number of additional concerns. Because we have in this order resolved our fundamental difficulties with BPSS, we hope to allow the related tariff to go into effect on short notice and thus allow service to the public to begin. We therefore take this opportunity to point out here our remaining specific tariff concerns so that AT&T may take action to solve our problems without lengthy and time-consuming tariff investigation and suspension procedures.

28. Our first problem relates to proposed Section 6.2.3.C, where AT&T would now require a minimum of twelve months notice, in writing, prior to discontinuance of BPSS. This twelve month notice of discontinuance requirement would apply even if a customer has had the service for a number of years. If notice is not given, the recurring charge for service would continue to apply for a period of twelve months from the date AT&T received notice, whether or not

³⁰ The blanket filing technique permits AT&T to receive Section 214 authorization for the major part of its annual construction in a single filing. See 47 C.F.R. § 63.06.

³¹ Notwithstanding the above, however, we intend to scrutinize BPSS once it is actually offered to the public under tariff to ensure that it is indeed a generally useful and available service. We wish to ensure that BPSS does not become a means by which AT&T could favor unreasonably its unregulated subsidiary, ABI. Should BPSS be used almost exclusively by ABI, serious questions would arise as to whether the service was communications common carriage at all. See *NASA*, 61 FCC 2d 56 (1976). Should BPSS be used almost exclusively by ABI, the Commission will consider taking further steps to ensure that there are no unreasonable barriers, tariff or otherwise, blocking the ability of the general public to use this service.

the customer continued to take service. Such a notice period would appear to severely limit a BPSS customer's ability to make rational economic decisions based upon the availability of alternative offerings, technologies and prices, and would, furthermore, discourage new customers from taking the service. By holding a customer to the service for a twelve month period, regardless of use, AT&T would in effect restrict the ability of its customers to take advantage of other carriers' similar offerings that might be available at lower prices, or that might provide more efficient and economical service because of new technology.

29. Furthermore, AT&T in this filing has not explained how this notice requirement is related to costs. Nor has it given any justification for the need for twelve months notice from an operational standpoint. Another difficulty we have with this requirement is that AT&T is silent as to whether, if replacement customers for BPSS facilities are available, a subscriber would still be bound to pay for service for the full twelve months following notice. Finally, AT&T says that its facilities plans are updated monthly. Thus, it would seem that AT&T's plans for reuse of facilities should be subject to demand considerations, and that AT&T has the ability, when demand warrants, to make facilities available in less than twelve months time.

30. We are aware that the marketing problem which AT&T seeks to overcome with this twelve-month notice provision is a common one, though varying in degree, to all private line or dedicated services. With the exception of the recently filed Terrestrial Digital Circuits (TDC) tariff,³² which became effective March 17, 1983, however, AT&T has imposed no similar tariff conditions on other private line services such as Series 2000 and 3000 voice-grade channels, CCSA or other services contained in Tariff 260. Even in the case of TDC, moreover, the required notification period prior to termination is three months. In view of the fact, therefore, that there are other ways for AT&T to recover costs associated with time lapses caused by service discontinuance, we are very concerned that the ratemaking techniques proposed here will pose a significant obstacle to market entry, arbitrage,³³ and particularly, achievement of our stated goal of making BPSS a more generally useful service. For all

³² See note 5, *supra*.

³³ We believe the twelve-month notice requirement would discourage resale, sharing and arbitrage. Arbitrage, in the Commission's regulatory scheme, is seen not as a means of developing vested interests, but as a way of bringing rates into line with competitive pricing patterns. Once the forces of arbitrage and/or sharing make the maintenance of monopoly-type rates infeasible, we expect that the initiator of these rates will eliminate the discrimination and the opportunity for arbitrage. In such circumstances, the reseller would suddenly have nothing to offer and its customers would migrate, as rapidly as possible, back to the underlying carrier's service. Under AT&T's proposal, at such point in time the

of the above reasons, we have significant problems with the proposed twelve-month notice requirement. We believe that AT&T can propose a substantially shorter notice period that would partially accomplish its marketing goals without unduly interfering with Commission policy.

31. A second new tariff provision which we believe has not been justified and could discourage potential users is proposed Section 6.2.4.A. That section states that if a customer's requirement for ports at one BPSS location exceeds the available capacity of that switching arrangement, an additional switching arrangement may be required in order to provide the requested number of ports. When this occurs, trunks are required to connect the newly installed switching arrangement to the existing switching arrangement. Under AT&T's tariff scheme, the last customer to gain access to a BPSS switch must pay for the trunk which AT&T claims is required to connect the two BPSS switches. It would appear, on the basis of information before us, that these intermachine trunks would be useful for other functions in addition to satisfying the dedicated communications requirements of a single customer. Even if this were not the case, we would question whether it is reasonable to charge one customer more than another even though the two would effectively receive the same service, i.e., the same number of switching ports with the same functional capabilities. In view of the fact that BPSS is represented as a general tariff offering this practice raises questions of equity and discrimination. We expect therefore that AT&T will explain why it believes the above practice to be reasonable, or, failing to do so, will eliminate it and distribute the attendant costs over all customers.³⁴

32. Review of the support material AT&T provided with its illustrative tariffs raises two methodological concerns. Our first concern relates to AT&T's support for the BPSS minimum monthly usage charge.³⁵ As proposed, this monthly charge is \$1,150 per access port, or 852 kilopackets of usage. AT&T developed this charge by determining the average monthly revenue per switch over a three-year planning period, from 1983-1985, and then dividing that amount (\$128,800) by the average number of available access ports (112) per switch over the 18 month period from 1983 to mid-1984. According to AT&T's own projections, however, the number of access ports per BPSS switch is to be increased through the end of 1985, and this increased number of ports would raise the average number of

reseller would be left without customers and yet would face the necessity to pay for a full year of unused service.

³⁴ AT&T should also revise Section 6.2.6.B to indicate whether the minimum monthly usage charge required by Section 6.2.4.B.4 applies when a customer tests its equipment before beginning service.

³⁵ See Volume 2, Section 5 of *Basic Packet Switching Service, Description and Justification*, November 1982.

ports per switch to 115, consequently lowering the average monthly charge. Thus, AT&T's use of different time periods to derive average monthly use per access port is clearly erroneous. In filing its BPSS tariff offering, AT&T should correct this methodology and use the same time period to determine the average number of access ports and the average monthly revenue.³⁸

33. The second methodological problem relates to the development of the minimum usage charge, one purpose of which is to ensure that the revenue requirement necessary to cover AT&T's switch investment and expenses will be recovered even if no usage occurs. In deriving this charge, AT&T has simply divided the average monthly switch revenue requirement by the number of access ports. We believe that this methodology sets the minimum usage charge at a significantly higher level than is needed to guarantee AT&T's revenue requirement. This is so because many access ports can be expected to substantially exceed the minimum usage level, thereby contributing more than an average amount of revenues. If customers were assessed the minimum usage charge for all remaining ports, even if they did not have the average amount of usage, AT&T would have realized more than its total BPSS switch revenue requirement. Therefore, AT&T could safely reduce the minimum usage requirement, a measure which would also have the salutary effect of lowering the entry threshold to potential BPSS customers. A preferable way to compute the minimum charge would be to construct a distribution of usage and develop rates based on that distribution, such that the aggregate revenues equal the total BPSS switch revenue requirement. In filing its revisions to Tariff 270, we expect AT&T to conduct such an analysis or demonstrate why its current method is appropriate.

34. Finally, with respect to tariff issues, we note that AT&T has proposed revisions in recognition of the Commission's concerns regarding potential imbalances in rates between DDS connections to BPSS, and DDS connections to packet switches located on customer premises. These revisions would provide for identical charges whether a DDS channel is terminated at the premises of a customer or within a telephone company office for connection to BPSS. This rate structure is said to ensure equal treatment of ABI and its competitors in the provision of DDS by AT&T. We consider this to be an extremely important change and we would be quite concerned if AT&T, at a later date, attempted to reinstitute different pricing techniques for BPSS terminations in the central office and customer premises terminations. To understand our concern here, some background is necessary. Private line service, as defined by the

³⁸ A rough calculation indicates that by considering the addition of these ports, the proposed minimum monthly usage charge would be reduced by about \$30 per access port.

telephone company for many years, is the offering of a dedicated channel extending between and among service points designated by the customer. In certain cases, one of the points or locations designated by the customer is an AT&T central office. For example, a CCSA switch located in the telephone company central office is considered a customer designated channel termination point. Historically, rates and rate structures for interstate private line services have generally not differentiated between customer and telephone company channel termination points. In other words, the rate has been the same to terminate a channel at a telephone company office as for any other customer designated location. As noted above, in its March 1982 BPSS proposal, AT&T departed from this historical ratemaking practice by devising a pricing structure which singled out telephone company points for special rate treatment.

35. We questioned this pricing approach in the BPSS decision for two reasons. First, we believe that there are significant public interest concerns if AT&T merely singles out BPSS central office terminations for independent rate treatment, while charging a single averaged rate for all other terminations.³⁷ The second reason which prompted us to criticize AT&T's rate structure was our recognition that ABI was likely to be at least the principal user of BPSS for the immediate future. Since any rate advantages accorded BPSS would immediately inure to the benefit of AT&T's subsidiary, AT&T had a clear incentive to discriminate in favor of BPSS when pricing the associated private line channels to the detriment of other enhanced services providers who also rely on AT&T transmission services. We were therefore concerned that AT&T's rate structure could undermine the separation policy objectives of *Computer II*.

36. In addition to finding that AT&T's modifications to the BPSS tariff should make the service more attractive to potential customers other than ABI, our conclusion that the public convenience and necessity requires us to grant AT&T's application also rests upon the elimination of special rate treatment for the BPSS channel termination. Thus, as indicated above, we would have considerable problems if AT&T were later able to implement a DDS rate structure which gave special treatment to BPSS terminations.³⁸

³⁷ It appeared, furthermore, from AT&T's initial filing that the \$180 charge would have applied even in cases where the BPSS machine and the DDS channels terminate at different central offices.

³⁸ Our concern here should not be viewed as disallowing separate charges for service functions—e.g., special testing, intra-office or cross-office connections—performed at the central office pursuant to a customer's request. Also, as competition in the marketplace evolves, our overall policies on ratemaking and interconnection will be continuously monitored to insure that a fair equilibrium exists which does not unreasonably disadvantage any competitor, including AT&T.

E. Other Issues

37. We consider now the various proposals made by petitioners to condition AT&T's Section 214 authorization. Telenet proposes that our grant restrict the sharing of BPSS facilities between AT&T and the BOCs. Telenet argues that AT&T-BOC sharing would preclude AT&T's competitors from having equal access to the BOC portion of the BPSS facilities. Because AT&T has indicated in its Reply that it does not intend to share BPSS facilities with the BOCs, it is not clear that such a condition is needed. Any future BPSS sharing decisions would be subject to full regulatory scrutiny. Telenet also proposes that we include language in our grant to require that interconnection of BPSS with other packet networks be accomplished by a publicly accepted interface standard such as CCITT's X.75 recommendation.³⁹ Because no equal access or interconnection policy for digital and packet networks has been implemented, it would be inappropriate to adopt the proposal offered by Telenet. Moreover, this issue is now the subject of General Docket No. 80-756, and is thus more appropriately considered in that proceeding.⁴⁰ Accordingly, we reject Telenet's proposed condition.⁴¹

38. In its comments, IBM proposes that we limit our grant of AT&T's authority to those specific services described in the application. IBM argues that an imprecise grant at this time may cause AT&T to assume that it has "carte blanche" authority to provide any service using BPSS facilities it chooses. We are aware that the 3B20 processor used in BPSS is a versatile, programmable instrument that might be configured through software changes to provide services that as yet have not been contemplated. Considering the competitive environment, the limited regulatory control of current standards organizations in the United States, and the evolutionary response of standards to new technology, we would expect that the nature of BPSS services could change. The impact of such services could require Commission attention. At the very least, the public interest requires that the Commission be afforded an opportunity to examine new BPSS service offering in light of the competitive environment at the time such services are contemplated.⁴² We anticipate that the means for review of such proposals is through Section 214. Therefore, we will restrict AT&T's BPSS offering to those services

³⁹ Terminal and Transit Control Procedures and Data Transfer System on International Circuits Between Packet Switched Data Networks. FASCICLE VIII.3 - 1980 CCITT Yellow Books.

⁴⁰ Digital Communications Protocols, Docket No. 80-756, Notice of Inquiry, 83 FCC 2d 218 (1980).

⁴¹ We need not consider in this proceeding IDCMA's comment concerning the Customer Service Unit as part of AT&T's DDS service offering. This matter is currently under consideration in Docket No. 81-216.

⁴² See *MCI Telecommunications Corp. v. FCC*, 561 F.2d 365 (D.C. Cir. 1977), cert. denied, 434 U.S. 1040 (1978) (Execunet I).

described in its August 1981, PUB54010 Technical Publication. We also believe this condition satisfies CBEMA's concern regarding Commission jurisdiction to consider further service offerings.⁴³

39. In our BPSS decision, we found that BPSS could create channels of communications within the meanings of Section 214(a) of the Act, and we therefore required that AT&T apply for certification pursuant to Section 214 of the Act. In this proceeding, which is in response to AT&T's Section 214 application, we make the requisite public interest finding with regard to BPSS. Implicit in our acceptance of the application for filing, and by our discussion herein, we find that BPSS is a basic service under Section 64.702 of our rules.

V. Conclusion

40. Our finding that grant of this application will serve the public interest, convenience and necessity is the result of a balancing of several considerations. See paras. 11-14 *supra*.

41. Having reviewed and considered AT&T's request for authority to provide BPSS, as well as the arguments offered by the several petitioners, we find no technical or legal reasons that can be construed as violations of our *Computer II* policies.

42. Accordingly, in view of the considerations expressed above, IT IS ORDERED that the petitions to deny filed by CBEMA, TYMNET and TELENET ARE DENIED.

43. Further, IT IS CERTIFIED, subject to the conditions in paragraphs 25 and 38 above, that the public convenience and necessity would be served if the Basic Packet Switching Service is offered as part of the basic network service as proposed in application W-P-C-4841 and as described in PUB54010, August 1981. Therefore, IT IS ORDERED, pursuant to Section 214 of the Communications Act, that the American Telephone and Telegraph Company IS HEREBY AUTHORIZED to provide the services as specified in the captioned application.

44. IT IS FURTHER ORDERED, that the September 1982 petition for limited reconsideration and clarification filed by CBEMA is DISMISSED AS MOOT (See Note 20, *supra*), and that the March 1983 petition for rulemaking filed by CBEMA IS DENIED (See note 1, *supra*).

45. The applicant is afforded 31 days from the date of release of this order to decline this authorization as conditioned. Failure to

⁴³ Tymnet also proposes that, to minimize the effects of AT&T's disclosure of information to ABL, the separate subsidiary be barred from using BPSS for a period of eighteen months, or until a competitor of ABI uses BPSS, whichever is less. The Commission has recently resolved this argument in a separate proceeding that clarifies the Computer II disclosure rule. Computer and Business Equipment Manufacturers Association, Report and Order, FCC 83-182, Mimeo No. 33209, at paragraphs 66-68, released May 9, 1983.

respond within that period will constitute formal acceptance of the authorization as conditioned.

FEDERAL COMMUNICATIONS COMMISSION
WILLIAM J. TRICARICO, *Secretary*

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
)
IP-Enabled Services) WC Docket No. 04-36
)

NOTICE OF PROPOSED RULEMAKING

Adopted: February 12, 2004

Released: March 10, 2004

Comment date: [60 Days After Federal Register Publication of this Notice]

Reply Comment date: [90 Days After Federal Register Publication of this Notice]

By the Commission: Chairman Powell, Commissioners Abernathy and Martin issuing separate statements; Commissioner Copps concurring and issuing a statement; Commissioner Adelstein approving in part, concurring in part and issuing a separate statement.

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I. INTRODUCTION

1. In this Notice of Proposed Rulemaking (Notice), we examine issues relating to services and applications making use of Internet Protocol (IP), including but not limited to voice over IP (VoIP) services (collectively, "IP-enabled services").¹ We seek comment on the impact that IP-enabled services, many of which are accessed over the Internet, have had and will continue to have on the United States' communications landscape. As a truly global network providing instantaneous connectivity to individuals and services, the Internet has transcended historical jurisdictional boundaries to become one of the greatest drivers of consumer choice and benefit, technical innovation, and economic development in the United States in the last ten years. We acknowledge that it has done so in an environment that is free of many of the regulatory obligations applied to traditional telecommunications services and networks. Carriers have begun to realize efficiencies associated with utilization of IP in both the backbone and the "last mile" of their networks. Customers are beginning to substitute IP-enabled services for traditional telecommunications services and networks, and we seek comment on the rate and extent of that substitution. Increasingly, these customers will speak with each other using VoIP-based services instead of circuit-switched telephony and view content over streaming Internet media instead of broadcast or cable platforms. By doing so, they will change, fundamentally, their use of these applications and services – consumers will become increasingly empowered to customize the services they use, and will choose these services from an unprecedented range of service providers and platforms.

¹ Specifically, the scope of this proceeding – and the term "IP-enabled services," as it is used here – includes services and applications relying on the Internet Protocol family. IP-enabled "services" could include the digital communications capabilities of increasingly higher speeds, which use a number of transmission network technologies, and which generally have in common the use of the Internet Protocol. Some of these may be highly managed to support specific communications functions. IP-enabled "applications" could include capabilities based in higher-level software that can be invoked by the customer or on the customer's behalf to provide functions that make use of communications services. Because both of these uses of IP are contributing to important transformations in the communications environment, this Notice seeks commentary on both, and uses the term "IP-enabled services" to refer to "applications" as well as "services." Recognizing the broad scope entailed by this definition, we invite comment below on how we might more rigorously distinguish those specific classes of IP-enabled services, if any, on which we should focus our attention. We emphasize, however, that this Notice does *not* address standard-setting issues for the Internet Protocol language itself, which are more appropriately addressed in other fora, or other items outside this Commission's jurisdiction, such as Internet governance.

2. This Commission must necessarily examine what its role should be in this new environment of increased consumer choice and power, and ask whether it can best meet its role of safeguarding the public interest by continuing its established policy of minimal regulation of the Internet and the services provided over it.² To that end, we invite comment on IP-enabled services available today and those expected to become available in the future. We seek comment on how we might distinguish among such services, and on whether any regulatory treatment would be appropriate for any class of services.

3. In other proceedings, we have recognized the paramount importance of encouraging deployment of broadband³ infrastructure to the American people.⁴ As broadband facilities have proliferated, communications services and networks have increasingly taken advantage of the efficiencies associated with translating data into IP packets running over the same network infrastructures.⁵ As discussed below, enterprises are already relying heavily on IP-based applications to facilitate both internal and external communications.⁶ Moreover,

² We note that IP-enabled services, as we define this term, are typically provided over broadband facilities, but could ride on narrowband facilities. It appears that as IP-enabled services become more sophisticated and high-speed facilities proliferate, these services will predominantly be provided on broadband platforms, including wireline, cable, wireless, and satellite facilities, and perhaps new platforms not widely used at present. See, e.g., *Inquiry Regarding Carrier Current Systems, Including Broadband over Power Line Systems*, ET Docket No. 03-104, Notice of Inquiry, 18 FCC Rcd 8498 (2003) (seeking comment on technical issues relating to provision of broadband over power line facilities).

³ We use the term "broadband" to signify "advanced telecommunications capability and advanced services," which we have defined, for the purposes of our section 706 Reports, as those services having the capability to support both upstream and downstream speeds in excess of 200 Kbps in the last mile. *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, Third Report, 17 FCC Rcd 2844, 2850-51, para. 9 (2002) (internal quotations omitted) (*Third Section 706 Report*); accord *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, Second Report, 15 FCC Rcd 20913, 20919-20, para. 10 (2000) (*Second Section 706 Report*). The Commission also has "denominate[d] as 'high-speed' those services with over 200 kbps capability in at least one direction." *Second Section 706 Report*, 15 FCC Rcd at 20920, para. 11; accord *Third Section 706 Report*, 17 FCC Rcd at 2850-51, para. 9.

⁴ See, e.g., *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Universal Service Obligations of Broadband Providers*, CC Docket Nos. 02-33, 95-20, 98-10, Notice of Proposed Rulemaking, 17 FCC Rcd 3019, 3020-21, para. 1 (2002) (*Wireline Broadband NPRM*).

⁵ See *infra* Part II.A.

⁶ See *infra* Part II.A. For example, more and more businesses are moving to VoIP solutions in lieu of PBXs and other traditional facilities to manage their communications. See, e.g., Nortel Networks & Verizon Communications, *Verizon Selects Nortel Networks to Accelerate Building of Nation's Largest Converged, Packet-Switched Wireline Network Using Voice-Over-IP Technology*, Press Release at 3 (Jan. 7, 2004) (stating that Verizon and Nortel intend to market VoIP upgrades to Verizon's existing PBX customers and to migrate them away from existing legacy PBXs to Verizon's converged IP network).

providers offering VoIP services⁷ are beginning to challenge traditional telecommunications carriers in residential markets – and even today use IP to transport residential interexchange calls, often unbeknownst to end users.⁸ The increasing deployment of broadband facilities therefore has prompted the development of services and applications that provide broader functionality and greater consumer choice at prices competitive to those of analogous services provided over the public switched telephone network (PSTN). Many observers predict that, before long, providers will be able to integrate voice and real-time video to provide new capabilities and service offerings.⁹ The development of such services is likely to prompt increased deployment of wireline, cable, wireless, and other broadband facilities¹⁰ capable of bringing IP-enabled services to the public, which in turn, we expect, will prompt further development and deployment of such services. This process may challenge the central role that legacy technologies have played in American communications for over 100 years.¹¹

4. But VoIP services are not necessarily mere substitutes for traditional telephony services, because the new networks based on the Internet Protocol are, both technically and administratively, different from the PSTN. Whereas the PSTN is designed to meet the analog communications requirements of two-way voice conversations, IP networks are designed to meet the short-burst digital data communications requirements of computing networks. Whereas the PSTN's design is logically and physically hierarchical, utilizing highly centralized signaling intelligence to connect parties to a communication, IP network design is "flat," distributing network intelligence and permitting highly dynamic and flexible routing that takes into account network delays, changes in loads, and changes in topology.¹² And whereas enhanced functionalities delivered via the PSTN typically must be created internally by the network

⁷ While we adopt no formal definition of "VoIP," we use the term generally to include any IP-enabled services offering real-time, multidirectional voice functionality, including, but not limited to, services that mimic traditional telephony.

⁸ See *infra* Part II.A.

⁹ See *infra* Part II.A.

¹⁰ See, e.g., *supra* note 2.

¹¹ According to industry data compiled by the Commission, interstate access minutes have declined significantly in recent years; industry watchers expect VoIP to hasten the decline. See *Universal Service Monitoring Report*, CC Docket No. 98-202, Table 8.2 (Dec. 22, 2003) (interstate switched access minutes declined to 486.0 billion minutes in 2002 from 538.3 billion interstate minutes in 2001, and interstate switched minutes declined to 113.8 billion in the first quarter 2003 from 124.8 billion in the first quarter of 2002); see also Peter Grant & Almar Latour, *Circuit Breaker: Battered Telecoms Face New Challenge: Internet Calling – The "Pac-Man" of Protocols*, Wall St. J., Oct. 9, 2003, at A1 (stating that VoIP poses a "credible threat" to established telecommunications carriers) (Grant & Latour); Dan Richman, *Internet Phone Calls Entice Consumers, Industry*, Seattle Post Intelligencer (last modified Dec. 12, 2003) <<http://msnbc.msn.com/id/3690595/>> (given the low cost of VoIP, business of land-line carriers is threatened).

¹² Applications requiring segmented data to arrive in sequence and without error generally rely on a higher-level end-to-end protocol such as the Transmission Control Protocol (TCP).

operator and are often tied to a physical termination point, IP-enabled services can be created by users or third parties, providing innumerable opportunities for innovative offerings competing with one another over multiple platforms and accessible wherever the user might have access to the IP network.¹³ The rise of IP thus challenges the key assumptions on which communications networks, and regulation of those networks, are predicated: Packets routed across a global network with multiple access points defy jurisdictional boundaries. Networks capable of facilitating any sort of application that programmers can devise have empowered consumers to choose services they desire rather than merely accepting a provider's one-size-fits-all offering. In this Notice, we seek comment on whether the proliferation of services and applications utilizing a common protocol may permit competitive developments in the marketplace to play the key role once played by regulation.

5. For all these reasons, the changes wrought by the rise of IP-enabled communications promise to be revolutionary. These developments are expected to reduce the cost of communication and to spur innovation and individualization, giving rise to a communications environment in which offerings are designed not to fit within the limitations of a legacy network but rather to provide each end user a highly customized, low-cost suite of services delivered in the manner of his or her choosing. IP-enabled services generally – and VoIP in particular – will encourage consumers to demand more broadband connections, which will foster the development of more IP-enabled services. IP-enabled services, moreover, have increased economic productivity and growth, and bolstered network redundancy and resiliency. Our aim in this proceeding is to facilitate this transition, relying wherever possible on competition and applying discrete regulatory requirements only where such requirements are necessary to fulfill important policy objectives. We expressly recognize the possibility that we ultimately will need to differentiate among various IP-enabled services. For example, much of the telecommunications regulation implemented by the Commission had its roots in seeking to control monopoly ownership of the PSTN. To the extent the market for IP-enabled services is not characterized by such monopoly conditions, we seek comment on whether there is a compelling rationale for applying traditional economic regulation to providers of IP-enabled services. As discussed below,¹⁴ other aspects of the existing regulatory framework – including those provisions designed to ensure disability access, consumer protection, emergency 911 service, law enforcement access for authorized wiretapping purposes, consumer privacy, and others – should continue to have relevance as communications migrate to IP-enabled services. Because we do not prejudge these issues, however, this Notice asks broad questions covering a wide range of services and applications, and a wide assortment of regulatory requirements and benefits, to ensure the development of a full and complete record upon which we can arrive at sound legal and policy conclusions regarding whether and how to differentiate between IP-

¹³ Indeed, while a century of PSTN development has given rise to relatively few opportunities for user customization, a mere decade of widespread commercial use has produced a dizzying array of IP-enabled services, ranging from presence management to multimedia conferencing to unified messaging, as discussed in greater detail below.

¹⁴ See *infra* Part V.B; Part VI.A.

enabled services and traditional voice legacy services, and how to differentiate among IP-enabled services themselves. As discussed above, fencing off IP platforms from economic regulation traditionally applied to legacy telecommunications services would not put them beyond the reach of regulations designed to promote public safety and consumer protection (such as E911) or other important public policy concerns. Instead, this proceeding is designed to seek public comment on future decisions that would start from the premise that IP-enabled services are minimally regulated.

6. The remainder of this Notice is organized as follows. In Part II, we describe the evolution of the IP-enabled services falling within the ambit of this proceeding,¹⁵ and set forth the legal framework against which we consider the appropriate regulatory treatment, if any, for these services.¹⁶ In Part III, we seek comment on whether it would be appropriate to establish categories of IP-enabled services, based on important distinguishing characteristics, and ask commenters to propose specific grounds on which such categorization, if appropriate, should be pursued.¹⁷ Part IV examines the jurisdictional issues associated with VoIP and other IP-enabled services and seeks comment on whether to extend the application of the Commission's ruling that a certain type of VoIP offering is an unregulated information service subject to federal jurisdiction.¹⁸ Part V seeks comment on the appropriate legal and regulatory framework for categories of IP-enabled services identified by commenters.¹⁹ Specifically, we seek comment on the appropriate legal classification of each type of IP-enabled service,²⁰ and then on the necessity of applying specific regulatory requirements or benefits to those specific categories.²¹ Part VI of this Notice addresses the applicability of several other regulatory requirements and the implications that our decisions here might have for rural carriers as well as for international and numbering issues.²²

II. BACKGROUND

7. Our consideration of the critical legal and regulatory questions posed in this Notice is necessarily informed by the specific technological evolution of the services at issue and

¹⁵ See *infra* Part II.A.

¹⁶ See *infra* Part II.B.

¹⁷ See *infra* Part III.

¹⁸ See *infra* Part IV; *Petition for Declaratory Ruling that pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service*, WC Docket No. 03-45, Memorandum Opinion and Order, FCC 04-27 (rel. Feb. 19, 2004) (*Pulver Declaratory Ruling*).

¹⁹ See *infra* Part V.

²⁰ See *infra* Part V.A.

²¹ See *infra* Part V.B.

²² See *infra* Part VI.

the specific legal framework under which we exercise our jurisdiction over interstate and international communications. In this section, we first briefly describe the history of IP-enabled services – a history characterized by explosive growth and, recently, the advent of offerings that promise to transform the communications environment – and then discuss the legal context in which we consider the questions posed by those offerings.

A. Technological and Market Evolution of IP-Enabled Services

8. The rise of the Internet has fundamentally changed the ways in which we communicate by increasing the speed of communication, the range of communicating devices, and the platforms over which they can send and receive. This growth has been possible because the Internet employs an open network architecture using a common protocol – the Internet Protocol, or IP – to transmit data across the network in a manner fundamentally different than the way in which signals transit a circuit-switched service.²³ Whereas circuit-switched networks generally reserve dedicated resources along a path through the network, IP networks route traffic without requiring the establishment of an end-to-end path. A telephone call placed over a circuit-switched network typically requires resources to be reserved along the path between both parties for the entire duration of the call, even if the amount of information being transferred does not require the full bandwidth of the facilities.²⁴ In contrast, in Internet Protocol networking, data is segmented into packets which are individually addressed and then transmitted over a series of physical networks which may be comprised of copper, fiber, coaxial cable, or wireless facilities.²⁵ When packets are transmitted via IP between two points, the

²³ In essence, the Internet is a global, packet-switched network of networks that are interconnected through the use of the common network protocol – IP. The Supreme Court has described the Internet as “an international network of interconnected computers.” *Reno v. ACLU*, 521 U.S. 844, 849-50 (1997). No single entity controls the Internet, for it is a “worldwide mesh or matrix of hundreds of thousands of networks, owned and operated by hundreds of thousands of people.” John S. Quarterman & Peter H. Salus, *How the Internet Works* (visited Dec. 17, 2003) <<http://www.mids.org/works.html>>.

²⁴ See Presentation by Christopher Rice, SBC Senior Vice-President, to FCC Staff, *VoIP Telephony Discussion* at 4 (Nov. 19, 2003) (*SBC Nov. 19 Presentation*) (“Trunk circuit held up between Phone A and Phone B for length of call”). This presentation, and all other cited presentations to Commission staff, have been filed in this docket (WC Docket No. 04-36) for public inspection.

²⁵ See *Living Internet: Routing* (visited Dec. 17, 2003) <http://livinginternet.com/i/w_route.htm> (IP is used to transfer packets between networks); *Living Internet: How Packets Work* (visited Dec. 17, 2003) <http://livinginternet.com/i/w_packet_packet.htm> (*How Packets Work*) (explaining how IP creates data packets and addresses them). The routers, which are computers connected to the IP network, examine the address on each IP packet, and, using a routing configuration table, decide to which other router in the network the IP packet should be sent. Each router in the network constantly communicates with the other routers, permitting each router to know whether the other router is active and the amount of traffic the other router is carrying. See Curt Franklin, *How Routers Work* (visited Dec. 17, 2003) <<http://computer.howstuffworks.com/router6.htm>> (*How Routers Work*). This information permits the routers to decide which route to use to send an IP packet toward its ultimate destination. See *Living Internet: How Switching Works* (visited Dec. 17, 2003) <http://livinginternet.com/i/w_packet_switch.htm>. When the packet reaches this final destination it is unwrapped and the data inside is used for an application.

network does not establish a permanent or exclusive path between the points.²⁶ Instead, routers read packet addresses individually, and decide – sometimes on a packet-by-packet basis – which route to use for each packet.²⁷ Thus, the routes that packets will take to the same destination may vary, depending on the best routing information available to the routers.²⁸ Indeed, packets traveling in the opposite direction on the return communications between the same sending and receiving pair may follow an entirely different path. Moreover, these packets may carry any type of information for applications offering widely disparate functions, including those facilitating voice communications.²⁹

9. The growth of the Internet has been accompanied by an explosion in consumer access to a growing universe of websites, all relying on IP. Many websites have evolved into content-rich information portals configured to serve the broad commercial, educational, political and entertainment interests of Internet users. In its initial stages, the Internet was primarily utilized for e-mail, file transfer, and – more recently – access to the world wide web. Increasingly, the Internet is being utilized for more sophisticated uses, such as peer-to-peer file sharing,³⁰ instant messaging, streaming media, online gaming, and virtual private networks (VPNs).³¹ In turn, as applications proliferate and demand for Internet access services grows, service providers continue to augment network capacity to offer faster Internet access services.³²

²⁶ See *Living Internet: Packet Switching History* (visited on Dec. 17, 2003) <http://livinginternet.com/iw_packet_inv.htm> (IP communications do not require an “always-on, continuous connection”).

²⁷ See *How Routers Work*.

²⁸ See *id.*; *Living Internet: Interior Gateway Protocols* (visited Dec. 17, 2003) <http://livinginternet.com/iw_route_igp.htm> (describing the algorithms that routers use in deciding where to forward a packet).

²⁹ See *How Packets Work*.

³⁰ In the “peer-to-peer” (P2P) model, each party to a communication has the same capabilities and either party can initiate a communication session. Applications residing on the user’s PC (or other hardware) permit the user to connect directly to another user’s hardware without the assistance of an Internet Service Provider. Now that some in industry believe that most of the voice quality issues have been addressed, P2P voice service offerings are on the rise. See Victor Schnee, *Free Voice? Skype’s Peer-To-Peer Is To Be Watched!*, Probe Financial Services (Oct. 27, 2003); Skype Limited, *What is Skype?* (visited Jan. 14, 2004) <<http://www.skype.com/skype.html>>.

³¹ See *infra* Part II.A.2.

³² Dial-up, or narrowband, Internet access utilizes the same PSTN infrastructure that telephone subscribers use to place traditional circuit-switched voice calls. As mentioned above, *see supra* note 3, the Commission has defined “high-speed” to describe transmission capacity capable of achieving over 200 kbps in at least one direction, and “advanced services” as having over 200 kbps capability in both directions. The Commission has more generally defined “high-speed” Internet as a service that “enables consumers to communicate over the Internet at speeds that are many times faster than the speeds offered through dial-up telephone connections” and that enables subscribers to “send and view content with little or no transmission delay, utilize sophisticated ‘real-time’ applications, and take advantage of other high-bandwidth services.” See *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner Inc. and America Online, Inc., Transferors, to AOL Time Warner* (continued....)

These broadband services have been deployed across multiple platforms, including those of local exchange carriers (LECs), cable operators, direct broadcast satellite (DBS), video programming providers and, increasingly, wireless (including WiFi) providers and electric companies using power lines.³³ In the following sections, we briefly describe a cross-section of the numerous offerings – including not only various sorts of IP telephony, but also new and unique forms of IP-based communication – made possible by these developments.

1. Internet Voice

10. Although several providers carry voice calls over their backbone IP networks, until recently, use of the Internet for the purpose of transmitting voice communications has been limited.³⁴ Early ventures in peer-to-peer IP telephony were largely unsuccessful in part due to the nature of early IP networks, which offered limited reliability and voice quality. Today, however, as a result of improvements in technology, IP networks are increasingly being used to carry voice communications. For example, private IP networks are used to provide an array of communications services to enterprise customers.³⁵ Residential users can access VoIP services

(Continued from previous page)

Inc., Transferee, CS Docket No. 00-30, Memorandum Opinion and Order, 16 FCC Red 6547, 6572, para. 63 (2001) (*FCC AOL Time Warner Merger Order*); see also *id.* at 6572, 6574-77, paras. 64, 69-73. Researchers at Telcordia predict that, in one decade, residential subscribers may possibly have Internet access speeds as high as one gigabit-per-second, and commercial systems may feasibly achieve approximately 20 terabits-per-second on a single optical fiber. See Presentation by Matthew S. Goodman, Ph.D., Chief Scientist and Telcordia Fellow, and Robert J. Runser, Ph.D., Senior Research Scientist, Telcordia Technologies, to FCC Staff, *Broadband Networking: What is Broadband?* 5 (Nov. 5, 2003). Providers are also increasing the speeds at which users can access the Internet over narrowband facilities. See, e.g., *ISPs Use Retail Chains To Drive Subscription Growth In 2004*, Electronic Information Report (Jan. 12, 2004) (describing “EarthLink Accelerator,” which “enables dial-up subscribers to access the Web at speed up to five times faster than standard 56K connections”).

³³ CMRS providers are also offering broadband access. See, e.g., Verizon Wireless, *Verizon Wireless Announces Roll Out of National 3G Network*, Press Release (Jan. 8, 2004) (Verizon Jan. 8, 2004 Press Release) (describing service providing speeds of 300 to 500 kbps); Monet Mobile Networks, *monet broadband*, at 3 (visited Jan. 14, 2004) <<http://www.monetmobile.com/Assets/Audiovoxuser.pdf>> (describing wireless broadband service introduced in the fall of 2002, offering average speeds of 700 kbps).

³⁴ The increase in the number of voice calls transmitted over at least a portion of an IP network over the past few years has been dramatic. In 2002, international VoIP traffic increased by 80% to 18.7 billion minutes, and comprised approximately 10.8% of all international call traffic. See *Telegeography 2004*, Primetrica, Inc. 12, 26 (Dec. 2004) (*Telegeography 2004*) (these numbers include all cross-border calls carried on an IP network and terminated on a PSTN; PC-to-PC communications and PVN traffic were excluded from Telegeography's survey). Another source estimates that, in 2002, the total world retail (residential and enterprise) IP voice traffic volume was approximately 47.5 billion minutes, while approximately 8 trillion minutes were carried using the PSTN. See *VoIP Services Assessment: Communications Service Strategies & Opportunities*, Stratecast Partners 19 (Feb. 2003) (*Stratecast Report*).

³⁵ Enterprises may utilize intra-office or interoffice private IP networks that handle voice calls and data transmission. Some of these IP networks are Virtual Private Networks (VPNs) that traverse the open Internet. See presentation by Christopher Rice, SBC Senior Vice-President, to FCC Staff, *VoIP Telephony Discussion* (Nov. 19, 2003) (*SBC Nov. 19 Presentation*).

using phones, laptops, and personal digital assistants. Even many gaming systems now feature VoIP functionality.³⁶ Also, wireless communications standards have evolved to include IP as a key component.³⁷ Many manufacturers are concentrating most, if not all, new development and marketing on IP-capable alternatives while merely providing maintenance support for legacy circuit-switched equipment currently in place.³⁸ Similarly, a recent flood of press announcements reflects that a number of service providers, from residential telephony companies

³⁶ See *infra* para. 19.

³⁷ For example, Code Division Multiple Access 2000 (cdma2000), one of the main third generation (3G) systems, uses enhanced Mobile IP in its core network architecture. See A. Jamalipour & P. Lorenz, "Merging IP and Wireless Networks," *IEEE Wireless Communications*, October 2003, Vol. 10 No. 5, at 6. The high-speed version of this standard, cdma2000 1xEV-DV (evolution – data, voice) supports an all IP-integrated voice, data, and video communications capability. See Y. Yoon et al., "Tutorial on CDMA 2000 1xEV-DV," *IEEE Wireless Communications and Networking Conference 2003 Ericsson Wireless Communications, USA*, March 17, 2003, at 9. Currently in the U.S., both Sprint PCS and Verizon Wireless support the 2.5G CDMA standard referred to as cdma2000 1X, which supports both circuit-switched voice and packet-switched data using Mobile IP. A 3G CDMA data-optimized standard is the cdma2000 1xEV-DO (evolution – data optimized) standard. See *CDMA2000 1xEV-DO is fast enough to be 3G* (visited Feb. 7, 2004) <<http://www.3g.co.uk/PR/April2002/3273.htm>>. To allow roaming users access to integrated data, voice, and multimedia services, standards bodies, such as the Internet Engineering Task Force (IETF) and Third-Generation Partnership Project (3GPP), are working on the specifications of an all IP wireless network. See N. Banerjee et al., The University of Texas at Arlington, "Mobility Support in Wireless Internet," *IEEE Wireless Communications*, October 2003, Vol. 10 No. 5, at 54. Another European 3G wireless network approved standard is the Universal Mobile Telecommunications System (UMTS). See UMTS Forum, *Network Evolution: Radio Access & Core Network Evolution GSM* (visited Feb. 7, 2004) <http://www.ums-forum.org/servlet/dycon/zturnts/ums/Live/en/ums/3G_Network_gsm>. UMTS' core network is comprised of an IP Multimedia Subsystem (IMS), which supports VoIP in addition to other multimedia services. UMTS also supports circuit-switched voice communications that are interconnected with the legacy PSTN. UMTS is an evolution of 2.5G GSM networks, including both the circuit-switched voice system and general packet radio service, GSM/GPRS, supporting IP services. See A. Jamalipour, "Tutorial on Wireless Mobile Internet – Architectures, Protocols and Services," *IEEE Wireless Communications and Networking Conference 2003, Ericsson Wireless Communications, USA*, March 16, 2003, at 50, 67; see also A. Jamalipour & P. Lorenz, "Merging IP and Wireless Networks," *IEEE Wireless Communications*, October 2003, Vol. 10 No. 5, at 6.

³⁸ See Nortel Networks, *Voice over IP* (visited Feb. 12, 2004) <<http://www.nortelnetworks.com/corporate/technology/voip/index.html>> ("Service providers and enterprises agree that the network of the future must offer combined voice and data communications over a single integrated platform built on packet technology."); Cisco Systems, *Cisco IP Communications Solutions* (visited Feb. 12, 2004) ("Cisco IP telephony solutions provide a flexible foundation for powerful new applications that extend the limits of traditional telephony.") <http://www.cisco.com/en/US/netsol/ns340/ns394/ns165/ns268/net_value_proposition09186a00800d756c.html>. Nortel is deploying VoIP-capable equipment that wireline carriers can use with their existing circuit-switched networks. See *Netphones Start Ringing Up Customers*, *BusinessWeek* online (Dec. 29, 2003) <http://www.businessweek.com/magazine/content/03_52/b3864039.htm> (estimating that spending on VoIP telephony equipment increased by 10% in 2003 from 2002). By some estimates, worldwide spending by businesses on IP telephony systems in 2003 was nearly double that of the previous year. See Grant and Latour (citing a research firm that estimates that spending on IP telephony systems would exceed \$1 billion in 2003, constituting approximately "20% of world-wide business spending on phone systems").

to cable providers, have begun to use or will soon use IP to provide voice services to residential customers.³⁹

11. These recent developments, however, must be understood within the context of the development of the technology in recent years, and the myriad services in which it is now used. IP telephony has been offered in various forms since at least 1995.⁴⁰ Early experience with the technology, however, appears to have deterred investors and consumers from adopting it because, analysts argue, its reliability and voice quality were below standards that most consumers would tolerate.⁴¹ According to many industry watchers, technology has now overcome prior quality and reliability concerns.⁴² These improvements, the creation of new IP

³⁹ See, e.g., Ben Charny, *Cox Communications Dives into VoIP*, CNET News.com (Dec. 15, 2003) <<http://news.com.com/2100-7352-5124440.html>> (describing Cox's offering of VoIP service to cable customers in Roanoke, Virginia); Ben Charny, *Qwest Taps into Net Telephony*, CNET News.com (Dec. 10, 2003) <<http://news.com.com/2100-7352-5119020.html>> (describing Qwest VoIP service offered to customers using its broadband facilities); Ben Charny & Jim Hu, *Time Warner Cable Reaches VoIP Deals*, CNET News.com (Dec. 8, 2003) <<http://news.com.com/2100-7352-5116936.html>> (describing VoIP services to be offered using Time Warner's cable facilities); Ben Charny, *Verizon Details Internet Phone Plans*, CNET News.com (Nov. 18, 2003) <<http://news.com.com/2100-7352-5108908.html>> (describing Verizon's plans to offer VoIP services to customers using its broadband facilities).

⁴⁰ See Grant and Zuckerman, *Redialing the Internet Frenzy?* Wall St. J., Nov. 13, 2003, at C1 (Grant and Zuckerman).

⁴¹ See *id.* at C1 (noting that many customers, especially enterprise customers, found the sound quality associated with early IP telephony to be unacceptable); see also Presentation by Michael Kende, Principal Consultant, Analysys Consulting, to FCC Staff, *Voice over IP Business Models 3* (Jan. 29, 2004).

⁴² Cable operators and wireline carriers have developed and deployed technology that overcomes prior voice quality issues. CableLabs, the cable industry's research and development group, has developed so-called PacketCable specifications that are designed to provide quality of service (QoS) to a variety of IP-enabled services. PacketCable is built on top of the DOCSIS 1.1 cable modem infrastructure that uses IP technology to enable a wide range of multimedia services, such as IP telephony, multimedia conferencing, interactive gaming, and general multimedia applications. Among these services, VoIP is the first service delivered over the PacketCable architecture. Because PacketCable mandates the use of a managed IP network, in that services are not delivered over the Internet, PacketCable compliant systems are able to guarantee priority delivery of voice IP packets over other data packets on the DOCSIS access network. CableLabs has already certified products that meet the PacketCable specifications, such as DOCSIS 1.1 modems that incorporate multimedia terminal adaptors (MTA) that permit a customer to connect a telephone directly to a cable modem. See David McIntosh & Maria Stachelek, *VoIP Services: PacketCable Delivers a Comprehensive System* (visited Jan. 7, 2004) <http://www.packetcable.com/downloads/NCTA02_VOIP_Services.pdf>.

Wireline carriers and their partners, such as Telcordia, have also developed solutions for voice quality issues. Some wireline carriers intend to use protocols such as multiprotocol label switching (MPLS), which is an application that runs on an IP network's routers, provides switching capability, and gives priority QoS to certain IP packets. When an IP packet enters the IP network, the MPLS places labels on that packet which determine whether it will receive priority treatment over other packets that transit the network. When an MPLS-labeled priority packet arrives at a router, once that router determines that the MPLS has granted that IP packet priority, it will send the packet through the router before non-priority packets, and it will send the packet on a route through the IP network that has the least congestion. The carrier solution also uses SIP for signaling purposes. See *SBC Nov. 19 Presentation* at 16-17.

services that traditional telephony providers may offer alongside voice service,⁴³ and increasing penetration of broadband into the residential market⁴⁴ have become important market drivers promoting deployment of IP telephony technologies. In addition, market entry by IP service providers such as Vonage appears to have spurred deployment of IP-enabled voice services by established telephony providers.⁴⁵

a. IP Telephony Offerings by Owners of Transmission Facilities

12. As noted above, an IP network transmits IP packets, which may contain data that, when unpacked, forms voice communication. Cable operators, wireline carriers, and wireless providers have announced that they have begun to deploy, or intend to deploy, IP networks to transmit IP telephony services to their subscribers. Cable operators have begun to offer video, broadband Internet, and IP telephony over their hybrid fiber-coaxial cable plant. Time Warner Cable predicts that it will offer IP telephony to all of its subscribers by the end of 2004.⁴⁶ To achieve this goal, Time Warner recently entered into an agreement with MCI and Sprint to use those companies' networks to provide IP telephony to its cable subscribers and to interconnect their calls with the PSTN.⁴⁷

13. AT&T states that it will provide VoIP service in 100 markets by the first quarter of 2004 and expects to enroll over one million customers in the next two years.⁴⁸ Other wireline carriers have announced plans to launch IP telephony services in 2004.⁴⁹ SBC currently offers IP telephony to small and medium size enterprises (SMEs) in 13 states, and BellSouth plans to

⁴³ See Douglas Sicker, *Delocalization in Telecommunications Networks*, The Progress & Freedom Foundation at 19 (Jan. 2004) <<http://pff.org/publications/communications/pop11.2delocalization.pdf>> ("In the long run, VoIP's true advantages (e.g., integrated networks and flexible service platforms) will be what drives its success.").

⁴⁴ See Grant & Latour (noting that the "spread of broadband connections" makes "VoIP much easier to use").

⁴⁵ See *id.* (noting that some top telecommunications carriers are testing their own IP telephony offerings in response to the "newfound success" of VoIP companies).

⁴⁶ See Presentation by John Billock, Vice Chairman & Chief Operating Officer, Time Warner Cable, to FCC VoIP Forum, at 5 (Dec. 1, 2003) <<http://www.fcc.gov/voip>> (*Time Warner VoIP Forum Presentation*). Time Warner recently introduced IP telephony to a small community in Maine, where it has an agreement with a competitive LEC to facilitate outgoing and incoming calls to and from the PSTN. See *id.*

⁴⁷ See MCI, *MCI and Time Warner Cable Partner to Deliver Next Generation, IP-Enabled Communications*, Press Release (Dec. 8, 2003); Ben Charny and Jim Hu, *Time Warner Cable Reaches VoIP Deals*, CNET News.com (visited Jan. 14, 2004) <<http://news.com.com/2100-7352-5116936.html>>.

⁴⁸ See Shawn Young, *AT&T to Launch Internet-Based Telephone Service*, Wall St. J. B6 (Dec. 11, 2003). AT&T's CEO David Dorman states, "Unlike many of our competitors, who are constrained by geographic reach or broadband access technologies, our voice over IP will be available in cities across America to customers with different kinds of broadband access." Margaret Kane & Scott Ard, *AT&T to Offer Internet Calling*, CNET News.com (Dec. 11, 2003) <<http://news.com.com/2100-7352-5119779.html>>.

⁴⁹ See Jo Maitland, *RBOC VOIP Coming in 2004*, Boardwatch (Nov. 11, 2003).

rollout service to SMEs in 9 states throughout 2004. Qwest announced that it would offer IP telephony to residential subscribers and SMEs in Minnesota in December 2003. Finally, Verizon intends to offer IP telephony to its DSL subscribers nationwide in the second quarter of 2004, and to businesses in the fourth quarter of 2004.⁵⁰

14. Wireless service providers have also begun providing IP telephony services. Second generation (2G) mobile communications systems solely using circuit-switched networks to provide voice service are now being supplemented by 2.5G and 3G systems providing enhanced multimedia services built on packet switching and IP routing.⁵¹ For example, Verizon Wireless and Sprint PCS have recently launched push-to-talk service,⁵² using VoIP technology, and additional carriers are expected to launch push-to-talk service this year.⁵³ Voice services will also be provided by service providers using WiFi technology.⁵⁴

b. IP Telephony Offerings By Other Providers

15. Providers not owning extensive facilities – or any facilities at all – have also begun to offer IP telephony services to residential end users. For example, pulver.com (Pulver) operates Free World Dialup (FWD), an Internet application that facilitates FWD members engaging in free peer-to-peer communications, exchanging voice, video, or text. FWD subscribers use a Session Initiation Protocol (SIP) phone or personal computer⁵⁵ to make “calls” to other FWD members that do not utilize the PSTN. Pulver states that the members’ end-user devices establish the actual connection and manage the call, and that the calls are carried by the members’ preexisting broadband connection rather than over Pulver-owned facilities.⁵⁶ Vonage offers an IP telephony service that permits a subscriber with a broadband connection to place telephone calls to, and to receive calls from, other Vonage broadband subscribers and end users

⁵⁰ See *id.*

⁵¹ For example, Verizon Wireless recently announced plans to rollout its 3G broadband network nationwide. See Verizon Wireless, *Verizon Wireless Announces Roll Out of National 3G Network*, Press Release (Jan. 8, 2004).

⁵² “Push-to-talk” services allow CMRS subscribers to use their mobile phones to send instant voice communications to an individual or group of users.

⁵³ See Verizon Wireless, *Verizon Wireless Launches National Push to Talk Service*, Press Release (Aug. 14, 2003); Sprint, *Sprint Launches Nationwide Two-Way Walkie-Talkie Style Service to Customers with a Quick Way to Communicate One-on-One or in Groups*, Press Release (Nov. 17, 2003).

⁵⁴ See Sue Marek, *Wi-Fi Winds Its Way Into Phones*, *WirelessWeek* (visited Jan. 15, 2004) <<http://www.wirelessweek.com/article/CA326389?text=wi%2Dfi+winds+its+way+into+phones&stt=001>>.

⁵⁵ See Petition for Declaratory Ruling that pulver.com’s Free World Dialup is Neither Telecommunications Nor a Telecommunications Service, WC Docket No. 03-45 at 3-4 (filed Feb. 5, 2003) (*Pulver Petition*).

⁵⁶ See *id.* at 2-3.

relying on traditional PSTN facilities alike.⁵⁷ Vonage does not provide its customers with Internet access or a personal computer. Rather, Vonage supplies software and a multimedia terminal adapter (MTA) that permits its customers to use analog phones to place calls via their broadband Internet connections.⁵⁸ Vonage provides each of its customers with traditional telephone numbers so that Vonage customers may be called by PSTN telephone subscribers.⁵⁹ When a Vonage customer communicates with a subscriber of ordinary telephone service, Vonage converts its customer's IP packets into the digital TDM (time division multiplexed) format for transfer through a media gateway to the PSTN, and vice versa.⁶⁰ If a Vonage customer communicates with another Vonage customer, this transmission does not utilize the PSTN and Vonage servers use SIP to direct the call to the other customer's personal computer or MTA.⁶¹

2. Other New and Future IP-Enabled Services

16. As discussed above, software developers expect to introduce IP-enabled data applications that take advantage of broadband speeds. In addition, as telephone service is migrated to an IP network, telephony providers plan to provide new IP-enabled data features that will enhance the telephony experience. Software developers are also upgrading traditional IP-enabled data services, such as instant messaging, e-mail, web surfing, gaming, and virtual private networks, to provide new features and capabilities that capitalize on the availability of higher speeds. As these services – which may integrate voice, video, and data capabilities while maintaining high quality of service – are introduced, it may become increasingly difficult, if not impossible, to distinguish “voice” service from “data” service, and users may increasingly rely on integrated services using broadband facilities delivered using IP rather than the traditional PSTN. Analysts predict the increasing integration of IP-enabled services with devices other than telephones and computers.

17. These new services will likely come in many varieties. For example, analysts predict that high-speed broadband connections will fuel the use of video-conferencing, on-demand conferencing, and collaboration on documents while conferencing.⁶² These video calls

⁵⁷ See Vonage Petition for Declaratory Ruling, WC Docket No. 03-211, at iii, 9 (filed Sept. 22, 2003) (*Vonage Petition*). Vonage customers cannot access the Vonage service with dial-up connections. See *id.* at 4.

⁵⁸ See *id.* at 5. Some of Vonage's customers use “native IP phones,” which produce digital signals and can only be used with an Internet connection and are incompatible with the PSTN. *Id.*

⁵⁹ See *id.* at 8 (“The telephone number associated with the Vonage customer is not tied to the customer's physical location. Rather, the telephone number is mapped to the digital signal processor contained in the customer's computer, enabling Vonage to identify and serve that customer over any Internet connection.”).

⁶⁰ See *id.* at 6-7.

⁶¹ See *id.* at iii, 6-7.

⁶² *Sprint Nov. 17 Presentation*.

and conferences may be accompanied by the transmission of data.⁶³ Some applications that are currently used by enterprise customers, or that may in the future be used by such customers, include distance training, Internet classrooms, IP customer support centers, voice-enabled transactions and content services, subscription video, and telemedicine.⁶⁴

18. With regard to telephone calls, IP-enabled data services might include virtual telephone numbers, directory dialing, automated voicemail attendants, call pre-screening, and call forwarding of pre-screened calls to other IP enabled devices, such as a computer or wireless phone.⁶⁵ Industry analysts also contemplate a unified messaging or a unified mailbox that collects a user's e-mail, voicemail, and faxes, which may be accessed through the web, a telephone or any other IP-enabled device.⁶⁶ These services permit users to decide which media they would like to use to respond to a given message.⁶⁷ For example, software might read a user's e-mail messages or faxes to him or her over the telephone, allowing the user to respond via e-mail, voicemail, facsimile, or voice telephone.⁶⁸

19. Software developers are embedding traditional IP-enabled data services with voice features. For example, both America Online's and Microsoft Windows XP's instant messaging (IM) clients include a voice feature, as do many chat applications.⁶⁹ "Click to talk" services offered by Web- or E-mail-based applications permit customers to click on a web button in order to speak with a service operator or to enter into an instant messaging session with the service operator.⁷⁰ Map and navigation services and online gaming services also contain voice

⁶³ See Presentation by Ming Lai, Telcordia Technologies, to FCC Staff, *Voice Over IP Overview: Services, Architectures, Ordering, and Billing* at 6 (May 19, 2003) (*Telcordia May 19 Presentation*).

⁶⁴ See *id.* at 6.

⁶⁵ See AT&T, *Services over Internet Protocol: Voice is Just the Beginning* at 3 (Dec. 2003) <<http://www.fcc.gov/voip>> (*AT&T FCC VoIP Forum Submission*) (discussing desktop multimedia tools to provide these IP-enabled data services for voice communications); *Telcordia May 19 Presentation* at 6; Grant & Latour ("[U]sers will be able to redirect calls to other numbers, take messages only during certain hours, [and] give messages only to certain callers.")

⁶⁶ See *AT&T FCC VoIP Forum Submission* at 3 (universal messaging); *Telcordia May 19 Presentation* at 6; Michael Rogers, *Will Telephone Calls Be Free?*, *Newsweek* (last modified Dec. 16, 2003) <<http://msnbc.msn.com/id/3730179>> (discussing an integrated "communications package that also includes voicemail, email, fax, instant messaging and video-conferencing").

⁶⁷ See *Sprint Nov. 17 Presentation*; Rogers ("[C]lever Web interfaces will let you convert your voicemail messages to email, or your emails to voice.").

⁶⁸ *Sprint Nov. 17 Presentation*; Rogers (discussing "myriad of ways" that a user may respond to a voicemail message or email).

⁶⁹ *Telcordia May 19 Presentation* at 6; Rogers (Web portals may offer telephone service as part of email and instant message packages).

⁷⁰ *Telcordia May 19 Presentation* at 6.

components.⁷¹ Many PC and console games, such as Microsoft's Xbox, permit their owners to play against other players via peer-to-peer Internet connections.⁷² Many of these games permit the gamers to speak with each other via the Internet as they play.⁷³

20. Applications providers are preparing to provide IP-enabled services over devices other than phones and computers.⁷⁴ Microsoft is currently testing its Internet Protocol television (IPTV) product, which it hopes will offer television subscribers more advanced services, such as HDTV, VOD, interactive television, instant channel changing, multiple pictures-in-picture, and a richer multimedia program guide, via their broadband connections.⁷⁵ In addition, Microsoft has already enabled VoIP capability in Windows CE devices by incorporating SIP into that operating system.⁷⁶ Personal digital assistants (PDAs) are currently capable of transmitting voice and other data using IP technology; additional IP applications are expected to be developed for PDAs and other mobile devices in the future.⁷⁷ Moreover, IP-enabled services are now or may soon be accessed through, or facilitate use of, cameras, home appliances, digital video recorders, medical devices, and other equipment.

21. Mobile services have also benefited from technological advances. Second-generation (2G) cellular and PCS systems, mainly using voice circuit-switched networks and low data rates, are now being supplemented or replaced by "2.5G" networks⁷⁸ supporting both circuit-switched and packet-switched services. Both Sprint and Verizon Wireless operate cdma2000 1x networks. Verizon Wireless, for example, currently operates a data-only overlay

⁷¹ *Telcordia May 19 Presentation* at 6.

⁷² See XBOX, *Xbox Live* (visited Dec. 18, 2003) <<http://www.xbox.com/en-us/live/games/default.htm>> (*Xbox Live*); GameSpy Industries, *gamespy arcade* (visited Dec. 18, 2003) <<http://www.gamespyarcade.com>> (*Gamespy*) (a web site for PC gamers to meet and play against each other online).

⁷³ See *Xbox Live; Gamespy*; Presentation by Kevin Werbach, Supernova Group LLC, to FCC VoIP Forum, at 5 (Dec. 1, 2003) <<http://www.fcc.gov/voip>> (*Werbach VoIP Forum Presentation*) (asking whether game chat devices "count as phones").

⁷⁴ See *Werbach VoIP Forum Presentation* at 4-5 (discussing the convergence of IP-enabled services and devices, including personal digital assistants (PDAs)); *AT&T FCC VoIP Forum Submission* at 4 (protocol conversion is occurring in many consumer devices, including cell phones that are also PDAs, SIP telephones that are also Java computing devices, and WiFi handsets that are SIP endpoints).

⁷⁵ See Alan Breznick, *Microsoft Pitches IPTV Initiative to MSOs and Telcos: Software Giant Aims to Make Commercial Product Available by End of 2004*, Cable Datacom News (Nov. 1, 2003) <<http://www.cabledatcomnews.com/nov03/nov03-6.html>>.

⁷⁶ See Microsoft, *Device Platforms* (visited Feb. 12, 2004) <<http://msdn.microsoft.com/embedded/devplat/default.aspx>> (describing Windows CE).

⁷⁷ See *Werbach VoIP Forum Presentation* at 4-5 (PDAs, wireless phones and push-to-talk devices that use an IP network for voice transmission); *AT&T FCC VoIP Forum Submission* at 3 (push-to-talk cellular services).

⁷⁸ See *supra* para. 14.

network based on the 1x EV-DO (evolution – data optimized) standard in Washington DC and San Diego, allowing up to 300 kbps to 500 kbps data rates.⁷⁹ Cingular and AT&T Wireless operate GSM/GPRS networks which allow voice circuit switched as well multi-media services.

22. Thus, as use of IP expands, the technology's transformative effect on the communications landscape will likely become only more prominent, giving rise to a "virtuous circle" in which competition begets innovation, which in turn begets more competition. End users are likely to enjoy greater and greater flexibility in designing or selecting communications packages that suit their individual needs, and can be expected to access those packages over networks of their choosing, on devices of their choosing. Many parties contend that, in all probability, cross-platform competition will sharpen as distinctions between "voice," "video," and "data" services blur. This competition will likely force more innovation and lower prices, resulting in more individual choice and hence even greater competition.

B. Legal Background

23. Our consideration of issues surrounding IP-enabled services and applications takes place within a legal framework comprised of statutory provisions and judicial precedent, prior Commission orders, ongoing Commission proceedings, and state actions relating to IP-enabled services. An understanding of this legal context is important to ensuring full consideration of the issues raised in this Notice.

1. Statutory Definitions and Commission Precedent

24. The Communications Act and prior Commission orders set forth several definitions relevant to our consideration of VoIP and other IP-enabled services. First, the Act defines the terms "common carrier" and "carrier" to include "any person engaged as a common carrier for hire, in interstate or foreign communication by wire or radio." The Act specifically excludes persons "engaged in radio broadcasting" from this definition.⁸⁰ Various regulatory obligations and entitlements set forth in the Act – including a prohibition on unjust or unreasonable discrimination among similarly situated customers and the requirement that all charges, practices, classifications, and regulations applied to common carrier service be "just and reasonable"⁸¹ – attach only to entities meeting this definition.

25. Second, the Commission has long distinguished between "basic" and "enhanced" service offerings. In the *Computer Inquiry* line of decisions,⁸² the Commission specified that a

⁷⁹ See Verizon Jan. 8, 2004 Press Release.

⁸⁰ 47 U.S.C. § 153(10).

⁸¹ See 47 U.S.C. §§ 201-02.

⁸² See *Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities*, Docket No. 16979, Notice of Inquiry, 7 FCC 2d 11 (1966) (*Computer I NOI*); *Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities*, (continued....)

"basic" service is a service offering transmission capacity for the delivery of information without net change in form or content.⁸³ Providers of "basic" services were subjected to common carrier regulation under Title II of the Act.⁸⁴ By contrast, an "enhanced" service contains a basic service component but also "employ[s] computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information."⁸⁵ The Commission concluded that enhanced services were subject to the Commission's jurisdiction.⁸⁶ It further found, however, that the enhanced service market was highly competitive with low barriers to entry; therefore, the Commission declined to treat providers of enhanced services as "common carriers" subject to regulation under Title II of the Act.⁸⁷ In separate orders, the Commission also determined that exempted enhanced service providers (ESPs) should not be subjected to originating access charges for ESP-bound traffic.⁸⁸

26. In 1996, the Telecommunications Act codified, with minor modifications, the Commission's distinction between regulated "basic" and largely unregulated "enhanced" services. The 1996 Act defined "telecommunications" to mean "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received."⁸⁹ The Act then defined "telecommunications service" to mean "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available to the public, regardless of facilities used."⁹⁰ The Commission has concluded, and courts have agreed, that the

(Continued from previous page)

Docket No. 16979, Final Decision and Order, 28 FCC 2d 267 (1971) (*Computer I Final Decision*); *Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)*, Docket No. 20828, Tentative Decision and Further Notice of Inquiry and Rulemaking, 72 FCC 2d 358 (1979) (*Computer II Tentative Decision*); *Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)*, Docket No. 20828, Final Decision, 77 FCC 2d 384 (1980) (*Computer II Final Decision*); *Amendment of Section 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry)*, CC Docket No. 85-229, Report and Order, 104 FCC 2d 958 (1986) (*Computer III*) (subsequent cites omitted) (collectively the *Computer Inquiries*).

⁸³ *Computer II Final Decision*, 77 FCC 2d at 419-22, paras. 93-99.

⁸⁴ *Id.* at 428, para. 114.

⁸⁵ 47 C.F.R. § 64.702; see also *Computer II Final Decision*, 77 FCC 2d at 420-21, para. 97.

⁸⁶ *Computer II Final Decision*, 77 FCC 2d at 432, para. 125.

⁸⁷ *Id.* at 432-35, paras. 126-132.

⁸⁸ *MTS and WATS Market Structure*, CC Docket No. 78-72 Phase I, Memorandum Opinion and Order, 97 FCC 2d 682, 715, para. 83 (1983) (*MTS/WATS Market Structure Order*); *Amendments of Part 69 of the Commission's Rules Relating to Enhanced Service Providers*, CC Docket No. 87-215, Order, 3 FCC Rcd 2631, 2633, para. 17 (1988) (*ESP Exemption Order*).

⁸⁹ 47 U.S.C. § 153(43).

⁹⁰ 47 U.S.C. § 153(46).

"telecommunications service" definition was "intended to clarify that telecommunications services are common carrier services."⁹¹ Various entitlements and obligations set forth in the Act – including, for example, the entitlement to access an incumbent's unbundled network elements for local service⁹² and the obligation to render a network accessible to people with disabilities⁹³ – attach only to entities providing "telecommunications service."

27. By contrast, the 1996 Act defined "information service" to mean "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications network or the management of a telecommunications service."⁹⁴ The Act did not establish any particular entitlements or requirements with regard to providers of information services, but the Commission has exercised its ancillary authority under Title I of the Act to apply requirements to information services.⁹⁵

⁹¹ *Cable & Wireless, PLC*, Order, 12 FCC Rcd 8516, 8521, para. 13 (1997); see also *Virgin Islands Tel. Corp. v. FCC*, 198 F.3d 921, 926-27 (D.C. Cir. 1999).

⁹² See 47 U.S.C. § 251(c)(3).

⁹³ See 47 U.S.C. § 255(c).

⁹⁴ 47 U.S.C. § 153(20). We note that the "information service" category includes all services that the Commission previously considered to be "enhanced services." See *Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended*, CC Docket No. 96-149, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 21905, 21956-57, para. 102 (1996) (subsequent history omitted). Specifically, enhanced services are defined in section 64.702(a) of the Commission's rules as "services, offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information," and include, among other things, such services as voicemail, electronic mail, facsimile store-and-forward, interactive voice response, protocol processing, gateway, and audiotext information services. 47 C.F.R. § 64.702(a).

⁹⁵ See, e.g., *Implementation of Section 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996*, WT Docket No. 96-198, Report and Order and Further Notice of Inquiry, 16 FCC Rcd 6417, 6455-62, paras. 93-108 (1999) (*Disability Access Order*) (invoking ancillary authority to impose section 255-like obligations on providers of voicemail and interactive menu services); see also *Computer II Final Decision*; *Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)*, Memorandum Opinion and Order, 84 FCC 2d 50 (1980) (*Computer II Reconsideration Decision*); *Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)*, Memorandum Opinion and Order on Further Reconsideration, 88 FCC 2d 512 (1981) (*Computer II Further Reconsideration Decision*) (asserting ancillary jurisdiction over enhanced services, including voicemail and interactive menus, as well as over CPE).

2. Commission Consideration of VoIP

28. While the Commission has not addressed IP-enabled services in a comprehensive and definitive manner, the Commission has discussed issues relating to VoIP. Moreover, there are several petitions relating to this issue currently pending before the Commission. These items are briefly described below.

a. Stevens Report

29. In a 1998 Report to Congress known as the "Stevens Report,"⁹⁶ the Commission considered the proper classification of IP telephony services under the 1996 Act.⁹⁷ In that Report, the Commission declined to render any conclusions regarding the proper legal and regulatory framework for addressing these services, stating that "definitive pronouncements" would be inappropriate "in the absence of a more complete record focused on individual service offerings."⁹⁸ The Commission did, however, observe that in the case of "computer-to-computer" IP telephony, where "individuals use software and hardware at their premises to place calls between two computers connected to the Internet," the Internet service provider did not appear to be "providing" telecommunications, and the service therefore appeared not to constitute "telecommunications service" under the Act's definition of that term.⁹⁹ In contrast, a "phone-to-phone" IP telephony service relying on "dial-up or dedicated circuits ... to originate or terminate Internet-based calls" appeared to "bear the characteristics of telecommunications services,"¹⁰⁰ so long as the particular service met four criteria:

- (1) it holds itself out as providing voice telephony or facsimile transmission service; (2) it does not require the customer to use CPE different from that CPE necessary to place an ordinary touch-tone call (or facsimile transmission) over the public switched telephone network; (3) it allows the customer to call telephone numbers assigned in accordance with the North American Numbering Plan, and associated international agreements; and (4) it transmits customer information without net change in form or content.¹⁰¹

⁹⁶ *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report to Congress, 13 FCC Rcd 11501 (1998) (*Stevens Report*).

⁹⁷ *See id.* at 11541-45, paras. 83-93.

⁹⁸ *See id.* at 11541, para. 83.

⁹⁹ *Id.* at 11543, para. 87.

¹⁰⁰ *Id.* at 11544, para. 89.

¹⁰¹ *Id.* at 11543-44, para. 88.

30. With respect to protocol conversion and phone-to-phone services, the Commission noted that its *Non-Accounting Safeguards Order* determined that “certain protocol processing services that result in no net protocol conversion to the end user are classified as basic services; those services are deemed telecommunications services.”¹⁰² The Commission further stated that “[t]he protocol processing that takes place incident to phone-to-phone IP telephony does not affect the service’s classification, under the Commission’s current approach, because it results in no net protocol conversion to the end user.”¹⁰³ Moreover, the Commission observed that “[t]he Act and the Commission’s rules impose various requirements on providers of telecommunications, including contributing to universal service mechanisms, paying interstate access charges, and filing interstate tariffs.”¹⁰⁴ The Commission also predicted that future proceedings would require it to consider “the regulatory status of various specific forms of IP telephony, including the regulatory requirements to which phone-to-phone providers may be subject if we were to conclude that they are ‘telecommunications carriers.’” Specifically, the Commission noted that to the extent it concluded that phone-to-phone IP telephony services constituted “telecommunications service[s]” and obtain the same circuit-switched access as obtained by other interexchange carriers, the Commission “may find it reasonable that [providers of such services] pay similar access charges.”¹⁰⁵ However, the Commission has also stated in its *Intercarrier Compensation NPRM* that IP telephony “threatens to erode access revenues for LECs because it is exempt from the access charges that traditional long-distance carriers must pay.”¹⁰⁶

b. Disability Access NOI

31. In 1999, the Commission issued an order implementing the disability accessibility provisions found in sections 251(a)(2) and 255 of the Act.¹⁰⁷ The Commission attached to that Order a Notice of Inquiry raising specific questions regarding the application of these sections and the Commission’s implementing regulations in the context of “IP telephony” and “computer-based equipment that replicates telecommunications functionality.”¹⁰⁸ That Notice sought comment on the extent to which Internet telephony was impairing access to communications services among people with disabilities, the efforts that manufacturers were taking to render new

¹⁰² *Id.* at 11526, para. 50 (citing *Non-Accounting Safeguards Order*, 11 FCC Rcd at 21958, para. 107).

¹⁰³ *Id.* at 11527, para. 52.

¹⁰⁴ *Id.* at 11544, para. 91.

¹⁰⁵ *Id.* at 11544-45, para. 91; see also *Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, Notice of Proposed Rulemaking, 16 FCC Rcd 9610 (2001) (*Intercarrier Compensation NPRM*).

¹⁰⁶ *Intercarrier Compensation NPRM*, 16 FCC Rcd at 9657 para. 133.

¹⁰⁷ See generally *Disability Access Order*, 16 FCC Rcd 6417; *infra* paras. 58-60.

¹⁰⁸ *Disability Access Order*, 16 FCC Rcd at 6483-84, para. 175; see generally *id.* at 6483-6486, paras. 173-85.

technologies accessible, and the degree to which these technologies should be subjected to the same disability access requirements as traditional telephony facilities.¹⁰⁹

c. Pending Petitions

32. Several parties have filed petitions asking the Commission to rule on the proper legal classification and regulatory treatment of various IP-enabled services. The services at issue in these petitions differ markedly, ranging from (1) a “phone-to-phone” service using IP to transport interexchange traffic to (2) an Internet application that facilitates peer-to-peer communications or to (3) services permitting IP telephony subscribers to communicate with subscribers of traditional circuit-switched telephone service to (4) a broad range of “IP platform services.”¹¹⁰ Today, in a separate order, we resolve one of these petitions, finding that Pulver’s Free World Dialup is an unregulated information service – that does not use the PSTN – subject to federal jurisdiction.¹¹¹ We hereby incorporate the records of the pending AT&T, Vonage and Level 3 petitions and note that the record developed here could influence disposition of those proceedings.¹¹² We note, however, that by seeking comment on whether access charges should apply to the various categories of service identified by the commenters, we are not addressing

¹⁰⁹ See *id.* at 6484-86, paras. 179-85.

¹¹⁰ See Petition for Declaratory Ruling that AT&T’s Phone-to-Phone IP Telephony Services are Exempt from Access Charges, WC Docket No. 02-361 (filed Oct. 18, 2002); *Pulver Petition*; *Vonage Petition*; Level 3 Petition for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of 47 U.S.C. § 251(g), Rule 51.701(b)(1), and Rule 69.5(b), WC Docket No. 03-266 (filed Dec. 23, 2003); Petition of SBC Communications Inc. for Declaratory Ruling (filed Feb. 5, 2004) (defining “IP platform services” to include networks relying on IP, the capabilities and functionalities of those networks, and services and applications utilizing those networks to facilitate communications). SBC has also filed a petition seeking forbearance from application of Title II regulations in the context of “IP platform services.” See Petition of SBC Communications Inc. for Forbearance, WC Docket No. 04-29 (filed Feb. 5, 2004). The Commission has solicited public comment on that petition. See *Pleading Cycle Established for Comments on Petition of SBC Communications Inc. for Forbearance Under Section 10 of the Communications Act from Application of Title II Common Carrier Regulation to “IP Platform Services,”* WC Docket No. 04-29, Public Notice, DA 04-360 (rel. Feb. 12, 2004).

¹¹¹ See *Pulver Declaratory Ruling*.

¹¹² In so doing, we also expressly preserve the Commission’s flexibility to address one or all of these petitions by issuing a declaratory ruling or rulings before the culmination of the instant proceeding. We also expressly preserve the Commission’s flexibility to address the *Inter-carrier Compensation* and *Universal Service* proceedings currently pending before the Commission before the culmination of the instant proceeding. See *Inter-carrier Compensation NPRM*, 16 FCC Rcd 9610 (2001); *Federal-State Joint Board on Universal Service*, 1998 Biennial Regulatory Review – Streamlined Contributor Reporting Requirements Associated with Administration of Telecommunications Relay Service, North American Numbering Plan, Local Number Portability, and Universal Service Support Mechanisms, *Telecommunications Services for Individuals with Hearing and Speech Disabilities*, and the *Americans with Disabilities Act of 1990*, *Administration of the North American Numbering Plan and North American Numbering Plan Cost Recovery Contribution Factor and Fund Size*, *Number Resource Optimization*, *Telephone Number Portability*, *Truth-in-Billing and Billing Format*, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, 98-170, Report and Order and Second Further Notice of Proposed Rulemaking, 17 FCC Rcd 24952, 24984-98, paras. 66-100 (2002) (*Universal Service Further NPRM*).

whether access charges apply or do not apply under existing law.

33. As a policy matter, we believe that any service provider that sends traffic to the PSTN should be subject to similar compensation obligations, irrespective of whether the traffic originates on the PSTN, on an IP network, or on a cable network. We maintain that the cost of the PSTN should be borne equitably among those that use it in similar ways.

d. State Regulation

34. We also note that states are beginning to address VoIP issues. Recently, several states have taken actions with regard to VoIP providers that are rapidly changing the regulatory landscape on the state level.¹¹³ Even at this early stage, states have begun to diverge in their approaches to the regulation of VoIP services. For example, some states have required VoIP providers to be certified to provide service in the state,¹¹⁴ while others have not.¹¹⁵

¹¹³ See, e.g., *State Telecom Activities*, Communications Daily, Jan. 8, 2004, at 7 (reporting that, after notifying VoIP providers that they must comply with state telephone regulations, the California Public Utilities Commission has now decided to open a proceeding to examine regulation of VoIP providers rather than taking immediate enforcement action against VoIP providers that did not comply); *State Telecom Activities*, Communications Daily, Dec. 3, 2003, at 9 (reporting that the Missouri Public Service Commission has called for comments on Time Warner Cable Information Services' application for a state certificate to provide VoIP services); *State Telecom Activities*, Communications Daily, Nov. 24, 2003, at 7 (reporting that the Ohio Public Utilities Commission of Ohio is considering an application by Time Warner Cable Information Services for a state certificate to provide VoIP services); *State Telecom Activities*, Communications Daily, Oct. 15, 2003 (reporting that the New York Public Service Commission has opened a case to consider its jurisdiction over VoIP services in response to an incumbent LEC complaint seeking to impose state telephone regulation on VoIP providers); *State Telecom Activities*, Communications Daily, Oct. 8, 2003 (reporting that the Washington Utilities & Transportation Commission, in response to a remand from a federal district court, began considering whether VoIP providers must register as competitive LECs and what state regulatory requirements should apply to VoIP providers).

¹¹⁴ For example, in September 2003, the Minnesota Commission found that it had jurisdiction over the VoIP services provided by companies such as Vonage in Minnesota and ordered Vonage to comply with state statutes and rules regarding the offering of telephone service. See *Vonage Holdings Corp. v. Minnesota Pub. Utils. Comm'n*, 290 F. Supp. 2d 993, 996 (D. Minn. 2003) (citing *In the Matter of the Complaint of the Minnesota Department of Commerce Against Vonage Holding Corp Regarding Lack of Authority to Operate in Minnesota*, Docket No. P-6214/C-03-108 (Minn. Pub. Utils. Comm'n Sept. 11, 2003) (order finding jurisdiction and requiring compliance)). Vonage sought review of this decision in federal court, and has also sought a ruling from the Commission regarding the issues raised by the Minnesota Commission's order. In a decision issued on October 16, 2003, the U.S. District Court for the District of Minnesota concluded that Vonage "uses telecommunications services, rather than provides them." *Id.* at 999 (emphasis in original). Further, the court held that "state regulation over VoIP services is not permissible because of the recognizable congressional intent to leave the Internet and information services largely unregulated." *Id.* at 1002. In the court's view, "Congress's expression of its intent to not have Title II apply to enhanced services demonstrates its intent to occupy the field of regulation of information services." *Id.* The Minnesota PUC has appealed this ruling. See Gayle Kansagor, *Minnesota PUC Appeals VoIP Ruling*, TR Daily, Feb. 13, 2004, at 7-8.

¹¹⁵ Florida, for example, recently enacted legislation excluding VoIP services from the class of "services" subject to regulation by the Florida Public Service Commission. This legislation, however, expressly stated that it did not (continued....)

III. CATEGORIZING IP-ENABLED SERVICES

35. In this section, we solicit comment regarding how, if at all, we should differentiate among various IP-enabled services to ensure that any regulations applied to such services are limited to those cases in which they are appropriate. As noted above, IP-enabled services are an increasingly available, sophisticated and attractive alternative to consumers. These services have arisen in an environment largely free of government regulation, and the great majority, we expect, should remain unregulated. To the extent – if any – that application of a particular regulatory requirement is needed to further critical national policy goals, that requirement must be tailored as narrowly as possible, to ensure that it does not draw into its reach more services than necessary.¹¹⁶ In order to guarantee that even those regulations deemed essential are applied only where needed, we seek comment as to whether it would be useful to divide IP-enabled services into discrete categories, and, if so, how we should define these categories. We also ask commenters to address whether there are technical or other characteristics of particular VoIP or other IP-enabled services that suggest that providers use the underlying network in different ways or provide different functionality to end users that warrants differential treatment. Further, we seek comment on how our regulatory framework should evolve over time, as IP-enabled services themselves evolve. In considering these issues, we ask commenters to address three central questions: In which cases is some form of regulation needed to pursue important national objectives? What differentiates those services for which some form of regulation is required from those for which it is not? Finally, in what relevant ways is a particular service like or unlike Pulver's Free World Dialup, which we have today classified as an "information" service, free from regulation under the Commission's current rules?

36. For purposes of stimulating analysis regarding the proper grounds for distinguishing among IP-enabled services, we provide below a list of functional and economic factors that might be used to divide these services into categories calling for distinct treatment, and ask commenters to address the utility of drawing distinctions based on these factors. As communications migrate from networks relying on incumbent providers enjoying monopoly ownership of underlying transmission facilities to an environment relying on numerous competing applications traversing numerous competing platforms, power over the prices and terms of service necessarily shifts from the provider to the end user. This shift raises the question whether our existing regulatory framework merits reevaluation. In establishing distinctions among various IP-enabled services, we seek ways to distinguish those regulations designed to respond to the dominance of centralized, monopoly-owned networks from those designed to protect public safety and other important consumer interests. We thus focus primarily on ways to distinguish services that might be viewed as replacements for traditional

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"affect the rights and obligations of any entity related to the payment of switched network access rates or other intercarrier compensation, if any, related to voice-over-Internet protocol service." Fla. Stat. ch. 364.02(12) (2003).

¹¹⁶ We believe, for example, that traditional economic regulation designed for the legacy network should not apply outside the context of the PSTN, and therefore will be inapplicable in the case of most IP-enabled services.

voice telephony (and which thus raise social policy concerns relating to emergency services, law enforcement, access by individuals with disabilities, consumer protection, universal service, and so forth) from other services (which do not appear to raise these same regulatory questions to the same extent).

37. We note that this list is not intended to be exhaustive, and we invite commenters to address any other characteristic that they believe should guide our decisions in this proceeding.¹¹⁷ Further, we do not presuppose that any one ground must be considered to the exclusion of any other ground, and invite commenters to explain why we should categorize services using a combination of factors, which may or may not include any of those listed below. In addressing the relevance of any specific consideration, we urge commenters to focus on the reasons why particular regulations should or should not be applied to particular services, why the benefits of differential treatment will outweigh administrative or other costs associated with the more complicated regulatory environment resulting from categorization, and how the technical or functional aspects of the service warrant particular categorization.

- *Functional equivalence to traditional telephony:* Some IP-enabled services resemble traditional wireline telephony, while others do to a lesser degree. These functional differences likely shape end users' expectations regarding the service. For example, consumers might consider a telephone replacement IP-enabled service to be very much like traditional telephony, but may have none of the same expectations for a voice function on a gaming platform. Is a service's functional equivalence to traditional telephony an appropriate basis on which to draw distinctions among IP-enabled services, or is such a comparison an unproductive endeavor? If so, what tests might we employ to identify such functional equivalence? In determining whether current regulatory requirements should be applied to IP-enabled services, should the Commission draw distinctions between services that facilitate instantaneous, simultaneous communications and those that do not?
- *Substitutability:* Should any regulation be reserved for those IP-enabled services that are used in lieu of, rather than simply in addition to – traditional telephony?¹¹⁸ Is a service's substitutability for traditional telephony an appropriate basis on which to draw distinctions among IP-enabled services? If so, what tests might we employ to identify substitutability? Should it matter, for purposes of categorization, whether the service at issue is provided to mass market or enterprise market customers?

¹¹⁷ We note, too, that the features listed below overlap. We include overlapping criteria because, at the margins, these similar tests might give rise to different results (for example, a service might interconnect with the PSTN but, due to other features or limitations, not be deemed a "substitute" for traditional telephony).

¹¹⁸ In strict economic terms, "substitutes" are services exhibiting positive cross-elasticity of demand. That is, two services are "substitutes" in the economic sense if demand for one rises when the price for the other increases, and falls when the price for the other drops. See, e.g., Steven E. Landsburg, *Price Theory and Applications* 108 (3d ed. 1995).

- *Interconnection with the PSTN and Use of the North American Numbering Plan:* One key distinction among VoIP services is that dividing those services that offer interconnection with the PSTN and/or utilize traditional NANPA-administered telephone numbers from those – including “closed” networks but also online games and other services not used primarily for voice communication – that do not. For example, Vonage currently offers a VoIP service that allows customers to place voice calls to numbers served by traditional telecommunications carriers using the PSTN, or by other VoIP providers, and assigns its customers traditional telephone numbers.¹¹⁹ Other services, however, might permit communication only within a single IP network or a set of intersecting IP networks, never interconnecting with the PSTN and/or never utilizing traditional telephone numbers. Should the Commission distinguish between such services on this basis?
- *Peer-to-Peer Communications vs. Network Services:* We solicit comment as to whether the Commission should distinguish between offerings that facilitate disintermediated peer-to-peer IP-enabled services (such as that offered by Pulver)¹²⁰ and IP-enabled services relying on a provider’s centralized servers (such as that offered by Vonage). Should a service that functions and is sold to consumers as a dedicated voice network offering some additional enhanced functionality be regulated differently from a service that simply facilitates direct peer-to-peer voice communications between or among end users? What criteria should we employ to distinguish “peer-to-peer” services from other services?
- *Facility Layer vs. Protocol Layer vs. Application Layer:* In recent years, several observers have urged reliance on a “layered” model to address VoIP and other areas of regulatory concern.¹²¹ Under the “layered” approach, regulation would differentiate not among different platforms, but rather among various aspects of a particular offering – distinguishing, for example, among the regulation applied to (1) the underlying transmission facility, (2) the communications protocols used to transmit information over that facility, and (3) the applications used by the end user to issue and receive information. Under a layered model, a provider’s ownership of bottleneck facilities might warrant economic regulation of the facilities “layer” but not of the applications that traverse those facilities. We note that while certain legacy

¹¹⁹ Vonage Petition at 6.

¹²⁰ We describe peer-to-peer services in note 30, above.

¹²¹ See, e.g., Kevin Werbach, *A Layered Model for Internet Policy* (Sept. 1, 2000) <<http://www.edventure.com/conversation/article.cfm?counter=2414930>>; Robert M. Entman, *Transition to an IP Environment*, The Aspen Institute (2001); Michael L. Katz, *Thoughts on the Implications of Technological Change for Telecommunications Policy*, The Aspen Institute (2001); Douglas C. Sicker, *Further Defining a Layered Model for Telecommunications Policy* (Oct. 3, 2002) <<http://intel.si.umich.edu/tpc/papers/2002/95/LayeredTelecomPolicy.pdf>>; MCI/CompTel Joint Reply, WC Docket No. 03-211 at 4 (filed Nov. 24, 2003).

services also involved severable “layers,” some parties state that IP-enabled services riding numerous (primarily broadband) platforms appear to erode the links among the facility, the protocol, and the application more systematically than previous services. In categorizing IP-enabled services, should the Commission rely on a “layers” approach? If so, how should it define the relevant layers? If we adopt a “layers” approach, must we also take into account competition between and among layers and the substitutability of different platforms and services for one another at different layers? On a related note, in some cases, IP-enabled services are offered by companies that also own the underlying transmission facilities, thus raising the question of how to regulate entities that provide multiple layers.¹²² Is ownership of such facilities relevant to our decisions here? We note that in other contexts, the Commission has countered the market power exercised by owners of bottleneck facilities by applying differential regulation to carriers that are deemed “dominant” and “non-dominant.”¹²³ Should the Commission apply a similar distinction here? Moreover, how should the Commission treat cases in which services offered by different providers at different “layers” are combined to create an IP-enabled service, as that term is used here?

- *Other Grounds for Categorization:* We invite comment as to whether the Commission should distinguish among IP-enabled services on grounds not discussed above. Should the Commission differentiate between services offered on a “common carriage” and “private carriage” basis?¹²⁴ Between services that do and do not utilize

¹²² See *supra* note 39.

¹²³ See, e.g., *Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor*, First Report and Order, 85 FCC 2d 1 (1980) (subsequent history omitted) (adopting the dominant/nondominant framework); *Policy and Rules Concerning the Interstate, Interexchange Marketplace, Implementation of Section 245(g) of the Communications Act of 1934*, CC Docket No. 96-61, Second Report and Order, 11 FCC Rcd 20730 (1996) (subsequent history omitted) (adopting mandatory detariffing for the interstate, domestic, interexchange service of nondominant interexchange carriers); *Implementation of Section 402(b)(2)(A) of the Telecommunications Act of 1996*, CC Docket No. 97-11, Report and Order, 14 FCC Rcd 11364, paras. 29-32 (1999) (adopting differing discontinuance requirements for dominant and non-dominant carriers). The D.C. Circuit recently stated that “market forces are generally sufficient to ensure the lawfulness of rate levels, rate structures, and terms and conditions of service set by carriers who lack market power.” *Orloff v. FCC*, 352 F.3d 415, 419, 421 (D.C. Cir. 2003) (quoting *Implementation of Sections 3(n) and 332 of the Communications Act Regulatory Treatment of Mobile Services*, GN Docket 93-252, Second Report and Order, 9 FCC Rcd 1411, 1478 (1994) (*CMRS Second Report and Order*)) (upholding Commission’s determination to forbear from applying tariff requirements to CMRS providers lacking market power).

¹²⁴ Under the D.C. Circuit’s so-called *NARUC I* decision (which predated, but survived, the 1996 Act), when considering whether a communications service is offered on a “private” or “common” carriage basis, the Commission first inquires whether there is a legal compulsion to serve the public indifferently, and then – if not – examines “whether there are reasons implicit in the nature of [the provider’s] operations to expect an indifferent holding out to the eligible user public.” See *Nat’l Ass’n of Regulatory Util. Comm’rs v. FCC*, 525 F.2d 630, 642 (D.C. Cir. 1976); *Virgin Islands Tel. Corp. v. FCC*, 198 F.3d at 924, 927.

the Internet? Should regulatory treatment depend on whether the service is being used as a "primary line" or whether, instead, it supplements an existing telephone line? Is there any utility to distinguishing between "phone-to-phone" services, "computer-to-computer" services, and "computer-to-phone" services, or to drawing other distinctions relating to the CPE used to access a service?¹²⁵ Should IP-enabled services be differentiated on the basis of the platform on which they are provided (e.g., wireline, wireless, cable, satellite)? Finally, is there some other basis upon which the Commission should draw distinctions among IP-enabled services?

IV. JURISDICTIONAL CONSIDERATIONS

38. In this section, we seek comment on the jurisdictional nature of IP-enabled services. We note that in a recent declaratory ruling, the Commission determined that Pulver's Free World Dialup is an unregulated information service subject to federal jurisdiction. FWD is a peer-to-peer service that facilitates VoIP calls between subscribers by informing them when other subscribers are online or "present."¹²⁶ As noted above, FWD offers its members no transmission services. Subscribers must "bring their own broadband" connection. This high-speed connection can be through cable modem, digital subscriber line, satellite, wireless or any other high-speed facility. In addition, FWD provides subscribers with its own numbers, not North American Numbering Plan numbers.¹²⁷

39. As explained in the *Pulver Declaratory Ruling*, FWD is an unregulated information service subject to federal jurisdiction. In this ruling, we explained that courts have recognized the preeminence of federal authority in the area of information services, particularly in the area the Internet and other interactive computer services.¹²⁸ This finding is consistent with Congress's clear intention, as expressed in the 1996 Act, that such services remain "unfettered" by federal or state regulation¹²⁹ and with our own "hands-off" approach to the Internet. We also determined that state-by-state regulation of FWD, an Internet application, is inconsistent with the controlling federal role over interstate commerce required by the Constitution. Moreover,

¹²⁵ See *Stevens Report*, 13 FCC Rcd at 11543-45, paras. 87-90.

¹²⁶ FWD offers other features to its members. For example, if the subscriber has opted in to FWD's voicemail service, FWD acts as a voicemail agent by accepting a call if a member is not available. Further, if a member's equipment generates a private Internet address that interferes with the ability of the user's CPE to determine Internet addresses, FWD will repair the addressing information and will relay the "signaling and media stream via a protocol conversion solution to facilitate delivery." See *Pulver Declaratory Ruling* at para. 11.

¹²⁷ This feature further emphasizes the fact that FWD member-to-member calls are routed over the Internet, not the PSTN.

¹²⁸ See *Pulver Declaratory Ruling* at paras. 17-18.

¹²⁹ See, e.g., 47 U.S.C. § 230(b); see also 47 U.S.C. § 157 & nt (stating that, in general, it is policy of the United States to encourage the deployment of new technologies and services to the public, and, in particular, the Commission is required to encourage the deployment of advanced telecommunications capability).

because FWD is a completely portable Internet service and for other reasons, the Commission determined that its traditional end-to-end approach to determining jurisdiction was inappropriate. Even if this analysis were applicable, however, we would still find that FWD is an interstate service based on the Commission's "mixed use" doctrine.¹³⁰

40. We seek comment on the appropriate basis or bases for asserting federal jurisdiction over the various categories of IP-enabled services. Specifically, we request comment on whether the Commission should extend the findings made in our *Pulver Declaratory Ruling* to other IP-enabled services. We also seek comment on whether the Commission's end-to-end analysis is similarly inappropriate for other IP-enabled services.¹³¹ We emphasize that our discussion of the end-to-end analysis refers only to the jurisdictional analysis (*i.e.* the inquiry into whether a call is interstate or intrastate based on its end points) and not the analysis of whether protocol conversion occurs between the end points of a communication. As noted in the *Pulver Declaratory Ruling*, with Internet communications, the points of origination and termination are not always known.¹³² Does the end-to-end analysis, designed to assess point-to-point communications, have any relevance in this new IP environment? To the extent we were to retain the end-to-end approach, we request comment on whether the Commission should apply its "mixed use" standard, described above, to other IP-enabled services. We also request comment on the capabilities of existing Internet geo-location technologies used to ascertain the location of the source of a packet. Specifically, are these technologies sufficiently accurate for purposes of determining the jurisdiction of some IP-enabled communications and how should they affect our jurisdictional analysis? In cases where the *Pulver Declaratory Ruling* analysis is inapposite, we seek comment as to whether there are other grounds on which we may assert federal jurisdiction over a given class of IP-enabled services. If we were to draw jurisdictional distinctions between classes of IP-enabled services, what service characteristics (*e.g.*, ability to determine the geographical location of the originating and terminating points of their customers' calls, use of the Internet) justify those distinctions?

41. We further seek comment regarding whether, and on what grounds, one or more classes of IP-enabled service should be deemed subject to *exclusive* federal jurisdiction with regard to traditional common carrier regulation. For example, the Constitution's Supremacy Clause prohibits state regulation in a variety of circumstances, including where the federal government occupies the field leaving no room for state regulation¹³³ or where it is not possible

¹³⁰ The Commission has previously applied the mixed use standard to situations where it was impractical or impossible to separate out interstate from intrastate traffic carried over a shared facility. See *Pulver Declaratory Ruling* at paras. 21-22 (citing *GTE Telephone Operating Cos.*, *GTE Tariff No. 1*, *GTOC Transmittal No. 1148*, CC Docket No. 98-79, Memorandum Opinion and Order, 13 FCC Rcd 22466, 22468, para. 5 (1998); *MTS/WATS Market Structure Order*, 97 FCC 2d 682).

¹³¹ See generally *Bell Atl. Tel. Cos. v. FCC*, 206 F.3d 1, 5-8 (D.C. Cir. 2000).

¹³² See *Pulver Declaratory Ruling* at para. 21.

¹³³ See, *e.g.*, *Fidelity Fed. Sav. & Loan Ass'n v. Cuesta*, 458 U.S. 141, 153 (1980) (citing *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947)).

to separate the interstate and intrastate aspects of a particular matter, and state regulation would negate valid Commission regulatory goals.¹³⁴ Does either of these grounds – or any other ground contemplated by the Supremacy Clause – apply to IP-enabled services?¹³⁵ Does the Commerce Clause, which denies states “the power unjustifiably to discriminate against or burden the interstate flow of articles of commerce,” apply to limit state regulation of IP-enabled services?¹³⁶ Alternatively, we note that section 253 preempts state regulations that “prohibit or have the effect of prohibiting the ability of an entity to provide any interstate or intrastate telecommunications service.”¹³⁷ In addition, as to mobile radio services, section 332 of the Act preempts state or local governments from regulating the “entry of or the rates charged by any commercial mobile service or any private mobile service.”¹³⁸ Do these provisions apply to any class of IP-enabled service? Finally, we seek comment regarding any other grounds upon which the Commission might form jurisdictional conclusions. What role could the states play in a federal regime? In addition, are there categories of IP-enabled services that can be regulated at both the state and federal level without interfering with valid Commission policy? If so, how? We seek comment on how section 2(b)’s reservation of state authority with respect to “intrastate communications service by wire or radio” affects our jurisdictional analysis.¹³⁹

V. APPROPRIATE LEGAL AND REGULATORY FRAMEWORK

42. We invite commenters to address the proper legal classification and appropriate regulatory treatment of each specific class of IP-enabled services they have identified in response to the questions posed above. The Act distinguishes between “telecommunications service[s]” and “information service[s],” and applies particular regulatory entitlements and obligations to the former class but not the latter.¹⁴⁰ Thus, our analysis begins with an

¹³⁴ *Texas Office of Pub. Util. Counsel v. FCC*, 183 F.3d 393, 422 (5th Cir. 1999) (citing *Pub. Serv. Comm’n of Maryland v. FCC*, 909 F.2d 1510, 1515 (D.C. Cir. 1990)).

¹³⁵ As summarized by the Supreme Court, federal law and policy preempts state action: (1) when Congress expresses a clear intent to preempt state law; (2) when there is outright or actual conflict between federal and state law; (3) where compliance with both federal and state law is in effect physically impossible; (4) where there is implicit in federal law a barrier to state regulation; (5) where Congress has legislated comprehensively, thus occupying an entire field of regulation; or (6) where the state law stands as an obstacle to the accomplishment and execution of the full objectives of Congress. See *Louisiana Pub. Serv. Comm’n v. FCC*, 476 U.S. 355, 368-69 (1986) (further citations omitted). The Court also notes that the “critical question in any preemption analysis is always whether Congress intended that federal regulation supersede state law.” *Id.* at 369. Additionally, the Supreme Court has held that preemption may result not only from action taken by Congress but also from a federal agency action that is within the scope of the agency’s congressionally delegated authority. See *id.*

¹³⁶ *Oregon Waste Sys. v. Dep’t of Envtl. Quality*, 511 U.S. 93, 98 (1994).

¹³⁷ 47 U.S.C. § 253.

¹³⁸ See 47 U.S.C. § 332(c)(3)(A).

¹³⁹ *Id.* § 152(b).

¹⁴⁰ See, e.g., *supra* paras. 24-27.

examination of the statutory definitions as they apply to particular types of IP-enabled service. But, as described more fully, commenters must consider what policy consequences flow from a particular statutory definition. The Act reflects Congress' attempt to balance numerous policy objectives. For example, Congress stated that the Internet should remain free from regulation.¹⁴¹ But Congress also has stated public policy goals that would presumably continue to apply as communications networks evolve. For example, it has stated that universal service should be maintained, that telecommunications equipment and services should remain usable by people with disabilities, that prompt emergency service should be available to the public through the 911 system, and that communications should be accessible to law enforcement officers acting on the basis of a lawfully obtained warrant.¹⁴² The Commission is empowered by statute to weigh these various objectives and craft regulations that specifically target the relevant features of VoIP and other IP-enabled services. Where the Act does not prescribe a particular regulatory treatment, the Commission may have authority to impose requirements under Title I of the Act. Alternatively, the Commission may forbear from applying specific provisions. Finally, of course, the Commission is entitled to amend or revoke its own rules and regulations when the underlying circumstances no longer apply. Accordingly, we seek specific, pragmatic proposals that account for the technical, market, or other features that characterize IP-enabled services and that address the interrelationship between those features, the statutory text, and our policy goals.

A. Statutory Classifications

43. In this section, we examine the appropriate statutory classification for each category of IP-enabled services identified by commenters in response to section III, above. Although, as described below, we do not believe that particular statutory classifications will lead inexorably to any particular regulatory treatment, these classifications are nevertheless important to our analysis. We therefore seek comment regarding the appropriate legal classification of the various types of IP-enabled service identified. Which classes of IP-enabled services, if any, are "telecommunications services" under the Act? Which, if any, are "information services"? How, if at all, does our conclusion today that Pulver's Free World Dialup is an information service impact the classification of other IP-enabled services? We note that the Act specifically excepts from the "information service" category activities relating to the "management, control or operation of a telecommunications system or the management of a telecommunications

¹⁴¹ 47 U.S.C. § 230 (stating federal policy "to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation").

¹⁴² See 47 U.S.C. § 255 (requiring manufacturer of telecommunications equipment and providers of telecommunications services to ensure that equipment and services are designed to be usable by individuals with disabilities, if readily achievable); 47 U.S.C. § 615 note (stating federal policy to encourage and facilitate prompt deployment of a seamless, ubiquitous, and reliable end-to-end public "911" system); 47 U.S.C. § 1002(a) (requiring carriers to ensure that equipment, facilities and services are capable of providing authorized surveillance to law enforcement agencies); see also 47 U.S.C. 254(c)(1) (declaring importance of maintaining universal service, defined as "an evolving level of telecommunications services that the Commission shall establish periodically ... taking into account advances in telecommunications and information technologies and services").

service.”¹⁴³ How, if at all, does this exception apply to IP-enabled services? What effect, if any, do judicial decisions – including but not necessarily limited to those issued in *Brand X Internet Services v. FCC*¹⁴⁴ and *Vonage Holdings Corp. v. Minnesota Pub. Utils. Comm’n*¹⁴⁵ – have on the Commission’s discretion to classify IP-enabled services? More broadly, how might statutory classifications rendered in this proceeding relate to the Commission’s previous tentative conclusion that DSL-based Internet access service is an “information service”?¹⁴⁶ Where a commenter advocates treating a particular class of IP-enabled services as “telecommunications services” and another class as “information services,” we ask that the commenter address specifically the reasons why the characteristics that differentiate or appear to make the two classes similar are relevant to the “telecommunications service”/“information service” distinction. Finally, we seek comment regarding whether new and evolving technologies and services raise the possibility that a single IP-enabled communications might comprise both an “information service” component and a “telecommunications service” component.

44. Where applicable, we also ask that commenters address the extent to which our previous interpretations of statutory terms are or are not suitable for proper classification of IP-enabled services. For example, Commission rules specify that the term “enhanced services” include those services that “employ computer processing applications that act on the . . . protocol . . . of the subscriber’s transmitted information.”¹⁴⁷ Should we continue to accord this specific distinction dispositive weight when classifying services? Are there other regulatory interpretations of the Act’s “telecommunications service” and “information service” definitions – including, for example, those set forth in the *Stevens Report*¹⁴⁸ – that should be revisited at this time? Finally, are there legal constraints on the Commission’s authority to revise its interpretation of these definitions, and if so, to what extent do such constraints preclude such revision?

¹⁴³ 47 U.S.C. § 153(20).

¹⁴⁴ 345 F.3d 1120 (9th Cir. 2003), *petitions for reh’g pending*.

¹⁴⁵ 290 F. Supp. 2d 993 (D. Minn. 2003), *appeal pending*.

¹⁴⁶ See *Wireline Broadband NPRM* at 3028, para. 16; *id.* at 3030, para. 20.

¹⁴⁷ See, e.g., 47 C.F.R. § 64.702(a).

¹⁴⁸ See *Stevens Report*, 13 FCC Rcd at 11543-44, para. 88 (suggesting distinctions based on whether service (1) holds itself out as providing voice telephony or facsimile transmission service; (2) does not require the customer to use CPE different from that CPE necessary to place an ordinary touch-tone call (or facsimile transmission) over the public switched telephone network; (3) allows the customer to call telephone numbers assigned in accordance with the North American Numbering Plan, and associated international agreements; and (4) transmits customer information without net change in form or content).

B. Specific Regulatory Requirements and Benefits

45. We recognize that the nature of IP-enabled services may well render the rationales animating the regulatory regime that now governs communications services inapplicable here, and that the disparate regulatory treatment assigned to providers of “telecommunications services” and “information services” might well be inappropriate in the context of IP-enabled services. We thus ask commenters to address how we might alter the regulatory treatment that might otherwise accompany the statutory classification they urge for various classes of IP-enabled service.

46. As mentioned above, Congress has provided the Commission with a host of statutory tools that together accord the Commission discretion in structuring an appropriate approach to IP-enabled services. Title II of the Communications Act governs the regulation of telecommunications services. Similarly, Title VI governs the regulation of cable services. Title I of the Act confers upon the Commission ancillary jurisdiction over matters that are not expressly within the scope of a specific statutory mandate but nevertheless necessary to the Commission’s execution of its statutorily prescribed functions.¹⁴⁹ Section 1 of the Communications Act established the Commission “[f]or the purpose of regulating interstate and foreign commerce in communication by wire and radio,”¹⁵⁰ and section 4(i) authorized the Commission to “perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this Act, as may be necessary in the execution of its functions.”¹⁵¹ Ancillary jurisdiction may be employed, in the Commission’s discretion, where the Commission has subject matter jurisdiction over the communications at issue and the assertion of jurisdiction is reasonably required to perform an express statutory obligation.¹⁵² “Because the Commission’s judgment on how the public interest is best served is entitled to substantial deference, the Commission’s choice of regulatory tools” when these conditions are met will stand “unless arbitrary or capricious.”¹⁵³

47. Second, with regard to telecommunications carriers and telecommunications services, the Commission is required to forbear from applying a particular regulation or statutory provision if it determines that: (1) enforcement of the regulation is not necessary to ensure that charges are just and reasonable, and are not unjustly or unreasonably discriminatory; (2) enforcement of the regulation is not necessary to protect consumers; and (3) forbearance is

¹⁴⁹ See, e.g., *Computer & Communications Indus. Ass’n v. FCC*, 693 F.2d 198, 213 (D.C. Cir. 1982) (declaring Commission authority in this area “well settled”).

¹⁵⁰ 47 U.S.C. § 151.

¹⁵¹ 47 U.S.C. § 154(i).

¹⁵² See generally *United States v. Southwestern Cable Co.*, 392 U.S. 157 (1968).

¹⁵³ *Computer & Communications Indus. Ass’n v. FCC*, 693 F.2d at 213.

consistent with the public interest.¹⁵⁴ Use of this forbearance authority might be appropriate if the statutory classification accorded to a particular class of IP-enabled services leads to regulatory consequences that are neither necessary nor appropriate in the context of such services.

48. In light of the statutory prerogatives described above, we ask commenters to describe which particular regulatory requirements and entitlements, if any, should apply to each category of IP-enabled service.¹⁵⁵ In the sections that follow, we set forth particular requirements and benefits that may or may not apply to some or all IP-enabled services. How would the particular statutory classifications urged by the commenter for various IP-enabled services impact the applicability of each of the regulatory obligations and benefits described below? For each class of service and each requirement or benefit, is the result appropriate as a matter of public policy? Specifically, are there reasons why the purposes of this requirement or benefit are more or less relevant in the context of IP-enabled services than they are in the context of traditional telephony services? Would there be any technical, economic, or other impediments to carriers' compliance with the requirement or enjoyment of the benefit that are not present in other contexts in which it applies? What consequences might application of a particular requirement or benefit have on investment and other pertinent business decisions? What public interests should we consider, and how would a choice to apply, or not to apply, the particular requirement or benefit implicate those interests? Assuming *arguendo* that the obligation or benefit does apply to some or all IP-enabled services, we seek comment as to whether it should be applied differently in the context of those services, and whether we are authorized to apply it differently. Finally, to what extent, if any, could voluntary agreements entered into by IP-enabled service serve the purpose now served by regulation in the context of the legacy circuit-switched network?

49. To the extent commenters argue that the default regulatory framework associated with the legal classification accorded to a given service is inappropriate, we seek comment on whether the Commission should use its forbearance authority or Title I ancillary powers to modify that framework. We ask commenters who urge forbearance to address the specific section 10 criteria as they relate to the application of particular requirements or benefits to IP-enabled services generally or individual IP-enabled services in particular. Similarly, to the extent that commenters urge that we apply requirements or benefits in contexts outside the express scope of a relevant statutory provision pursuant to our Title I jurisdiction, we seek

¹⁵⁴ 47 U.S.C. § 160. Section 10(d) specifies, however, that "[e]xcept as provided in section 251(f), the Commission may not forbear from applying the requirements of section 251(c) or 271 under subsection (a) of this section until it determines that those requirements have been fully implemented." See *id.* § 160(d).

¹⁵⁵ For example, one might question what it would mean to apply E911 obligations on an Internet retailer, or to tariff an online newspaper offering. Similarly, some obligations may only be sensible in the context of VoIP service. However, to ensure that whatever distinctions we ultimately draw among different IP-enabled services are sound as a matter of law, technology, and public policy, we decline in this Notice to foreclose any particular approach, and therefore frame our questions in terms of all "IP-enabled services," though some may only apply to particular types of service.

comment on whether the assertion of jurisdiction is reasonably ancillary to the Commission's statutory responsibilities.¹⁵⁶

1. Public Safety and Disability Access

a. Introduction

50. The Commission is charged with ensuring that radio and wire communications are comprehensively available to all in our nation, that they serve the interest of the national defense, promote the safety of life and property, and provide individuals with disabilities with equivalent access to such services in the public interest. In addition, the Wireless Communications and Public Safety Act of 1999 (911 Act) directs the Commission to "encourage and facilitate the prompt deployment of a seamless, ubiquitous, and reliable end-to-end infrastructure" for public safety communications, and establishes 911 as the national emergency number to enable all citizens to reach emergency services directly and efficiently, whether they use a wireless or wireline phone.¹⁵⁷ In this section, we seek comment on the public safety and disability access implications of IP technology and services.¹⁵⁸

b. 911/E911 and Critical Infrastructure Deployment in IP-Enabled Services

51. Efforts by federal, state, and local government, along with the significant efforts by wireline and wireless service providers, have resulted in the nearly ubiquitous deployment of 911 service. While 911 service for wireline consumers has been in existence since 1965, wireless 911 service has been a requirement since 1996. The emergence of IP as a means of transmitting voice and data and providing other services via wireless, cable, and wireline communications has significant implications for meeting the nation's critical infrastructure and

¹⁵⁶ See, e.g., *United States v. Midwest Video Corp.*, 406 U.S. 649, 661 (1972) (citing *Southwestern Cable Co.*, 392 U.S. at 175) (upholding Commission's exercise of its Title I powers to regulate community antenna television (CATV) when the growth of that service "threatened to deprive the public of the various benefits of [the] system of local broadcasting stations that the Commission was charged with developing and overseeing").

¹⁵⁷ 47 U.S.C. § 615 note (e); see *Wireless Communications and Public Safety Act of 1999*, Pub. L. No. 106-81, 113 Stat. 1286 (codified at 47 USC §§ 222, 251(e)) (911 Act). In enacting the 911 Act, Congress found that emerging technologies could be a critical component of such an end-to-end infrastructure.

¹⁵⁸ The Department of Justice has informed the Commission that it plans to file a petition for rulemaking asking the Commission to initiate a comprehensive rulemaking to address law enforcement's needs relative to CALEA. See 47 U.S.C. §§ 1000 *et seq.* The Commission recognizes the importance of ensuring that law enforcement's requirements are fully addressed. The Commission takes seriously the issues raised by law enforcement agencies concerning lawfully authorized wiretaps. Accordingly, the Commission plans to initiate a rulemaking proceeding in the near future to address the matters we anticipate will be raised by law enforcement, including the scope of services that are covered, who bears responsibility for compliance, the wiretap capabilities required by law enforcement, and acceptable compliance standards. This Notice does not prejudice the outcome of our proceeding on CALEA, and we will closely coordinate our efforts in these two dockets.

911 communications needs and for that reason we seek comment below on various aspects associated with determining the appropriate regulatory treatment for IP-enabled services.

52. Under the Commission's rules, there are two sets of requirements for 911. The first set, "basic 911," requires covered carriers to deliver all 911 calls to the appropriate public safety answering point (PSAP) or designated statewide default answering point.¹⁵⁹ Basic 911 service does not address what sort of information the PSAP should receive from that call; rather it seeks to ensure the delivery of 911 calls. The Commission, therefore, also adopted requirements for covered wireless carriers to be capable of delivering the calling party's call-back number and the calling party's location information.¹⁶⁰ These rules, referred to as the Commission's "enhanced 911" (E911) rules, are currently being phased in across the country and deployment of E911 capability is ongoing.¹⁶¹

53. Against this backdrop, we seek comment in this proceeding on the potential applicability of 911, E911, and related critical infrastructure regulation to VoIP and other IP-enabled services. As an initial matter, we have previously found in the *E911 Scope Order* that the Commission has statutory authority under Sections 1, 4(i), and 251(e)(3) of the Act to determine what entities should be subject to the Commission's 911 and E911 rules.¹⁶² However, in deciding whether to exercise our regulatory authority in the context of IP-enabled services, we are mindful that development and deployment of these services is in its early stages, that these services are fast-changing and likely to evolve in ways that we cannot anticipate, and that imposition of regulatory mandates, particularly those that impose technical mandates, should be undertaken with caution. How should we weigh the potential public benefits of requiring

¹⁵⁹ See 47 C.F.R. §§ 20.18(b), 64.3001.

¹⁶⁰ See *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, RM 8143, Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 18676, 18689-18722, paras. 24-91 (1996). Recognizing the challenges of implementation of E911 requirements, the Commission adopted a phased implementation plan for the covered carriers. Phase I implementation, which requires a covered carrier to transmit a 911 caller's call-back number and cell site to the appropriate PSAP, began on April 1, 1998. See 47 C.F.R. § 20.18(d). Phase II implementation, which requires a covered carrier to transmit a 911 caller's location information to the appropriate PSAP, began on October 1, 2001. See 47 C.F.R. § 20.18 (e), (h).

¹⁶¹ See 47 C.F.R. § 20.18.

¹⁶² *Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems; Amendment of Parts 2 and 25 to Implement the Global Mobile Personal Communications by Satellite (GMPCS) Memorandum of Understanding and Arrangements; Petition of the National Telecommunications and Information Administration to Amend Part 25 of the Commission's Rules to Establish Emissions Limits for Mobile and Portable Earth Stations Operating in the 1610-1660.5 MHz Band*, Docket Nos. CC Docket No. 94-102, IB Docket No. 99-67, Report and Order and Second Further Notice of Proposed Rulemaking, FCC 03-290 at paras. 13-15 (rel. Dec. 1, 2003) (*E911 Scope Order*). In the *E911 Scope Order*, the Commission found that it had authority under sections 1, 4(i), and 251(e)(3) of the Act, 47 U.S.C. §§ 151, 154(i), 251(e)(3), to determine whether the public interest required that a provider of a particular service should be required to provide 911/E911 to its customers, and if so, to what extent and in what time frame such covered service should be subject to the Commission's 911/E911 requirements.

emergency calling and other public safety capabilities against the risk that regulation could slow technical and market development? We seek comment on whether the natural evolution of IP-enabled services over the course of the next few years will lead to technological improvements and cost savings in the transmittal of and response to emergency information, interoperability among public safety entities, and other elements of critical infrastructure needed to provide for public safety and homeland security in accordance with the Commission's statutory obligations and regulatory objectives. We recognize, too, that IP-enabled services may enhance the capabilities of PSAPs and first responders – and thus promote public safety – by providing information that cannot be conveyed by non-IP-enabled systems. Therefore, before we make any decision with respect to regulation, it is important that we develop a fuller understanding of the ways in which IP-enabled services or IP protocols can facilitate 911, E911, and critical infrastructure deployment and reduce attendant costs, both currently and in the future. We next ask commenters to address the technical and operational capabilities of current VoIP and other IP-enabled services to work with 911 service. We seek comment on whether IP-enabled services are technically and operationally capable of complying with the Commission's basic 911 service rules to ensure that calls are directed to the appropriate PSAP.¹⁶³ In particular, we seek comment on issues relating to the routing of IP-initiated 911 calls to PSAPs, and the potential for IP-enabled services to provide a viable and cost-effective alternative to the dedicated 911-trunking facilities in use today. Are there multiple technical methods by which VoIP providers could route calls? We also seek comment on ways in which current IP-enabled service providers seek to provide a similar service to their customers.

54. We also seek comment on whether VoIP and other IP-enabled services are technologically and operationally capable of delivering call-back and location information, enhanced 911 service, or to provide analogous functionalities that would meet the intent of the 911 Act and the Commission's regulations. We seek comment on whether there are multiple technical methods by which VoIP providers could provide call-back and location information? Are minimal technical requirements necessary, and what solutions can potentially provide them most effectively and efficiently? We note that the *Hatfield Report*,¹⁶⁴ which we commissioned in 2002 to provide an independent analysis of technical issues associated with the implementation of enhanced 911 services, examined IP technology as a potential solution to such issues. Moreover, some vendors of VoIP equipment claim to have resolved the technical problems associated with transmitting location and call-back to the appropriate PSAP through software upgrades.¹⁶⁵ To the extent that there is data on whether these software solutions meet or provide some functionality useful in meeting the Commission's E911 requirements, we request

¹⁶³ See 47 C.F.R. §§ 20.18(b), 64.3001.

¹⁶⁴ See generally Dale N. Hatfield, *A Report on Technical and Operational Issues Impacting the Provision of Wireless Enhanced 911 Services* <http://gulfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6513296239> (*Hatfield Report*).

¹⁶⁵ See Encore Networks, Inc., *Helping LECs Comply with Local Regulations for E911 Services* (visited Feb. 7, 2004) <http://www.fastcomm.com/zzs_e911.htm>.

commenters to provide such data. In addition to considering software-based solutions, are there other location solutions that equipment manufacturers could provide to enable a PSAP to identify the location of an IP-based 911 "caller"? Should the Commission distinguish between classes of IP-enabled service providers based on the method by which they provide these capabilities?

55. In the *E911 Scope Order*, we identified four criteria as relevant to determining whether particular entities should, in the public interest, be subject to some form of 911/E911 regulation: 1) the entity offers real-time, two-way switched voice service, interconnected with the public switched network, either on a stand-alone basis or packaged with other telecommunications services; 2) customers using the service or device have a reasonable expectation of access to 911 and enhanced 911 services; 3) the service competes with traditional CMRS or wireline local exchange service; and 4) it is technically and operationally feasible for the service or device to support E911.¹⁶⁶ We also stated that other factors could inform our decision as well.¹⁶⁷ We seek comment on whether there are IP-enabled services, and VoIP services in particular, that satisfy these four criteria. In view of the variety of IP-enabled services, and their very different functionalities, we also seek comment on whether these four criteria provide the appropriate analytical framework for determining whether and to what extent IP-enabled services should fall within the scope of our 911 and E911 regulatory framework. Should any of these criteria be modified, weighed differently, or replaced? Should alternative criteria be considered?

56. Assuming that we find IP-enabled services in general or certain services in particular to fall within our E911 "scope" criteria, we seek comment on how best to achieve our policy objectives for ensuring the availability of 911 and E911 capability. Should the Commission extend 911 and E911 requirements to such services, and if so, by what means and to what extent? We emphasize that we do not presume at this point that direct regulation would be required, and we specifically seek comment on the effectiveness of alternatives to direct regulation to achieve our public policy goals. For example, in December 2003, the National Emergency Number Association (NENA) and the Voice on the NET (VON) Coalition reached a voluntary agreement on approaches to provide VoIP subscribers with basic 911 service, and to work together to develop solutions that may lead to VoIP subscribers receiving enhanced 911 functionality.¹⁶⁸ We seek comment on the potential for similar agreements among public safety

¹⁶⁶ See *E911 Scope Order* at paras. 18-19.

¹⁶⁷ *Id.* at para. 19.

¹⁶⁸ See VON Coalition and NENA, *Public Safety and Internet Leaders Connect on 911*, Press Release (Dec. 1, 2003) (setting forth agreement for how two industry groups will work together as VoIP is deployed). Among other things, NENA and VON agreed that for "service to customers using phones that have the functionality and appearance of conventional telephones," 911 access would be provided within a reasonable period of three to six months, and "prior to that time [service providers would] inform customers of the lack of access." The agreement also stated that VoIP providers would work with local officials as the providers introduced their services into those local areas on ways to provide 911 access.

trade associations, commercial IP-stakeholders, consumers, and state and local E911 coordinators and administrators. To what extent can voluntary consensus, rather than regulation, spur deployment of IP-enabled E911 services? Should the Commission seek to facilitate voluntary, inclusive agreements similar to the NENA/VON agreement? Would promulgation of best practices or technical guidelines promote the provision of effective IP-based E911 services? If we conclude that mandatory requirements are necessary, how can we provide for technological flexibility so that our rules allow for the development of new and innovative technologies?

57. We also seek comment on the time frame in which we should consider 911 and E911 regulatory issues in the IP context. We note that the rapid growth, proliferation, and evolution of IP-enabled services and platforms, both now and in the future, may make timely regulatory assessment and response difficult. However, we recognize that the 911 Act establishes 911 as the national emergency number and requires the Commission to play an active role in promoting the deployment of a widespread network for public safety communications. Thus, we ask whether it may be appropriate to impose a requirement that some or all IP-enabled voice services provide 911 functionality to consumers and seek comment on this proposal. In light of the rapid pace of innovation in IP technology and services, and the potential for these innovations to yield future public safety benefits, we seek comment on whether consideration should be given to refraining from imposing E911 or related regulatory obligations on IP-enabled services until these services are better established and more widely adopted by consumers. At the same time, we seek to avoid a scenario in which a decision to impose E911 requirements at a future date would require costly and inefficient "retrofitting" of embedded IP infrastructure. Therefore, we seek comment on how best to balance these considerations. We also seek comment on how IP-enabled service providers, public safety entities, and other affected parties, can best ensure that their forward planning in business and technology development allows for the possibility of future implementation of IP-enabled E911 services without the need for retrofitting.

c. Disability Access

58. We seek comment on how we should apply the disability accessibility requirements set forth in sections 255 and 251(a)(2) to any providers of VoIP or other IP-enabled services.¹⁶⁹ In September 1999, the Commission issued an order adopting rules to implement

¹⁶⁹ Section 255 requires a manufacturer of telecommunications equipment or CPE to ensure that such equipment is designed to be accessible to and usable by individuals with disabilities, if readily achievable, and requires a provider of a "telecommunications service" to ensure that its service is accessible to and usable by people with disabilities, if readily achievable. See 47 U.S.C. § 255. Where these goals are not readily achievable, section 255 requires that the equipment or service be made compatible with peripherals or specialized CPE commonly used to allow access to people with disabilities. See 47 U.S.C. § 255(d). Finally, section 251(a)(2) prohibits telecommunications carriers from installing network features, functions, or capabilities that do not comply with the guidelines and standards set forth in section 255. See 47 U.S.C. § 251(a)(2).

Section 255, adopting definitions from the Americans with Disabilities Act (ADA), defines the term "disability" to include "a physical or mental impairment that substantially limits one or more of the major life activities of such individual," "a record of such impairment," or the state of "being regarded as having such an (continued....)

sections 255 and 251(a)(2) (*Disability Access Order*),¹⁷⁰ which included a Notice of Inquiry regarding, among other things, section 255's applicability in the context of "Internet telephony" and "computer-based equipment that replicates telecommunications functionality."¹⁷¹ We invite commenters here to refresh the record compiled in response to that Notice of Inquiry. We ask that commenters address the range of questions presented above in relation not only to the "IP telephony" services that were the focus of the prior Notice, but also with regard to the full range of other IP-enabled services at issue here. Specifically, do and should the rules established in the *Disability Access Order* apply in the context of VoIP or other IP-enabled services? We note specifically that in the *Disability Access Order*, the Commission relied on Title I to apply section 255 obligations to providers of voicemail and interactive menu services, both of which were deemed "information services."¹⁷² Would that approach be appropriate with regard to any providers of VoIP or other IP-enabled services that we deem to be "information services"?

59. Section 225 of the Communications Act requires common carriers offering voice telephone service to also provide Telecommunications Relay Service (TRS) so that persons with disabilities will have equal access to the telecommunications network.¹⁷³ Beyond traditional TRS, which requires the use of a teletypewriter (TTY), the Commission has implemented this mandate by determining that two IP-enabled services, IP Relay and Video Relay Service (VRS), are forms of TRS.¹⁷⁴ In both scenarios, the Commission determined that TRS, as defined, was

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impairment." See 42 U.S.C. § 12102(2)(A); see also 47 U.S.C. § 255(a)(1) (adopting ADA definition by reference). The Commission's regulations implementing section 255 specifically define "readily achievable," "usable," "accessible," and other pertinent terms. See 47 C.F.R. § 6.3.

¹⁷⁰ See generally *Disability Access Order*, 16 FCC Rcd 6417. Among other things, the Commission (1) required manufacturers and service providers to develop processes to evaluate the accessibility, usability, and compatibility of covered services and equipment, see *Disability Access Order*, 16 FCC Rcd at 6429-33, paras. 21-30; (2) required manufacturers and service providers to ensure that information and documentation provided in connection with equipment or service be accessible to people with disabilities, where readily achievable, and that employee training, where provided at all, account for accessibility requirements, see *id.*; (3) required the maximum feasible deployment of accessibility features that can be incorporated into product design, see *id.* at 6440-42, paras. 49-54; and (4) prohibited telecommunications carriers from installing network features, functions, or capabilities that do not comply with the accessibility requirements set forth elsewhere in the Order, see *id.* at 6435-37, paras. 37-42.

¹⁷¹ *Id.* at 6483, para. 175; see generally *id.* at 6483-87, paras. 173-85.

¹⁷² See *id.* at 6455-62, paras. 93-108.

¹⁷³ 47 U.S.C. § 225. TRS enables an individual with a hearing or speech disability to communicate by telephone or other device with a hearing individual. This is accomplished through TRS facilities that are staffed by specially trained communications assistants (CAs) using special technology. The CA relays conversations between persons using various types of assistive communication devices and persons who do not require such assistive devices. See generally *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, CC Docket No. 98-67, Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 5140, para. 2 (2000) (*Improved TRS Order & FNPRM*).

¹⁷⁴ IP Relay functions in a similar manner to traditional TRS except that instead of a TTY, which is generally linked to the PSTN, the text is provided to, and received from, the communications assistant (CA) via the TRS consumer's computer or other Internet-enabled device. See generally *Provision of Improved Telecommunications* (continued....)

not limited to “telecommunications” and that Congress intended the term “telephone transmission services” to be interpreted broadly to implement section 225’s goal to “ensure that interstate and intrastate [TRS] are available, to the extent possible and in the most efficient manner, to hearing-impaired and speech-impaired individuals in the United States.”¹⁷⁵ We seek comment on how these interpretations should inform our deliberations as we consider the appropriate classifications for IP-enabled services. We also note that current or future IP-enabled services may facilitate communications by individuals with disabilities more effectively than traditional technologies. To what extent, if any, will the advent of IP-enabled services improve traditional services designed to ensure access by persons with disabilities?

60. Relatedly, we seek comment on how migration to IP-enabled services will affect our statutory obligation to ensure that interstate and intrastate telecommunications relay services are available to hearing-impaired and speech-impaired individuals. Section 225 created a cost recovery mechanism whereby providers of eligible TRS services are compensated for the “reasonable costs” of providing interstate TRS¹⁷⁶ and required the Commission to prescribe regulations ensuring that those costs “be recovered from all subscribers for every interstate service and costs caused by intrastate telecommunications relay services shall be recovered from the intrastate jurisdiction.”¹⁷⁷ We seek comment regarding how other decisions we make in this docket might affect contributions to the Interstate TRS Fund, and how, if at all, the Commission should amend its rules in light of the increasing use of IP-enabled services. We also seek comment on how any change in our TRS rules will affect the provision of intrastate TRS by the states.

2. Carrier Compensation

(Continued from previous page)

Relay Services and Speech-To-Speech Services for Individuals with Hearing and Speech Disabilities; Petition for Clarification of WorldCom, Inc., CC Docket No. 98-67, Declaratory Ruling and Second Further Notice of Proposed Rulemaking, 17 FCC Rcd 7779 (2002) (*IP Relay Order*). TRS is a telecommunications relay service that allows persons with hearing or speech disabilities who use sign language to communicate with the CA in sign language (rather than by text) through video equipment. A video link allows the CA to view and interpret the party’s signed conversation (and vice versa), and then relay the conversation back and forth with the other party to the call (the voice caller). In almost all cases, the video link is provided over the Internet. See *Improved TRS Order & FNPRM*, 15 FCC Rcd at 5152-54, paras. 21-27.

¹⁷⁵ *IP Relay Order*, 17 FCC Rcd at 7783, para. 10.

¹⁷⁶ See 47 U.S.C. § 225(d)(3); 47 C.F.R. § 64.604(c)(5)(iii)(E).

¹⁷⁷ 47 U.S.C. § 225(d)(3). Under our existing rules, every carrier providing interstate telecommunications services must contribute to the Interstate TRS Fund on the basis of end-user telecommunications revenues. See 47 C.F.R. § 64.604(c)(5)(iii)(A).

61. The Commission seeks comment on the extent to which access charges¹⁷⁸ should apply to VoIP or other IP-enabled services.¹⁷⁹ If providers of these services are not classified as interexchange carriers, or these services are not classified as telecommunications services, should providers nevertheless pay for use of the LECs' switching facilities? As a policy matter, we believe that any service provider that sends traffic to the PSTN should be subject to similar compensation obligations, irrespective of whether the traffic originates on the PSTN, on an IP network, or on a cable network. We maintain that the cost of the PSTN should be borne equitably among those that use it in similar ways. Given this, under what authority could the Commission require payment for these services? If charges should be assessed on these services, should they be the same as the access charges assessed on providers of telecommunications services, or should the charges be computed and assessed differently? How should different charges be computed and assessed? By seeking comment on whether access charges should apply to the various categories of service identified by the commenters, we are not addressing whether charges apply or do not apply under existing law.¹⁸⁰

62. If, on the other hand, VoIP or other IP-enabled services are classified as telecommunications services, should the Commission forbear from applying access charges to these services, or impose access charges different from those paid by non-IP-enabled telecommunications service providers? If so, how should different charges be computed and assessed? If commenters believe charges should be assessed, must carriers pay access charges,

¹⁷⁸ Section 69.5(b) of the Commission's rules states that "[c]arrier's carrier charges shall be computed and assessed upon all interexchange carriers that use local exchange switching facilities for the provision of interstate or foreign telecommunications services." 47 C.F.R. § 69.5. To keep local telephone rates low, access charges traditionally have exceeded the forward-looking economic costs of providing access services. See *Intercarrier Compensation NPRM*, 16 FCC Rcd at 9614, para. 7 (citing *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776 (1997) (*First Universal Service Report and Order*)).

¹⁷⁹ Since 1983 the Commission has exempted enhanced service providers (ESPs) from the payment of certain interstate access charges (the "ESP exemption"). See *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Intercarrier Compensation for ISP-Bound Traffic*, CC Docket Nos. 96-98, 99-68, Order on Remand and Report and Order, 16 FCC Rcd 9151, 9158, para. 11 (2001) (*ISP Remand Order*) (citing *MTS/WATS Market Structure Order*, 97 FCC 2d at 715, para. 83); see also *ESP Exemption Order*, 3 FCC Rcd at 2633, para. 17; *Access Charge Reform*, CC Docket Nos. 96-262, 94-1, 91-213, 95-72, First Report and Order, 12 FCC Rcd 15982, 16133, para. 344 (1997) (*Access Charge Reform First Report and Order*). Consequently, ESPs are treated as end users for the purpose of applying access charges and are, therefore, entitled to pay local business rates for their connections to the LEC central offices and the PSTN. See *ISP Remand Order*, 16 FCC Rcd at 9158, para. 11 (citing *ESP Exemption Order*, 3 FCC Rcd at 2635 n.8, 2637 n.53); see also *Access Charge Reform First Report and Order*, 12 FCC Rcd at 16133-35, paras. 344-48.

¹⁸⁰ Thus, we expressly preserve the Commission's flexibility to address one or all of the petitions discussed above by issuing a declaratory ruling or rulings before the culmination of the instant proceeding. We also expressly preserve the Commission's flexibility to address the *Intercarrier Compensation* and *Universal Service* proceedings currently pending before the Commission before the culmination of the instant proceeding. See *Intercarrier Compensation NPRM*, 16 FCC Rcd 9610 (2001); *Universal Service Further NPRM*, 17 FCC Rcd 24952 (2002).

or should they instead pay compensation under section 251(b)(5) of the Act?¹⁸¹ Would assessment of rates lower than access charge rates require increases in universal service support or end-user charges? If no access charges, or different charges, are assessed for VoIP and IP-enabled service providers' use of the PSTN, would identification of this traffic result in significant additional incremental costs?

3. Universal Service

63. We seek comment on how the regulatory classification of IP-enabled services, including VoIP, would affect the Commission's ability to fund universal service. Many of these issues have already been raised in the *Wireline Broadband NPRM*, and we encourage parties to incorporate into this docket prior filings in that proceeding that are relevant to our inquiry here. In the *Wireline Broadband NPRM*, the Commission sought comment on whether facilities-based broadband Internet access providers are required to contribute, pursuant to its mandatory authority,¹⁸² or should be required to contribute to universal service, pursuant to its permissive authority.¹⁸³ In this proceeding, we broaden that inquiry by asking commenters to address the contribution obligations of both facilities-based and non-facilities-based providers of IP-enabled services. These questions are also intertwined with issues raised in our separate *Universal Service Contribution Methodology* proceeding, which explores possible ways to reform our current methodology for assessing universal service contributions.¹⁸⁴ We leave questions of whether to reform the current methodology to the separate *Universal Service Contribution Methodology* proceeding.

64. If certain classes of IP-enabled services are determined to be information services, could or should the Commission require *non-facilities-based* providers of such services to

¹⁸¹ Section 251(b)(5) requires LECs to "establish reciprocal compensation arrangements for the transport and termination of telecommunications." 47 U.S.C. § 251(b)(5).

¹⁸² See 47 U.S.C. § 254(d). Section 254(d) states that "[e]very telecommunications carrier that provides interstate telecommunications services *shall* contribute" to universal service. This section is often referred to as the Commission's mandatory contribution authority.

¹⁸³ *Wireline Broadband NPRM*, 17 FCC Rcd at 3053, para. 74; see also *Stevens Report*, 13 FCC Rcd at 11570, para. 139; 47 U.S.C. § 254(d). Section 254(d) states that "[a]ny other provider of interstate telecommunications may be required to contribute ... if the public interest so requires." This section is often referred to as the Commission's permissive contribution authority.

¹⁸⁴ See *Federal-State Joint Board on Universal Service, 1998 Biennial Regulatory Review – Streamlined Contributor Reporting Requirements Associated with Administration of Telecommunications Relay Service, North American Numbering Plan, Local Number Portability, and Universal Service Support Mechanisms, Telecommunications Services for Individuals with Hearing and Speech Disabilities, and the Americans with Disabilities Act of 1990, Administration of the North American Numbering Plan and North American Numbering Plan Cost Recovery Contribution Factor and Fund Size, Number Resource Optimization, Telephone Number Portability, Truth-in-Billing and Billing Format*, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, 98-170, Report and Order and Second Further Notice of Proposed Rulemaking, 17 FCC Rcd 24952, 24984-24998, paras. 66-100 (2002).

contribute to universal service pursuant to its permissive authority? Would such providers "provide" telecommunications? If the Commission were to exercise its permissive authority over facilities-based and non-facilities-based providers of IP-enabled services, how could it do so in an equitable and nondiscriminatory fashion? Would the Commission identify specific services that are subject to its permissive authority? How would providers of IP-enabled services identify the portion of their IP-enabled service revenues that constitute end-user telecommunications revenues? If certain IP-enabled services are information services, the Commission has determined that such services would be subject to federal jurisdiction. Which entity is providing telecommunications in this instance and how can we identify the interstate revenues, if any, associated with the provision of such telecommunications? If the Commission determines that other IP-enabled services are not information services, how would providers of such services identify their interstate and international telecommunications revenues? If IP-enabled services are not subject to contributions, what would be the magnitude of the forgone contribution revenues over the next five years? Does the advent of IP-enabled services weigh in favor of any specific reforms currently under consideration in our *Universal Service Contribution Methodology* proceeding?¹⁸⁵ For example, under a telephone number-based methodology, VoIP providers that utilize telephone numbers would be subject to assessment. Under a connections-based methodology, providers of broadband connections used to provide VoIP could be subject to assessment.

65. In addition to considering the impact of our classification decision on funding the universal service support mechanisms, the Commission must also evaluate how the regulatory classification of IP-enabled services would affect the Commission's universal service support mechanisms.¹⁸⁶ Previously, the Commission concluded that the generic universal service definition in section 254(c)(1) is "explicitly limited to telecommunications services."¹⁸⁷ At the same time, the Commission found that the statute provided the authority to support a broader

¹⁸⁵ *Id.*

¹⁸⁶ Universal service programs consist of support to subsidize loop costs, and, in some cases, switching costs of eligible carriers servicing high-cost areas, and Lifeline/Link Up, which provides support to low-income consumers for telephone service and installation. Section 254 of the Act codified the Commission's historical commitment to universal service, directing the Commission to establish policies to preserve and advance universal service. The "core" services that are currently supported by universal service include: single-party service; voice grade access to the public switched network; DTMF signaling or its functional equivalent; access to emergency services; access to operator services; access to interexchange services; access to directory assistance; and toll limitation services for qualifying low-income consumers. See 47 C.F.R. § 54.101. Section 254 also directed the Commission to create mechanisms to enhance access to advanced telecommunications and information services for schools, libraries and rural health care providers, respectively. Currently, the schools and libraries mechanism provides support for telecommunications services, internet access, and internal connections, while the rural healthcare mechanism provides support for telecommunications services and internet access. All of these mechanisms are referred to collectively as "universal service."

¹⁸⁷ *First Universal Service Report and Order*, 12 FCC Rcd at 9009, para. 437.

class of services, including Internet access, an information service, for schools and libraries.¹⁸⁸ If IP-enabled services, or specific classes of services, are information services, would the Commission need to revisit its interpretation of section 254(c)(1) in order to include such services in the list of supported services?¹⁸⁹ We seek specific comment on how the regulatory classification of IP-enabled services would impact each of the current universal service support mechanisms – high cost, low income, schools and libraries, and rural health care programs – and whether any rule changes are necessary in light of our ultimate classification decision. We also seek comment on whether the advent of VoIP or other IP-enabled services requires any modifications to our rules to fulfill the requirements of section 254(e) and 254(k).¹⁹⁰ In particular, how can the Commission ensure that services supported by universal service bear no more than a reasonable portion of the costs associated with facilities that are used to provide both supported services and unsupported services?

66. We seek comment more broadly on how potential migration to IP-enabled services will affect our statutory obligations to support and advance universal service.¹⁹¹ Commenters should describe whether migration to IP-enabled services might lessen eligible telecommunications carriers' (ETCs) ability to maintain existing circuit-switched networks and deploy new packet-switched networks. In some instances, IP-enabled providers reach end-user customers using loops that are currently supported by universal service. To what extent would classification of IP-enabled services, or specific classes of such services, as information services affect the eligibility of rural and non-rural ETCs for high cost support? Will migration to IP-enabled services lower or raise the cost of providing service on the public switched network or IP-enabled platforms? We fully recognize that many IP-enabled services are delivered over network infrastructure that traditionally has been supported by universal service. We seek to

¹⁸⁸ *Id.*; see also 47 U.S.C. § 254(c)(3), (h)(1)(B). The U.S. Court of Appeals for the Fifth Circuit upheld the Commission's determination that it had the authority to support non-telecommunications services for schools and libraries. See *Texas Office of Pub. Util. Counsel v. FCC*, 183 F.3d at 439-43.

¹⁸⁹ Even though advanced services are not directly supported by federal universal service, "[Commission] policies do not impede the deployment of modern plant capable of providing access to advanced services." *Federal-State Joint Board on Universal Service, Multi-Association Group (MAG) Plan for Regulation of Interstate Services of Non-Price Cap Incumbent Local Exchange Carriers and Interexchange Carriers*, CC Docket Nos. 96-45, 00-256, Fourteenth Report and Order, Twenty Second Order on Reconsideration, 16 FCC Rcd 11244, 1322, paras. 199-200 (2001) ("Fourteenth Report and Order"), *recon. pending* ("The public switched telephone network is not a single-use network. Modern network infrastructure can provide access not only to voice services, but also to data, graphics, video, and other services."); see also *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Order and Order on Reconsideration, 18 FCC Rcd 15090, 15095, para. 13 (2003) (describing "no barriers" policy).

¹⁹⁰ Section 254(e) states that support shall only be used for the provision, maintenance, and upgrading of facilities and services for which the support is intended. 47 U.S.C. § 254(e). Section 254(k) also requires that services supported by universal service bear no more than a reasonable share of the joint and common costs of the facilities used to provide these services. 47 U.S.C. § 254(k).

¹⁹¹ 47 U.S.C. § 254(b).

develop a record on whether there is a fundamental need to reexamine our universal service paradigm if consumers increasingly are utilizing other platforms, unsupported by universal service funds, to fulfill their communications needs.

4. Title III

67. As noted above, IP-enabled services can be provided over any broadband platform, including a wireless platform, and there are numerous examples of wireless providers offering such services. IP-enabled services may also involve the use of wireless technology in combination with other platforms, *e.g.*, a VoIP call may originate from a mobile device and terminate on a wireline or cable platform. To the extent that providers of IP-enabled services use wireless technology to deliver such services, they fall within the ambit of Title III of the Act, which provides the structure for the Commission's regulation of spectrum-based services, including broadcasting and all other services that use radio waves.¹⁹² Moreover, within Title III, Section 332 provides a specific framework for regulation of commercial mobile radio service (CMRS) providers.¹⁹³ Section 332 provides that CMRS providers are common carriers subject to the provisions of Title II, but it also authorizes the Commission to forbear from applying Title II provisions it determines are inapplicable.¹⁹⁴ Accordingly, in implementing Section 332, the Commission has forbore from applying most Title II economic regulation to CMRS providers based on the competitive nature of the CMRS marketplace.¹⁹⁵ In addition, Section 332 limits state regulation of CMRS by preempting states from regulating the entry of or rates charged by CMRS providers.¹⁹⁶

68. In light of this statutory framework and history of forbearance, we seek comment on what effect Title III may have on the provision or regulation of IP-enabled services provided over, in whole or in part, a wireless platform. Does Title III require us to treat such services differently from other IP-enabled services? We note that Title III does not expressly identify or distinguish wireless services based on whether they are IP-enabled. Does Title III apply to IP-enabled wireless services and other wireless services in the same way? We also note that most of our rules governing the licensing and operation of wireless services, particularly commercial services, are technology-neutral except to the extent necessary to prevent interference among competing spectrum uses. We thus seek comment on whether the Commission should make any distinctions among wireless providers of IP-enabled services based on the nature of their spectrum use (*e.g.*, fixed/mobile, licensed/unlicensed).

¹⁹² See *Title III – Provisions Relating to Radio*, 47 U.S.C. §§ 301 *et seq.*

¹⁹³ 47 U.S.C. § 332.

¹⁹⁴ 47 U.S.C. § 332(c)(1).

¹⁹⁵ See generally *CMRS Second Report and Order*, 9 FCC Rcd 1411.

¹⁹⁶ 47 U.S.C. § 332(c)(3).

69. We also seek comment on the impact of Section 332 on IP-enabled services offered by CMRS providers. Section 332(c)(1) provides that CMRS providers are common carriers subject to the provisions of Title II, but it also gives the Commission authority to limit Title II regulation of CMRS.¹⁹⁷ Accordingly, in implementing Section 332, the Commission has refrained from applying most Title II economic regulation to CMRS providers based on the competitive nature of the CMRS marketplace.¹⁹⁸ In addition, Section 332(c)(3) preempts states from regulating the entry of or rates charged by CMRS providers.¹⁹⁹ Thus, to the extent that CMRS providers offer VoIP or other IP-enabled CMRS services that we classify as subject to Title II, we believe that the statutory provisions of Section 332 apply, *i.e.*, states are preempted from regulating entry or rates of such services, and the Commission may limit their regulation under Title II. We seek comment on this analysis. We also seek comment on whether there is any reason that the Commission's existing deregulatory policies with respect to Title II regulation of CMRS should not apply uniformly to IP-enabled CMRS as well as other CMRS.

5. Title VI

70. IP-enabled services, such as VoIP, also can be – and often are – provided over cable facilities. What impact, if any, should the provision of broadband over cable plant have on the Commission's treatment of IP-enabled services? What effect, if any, does Title VI of the Act have on any potential regulation of cable-based IP-enabled services?²⁰⁰ If the Commission determines that IP-enabled services, or any particular class of IP-enabled services, are telecommunications services, should the Commission forbear from applying certain Title II provisions to cable providers' offering IP-enabled services? Alternatively, if the Commission determines that some or all IP-enabled services constitute information services, could the Commission use its ancillary jurisdiction to apply any Title II-like obligation to any cable providers of IP-enabled services? If so, what is the basis for an exercise of that authority? Finally, is any class of IP-enabled services properly classified under the Act as "cable

¹⁹⁷ Section 332(c)(1) of the Act provides that the Commission may specify any provision of Title II, other than Sections 201, 202, and 208, as inapplicable to CMRS providers if it finds certain criteria specified by the statute to have been met. 47 U.S.C. § 332(c)(1). Since this provision was adopted, the Commission has obtained broader forbearance authority with respect to all telecommunications providers under Section 10 of the Act. 47 U.S.C. § 160.

¹⁹⁸ See generally *CMRS Second Report and Order*, 9 FCC Red 1411.

¹⁹⁹ 47 U.S.C. § 332(c)(3). States may petition the Commission for authority to regulate CMRS rates based on certain statutory criteria, but no state has been granted such authority to date.

²⁰⁰ See 47 U.S.C. §§ 521 *et seq.*; 47 C.F.R. §§ 76.1 *et seq.* For example, Title VI and our implementing rules govern the video programming that a cable operator must carry, *see* 47 U.S.C. §§ 534, 536, 531; establish rules that prevent a cable operator from unfairly withholding affiliated video programming from other cable operators and satellite broadcast providers, *see* 47 U.S.C. § 548; establish horizontal cable ownership limits, *see* 47 U.S.C. § 533(f)(1); and establish and limit the authority for local franchises to regulate cable operators, *see* 47 U.S.C. §§ 541 *et seq.*

service”²⁰¹ If so, what regulatory requirements, if any, would apply to those services? Specifically, should any class of VoIP or other IP-enabled service be construed to be a “cable service” for franchising purposes?²⁰² In responding to these questions, we ask commenters to explain whether the Commission should make any distinction among categories of cable providers for regulatory purposes.

VI. OTHER REGULATORY REQUIREMENTS

A. Consumer Protection

71. In this section, we seek comment on whether it is necessary to extend the customer proprietary network information (CPNI) requirements and other consumer protections afforded in the Act to subscribers of VoIP or other IP-enabled services. First, section 222 of the Act restricts telecommunications carriers’ use and disclosure of CPNI.²⁰³ In section 222, Congress recognized both that telecommunications carriers are in a unique position to collect sensitive personal information and that customers maintain an important privacy interest in protecting this information from disclosure and dissemination. We seek comment on whether the CPNI requirements should apply to any provider of VoIP or other IP-enabled services.

72. Second, we seek comment regarding a number of other consumer protections set forth in the Act and Commission rules. For example, section 214 of the Act requires common carriers to obtain Commission authorization before constructing, acquiring, operating or engaging in transmission over lines of communications, or discontinuing, reducing or impairing

²⁰¹ The term “cable service” means

(A) the one-way transmission to subscribers of (i) video programming, or (ii) other programming service, and (B) subscriber interaction, if any, which is required for the selection or use of such video programming or other programming service.

47 U.S.C. § 522(6). “Video programming” means “programming provided by, or generally considered comparable to programming provided by, a television broadcast station.” 47 U.S.C. § 522(20). “Other programming service” means “information that a cable operator makes available to all subscribers generally.” 47 U.S.C. § 522(14). The term “interactive on-demand service” means “a service providing video programming to subscribers over switched networks on an on-demand, point-to-point basis, but does not include services providing video programming prescheduled by the programming providers.” 47 U.S.C. § 522(12).

²⁰² See 47 U.S.C. § 522(6)(A), (14).

²⁰³ 47 U.S.C. § 222. CPNI is defined to include “(A) information that relates to the quantity, technical configuration, type, destination, location, and amount of use of a telecommunications service subscribed to by any customer of a telecommunications carrier, and that is made available to the carrier by the customer solely by virtue of the carrier-customer relationship; and (B) information contained in the bills pertaining to telephone exchange service or telephone toll service received by a customer of a carrier.” 47 U.S.C. § 222(h)(1).

telecommunications service to a community.²⁰⁴ Section 258 of the Act prohibits “slamming” by requiring that any “telecommunications carrier” must adhere to authorization and verification procedures prescribed by the Commission when submitting and executing carrier changes.²⁰⁵ Violators are liable to the subscriber’s properly authorized carrier for all charges collected.²⁰⁶ Moreover, under sections 201 and 258 of the Act, the Commission has adopted “Truth-in-Billing” rules to improve consumers’ understanding of their telephone bills.²⁰⁷ Finally, the Commission has adopted rules pursuant to section 226 of the Act²⁰⁸ to ensure that customers are able to reach their preferred long distance carriers from public telephones and receive sufficient information about the rates they will pay for operator services at public phones and aggregator locations such as hotels, hospitals, and educational institutions.²⁰⁹ We seek comment on whether these billing-related requirements – or any other consumer protections not discussed here²¹⁰ – should apply to any providers of VoIP or other IP-enabled services.

B. Economic Regulation

73. We also seek comment on whether various traditional economic regulations set forth in Title II and Commission rules should be applied to any class of IP-enabled service provider. Among other things, Title II requires all common carriers of interstate or foreign communications by wire or radio to provide those communications upon reasonable request at rates, classifications, and practices that are just and reasonable;²¹¹ prohibits common carriers

²⁰⁴ 47 U.S.C. § 214. See, e.g., *Verizon Telephone Companies Section 63.71 Application to Discontinue Expanded Interconnection Service Through Physical Collocation*, WC Docket No. 02-237, Order, 18 FCC Rcd 22737, 22742, para. 8 (2003) (applying five factors to determine whether “reasonable substitutes are available” to consumers).

²⁰⁵ 47 U.S.C. § 258(a).

²⁰⁶ 47 U.S.C. § 258(b); see also 47 C.F.R. § 64.1170.

²⁰⁷ See 47 C.F.R. §§ 64.2400-64.2401. Among other things, a telephone bill must: (1) be accompanied by a brief, clear, non-misleading, plain language description of the service or services rendered; (2) identify the service provider associated with each charge; (3) clearly and conspicuously identify any change in service provider; (4) identify those charges for which non-payment will not result in disconnection of the customer’s basic local service; and (5) provide at least one toll-free number for customers to call to inquire or dispute any charges on the bill. The Commission also determined that carriers should use standard labels on bills when referring to line item charges relating to federal regulatory action, such as universal service fees, subscriber line charges, and local number portability charges. See *Truth-in-Billing and Billing Format*, CC Docket No. 98-170, Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd 7492, 7503, 7523, paras. 21, 50 (1999), *reconsideration granted in part*, Order on Reconsideration, 15 FCC Rcd 6023 (2000), Errata, 15 FCC Rcd 16544 (Com. Car. Bur. 2000).

²⁰⁸ 47 U.S.C. § 226. Section 226 is also referred to as the “Telephone Operator Consumer Services Improvement Act” (TOCSIA). See 47 U.S.C. § 226(a)(2) (defining “aggregator”), (a)(9) (defining “provider of operator services”).

²⁰⁹ See 47 C.F.R. §§ 64.703-64.710.

²¹⁰ See, e.g., 47 U.S.C. § 223 (prohibiting obscene or harassing telephone calls); 47 U.S.C. § 228 (regulating pay-per-call services).

²¹¹ 47 U.S.C. § 201. Section 201 also is the basis for the Commission’s authority to impose access charges on interexchange carriers. See generally *infra* Section V.B.2. In addition, pursuant to section 201, U.S. carriers are (continued....)

from unjustly or unreasonably discriminating in "charges, practices, classifications, regulations, facilities, or services" against similarly situated third-party customers;²¹² and requires providers of telecommunications service to interconnect directly or indirectly with the facilities and equipment of other such providers.²¹³ Further, the Act imposes additional requirements upon LECs, including, for example, the obligation to provide number portability.²¹⁴ The Act also entitles providers of telecommunications services to use certain incumbent LEC network elements on an unbundled basis and at cost-based rates.²¹⁵ Finally, under the Commission's *Computer Inquiry* decisions,²¹⁶ "facilities-based common carriers" are required to provide the basic transmission services underlying their enhanced services on a nondiscriminatory basis pursuant to tariffs.²¹⁷

74. While several of the regulatory obligations discussed in previous sections of this Notice may have general applicability to any entity that seeks to offer voice services, many of the "economic" regulations set forth here have been written to apply specifically to cases

(Continued from previous page)

required to make international settlement payments to terminate international traffic unless they are exempted from such payments on certain routes or receive a waiver.

²¹² 47 U.S.C. § 202.

²¹³ 47 U.S.C. § 251(a)(1); see also, e.g., 47 U.S.C. §§ 203(a) (requiring common carriers to file with the Commission tariffs for interstate and international wire and radio communications).

²¹⁴ See 47 U.S.C. § 251(b) (requiring those telecommunications carriers classified as LECs to offer services for resale; to provide number portability; to offer dialing parity; to provide access to rights-of-way; and to "enter into reciprocal compensation arrangements for the transport and termination of telecommunications").

²¹⁵ See 47 U.S.C. § 251(c)(3); *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978 (2003) (*Triennial Review Order*), corrected by Errata, 18 FCC Rcd 19020 (2003), petitions for review pending, *United States Telecom Ass'n v. FCC*, D.C. Cir. No. 00-1012 (and consolidated cases).

²¹⁶ See *Wireline Broadband NPRM*, 17 FCC Rcd at 3036-40, paras. 33-42 (providing detailed summary of the history and requirements of the *Computer Inquiry* regime).

²¹⁷ See *Computer II Final Order*, 77 FCC 2d at 415-16, para. 83. BOCs have more specific obligations under the *Computer Inquiry* regime, through either "comparably efficient interconnection" (CEI) or "open network architecture" (ONA). See generally *Computer III Phase I Order*, 104 FCC 2d at 1039-42, paras. 155-165 (describing ONA requirements); *id.* at 1064, para. 214 (describing CEI requirements).

We note that the Commission has proceedings pending before it concerning whether it should modify or eliminate the *Computer Inquiry* rules as they apply to wireline facilities. See, e.g., *Wireline Broadband NPRM*, 17 FCC Rcd 3019; *Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review of Computer III and ONA Safeguards and Requirements*, CC Docket Nos. 95-20, 98-10, Further Notice of Proposed Rulemaking, 13 FCC Rcd 6040 (1998). We do not seek to review those issues in this Notice. Rather, our request for comment is limited to the application of those rules to IP-enabled services, as we have defined that term above.

involving a monopoly service provider using its bottleneck facilities to provide services to a public that is without significant power to negotiate the rates, terms, and conditions of those services. With the advent of competition in markets for telecommunications services, the Commission has tailored the application of these requirements, reserving application of the most stringent for carriers considered “dominant.”²¹⁸ As a threshold matter, therefore, we seek comment on whether any of these economic regulations are appropriate in the context of IP-enabled services, given that customers often can obtain these services from multiple, intermodal, facilities- and non-facilities-based service providers.²¹⁹ Specifically, we seek comment on (1) what regulations, if any, would apply to each class of IP-enabled services, given the legal classification urged for that class; (2) whether, for services classified as “telecommunications services,” we should use our forbearance authority to remove a particular obligation or entitlement;²²⁰ and (3) whether, for services classified as “information services,” we should exercise our ancillary jurisdiction to impose a particular obligation or entitlement. In answering these questions, we ask that commenters specifically address the market conditions that form the rationale for economic regulation in the context of the legacy network, and the extent, if any, to which the market for IP-enabled services calls for application of similar regulation.

C. Rural Considerations

75. We note that this Commission has repeatedly recognized the unique challenges facing rural carriers.²²¹ Because rural carriers generally have higher operating and equipment costs, which are attributable to lower subscriber density, small exchanges, and a lack of

²¹⁸ It has been the Commission’s policy to detariff non-dominant carriers in order foster competition in the market for interstate, domestic, interexchange telecommunications services by subjecting these carriers to “the same incentives and rewards that firms in other competitive markets confront.” *Policy and Rules Concerning the Interstate, Interexchange Marketplace*, CC Docket No. 96-61, Second Report and Order, 11 FCC Rcd 20730, 20732-33, paras. 3-4 (1996). By contrast, the Commission continues to treat incumbent LECs as dominant carriers and, absent a specific finding to the contrary for a particular market, these carriers remain subject to tariff filings, tariff support and pricing requirements. See, e.g., *Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services*, CC Docket No. 01-337, Notice of Proposed Rulemaking, 16 FCC Rcd 22745, 22747-48, para. 5 (2001) (*Incumbent LEC Broadband NPRM*). In addition, in the Commission’s *Competitive Carrier* proceeding, the Commission removed many of the section 214 obligations imposed on non-dominant carriers. See *id.* at 22751-52, para. 9.

²¹⁹ For example, we note that the Commission has exercised its forbearance authority several times with respect to CMRS providers because it determined that consumers have competitive choices available to them. See, e.g., *CMRS Second Report and Order*, 9 FCC Rcd 1411 (declining to apply the requirements contained in sections 203, 204, 205, 211, and 214 of the Act to CMRS providers); see also 47 C.F.R. § 20.15. As noted above, the D.C. Circuit has recently affirmed the Commission’s approach. See *supra* note 123 (citing *Orloff v. FCC*, 352 F.3d 415).

²²⁰ We note that section 10(d) prohibits the Commission from forbearing from the application of section 251(c) unless it determines that the latter provision has been “fully implemented.” See 47 U.S.C. § 160(d). To the extent commenters urge forbearance from application of that subsection, we ask that they address this section 10(d) limitation.

²²¹ See, e.g., *Fourteenth Report and Order*, 16 FCC Rcd at 11302, para. 145.

economies of scale, the Commission has historically not adopted one-size-fits-all policies that might impede rather than support the provision of affordable service by rural carriers.²²² We have sought comment, above, on the implications of our decisions in this docket for the universal service support mechanisms, including our high cost fund. In addition, we note that rural incumbent LECs derive a significant portion of their revenues from access charges. How might the jurisdictional analysis, set out above, affect the level of intrastate access charges that these carriers receive? We invite commenters to address whether our policies for IP-enabled services have other implications for rural communities and the providers which serve them.

D. Other Considerations

76. Finally, we seek comment on other implications of our decisions in this docket. First, we seek comment on the potential international implications raised by the use IP-enabled services, such as the potential impact on international settlement rates²²³ and the ability of consumers to take their IP CPE overseas and continue to make and receive calls.²²⁴ We also ask parties to comment on whether the growing use of IP-enabled services presents any foreign policy or trade issues.²²⁵ Further, we seek comment whether any action relating to numbering resources is desirable to facilitate or at least not impede the growth of IP-enabled services, while at the same time continuing to maximize the use and life of numbering resources in the North American Numbering Plan.²²⁶

²²² *Id.*

²²³ See *International Settlements Policy Reform; International Settlement Rates*, IB Docket Nos. 02-324, 96-261, 17 FCC Rcd 19954, 19961, para. 7 (2002) (citing *International Settlement Rates*, IB Docket No. 96-261, Report and Order, 12 FCC Rcd 19806, 19904-05, para. 216 (1997); Report and Order on Reconsideration and Order Lifting Stay, 14 FCC Rcd 9256 (1999), *aff'd sub nom. Cable & Wireless P.L.C. v. FCC*, 166 F.3d 1224 (D.C. Cir. 1999)).

²²⁴ See Dan Gillmor, *Internet Calls to Challenge Phone Companies*, San Jose Mercury News, Jun. 8, 2003, at 2003 WL 19867191 (describing consumers in Japan using a telephone number assigned to area code 415, which is assigned to California); Kripa Raman, *UK Phone Numbers On Offer Here*, The Hindu Business Line, at 2003 WL 66051291 (reporting that United Kingdom company offers phone numbers assigned to the U.K. in India).

²²⁵ Currently, the Commission requires common carriers to obtain section 214 authorization to provide United States-international service. See 47 C.F.R. §§ 63.12, 63.18. This authorization process provides the Executive Branch an opportunity to review applications for national security, law enforcement, foreign policy, and trade issues prior to the carrier initiating international service. See *Rules and Policies on Foreign Participation in the U.S. Telecommunications Market*, IB Docket Nos. 97-142, 95-22, Report and Order and Order on Reconsideration, 12 FCC Rcd 23891, 23919-21, paras. 61-66 (1997) (explaining that the Commission accords deference to the expertise of the Executive Branch regarding issues of national security, law enforcement, foreign policy, and trade policy related to an international section 214 application), Order on Reconsideration, 15 FCC Rcd 18158 (2000).

²²⁶ The impact of IP-enabled services on numbering resources has been raised by members of the North American Numbering Council (NANC), our federal advisory committee on numbering issues, at a number of recent NANC meetings, including those held November 19-20, 2002, January 22, 2003, March 19, 2003, September 25, 2003, and November 5, 2003. See *NANC Meeting Minutes* (visited Feb. 7, 2004) <<http://www.fcc.gov/wcb/tapd/Nanc/nancminu.html>>. Moreover, several members of NANC prepared two white (continued....)

77. To the extent that we determine IP-enabled services are information services, we seek comment on whether there are any other policy priorities that we should consider. For example, to what extent, if any, do our policy priorities for IP-enabled services assume an underlying open network architecture? Will our decisions in this proceeding affect the incentives of facilities-based IP service providers to provide network access to non-facilities-based IP service providers? Will the incentives of facilities-based and non-facilities-based IP service providers differ? How should our policies differ with a closed or proprietary architecture? Similarly, are there customer privacy issues, separate from those raised in section 222 of the Act, that this Commission should consider?

78. Further, what are the impacts of our decisions on consumers' ability to bring section 208 complaints against IP service providers? Similarly, will there be any impact on the ability of IP service providers to bring enforcement actions against carriers or other providers? Will our decisions have any affect on the Commission's ability expeditiously to address complaints between IP service and facilities-based carriers? To the extent that IP-enabled services, or some subset thereof, are considered to be information services, would state commissions have the authority to resolve interconnection or service-related disputes? As a general matter, what role should state and local governments play with respect to these issues?²²⁷ How would that change under various approaches outlined in the item?

VII. PROCEDURAL MATTERS

A. Ex Parte Presentations

79. This matter shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.²²⁸ Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required.²²⁹ Other requirements pertaining to oral and written presentations are set forth in section 1.1206(b)

(Continued from previous page)

papers on the effect of VoIP on numbering resources for presentation at the January 22, 2003, and March 19, 2003 NANC meetings. See BellSouth et al., *VOIP Numbering Issues* (visited Feb. 7, 2004) <http://www.nanc-chair.org/docs/Nov/Nov02_VoIP_White_Paper.doc>; AT&T, *VOIP Numbering Issues – Much Ado About Nothing?* (Jan. 22, 2003) <http://www.nanc-chair.org/docs/nowg/Jan03_ATT_VOIP_Paper.doc>. Finally, the Industry Numbering Committee of the Alliance for Telecommunications Industry Solutions prepared a "Report on VoIP Numbering Issues" for presentation at the November 5, 2003 NANC meeting. See <http://www.nanc-chair.org/docs/nowg/Jan03_BellSouth_VOIP_Contribution.doc> (visited Feb. 7, 2004).

²²⁷ See, e.g., Letter from Matthew C. Ames, Counsel for National League of Cities et al., to Marlene H. Dortch, Secretary, Federal Communications Commission, WC Docket Nos. 02-361, 03-45, 03-211 & 03-251, at 4 (filed Jan. 16, 2004) (stating that "local governments should receive adequate rent for use of public land or other public resources").

²²⁸ 47 C.F.R. §§ 1.200 *et seq.*

²²⁹ See 47 C.F.R. § 1.1206(b)(2).

of the Commission's rules.

B. Comment Filing Procedures

80. Pursuant to sections 1.415 and 1.419 of the Commission's rules,²³⁰ interested parties may file comments within 60 days after publication of this Notice in the Federal Register and may file reply comments within 90 days after publication of this Notice in the Federal Register. All filings should refer to WC Docket No. 04-36. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies.²³¹

81. Comments filed through ECFS can be sent in electronic form via the Internet to <<http://www.fcc.gov/e-file/ecfs.html>>. Only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include a full name, postal service mailing address, and the applicable docket number, which in this instance is WC Docket No. 04-36. Parties may also submit an electronic comment by Internet e-mail. To obtain filing instructions for e-mail comments, commenters should send an e-mail to ecfshelp@fcc.gov, and should include the following words in the regarding line of the message: "get form<your e-mail address>." A sample form and directions will be sent in reply.

82. Parties who choose to file by paper must file an original and four copies of each filing. Parties filing by paper must also send five (5) courtesy copies to the attention of Janice M. Myles, Wireline Competition Bureau, Competition Policy Division, 445 12th Street, S.W., Suite 5-C327, Washington, D.C. 20554, or via e-mail janice.myles@fcc.gov. Paper filings and courtesy copies must be delivered in the following manner. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail).

83. The Commission's contractor, Natek, Inc., will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, N.E., Suite 110, Washington, D.C. 20002. The filing hours at this location last from 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building. This facility is the only location where hand-delivered or messenger-delivered paper filings or courtesy copies for the Commission's Secretary and Commission staff will be accepted.

84. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

85. U.S. Postal Service first-class mail, Express Mail, and Priority Mail should be addressed to 445 12th Street, SW, Washington, D.C. 20554.

²³⁰ 47 C.F.R. §§ 1.415, 1.419.

²³¹ See Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121 (1998).

86. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

87. One copy of each filing must be sent to Qualex International, Portals II, 445 12th Street, S.W., Room CY-B402, Washington, D.C. 20554, telephone 202-863-2893, facsimile 202-863-2898, or via e-mail qualexint@aol.com.

88. Each comment and reply comment must include a short and concise summary of the substantive arguments raised in the pleading. Comments and reply comments must also comply with section 1.48 and all other applicable sections of the Commission's rules.²³² We direct all interested parties to include the name of the filing party and the date of the filing on each page of their comments and reply comments. All parties are encouraged to utilize a table of contents, regardless of the length of their submission.

89. Filings and comments may be downloaded from the Commission's ECFS web site, and filings and comments are available for public inspection and copying during regular business hours at the FCC Reference Information Center, Portals II, 445 12th Street, SW, Room CY-A257, Washington, D.C. 20554. They may also be purchased from the Commission's duplicating contractor, Qualex International, which can be reached at Portals II, 445 12th Street, SW, Room CY-B402, Washington, D.C. 20554, by telephone at 202-863-2893, by facsimile at 202-863-2898, or via e-mail at qualexint@aol.com.

C. Accessible Formats

90. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0531 (voice), 202-418-7365 (tty).

D. Initial Regulatory Flexibility Analysis

91. As required by the Regulatory Flexibility Act, 5 U.S.C. § 603, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules addressed in this document. The IRFA is set forth in Appendix A. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments filed in response to this Notice of Proposed Rule Making as set forth in paragraph 80, and have a separate and distinct heading designating them as responses to the IRFA.

VIII. ORDERING CLAUSES

92. Accordingly, IT IS ORDERED that pursuant to the authority contained in sections 1, 4(i), and 4(j) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151,

²³² See 47 C.F.R. § 1.48.

154(i), 154(j), this *Notice of Proposed Rulemaking* IS ADOPTED.

93. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Notice of Proposed Rulemaking*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the Regulatory Flexibility Act.²³³

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

²³³ See 5 U.S.C. § 603(a).

Appendix A: Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ the Commission has prepared the present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities that might result from this Notice of Proposed Rulemaking (Notice). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice provided above. The Commission will send a copy of the Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.² In addition, the Notice and IRFA (or summaries thereof) will be published in the Federal Register.³

1. Need for, and Objectives of, the Proposed Rules

2. This Notice examines issues relating to services and applications making use of Internet Protocol (IP), including but not limited to voice over IP (VoIP) services (collectively, "IP-enabled services"). IP-enabled "services" could include the digital communications capabilities of increasingly higher speeds, which use a number of transmission network technologies, and which generally have in common the use of the Internet Protocol. Some of these may be highly managed to support specific communications functions. IP-enabled "applications" could include capabilities based in higher-level software that can be invoked by the customer or on the customer's behalf to provide functions that make use of communications services. The Notice states that the Commission must examine what its role should be in this new environment of increased consumer choice and power, and asks whether it can best meet its role of safeguarding the public interest by continuing its established policy of minimal regulation of the Internet and the services provided over it.

3. To assist the Commission in its analysis of how properly to treat IP-enabled services, the Notice seeks comment on ways in which the Commission might distinguish among such services, and on what regulatory treatment, if any, would be appropriate for different classes of service. The Notice then requests comment on whether the services comprising each category constitute "telecommunications services" or "information services" under the definitions set forth in the Act. Finally, recognizing the central importance of these legal classifications but also highlighting the Commission's statutory forbearance authority and Title I ancillary jurisdiction, the Notice describes a number of central regulatory requirements (including, for example, those relating to access charges, universal service, the 911 and E911 systems, and disability accessibility), and asks which, if any, should apply to each category of IP-enabled services.

¹ See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 *et. seq.*, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, 110 Stat. 857 (1996).

² See 5 U.S.C. § 603(a).

³ See *id.*

2. Legal Basis

4. The legal basis for any action that may be taken pursuant to this Notice is contained in sections 1, 4(i), and 4(j) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i) and 154(j), and sections 1.1, 1.48, 1.411, 1.412, 1.415, 1.419, and 1.1200-1.1216, of the Commission's rules, 47 C.F.R. §§ 1.1, 1.48, 1.411, 1.412, 1.415, 1.419, and 1.1200-1.1216.

3. Description and Estimate of the Number of Small Entities to Which the Proposed Rules May Apply

5. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules.⁴ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."⁵ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.⁶ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).⁷ This present Notice of Proposed Rulemaking might, in theory, reach a variety of industries; out of an abundance of caution, we have attempted to cast a wide net in describing categories of potentially affected small entities. We would appreciate any comment on the extent to which the various entities might be affected by our action.

6. *Small Businesses.* Nationwide, there are a total of approximately 22.4 million small businesses, according to SBA data.⁸

7. *Small Organizations.* Nationwide, there are approximately 1.6 million small organizations.⁹

⁴ 5 U.S.C. §§ 603(b)(3), 604(a)(3).

⁵ *Id.* § 601(6).

⁶ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such terms which are appropriate to the activities of the agency and publishes such definitions(s) in the Federal Register."

⁷ 15 U.S.C. § 632.

⁸ See SBA, Programs and Services, SBA Pamphlet No. CO-0028, at page 40 (July 2002).

⁹ Independent Sector, The New Nonprofit Almanac & Desk Reference (2002).

8. *Small Governmental Jurisdictions.* The term "small governmental jurisdiction" is defined as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."¹⁰ As of 1997, there were approximately 87,453 governmental jurisdictions in the United States.¹¹ This number includes 39,044 county governments, municipalities, and townships, of which 37,546 (approximately 96.2%) have populations of fewer than 50,000, and of which 1,498 have populations of 50,000 or more. Thus, we estimate the number of small governmental jurisdictions overall to be 84,098 or fewer.

a. **Telecommunications Service Entities**

(i) **Wireline Carriers and Service Providers**

9. We have included small incumbent local exchange carriers in this present RFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation."¹² The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent local exchange carriers are not dominant in their field of operation because any such dominance is not "national" in scope.¹³ We have therefore included small incumbent local exchange carriers in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

10. *Incumbent Local Exchange Carriers (LECs).* Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁴ According to Commission data,¹⁵ 1,337 carriers have reported that they

¹⁰ 5 U.S.C. § 601(5).

¹¹ U.S. Census Bureau, Statistical Abstract of the United States: 2000, Section 9, pages 299-300, Tables 490 and 492.

¹² *Id.* § 632.

¹³ Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of "small-business concern," which the RFA incorporates into its own definition of "small business." See 15 U.S.C. § 632(a) (Small Business Act); 5 U.S.C. § 601(3) (RFA). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. See 13 C.F.R. § 121.102(b).

¹⁴ 13 C.F.R. § 121.201, NAICS code 517110 (changed from 513310 in Oct. 2002).

are engaged in the provision of incumbent local exchange services. Of these 1,337 carriers, an estimated 1,032 have 1,500 or fewer employees and 305 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our action.

11. *Competitive Local Exchange Carriers (CLECs), Competitive Access Providers (CAPs), "Shared-Tenant Service Providers," and "Other Local Service Providers."* Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁶ According to Commission data,¹⁷ 609 carriers have reported that they are engaged in the provision of either competitive access provider services or competitive local exchange carrier services. Of these 609 carriers, an estimated 458 have 1,500 or fewer employees and 151 have more than 1,500 employees. In addition, 16 carriers have reported that they are "Shared-Tenant Service Providers," and all 16 are estimated to have 1,500 or fewer employees. In addition, 35 carriers have reported that they are "Other Local Service Providers." Of the 35, an estimated 34 have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, "Shared-Tenant Service Providers," and "Other Local Service Providers" are small entities that may be affected by our action.

12. *Local Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.¹⁸ According to Commission data,¹⁹ 133 carriers have reported that they are engaged in the provision of local resale services. Of these, an estimated 127 have 1,500 or fewer employees and six have more than 1,500 employees. Consequently, the Commission estimates that the majority of local resellers are small entities that may be affected by our action.

13. *Toll Resellers.* The SBA has developed a small business size standard for the category of Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁰ According to Commission data,²¹ 625 carriers have reported

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¹⁵ FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, "Trends in Telephone Service" Table 5.3, page 5-5 (Aug. 2003) ("Trends in Telephone Service"). This source uses data that are current as of December 31, 2001.

¹⁶ 13 C.F.R. § 121.201, NAICS code 517110 (changed from 513310 in Oct. 2002).

¹⁷ "Trends in Telephone Service" at Table 5.3.

¹⁸ 13 CFR § 121.201, NAICS code 517310 (changed from 513330 in Oct. 2002).

¹⁹ "Trends in Telephone Service" at Table 5.3.

²⁰ 13 CFR § 121.201, NAICS code 517310 (changed to 513330 in Oct. 2002).

that they are engaged in the provision of toll resale services. Of these, an estimated 590 have 1,500 or fewer employees and 35 have more than 1,500 employees. Consequently, the Commission estimates that the majority of toll resellers are small entities that may be affected by our action.

14. *Payphone Service Providers (PSPs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for payphone services providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²² According to Commission data,²³ 761 carriers have reported that they are engaged in the provision of payphone services. Of these, an estimated 757 have 1,500 or fewer employees and four have more than 1,500 employees. Consequently, the Commission estimates that the majority of payphone service providers are small entities that may be affected by our action.

15. *Interexchange Carriers (IXCs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for providers of interexchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁴ According to Commission data,²⁵ 261 carriers have reported that they are engaged in the provision of interexchange service. Of these, an estimated 223 have 1,500 or fewer employees and 38 have more than 1,500 employees. Consequently, the Commission estimates that the majority of IXCs are small entities that may be affected by our action.

16. *Operator Service Providers (OSPs)*. Neither the Commission nor the SBA has developed a small business size standard specifically for operator service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁶ According to Commission data,²⁷ 23 carriers have reported that they are engaged in the provision of operator services. Of these, an estimated 22 have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the Commission estimates that the majority of OSPs are small entities that may be affected by our action.

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²¹ "Trends in Telephone Service" at Table 5.3.

²² 13 CFR § 121.201, NAICS code 517110 (changed from 513310 in Oct. 2002).

²³ "Trends in Telephone Service" at Table 5.3.

²⁴ 13 C.F.R. § 121.201, NAICS code 517110 (changed from 513310 in Oct. 2002).

²⁵ "Trends in Telephone Service" at Table 5.3.

²⁶ 13 C.F.R. § 121.201, NAICS code 517110 (changed from 513310 in Oct. 2002).

²⁷ "Trends in Telephone Service" at Table 5.3.

17. *Prepaid Calling Card Providers.* Neither the Commission nor the SBA has developed a small business size standard specifically for prepaid calling card providers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.²⁸ According to Commission data,²⁹ 37 carriers have reported that they are engaged in the provision of prepaid calling cards. Of these, an estimated 36 have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the Commission estimates that the majority of prepaid calling card providers are small entities that may be affected by our action.

18. *800 and 800-Like Service Subscribers.*³⁰ Neither the Commission nor the SBA has developed a small business size standard specifically for 800 and 800-like service ("toll free") subscribers. The appropriate size standard under SBA rules is for the category Telecommunications Resellers. Under that size standard, such a business is small if it has 1,500 or fewer employees.³¹ The most reliable source of information regarding the number of these service subscribers appears to be data the Commission collects on the 800, 888, and 877 numbers in use.³² According to our data, at the end of January, 1999, the number of 800 numbers assigned was 7,692,955; the number of 888 numbers assigned was 7,706,393; and the number of 877 numbers assigned was 1,946,538. We do not have data specifying the number of these subscribers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of toll free subscribers that would qualify as small businesses under the SBA size standard. Consequently, we estimate that there are 7,692,955 or fewer small entity 800 subscribers; 7,706,393 or fewer small entity 888 subscribers; and 1,946,538 or fewer small entity 877 subscribers.

(ii) International Service Providers

19. The Commission has not developed a small business size standard specifically for providers of international service. The appropriate size standards under SBA rules are for the two broad categories of Satellite Telecommunications and Other Telecommunications. Under both categories, such a business is small if it has \$12.5 million or less in average annual receipts.³³ For the first category of Satellite Telecommunications, Census Bureau data for 1997

²⁸ 13 C.F.R. § 121.201, NAICS code 517310 (changed from 513330 in Oct. 2002).

²⁹ "Trends in Telephone Service" at Table 5.3.

³⁰ We include all toll-free number subscribers in this category, including those for 888 numbers.

³¹ 13 C.F.R. § 121.201, NAICS code 517310 (changed from 513330 in Oct. 2002).

³² FCC, Common Carrier Bureau, Industry Analysis Division, *Study on Telephone Trends*, Tables 21.2, 21.3, and 21.4 (Feb. 1999).

³³ 13 C.F.R. § 121.201, NAICS codes 517410 and 517910 (changed from 513340 and 513390 in Oct. 2002).

show that there were a total of 324 firms that operated for the entire year.³⁴ Of this total, 273 firms had annual receipts of under \$10 million, and an additional 24 firms had receipts of \$10 million to \$24,999,999. Thus, the majority of Satellite Telecommunications firms can be considered small.

20. The second category – Other Telecommunications – includes “establishments primarily engaged in ... providing satellite terminal stations and associated facilities operationally connected with one or more terrestrial communications systems and capable of transmitting telecommunications to or receiving telecommunications from satellite systems.”³⁵ According to Census Bureau data for 1997, there were 439 firms in this category that operated for the entire year.³⁶ Of this total, 424 firms had annual receipts of \$5 million to \$9,999,999 and an additional six firms had annual receipts of \$10 million to \$24,999,990. Thus, under this second size standard, the majority of firms can be considered small.

(iii) Wireless Telecommunications Service Providers

21. *Wireless Service Providers.* The SBA has developed a small business size standard for wireless firms within the two broad economic census categories of “Paging”³⁷ and “Cellular and Other Wireless Telecommunications.”³⁸ Under both SBA categories, a wireless business is small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 1997 show that there were 1,320 firms in this category, total, that operated for the entire year.³⁹ Of this total, 1,303 firms had employment of 999 or fewer employees, and an additional 17 firms had employment of 1,000 employees or more.⁴⁰ Thus, under this category and associated small business size standard, the majority of firms can be considered small. For the census category Cellular and Other Wireless Telecommunications, Census Bureau data for

³⁴ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 513340 (issued Oct. 2000).

³⁵ Office of Management and Budget, North American Industry Classification System 513 (1997) (NAICS code 513390, changed to 517910 in Oct. 2002).

³⁶ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 513390 (issued Oct. 2000).

³⁷ 13 C.F.R. § 121.201, NAICS code 513321 (changed to 517211 in October 2002).

³⁸ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

³⁹ U.S. Census Bureau, 1997 Economic Census, Subject Series: “Information,” Table 5, Employment Size of Firms Subject to Federal Income Tax: 1997, NAICS code 513321 (issued October 2000).

⁴⁰ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is “Firms with 1000 employees or more.”

1997 show that there were 977 firms in this category, total, that operated for the entire year.⁴¹ Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.⁴² Thus, under this second category and size standard, the majority of firms can, again, be considered small.

22. *Cellular Licensees.* The SBA has developed a small business size standard for wireless firms within the broad economic census category "Cellular and Other Wireless Telecommunications."⁴³ Under this SBA category, a wireless business is small if it has 1,500 or fewer employees. For the census category Cellular and Other Wireless Telecommunications firms, Census Bureau data for 1997 show that there were 977 firms in this category, total, that operated for the entire year.⁴⁴ Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.⁴⁵ Thus, under this category and size standard, the great majority of firms can be considered small. According to the most recent *Trends in Telephone Service* data, 719 carriers reported that they were engaged in the provision of cellular service, Personal Communications Service (PCS), or Specialized Mobile Radio (SMR) Telephony services, which are placed together in the data.⁴⁶ We have estimated that 294 of these are small, under the SBA small business size standard.⁴⁷

23. *Common Carrier Paging.* The SBA has developed a small business size standard for wireless firms within the broad economic census categories of "Cellular and Other Wireless Telecommunications."⁴⁸ Under this SBA category, a wireless business is small if it has 1,500 or fewer employees. For the census category of Paging, Census Bureau data for 1997 show that there were 1,320 firms in this category, total, that operated for the entire year.⁴⁹ Of

⁴¹ U.S. Census Bureau, 1997 Economic Census, Subject Series: "Information," Table 5, Employment Size of Firms Subject to Federal Income Tax: 1997, NAICS code 513322 (issued October 2000).

⁴² *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1000 employees or more."

⁴³ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

⁴⁴ U.S. Census Bureau, 1997 Economic Census, Subject Series: "Information," Table 5, Employment Size of Firms Subject to Federal Income Tax: 1997, NAICS code 513322 (issued October 2000).

⁴⁵ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1000 employees or more."

⁴⁶ "Trends in Telephone Service" at Table 5.3.

⁴⁷ "Trends in Telephone Service" at Table 5.3.

⁴⁸ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

⁴⁹ U.S. Census Bureau, 1997 Economic Census, Subject Series: "Information," Table 5, Employment Size of Firms Subject to Federal Income Tax: 1997, NAICS code 513321 (issued October 2000).

this total, 1,303 firms had employment of 999 or fewer employees, and an additional 17 firms had employment of 1,000 employees or more.⁵⁰ Thus, under this category and associated small business size standard, the great majority of firms can be considered small. In the Paging *Third Report and Order*, we developed a small business size standard for “small businesses” and “very small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁵¹ A “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. Additionally, a “very small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.⁵² The SBA has approved these small business size standards.⁵³ An auction of Metropolitan Economic Area licenses commenced on February 24, 2000, and closed on March 2, 2000.⁵⁴ Of the 985 licenses auctioned, 440 were sold. Fifty-seven companies claiming small business status won. According to the most recent *Trends in Telephone Service*, 433 carriers reported that they were engaged in the provision of paging and messaging services.⁵⁵ Of those, we estimate that 423 are small, under the SBA approved small business size standard.⁵⁶

24. *Wireless Communications Services.* This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission established small business size standards for the wireless communications services (WCS) auction. A “small business” is an entity with average gross revenues of \$40 million for each of the three preceding years, and a “very small business” is an entity with average gross revenues of \$15 million for each of the three preceding years. The SBA has approved these small business size standards.⁵⁷ The Commission auctioned geographic area licenses in the WCS service. In the auction, there

⁵⁰ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is “Firms with 1000 employees or more.”

⁵¹ Amendment of Part 90 of the Commission’s Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, FR Docket No. 89-552, Third Report and Order and Fifth Notice of Proposed Rulemaking, 12 FCC Rcd 10943, 11068-70, paras. 291-295, 62 FR 16004 (Apr. 3, 1997).

⁵² See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from A. Alvarez, Administrator, SBA (Dec. 2, 1998) (SBA Dec. 2, 1998 letter).

⁵³ *Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems*, Memorandum Opinion and Order on Reconsideration and Third Report and Order, 14 FCC Rcd 10030 paras. 98-107 (1999).

⁵⁴ *Id.* at 10085 para. 98.

⁵⁵ “Trends in Telephone Service” at Table 5.3.

⁵⁶ “Trends in Telephone Service” at Table 5.3.

⁵⁷ SBA Dec. 2, 1998 letter.

were seven winning bidders that qualified as "very small business" entities, and one that qualified as a "small business" entity.

25. *Wireless Telephony.* Wireless telephony includes cellular, personal communications services (PCS), and specialized mobile radio (SMR) telephony carriers. As noted earlier, the SBA has developed a small business size standard for "Cellular and Other Wireless Telecommunications" services.⁵⁸ Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.⁵⁹ According to the most recent *Trends in Telephone Service* data, 719 carriers reported that they were engaged in the provision of wireless telephony.⁶⁰ We have estimated that 294 of these are small under the SBA small business size standard.

26. *Broadband Personal Communications Service.* The broadband Personal Communications Service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission defined "small entity" for Blocks C and F as an entity that has average gross revenues of \$40 million or less in the three previous calendar years.⁶¹ For Block F, an additional classification for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁶² These standards defining "small entity" in the context of broadband PCS auctions have been approved by the SBA.⁶³ No small businesses, within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 small and very small business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.⁶⁴ On March 23, 1999, the Commission re-auctioned 347 C, D, E, and F Block licenses. There were 48 small business winning bidders. On January 26, 2001, the Commission completed the

⁵⁸ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

⁵⁹ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

⁶⁰ "Trends in Telephone Service" at Table 5.3.

⁶¹ See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, WT Docket No. 96-59, Report and Order, 11 FCC Rcd 7824, 61 FR 33859 (July 1, 1996) (PCS Order); see also 47 C.F.R. § 24.720(b).

⁶² See PCS Order).

⁶³ See, e.g., *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fifth Report and Order, 9 FCC Rcd 5332, 59 FR 37566 (July 22, 1994).

⁶⁴ FCC News, Broadband PCS, D, E and F Block Auction Closes, No. 71744 (rel. Jan. 14, 1997). See also Amendment of the Commission's Rules Regarding Installment Payment Financing for Personal Communications Services (PCS) Licenses, WT Docket No. 97-82, Second Report and Order, 12 FCC Rcd 16436, 62 FR 55348 (Oct. 24, 1997).

auction of 422 C and F Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in this auction, 29 qualified as "small" or "very small" businesses. Subsequent events, concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant. In addition, we note that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated.

27. *Narrowband Personal Communications Services.* To date, two auctions of narrowband personal communications services (PCS) licenses have been conducted. For purposes of the two auctions that have already been held, "small businesses" were entities with average gross revenues for the prior three calendar years of \$40 million or less. Through these auctions, the Commission has awarded a total of 41 licenses, out of which 11 were obtained by small businesses. To ensure meaningful participation of small business entities in future auctions, the Commission has adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.⁶⁵ A "small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million. A "very small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million. The SBA has approved these small business size standards.⁶⁶ In the future, the Commission will auction 459 licenses to serve Metropolitan Trading Areas (MTAs) and 408 response channel licenses. There is also one megahertz of narrowband PCS spectrum that has been held in reserve and that the Commission has not yet decided to release for licensing. The Commission cannot predict accurately the number of licenses that will be awarded to small entities in future actions. However, four of the 16 winning bidders in the two previous narrowband PCS auctions were small businesses, as that term was defined. The Commission assumes, for purposes of this analysis, that a large portion of the remaining narrowband PCS licenses will be awarded to small entities. The Commission also assumes that at least some small businesses will acquire narrowband PCS licenses by means of the Commission's partitioning and disaggregation rules.

28. *220 MHz Radio Service – Phase I Licensees.* The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a small business size standard for small entities specifically applicable to such incumbent 220

⁶⁵ *Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS*, Docket No. ET 92-100, Docket No. PP 93-253, Second Report and Order and Second Further Notice of Proposed Rulemaking, 15 FCC Rcd 10456, 65 FR 35875 (June 6, 2000).

⁶⁶ See SBA Dec. 2, 1998 letter.

MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to "Cellular and Other Wireless Telecommunications" companies. This category provides that a small business is a wireless company employing no more than 1,500 persons.⁶⁷ According to the Census Bureau data for 1997, only 12 wireless firms out of a total of 1,238 such firms that operated for the entire year, had 1,000 or more employees.⁶⁸ If this general ratio continues in the context of Phase I 220 MHz licensees, the Commission estimates that nearly all such licensees are small businesses under the SBA's small business size standard.

29. *220 MHz Radio Service – Phase II Licensees.* The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is a new service, and is subject to spectrum auctions. In the *220 MHz Third Report and Order*, we adopted a small business size standard for "small" and "very small" businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁶⁹ This small business size standard indicates that a "small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.⁷⁰ A "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years. The SBA has approved these small business size standards.⁷¹ Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.⁷² In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold.⁷³ Thirty-nine small businesses won licenses in the first 220 MHz auction. The second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.⁷⁴

⁶⁷ 13 CFR § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

⁶⁸ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization), Table 5, NAICS code 513322 (issued October 2000)."

⁶⁹ *220 MHz Third Report and Order*, 12 FCC Rcd 10943, 11068-70 paras. 291-295 (1997).

⁷⁰ *Id.* at 11068-70 para. 291.

⁷¹ See letter to D. Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from A. Alvarez, Administrator, Small Business Administration (Jan. 6, 1998).

⁷² See generally Public Notice, "220 MHz Service Auction Closes," 14 FCC Rcd 605 (1998).

⁷³ See, e.g., Public Notice, "FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made," 14 FCC Rcd 1085 (1999).

⁷⁴ Public Notice, "Phase II 220 MHz Service Spectrum Auction Closes," 14 FCC Rcd 11218 (1999).

30. *800 MHz and 900 MHz Specialized Mobile Radio Licenses.* The Commission awards "small entity" and "very small entity" bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years, or that had revenues of no more than \$3 million in each of the previous calendar years, respectively.⁷⁵ These bidding credits apply to SMR providers in the 800 MHz and 900 MHz bands that either hold geographic area licenses or have obtained extended implementation authorizations. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. The Commission assumes, for purposes here, that all of the remaining existing extended implementation authorizations are held by small entities, as that term is defined by the SBA. The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz SMR bands. There were 60 winning bidders that qualified as small or very small entities in the 900 MHz SMR auctions. Of the 1,020 licenses won in the 900 MHz auction, bidders qualifying as small or very small entities won 263 licenses. In the 800 MHz auction, 38 of the 524 licenses won were won by small and very small entities. Consequently, the Commission estimates that there are 301 or fewer small entity SMR licensees in the 800 MHz and 900 MHz bands that may be affected by the rules and policies adopted herein.

31. *700 MHz Guard Band Licensees.* In the 700 MHz Guard Band Order, we adopted a small business size standard for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁷⁶ A "small business" as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years. An auction of 52 Major Economic Area (MEA) licenses commenced on September 6, 2000, and closed on September 21, 2000.⁷⁷ Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001 and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.⁷⁸

32. *Rural Radiotelephone Service.* The Commission has not adopted a size standard

⁷⁵ 47 CFR § 90.814(b)(1).

⁷⁶ See *Service Rules for the 746-764 MHz Bands, and Revisions to part 27 of the Commission's Rules*, WT Docket No. 99-168, Second Report and Order, 65 FR 17599 (April 4, 2000).

⁷⁷ See generally Public Notice, "220 MHz Service Auction Closes," Report No. WT 98-36 (Oct. 23, 1998).

⁷⁸ Public Notice, "700 MHz Guard Band Auction Closes," DA 01-478 (rel. Feb. 22, 2001).

for small businesses specific to the Rural Radiotelephone Service.⁷⁹ A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio System (BETRS).⁸⁰ The Commission uses the SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," i.e., an entity employing no more than 1,500 persons.⁸¹ There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

33. *Air-Ground Radiotelephone Service.* The Commission has not adopted a small business size standard specific to the Air-Ground Radiotelephone Service.⁸² We will use SBA's small business size standard applicable to "Cellular and Other Wireless Telecommunications," i.e., an entity employing no more than 1,500 persons.⁸³ There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small under the SBA small business size standard.

34. *Aviation and Marine Radio Services.* Small businesses in the aviation and marine radio services use a very high frequency (VHF) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category "Cellular and Other Telecommunications," which is 1,500 or fewer employees.⁸⁴ Most applicants for recreational licenses are individuals. Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any statute or treaty. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 712,000 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a "small" business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars. In addition, a "very small" business is one that, together with controlling interests and

⁷⁹ The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

⁸⁰ BETRS is defined in sections 22.757 and 22.759 of the Commission's Rules, 47 C.F.R. §§ 22.757 and 22.759.

⁸¹ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

⁸² The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

⁸³ 13 CFR § 121.201, NAICS codes 513322 (changed to 517212 in October 2002).

⁸⁴ 13 CFR § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars.⁸⁵ There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as "small" businesses under the above special small business size standards.

35. *Fixed Microwave Services.* Fixed microwave services include common carrier,⁸⁶ private operational-fixed,⁸⁷ and broadcast auxiliary radio services.⁸⁸ At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not created a size standard for a small business specifically with respect to fixed microwave services. For purposes of this analysis, the Commission uses the SBA small business size standard for the category "Cellular and Other Telecommunications," which is 1,500 or fewer employees.⁸⁹ The Commission does not have data specifying the number of these licensees that have more than 1,500 employees, and thus is unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA's small business size standard. Consequently, the Commission estimates that there are up to 22,015 common carrier fixed licensees and up to 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services that may be small and may be affected by the rules and policies adopted herein. We noted, however, that the common carrier microwave fixed licensee category includes some large entities.

36. *Offshore Radiotelephone Service.* This service operates on several UHF television broadcast channels that are not used for television broadcasting in the coastal areas of states bordering the Gulf of Mexico.⁹⁰ There are presently approximately 55 licensees in this

⁸⁵ *Amendment of the Commission's Rules Concerning Maritime Communications*, PR Docket No. 92-257, Third Report and Order and Memorandum Opinion and Order, 13 FCC Rcd 19853 (1998).

⁸⁶ See 47 C.F.R. §§ 101 *et seq.* (formerly, Part 21 of the Commission's Rules) for common carrier fixed microwave services (except Multipoint Distribution Service).

⁸⁷ Persons eligible under parts 80 and 90 of the Commission's Rules can use Private Operational-Fixed Microwave services. See 47 C.F.R. Parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

⁸⁸ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission's rules. See 47 C.F.R. Part 74. This service is available to licensees of broadcast stations and to broadcast and cable network entities. Broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile television pickups, which relay signals from a remote location back to the studio.

⁸⁹ 13 CFR § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

⁹⁰ This service is governed by Subpart I of Part 22 of the Commission's rules. See 47 C.F.R. §§ 22.1001-22.1037.

service. We are unable to estimate at this time the number of licensees that would qualify as small under the SBA's small business size standard for "Cellular and Other Wireless Telecommunications" services.⁹¹ Under that SBA small business size standard, a business is small if it has 1,500 or fewer employees.⁹²

37. *39 GHz Service.* The Commission created a special small business size standard for 39 GHz licenses – an entity that has average gross revenues of \$40 million or less in the three previous calendar years.⁹³ An additional size standard for "very small business" is: an entity that, together with affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁹⁴ The SBA has approved these small business size standards.⁹⁵ The auction of the 2,173 39 GHz licenses began on April 12, 2000 and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses. Consequently, the Commission estimates that 18 or fewer 39 GHz licensees are small entities that may be affected by the rules and policies adopted herein.

38. *Multipoint Distribution Service, Multichannel Multipoint Distribution Service, and ITFS.* Multichannel Multipoint Distribution Service (MMDS) systems, often referred to as "wireless cable," transmit video programming to subscribers using the microwave frequencies of the Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS).⁹⁶ In connection with the 1996 MDS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of less than \$40 million in the previous three calendar years.⁹⁷ The MDS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs). Of the 67 auction winners, 61 met the definition of a small business. MDS also includes licensees of stations authorized prior to the auction. In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution, which includes all such companies

⁹¹ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

⁹² *Id.*

⁹³ See Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands, ET Docket No. 95-183, Report and Order, 63 Fed.Reg. 6079 (Feb. 6, 1998).

⁹⁴ *Id.*

⁹⁵ See Letter to Kathleen O'Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Feb. 4, 1998).

⁹⁶ Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act – Competitive Bidding, MM Docket No. 94-131 and PP Docket No. 93-253, Report and Order, 10 FCC Rcd 9589, 9593 para. 7 (1995).

⁹⁷ 47 C.F.R. § 21.961(b)(1).

generating \$12.5 million or less in annual receipts.⁹⁸ According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year.⁹⁹ Of this total, 1,180 firms had annual receipts of under \$10 million and an additional 52 firms had receipts of \$10 million or more but less than \$25 million. Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies adopted herein. This SBA small business size standard also appears applicable to ITFS. There are presently 2,032 ITFS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in this analysis as small entities.¹⁰⁰ Thus, we tentatively conclude that at least 1,932 licensees are small businesses.

39. *Local Multipoint Distribution Service.* Local Multipoint Distribution Service (LMDS) is a fixed broadband point-to-multipoint microwave service that provides for two-way video telecommunications.¹⁰¹ The auction of the 1,030 Local Multipoint Distribution Service (LMDS) licenses began on February 18, 1998 and closed on March 25, 1998. The Commission established a small business size standard for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.¹⁰² An additional small business size standard for "very small business" was added as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.¹⁰³ The SBA has approved these small business size standards in the context of LMDS auctions.¹⁰⁴ There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 40 winning bidders. Based on this information, we conclude that the number of small LMDS licenses consists of the 93 winning bidders in the first auction and the 40 winning bidders in the re-auction, for a total of 133 small entity LMDS providers.

40. *218-219 MHz Service.* The first auction of 218-219 MHz spectrum resulted in

⁹⁸ 13 C.F.R. § 121.201, NAICS code 513220 (changed to 517510 in October 2002).

⁹⁹ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)", Table 4, NAICS code 513220 (issued October 2000).

¹⁰⁰ In addition, the term "small entity" within SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on ITFS licensees.

¹⁰¹ See Local Multipoint Distribution Service, *Second Report and Order*, 12 FCC Rcd 12545 (1997).

¹⁰² *Id.*

¹⁰³ See Local Multipoint Distribution Service, *Second Report and Order*, 12 FCC Rcd 12545 (1997).

¹⁰⁴ See Letter to Dan Phythyon, Chief, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (Jan. 6, 1998).

170 entities winning licenses for 594 Metropolitan Statistical Area (MSA) licenses. Of the 594 licenses, 557 were won by entities qualifying as a small business. For that auction, the small business size standard was an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.¹⁰⁵ In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we established a small business size standard for a "small business" as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not to exceed \$15 million for the preceding three years.¹⁰⁶ A "very small business" is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not to exceed \$3 million for the preceding three years.¹⁰⁷ We cannot estimate, however, the number of licenses that will be won by entities qualifying as small or very small businesses under our rules in future auctions of 218-219 MHz spectrum.

41. *24 GHz – Incumbent Licensees.* This analysis may affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The applicable SBA small business size standard is that of "Cellular and Other Wireless Telecommunications" companies. This category provides that such a company is small if it employs no more than 1,500 persons.¹⁰⁸ According to Census Bureau data for 1997, there were 977 firms in this category, total, that operated for the entire year.¹⁰⁹ Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more.¹¹⁰ Thus, under this size standard, the great majority of firms can be considered small. These broader census data notwithstanding, we believe that there are only two licensees in the 24 GHz band that were relocated from the 18

¹⁰⁵ *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, PP Docket No. 93-253, Fourth Report and Order, 59 Fed. Reg. 24947 (May 13, 1994).

¹⁰⁶ In the Matter of Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 64 Fed.Reg. 59656 (Nov. 3, 1999).

¹⁰⁷ In the Matter of Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, WT Docket No. 98-169, Report and Order and Memorandum Opinion and Order, 64 Fed.Reg. 59656 (Nov. 3, 1999).

¹⁰⁸ 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002).

¹⁰⁹ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Employment Size of Firms Subject to Federal Income Tax: 1997," Table 5, NAICS code 513322 (issued Oct. 2000).

¹¹⁰ *Id.* The census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

GHz band, Teligent¹¹¹ and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1,500 employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

42. *24 GHz – Future Licensees.* With respect to new applicants in the 24 GHz band, the small business size standard for “small business” is an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not in excess of \$15 million.¹¹² “Very small business” in the 24 GHz band is an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.¹¹³ The SBA has approved these small business size standards.¹¹⁴ These size standards will apply to the future auction, if held.

b. Cable and OVS Operators

43. *Cable and Other Program Distribution.* This category includes cable systems operators, closed circuit television services, direct broadcast satellite services, multipoint distribution systems, satellite master antenna systems, and subscription television services. The SBA has developed small business size standard for this census category, which includes all such companies generating \$12.5 million or less in revenue annually.¹¹⁵ According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year.¹¹⁶ Of this total, 1,180 firms had annual receipts of under \$10 million and an additional 52 firms had receipts of \$10 million or more but less than \$25 million. Consequently, the Commission estimates that the majority of providers in this service category are small businesses that may be affected by the rules and policies adopted herein.

44. *Cable System Operators (Rate Regulation Standard).* The Commission has developed its own small business size standard for cable system operators, for purposes of rate

¹¹¹ Teligent acquired the DEMS licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

¹¹² In the Matter of Amendments to Parts 1,2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz, Report and Order, 15 FCC Rcd 16934, 16967 (2000); see also 47 C.F.R. § 101.538(a)(2).

¹¹³ In the Matter of Amendments to Parts 1,2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz, Report and Order, 15 FCC Rcd 16934, 16967 (2000); see also 47 C.F.R. § 101.538(a)(1).

¹¹⁴ See Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Gary M. Jackson, Assistant Administrator, SBA (July 28, 2000).

¹¹⁵ 13 CFR § 121.201, North American Industry Classification System (NAICS) code 513220 (changed to 517510 in October 2002).

¹¹⁶ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4, NAICS code 513220 (issued October 2000).

regulation. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide.¹¹⁷ The most recent estimates indicate that there were 1,439 cable operators who qualified as small cable system operators at the end of 1995.¹¹⁸ Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, the Commission estimates that there are now fewer than 1,439 small entity cable system operators that may be affected by the rules and policies adopted herein.

45. *Cable System Operators (Telecom Act Standard).* The Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."¹¹⁹ The Commission has determined that there are 67,700,000 subscribers in the United States.¹²⁰ Therefore, an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate.¹²¹ Based on available data, the Commission estimates that the number of cable operators serving 677,000 subscribers or fewer, totals 1,450.¹²² The Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million,¹²³ and therefore are unable, at this time, to estimate more accurately the number of cable system operators that would qualify as small cable operators under the size standard contained in the Communications Act of 1934.

46. *Open Video Services.* Open Video Service (OVS) systems provide subscription

¹¹⁷ 47 CFR § 76.901(e). The Commission developed this definition based on its determination that a small cable system operator is one with annual revenues of \$100 million or less. *Implementation of Sections of the 1992 Cable Act: Rate Regulation*, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393 (1995), 60 FR 10534 (Feb. 27, 1995).

¹¹⁸ Paul Kagan Associates, Inc., *Cable TV Investor*, February 29, 1996 (based on figures for December 30, 1995).

¹¹⁹ 47 U.S.C. § 543(m)(2).

¹²⁰ See FCC Announces New Subscriber Count for the Definition of Small Cable Operator, Public Notice DA 01-158 (Jan. 24, 2001).

¹²¹ 47 CFR § 76.901(f).

¹²² See FCC Announces New Subscriber Count for the Definition of Small Cable Operators, Public Notice, DA-01-0158 (rel. January 24, 2001).

¹²³ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(f) of the Commission's rules. See 47 CFR § 76.909(b).

services.¹²⁴ The SBA has created a small business size standard for Cable and Other Program Distribution.¹²⁵ This standard provides that a small entity is one with \$12.5 million or less in annual receipts. The Commission has certified approximately 25 OVS operators to serve 75 areas, and some of these are currently providing service.¹²⁶ Affiliates of Residential Communications Network, Inc. (RCN) received approval to operate OVS systems in New York City, Boston, Washington, D.C., and other areas. RCN has sufficient revenues to assure that they do not qualify as a small business entity. Little financial information is available for the other entities that are authorized to provide OVS and are not yet operational. Given that some entities authorized to provide OVS service have not yet begun to generate revenues, the Commission concludes that up to 24 OVS operators (those remaining) might qualify as small businesses that may be affected by the rules and policies adopted herein.

c. Internet Service Providers

47. *Internet Service Providers.* The SBA has developed a small business size standard for Internet Service Providers (ISPs). ISPs "provide clients access to the Internet and generally provide related services such as web hosting, web page designing, and hardware or software consulting related to Internet connectivity."¹²⁷ Under the SBA size standard, such a business is small if it has average annual receipts of \$21 million or less.¹²⁸ According to Census Bureau data for 1997, there were 2,751 firms in this category that operated for the entire year.¹²⁹ Of these, 2,659 firms had annual receipts of under \$10 million, and an additional 67 firms had receipts of between \$10 million and \$24,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

d. Other Internet-Related Entities

48. *Web Search Portals.* We note that, in this Notice, we have described activities such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The Commission has not adopted a size standard for entities that create or provide these types of services or applications. However, the census bureau has

¹²⁴ See 47 U.S.C. § 573.

¹²⁵ 13 CFR § 121.201, NAICS code 513220 (changed to 517510 in October 2002).

¹²⁶ See <<http://www.fcc.gov/csb/ovs/csovsr.html>> (current as of March 2002).

¹²⁷ U.S. Census Bureau, "2002 NAICS Definitions: 518111 Internet Service Providers" (Feb. 2004) <www.census.gov>.

¹²⁸ 13 C.F.R. § 121.201, NAICS code 518111 (changed from previous code 514191, "On-Line Information Services," in Oct. 2002).

¹²⁹ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 514191 (issued Oct. 2000).

identified firms that "operate web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format. Web search portals often provide additional Internet services, such as e-mail, connections to other web sites, auctions, news, and other limited content, and serve as a home base for Internet users."¹³⁰ The SBA has developed a small business size standard for this category; that size standard is \$6 million or less in average annual receipts.¹³¹ According to Census Bureau data for 1997, there were 195 firms in this category that operated for the entire year.¹³² Of these, 172 had annual receipts of under \$5 million, and an additional nine firms had receipts of between \$5 million and \$9,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

49. *Data Processing, Hosting, and Related Services.* Entities in this category "primarily ... provid[e] infrastructure for hosting or data processing services."¹³³ The SBA has developed a small business size standard for this category; that size standard is \$21 million or less in average annual receipts.¹³⁴ According to Census Bureau data for 1997, there were 3,700 firms in this category that operated for the entire year.¹³⁵ Of these, 3,477 had annual receipts of under \$10 million, and an additional 108 firms had receipts of between \$10 million and \$24,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

50. *All Other Information Services.* "This industry comprises establishments primarily engaged in providing other information services (except new syndicates and libraries and archives)."¹³⁶ We note that, in this Notice, we have described activities such as email, online gaming, web browsing, video conferencing, instant messaging, and other, similar IP-enabled services. The SBA has developed a small business size standard for this category; that

¹³⁰ U.S. Census Bureau, "2002 NAICS Definitions: 518112 Web Search Portals" (Feb. 2004) <www.census.gov>.

¹³¹ 13 C.F.R. § 121.201, NAICS code 518112 (changed from 514199 in Oct. 2002).

¹³² U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 514199 (issued Oct. 2000). This category was created for the 2002 Economic Census by taking a portion of the superseded 1997 category, "All Other Information Services," NAICS code 514199. The data cited in the text above are derived from the superseded category.

¹³³ U.S. Census Bureau, "2002 NAICS Definitions: 518210 Data Processing, Hosting, and Related Services" (Feb. 2004) <www.census.gov>.

¹³⁴ 13 C.F.R. § 121.201, NAICS code 518210 (changed from 514210 in Oct. 2002).

¹³⁵ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 514210 (issued Oct. 2000).

¹³⁶ U.S. Census Bureau, "2002 NAICS Definitions: 519190 All Other Information Services" (Feb. 2004) <www.census.gov>.

size standard is \$6 million or less in average annual receipts.¹³⁷ According to Census Bureau data for 1997, there were 195 firms in this category that operated for the entire year.¹³⁸ Of these, 172 had annual receipts of under \$5 million, and an additional nine firms had receipts of between \$5 million and \$9,999,999. Consequently, we estimate that the majority of these firms are small entities that may be affected by our action.

51. *Internet Publishing and Broadcasting.* "This industry comprises establishments engaged in publishing and/or broadcasting content on the Internet exclusively. These establishments do not provide traditional (non-Internet) versions of the content that they publish or broadcast."¹³⁹ The SBA has developed a small business size standard for this new (2002) census category; that size standard is 500 or fewer employees.¹⁴⁰ To assess the prevalence of small entities in this category, we will use 1997 Census Bureau data for a relevant, now-superseded census category, "All Other Information Services." The SBA small business size standard for that prior category was \$6 million or less in average annual receipts. According to Census Bureau data for 1997, there were 195 firms in the prior category that operated for the entire year.¹⁴¹ Of these, 172 had annual receipts of under \$5 million, and an additional nine firms had receipts of between \$5 million and \$9,999,999. Consequently, we estimate that the majority of the firms in this current category are small entities that may be affected by our action.

52. *Software Publishers.* These companies may design, develop or publish software and may provide other support services to software purchasers, such as providing documentation or assisting in installation. The companies may also design software to meet the needs of specific users. The SBA has developed a small business size standard of \$21 million or less in average annual receipts for all of the following pertinent categories: Software Publishers, Custom Computer Programming Services, and Other Computer Related Services.¹⁴² For Software Publishers, Census Bureau data for 1997 indicate that there were 8,188 firms in

¹³⁷ 13 C.F.R. § 121.201, NAICS code 519190 (changed from 514199 in Oct. 2002).

¹³⁸ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 514199 (issued Oct. 2000). This category was created for the 2002 Economic Census by taking a portion of the superseded 1997 category, "All Other Information Services," NAICS code 514199. The data cited in the text above are derived from the superseded category.

¹³⁹ U.S. Census Bureau, "2002 NAICS Definitions: 516110 Internet Publishing and Broadcasting" (Feb. 2004) <www.census.gov>.

¹⁴⁰ 13 C.F.R. § 121.201, NAICS code 516110 (derived from 514199 and other 1997 codes).

¹⁴¹ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 514199 (issued Oct. 2000). This category was created for the 2002 Economic Census by taking portions of numerous 1997 categories.

¹⁴² 13 C.F.R. § 121.201, NAICS codes 511210, 541511, and 541519.

the category that operated for the entire year.¹⁴³ Of these, 7,633 had annual receipts under \$10 million, and an additional 289 firms had receipts of between \$10 million and \$24,999,999. For providers of Custom Computer Programming Services, the Census Bureau data indicate that there were 19,334 firms that operated for the entire year.¹⁴⁴ Of these, 18,786 had annual receipts of under \$10 million, and an additional 352 firms had receipts of between \$10 million and \$24,999,999. For providers of Other Computer Related Services, the Census Bureau data indicate that there were 5,524 firms that operated for the entire year.¹⁴⁵ Of these, 5,484 had annual receipts of under \$10 million, and an additional 28 firms had receipts of between \$10 million and \$24,999,999. Consequently, we estimate that the majority of the firms in each of these three categories are small entities that may be affected by our action.

e. Equipment Manufacturers

53. In section V.B.1 of this Notice, we invite comment on whether the disability access provisions of sections 255 and 252(a)(2) of the Act, as well as the Commission's Rules implementing these statutes in the *Disability Access Order*, apply in the context of VoIP and other IP-enabled services. Section V.B.1 notes that sections 255 and 252(a)(2) and the Commission's implementing rules apply to manufacturers of equipment that the Act and the rules deem covered by the provisions.¹⁴⁶ The Commission currently does not collect data regarding how many, or which, companies manufacture such equipment. Thus, out of an abundance of caution, we have perhaps been over-inclusive in creating the following list of possibly covered entities. Again, commenters are invited to comment on these categories and on the possible number of small entities within these categories.

54. *Wireless Communications Equipment Manufacturers.* The SBA has established a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing. Examples of products in this category include "transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment"¹⁴⁷ and may include other devices that transmit and receive IP-enabled

¹⁴³ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 511210 (issued Oct. 2000).

¹⁴⁴ U.S. Census Bureau, 1997 Economic Census, Subject Series: Professional, Scientific, and Technical Services, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4a, NAICS code 541511 (issued Oct. 2000).

¹⁴⁵ U.S. Census Bureau, 1997 Economic Census, Subject Series: Professional, Scientific, and Technical Services, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4a, NAICS code 541519 (issued Oct. 2000).

¹⁴⁶ See Notice section V.B.1.

¹⁴⁷ Office of Management and Budget, North American Industry Classification System 308-09 (1997) (NAICS code 334220).

services, such as personal digital assistants (PDAs). Under the SBA size standard, firms are considered small if they have 750 or fewer employees.¹⁴⁸ According to Census Bureau data for 1997, there were 1,215 establishments¹⁴⁹ in this category that operated for the entire year.¹⁵⁰ Of those, there were 1,150 that had employment of under 500, and an additional 37 that had employment of 500 to 999. The percentage of wireless equipment manufacturers in this category was approximately 61.35%,¹⁵¹ so we estimate that the number of wireless equipment manufacturers with employment of under 500 was actually closer to 706, with an additional 23 establishments having employment of between 500 and 999. Consequently, we estimate that the majority of wireless communications equipment manufacturers are small entities that may be affected by our action.

55. *Telephone Apparatus Manufacturing.* This category “comprises establishments primarily engaged primarily in manufacturing wire telephone and data communications equipment.”¹⁵² Examples of pertinent products are “central office switching equipment, cordless telephones (except cellular), PBX equipment, telephones, telephone answering machines, and data communications equipment, such as bridges, routers, and gateways.”¹⁵³ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁵⁴ According to Census Bureau data for 1997, there were 598 establishments in this category that operated for the entire year.¹⁵⁵ Of these, 574 had employment of under 1,000, and an additional 17 establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

¹⁴⁸ 13 C.F.R. § 121.201, NAICS code 334220.

¹⁴⁹ The number of “establishments” is a less helpful indicator of small business prevalence in this context than would be the number of “firms” or “companies,” because the latter take into account the concept of common ownership or control. Any single physical location for an entity is an establishment, even though that location may be owned by a different establishment. Thus, the numbers given may reflect inflated numbers of businesses in this category, including the numbers of small businesses. In this category, the Census breaks-out data for firms or companies only to give the total number of such entities for 1997, which were 1,089.

¹⁵⁰ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Industry Statistics by Employment Size,” Table 4, NAICS code 334220 (issued Aug. 1999).

¹⁵¹ *Id.* Table 5.

¹⁵² Office of Management and Budget, North American Industry Classification System 308 (1997) (NAICS code 334210).

¹⁵³ *Id.*

¹⁵⁴ 13 C.F.R. § 121.201, NAICS code 334210.

¹⁵⁵ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Telephone Apparatus Manufacturing,” Table 4, NAICS code 334210 (issued Sept. 1999).

56. *Electronic Computer Manufacturing.* This category "comprises establishments primarily engaged in manufacturing and/or assembling electronic computers, such as mainframes, personal computers, workstations, laptops, and computer servers."¹⁵⁶ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁵⁷ According to Census Bureau data for 1997, there were 563 establishments in this category that operated for the entire year.¹⁵⁸ Of these, 544 had employment of under 1,000, and an additional 11 establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

57. *Computer Terminal Manufacturing.* "Computer terminals are input/output devices that connect with a central computer for processing."¹⁵⁹ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁶⁰ According to Census Bureau data for 1997, there were 142 establishments in this category that operated for the entire year, and all of the establishments had employment of under 1,000.¹⁶¹ Consequently, we estimate that the majority or all of these establishments are small entities that may be affected by our action.

58. *Other Computer Peripheral Equipment Manufacturing.* Examples of peripheral equipment in this category include keyboards, mouse devices, monitors, and scanners.¹⁶² The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁶³ According to Census Bureau data for 1997, there were 1061 establishments in this category that operated for the entire year.¹⁶⁴ Of these, 1,046 had

¹⁵⁶ Office of Management and Budget, North American Industry Classification System 306 (1997) (NAICS code 334111).

¹⁵⁷ 13 C.F.R. § 121.201, NAICS code 334111.

¹⁵⁸ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Electronic Computer Manufacturing," Table 4, NAICS code 334111 (issued Aug. 1999).

¹⁵⁹ Office of Management and Budget, North American Industry Classification System 307 (1997) (NAICS code 334113).

¹⁶⁰ 13 C.F.R. § 121.201, NAICS code 334113.

¹⁶¹ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Computer Terminal Manufacturing," Table 4, NAICS code 334113 (issued Aug. 1999).

¹⁶² Office of Management and Budget, North American Industry Classification System 307-08 (1997) (NAICS code 334119).

¹⁶³ 13 C.F.R. § 121.201, NAICS code 334119.

¹⁶⁴ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Other Computer Peripheral Equipment Manufacturing," Table 4, NAICS code 334119 (issued Aug. 1999).

employment of under 1,000, and an additional six establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

59. *Fiber Optic Cable Manufacturing.* These establishments manufacture “insulated fiber-optic cable from purchased fiber-optic strand.”¹⁶⁵ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁶⁶ According to Census Bureau data for 1997, there were 38 establishments in this category that operated for the entire year.¹⁶⁷ Of these, 37 had employment of under 1,000, and one establishment had employment of 1,000 to 2,499. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

60. *Other Communication and Energy Wire Manufacturing.* These establishments manufacture “insulated wire and cable of nonferrous metals from purchased wire.”¹⁶⁸ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.¹⁶⁹ According to Census Bureau data for 1997, there were 275 establishments in this category that operated for the entire year.¹⁷⁰ Of these, 271 had employment of under 1,000, and four establishments had employment of 1,000 to 2,499. Consequently, we estimate that the majority or all of these establishments are small entities that may be affected by our action.

61. *Audio and Video Equipment Manufacturing.* These establishments manufacture “electronic audio and video equipment for home entertainment, motor vehicle, public address and musical instrument amplifications.”¹⁷¹ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 750 or fewer employees.¹⁷²

¹⁶⁵ Office of Management and Budget, North American Industry Classification System 330 (1997) (NAICS code 335921).

¹⁶⁶ 13 C.F.R. § 121.201, NAICS code 335921.

¹⁶⁷ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Fiber Optic Cable Manufacturing,” Table 4, NAICS code 335921 (issued Nov. 1999).

¹⁶⁸ Office of Management and Budget, North American Industry Classification System 331 (1997) (NAICS code 335929).

¹⁶⁹ 13 C.F.R. § 121.201, NAICS code 335929.

¹⁷⁰ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Other Communication and Energy Wire Manufacturing,” Table 4, NAICS code 335929 (issued Nov. 1999).

¹⁷¹ U.S. Census Bureau, “2002 NAICS Definitions: 334310 Audio and Video Equipment Manufacturing” (Feb. 2004) <www.census.gov>.

¹⁷² 13 C.F.R. § 121.201, NAICS code 334310.

According to Census Bureau data for 1997, there were 554 establishments in this category that operated for the entire year.¹⁷³ Of these, 542 had employment of under 500, and nine establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

62. *Electron Tube Manufacturing.* These establishments are “primarily engaged in manufacturing electron tubes and parts (except glass blanks).”¹⁷⁴ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 750 or fewer employees.¹⁷⁵ According to Census Bureau data for 1997, there were 158 establishments in this category that operated for the entire year.¹⁷⁶ Of these, 148 had employment of under 500, and three establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

63. *Bare Printed Circuit Board Manufacturing.* These establishments are “primarily engaged in manufacturing bare (i.e., rigid or flexible) printed circuit boards without mounted electronic components.”¹⁷⁷ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.¹⁷⁸ According to Census Bureau data for 1997, there were 1,389 establishments in this category that operated for the entire year.¹⁷⁹ Of these, 1,369 had employment of under 500, and 16 establishments had employment of 500 to 999. Consequently, we estimate that the majority of these establishments are small entities that may be affected by our action.

64. *Semiconductor and Related Device Manufacturing.* These establishments manufacture “computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media.”¹⁸⁰ The SBA has developed a small

¹⁷³ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Audio and Video Equipment Manufacturing,” Table 4, NAICS code 334310 (issued Aug. 1999).

¹⁷⁴ U.S. Census Bureau, “2002 NAICS Definitions: 334411 Electron Tube Manufacturing” (Feb. 2004) <www.census.gov>.

¹⁷⁵ 13 C.F.R. § 121.201, NAICS code 334411.

¹⁷⁶ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Electron Tube Manufacturing,” Table 4, NAICS code 334411 (issued July 1999).

¹⁷⁷ U.S. Census Bureau, “2002 NAICS Definitions: 334412 Bare Printed Circuit Board Manufacturing” (Feb. 2004) <www.census.gov>.

¹⁷⁸ 13 C.F.R. § 121.201, NAICS code 334412.

¹⁷⁹ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Bare Printed Circuit Board Manufacturing,” Table 4, NAICS code 334412 (issued Aug. 1999).

¹⁸⁰ U.S. Census Bureau, “2002 NAICS Definitions: 334413 Semiconductor and Related Device Manufacturing” (Feb. 2004) <www.census.gov>.

business size standard for this category of manufacturing; that size standard is 500 or fewer employees.¹⁸¹ According to Census Bureau data for 1997, there were 1,082 establishments in this category that operated for the entire year.¹⁸² Of these, 987 had employment of under 500, and 52 establishments had employment of 500 to 999.

65. *Electronic Capacitor Manufacturing.* These establishments manufacture “electronic fixed and variable capacitors and condensers.”¹⁸³ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.¹⁸⁴ According to Census Bureau data for 1997, there were 128 establishments in this category that operated for the entire year.¹⁸⁵ Of these, 121 had employment of under 500, and four establishments had employment of 500 to 999.

66. *Electronic Resistor Manufacturing.* These establishments manufacture “electronic resistors, such as fixed and variable resistors, resistor networks, thermistors, and varistors.”¹⁸⁶ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.¹⁸⁷ According to Census Bureau data for 1997, there were 118 establishments in this category that operated for the entire year.¹⁸⁸ Of these, 113 had employment of under 500, and 5 establishments had employment of 500 to 999.

67. *Electronic Coil, Transformer, and Other Inductor Manufacturing.* These establishments manufacture “electronic inductors, such as coils and transformers.”¹⁸⁹ The SBA has developed a small business size standard for this category of manufacturing; that size

¹⁸¹ 13 C.F.R. § 121.201, NAICS code 334413.

¹⁸² U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Semiconductor and Related Device Manufacturing,” Table 4, NAICS code 334413 (issued July 1999).

¹⁸³ U.S. Census Bureau, “2002 NAICS Definitions: 334414 Electronic Capacitor Manufacturing” (Feb. 2004) <www.census.gov>.

¹⁸⁴ 13 C.F.R. § 121.201, NAICS code 334414.

¹⁸⁵ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Electronic Capacitor Manufacturing,” Table 4, NAICS code 334414 (issued July 1999).

¹⁸⁶ U.S. Census Bureau, “2002 NAICS Definitions: 334415 Electronic Resistor Manufacturing” (Feb. 2004) <www.census.gov>.

¹⁸⁷ 13 C.F.R. § 121.201, NAICS code 334415.

¹⁸⁸ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, “Electronic Resistor Manufacturing,” Table 4, NAICS code 334415 (issued Aug. 1999).

¹⁸⁹ U.S. Census Bureau, “2002 NAICS Definitions: 334416 Electronic Coil, Transformer, and Other Inductor Manufacturing” (Feb. 2004) <www.census.gov>.

standard is 500 or fewer employees.¹⁹⁰ According to Census Bureau data for 1997, there were 448 establishments in this category that operated for the entire year.¹⁹¹ Of these, 446 had employment of under 500, and two establishments had employment of 500 to 999.

68. *Electronic Connector Manufacturing.* These establishments manufacture "electronic connectors, such as coaxial, cylindrical, rack and panel, pin and sleeve, printed circuit and fiber optic."¹⁹² The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.¹⁹³ According to Census Bureau data for 1997, there were 347 establishments in this category that operated for the entire year.¹⁹⁴ Of these, 332 had employment of under 500, and 12 establishments had employment of 500 to 999.

69. *Printed Circuit Assembly (Electronic Assembly) Manufacturing.* These are establishments "primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards."¹⁹⁵ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 500 or fewer employees.¹⁹⁶ According to Census Bureau data for 1997, there were 714 establishments in this category that operated for the entire year.¹⁹⁷ Of these, 673 had employment of under 500, and 24 establishments had employment of 500 to 999.

70. *Other Electronic Component Manufacturing.* These are establishments "primarily engaged in loading components onto printed circuit boards or who manufacture and ship loaded printed circuit boards."¹⁹⁸ The SBA has developed a small business size standard

¹⁹⁰ 13 C.F.R. § 121.201, NAICS code 334416.

¹⁹¹ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Electronic Coil, Transformer, and Other Inductor Manufacturing," Table 4, NAICS code 334416 (issued Aug. 1999).

¹⁹² U.S. Census Bureau, "2002 NAICS Definitions: 334417 Electronic Connector Manufacturing" (Feb. 2004) <www.census.gov>.

¹⁹³ 13 C.F.R. § 121.201, NAICS code 334417.

¹⁹⁴ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Electronic Connector Manufacturing," Table 4, NAICS code 334417 (issued July 1999).

¹⁹⁵ U.S. Census Bureau, "2002 NAICS Definitions: 334418 Printed Circuit Assembly (Electronic Assembly) Manufacturing" (Feb. 2004) <www.census.gov>.

¹⁹⁶ 13 C.F.R. § 121.201, NAICS code 334418.

¹⁹⁷ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Printed Circuit Assembly (Electronic Assembly) Manufacturing," Table 4, NAICS code 334418 (issued Sept. 1999).

¹⁹⁸ U.S. Census Bureau, "2002 NAICS Definitions: 334419 Other Electronic Component Manufacturing" (Feb. 2004) <www.census.gov>.

for this category of manufacturing; that size standard is 500 or fewer employees.¹⁹⁹ According to Census Bureau data for 1997, there were 1,835 establishments in this category that operated for the entire year.²⁰⁰ Of these, 1,814 had employment of under 500, and 18 establishments had employment of 500 to 999.

71. *Computer Storage Device Manufacturing.* These establishments manufacture "computer storage devices that allow the storage and retrieval of data from a phase change, magnetic, optical, or magnetic/optical media."²⁰¹ The SBA has developed a small business size standard for this category of manufacturing; that size standard is 1,000 or fewer employees.²⁰² According to Census Bureau data for 1997, there were 209 establishments in this category that operated for the entire year.²⁰³ Of these, 197 had employment of under 500, and eight establishments had employment of 500 to 999.

4. **Description of Projected Reporting, Recordkeeping and Other Compliance Requirements**

72. None at this time.

5. **Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered**

73. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include (among others) the following four alternatives: (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.²⁰⁴

74. The Notice expressly states that the Commission may ultimately need to

¹⁹⁹ 13 C.F.R. § 121.201, NAICS code 334419.

²⁰⁰ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Other Electronic Component Manufacturing," Table 4, NAICS code 334419 (issued Aug. 1999).

²⁰¹ U.S. Census Bureau, "2002 NAICS Definitions: 334112 Computer Storage Device Manufacturing" (Feb. 2004) <www.census.gov>.

²⁰² 13 C.F.R. § 121.201, NAICS code 334112.

²⁰³ U.S. Census Bureau, 1997 Economic Census, Industry Series: Manufacturing, "Computer Storage Device Manufacturing," Table 4, NAICS code 334112 (issued July 1999).

²⁰⁴ 5 U.S.C. § 603(c).

differentiate among various IP-enabled services, and that regulation may be deemed inappropriate with regard to most, if not all, IP-enabled services, applications or providers. It thus seeks comment on the appropriate grounds on which to differentiate among providers of IP-enabled services. The Notice further seeks comment on the appropriate legal classification for each category of IP-enabled services, and on which regulatory requirements, if any, should be applied to services falling into each category. The Notice makes no conclusions regarding which regulations, if any, would apply to any entity, including small entities. We seek comment here on the effect various proposals will have on small entities, and on the effect alternative rules would have on those entities.

6. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

75. None.

STATEMENT OF
CHAIRMAN MICHAEL K. POWELL

Re: IP-Enabled Services, WC Docket No. 04-36.

More than two decades ago, the Commission made the courageous decision to fence off information services – the precursors of today’s internet – from traditional monopoly regulation. This approach was embraced by Congress in that 1996 Act. The Commission’s pro-competitive and deregulatory policies allowed competition to flourish and helped usher in a period of growth and innovation unlike any other in our nation’s history. Today, we issue an item that follows in that tradition of fostering innovation and consumer choice. The item recognizes that we have entered an Age of Personal Communications. IP-enabled services and the proliferation of IP devices enable consumers to increasingly choose innovative, personalized Internet applications and content.

As new and innovative ways to communicate have emerged, so too have calls for us to examine the appropriate public policy for highly innovative, highly efficient services based on Internet Protocol. In this comprehensive Notice of Proposed Rulemaking, we seek comment on how applications that use IP are changing our communications network and the very assumptions on which our current regulatory policies are based.

Our starting point – and our most important finding – is the recognition that all IP-enabled services exist in a dynamic, fast-changing environment that is peculiarly ill-suited to the century old telephone model of regulation. Competitive market forces, rather than prescriptive rules, will respond to public need much more quickly and more effectively than even the best intentioned responses of government regulators. Indeed, our best hope for continuing the investment, innovation, choice and competition that characterizes Internet services today lies in limiting to a minimum the labyrinth of regulations and fees that apply to the Internet. All too often, these edicts can thwart competition even among traditional telecommunications providers.

While IP-enabled services should remain free from traditional monopoly regulation, rules designed to ensure law enforcement access, universal service, disability access, and emergency 911 service can and should be preserved in the new architecture. In today’s Notice, we seek comment on whether and how to apply discrete regulatory requirements where necessary to fulfill important federal policy objectives.

Above all, law enforcement access to IP-enabled communications is essential. The Communications Assistance for Law Enforcement Act (CALEA) requires telecommunications carriers to ensure that their equipment is capable of providing surveillance capabilities to law enforcement agencies. CALEA requirements can and should apply to VoIP and other IP enabled service providers, even if these services are “information services” for purposes of the Communications Act. Nothing in today’s proceeding should be read to suggest that law enforcement agencies should not have the access to communications infrastructure they need to protect our nation. On the contrary, all IP-enabled services should consider the needs of law

enforcement as they continue to develop innovative technologies. Nevertheless, the technical issues associated with law-enforcement access to VoIP communications are both novel and complex, and, ultimately, worthy of their own separately docketed proceeding. To address these issues, we intend to initiate a CALEA rulemaking proceeding in the near future. The new proceeding will address the scope of covered services, assign responsibility for compliance, identify the wiretap capabilities required by law enforcement and provide acceptable compliance standards.

IP networks cost much less to build and operate. As in so many other areas, I believe VoIP can help control high universal service costs in order to ensure that every American has affordable telephone service. As the item notes, however, IP services ride atop a physical layer that, in many areas, is still expensive to build and maintain. To continue to ensure the entire nation has access to vital communications services, the NPRM considers distinguishing service providers that offer interconnection with the nation's public switched telephone network from those that do not. To determine the precise scope of support obligations in the new IP world, today's action quite properly seeks comment on a number of complex funding questions. Yet it does not – and cannot – change the existing obligations of providers to comply with our rules, especially our rules requiring providers of traditional long distance services to pay fair compensation for using the public switched telephone network. During and after the transition to next generations communications networks, the Commission can and will fulfill its statutory obligation to ensure that every American has access to the network at an affordable price.

As we move forward, the Commission will also hold a series of "Solutions Summits" to tackle how a VoIP provider can best respond to the needs of various communities where the market may not readily respond. We will be asking leaders in the law-enforcement, first-responder and disabled communities to come together to talk about creative ways to address some of these issues. It is my hope that industry can take the lead in solving some of the real problems that stem from the migration from the monopoly analog world to the competitive new digital world of communications. If leaders from industry and the government work together to identify issues, study them and stay vigilant, we can rely on enterprise and entrepreneurship to respond to many public needs. Our first "Solutions Summits" will be held on March 18 and will address E911 issues.

Today's notice recognizes that we simply cannot contort the character of the Internet to suit our familiar notions of regulation. We will not dumb down the genius of the web to match the limited vision of a regulator. At the same time, we remain committed to making special efforts to target those areas most in need of public protection. Working together, we will ensure that the promise of these new innovative technologies and services is realized for all Americans.

STATEMENT OF
COMMISSIONER KATHLEEN Q. ABERNATHY

Re: IP-Enabled Services, WC Docket No. 04-36.

With this NPRM, the Commission launches an inquiry into a revolutionary set of services and applications. We stand at the threshold of a profound transformation of the telecommunications marketplace, as the circuit-switching technology of yesteryear is rapidly giving way to IP-based communications. In the IP world, voice communications, once restricted to a dedicated, specialized network, represent but one application — one species of bits — provided alongside many others. Although I firmly believe that prescriptive regulation in many instances will prove unnecessary, I strongly support this effort to develop an appropriate regulatory framework. Indeed, it may seem paradoxical but it is undoubtedly true that we can ensure freedom from regulation only if we commence a regulatory proceeding.

While it is premature to say precisely what this framework will look like, there is no question that the time is right for the Commission to build a record. As service providers are developing business plans and courts and state commissions are starting to reach potentially divergent conclusions about the rules of the road, the risks of inaction are great. This Commission must step forward and provide guidance, or providers may be subject to a patchwork of inconsistent rules. The promise of IP-enabled services is too great to risk such an outcome.

As we conduct this rulemaking, I will keep an open mind but at the same time I will be guided by some overarching predispositions. *First*, I believe that the regulatory framework for IP-based services must be predominantly federal. A federal scheme will facilitate nationwide deployment strategies and avoid the burdens associated with inconsistent state rules. Moreover, most forms of IP communications appear to transcend jurisdictional boundaries, rendering obsolete the traditional separation of services into interstate and intrastate buckets. *Second*, I am deeply skeptical about the application of economic regulation to these nascent services. Public-utility regulations have traditionally been imposed on local exchange carriers to restrain their market power. Services such as VOIP, by contrast, appear to have low barriers to entry and it does not appear that any provider occupies a dominant market position. Rather than reflexively extending our legacy regulations to VOIP providers, we need to take this opportunity to step back and ascertain whether those rules still make sense for *any* providers, including incumbents. *Third*, notwithstanding my interest in maintaining a light touch, I am committed to ensuring that our regulatory approach meets certain critical social policy objectives. As most policymakers at the federal and state level have recognized, we will need to find solutions to guarantee access to 911 services, the ability of law enforcement agencies to conduct surveillance, the preservation of universal service, and access by persons with disabilities. Some of these goals may well be achieved without heavy-handed regulation, but I am willing to support targeted governmental mandates where necessary.

Finally, although the NPRM appropriately refrains from proposing actual service categories and classifications at this early stage, I strongly support taking action to clarify the existing state of the law. The NPRM asks many broad questions about the regime we will establish at the

conclusion of this rulemaking, but we plainly have rules on the books *today* — rules concerning interstate access charges and universal service contributions, among other things — that appear to apply to some services offered in the marketplace. Providers have filed petitions for declaratory rulings because clarity is sorely needed: most notably, some interexchange carriers are paying access charges for terminating so-called phone-to-phone IP calls, whereas some are not. This disparity distorts competition as well as the flow of capital. In an upcoming order or orders, I urge my colleagues to provide as much clarity as possible regarding our existing rules in the interest of our shared goal of promoting regulatory certainty.

**CONCURRING STATEMENT OF
COMMISSIONER MICHAEL J. COPPS**

Re: IP-Enabled Services, WC Docket No. 04-36.

After two years of dialogue on classifying, reclassifying and declassifying services, in this proceeding the Commission finally focuses on the consequences of a Title I approach on a whole range of public safety, emergency response, universal service and disabilities access policies that we have a duty to protect. I have long advocated that we do this.

But I limit my support to concurring here because this proceeding on IP-enabled services strikes me as getting rather too close to final conclusions. In this Notice, we seem to be judging IP-related services without defining them. We ask questions about how to classify these ill-defined services, but then presume, or at least suggest, the answers. The impression is left that we are asking what rules we should apply *when* we relocate whole services and technologies to Title I from Title II. Were we eventually to take this route, we would be rewriting the 1996 Act—from top to bottom. This agency has no right to substitute its reclassification wishes for the will of Congress.

So I will support this Notice only with the understanding that, once we have a full record, our options remain completely open.

We all marvel at the transformative potential of new IP services. They sizzle with possibility for consumers and businesses alike. But for this transformation to happen with real spark, we need keep some fundamentals in mind. For example, we need to address intercarrier compensation to create a level playing field that minimizes arbitrages and maximizes the opportunities for new technologies to flourish. And we must recognize the role that universal service will play to make sure that all areas of the nation are covered with the technologies to create a seamless communications system and a seamless country. IP applications will only revolutionize communications if everyone has access to really high capacity bandwidth. Only when everyone, everywhere in America has access to broadband, will the IP transformation we herald here really take place.

STATEMENT OF
COMMISSIONER KEVIN J. MARTIN

Re: IP-Enabled Services, WC Docket No. 04-36.

I am glad that the Commission is moving forward today with a Notice of Proposed Rulemaking to address and clarify the regulatory status of Voice over Internet Protocol (VoIP) and Internet Protocol (IP)-enabled services. Today's NPRM recognizes the benefits that VoIP brings such as greater efficiency and that the Commission will approach VoIP with a light regulatory touch.

VoIP and IP based services will provide consumers with personalized applications and content resulting in more competition and greater choice. These IP services have the potential to spur further innovation and help drive the ubiquitous deployment of broadband and IP networks that will bring even greater benefits to consumers in the future.

As I have stated previously, as VoIP services move toward becoming a substitute for traditional telephony services, we need to carefully consider and address any questions and concerns regarding the obligations to provide traditional public safety services such as 911 and the ability to comply with law enforcement requirements. I thus support today's announcement that the Commission will soon initiate a comprehensive rulemaking to address law enforcement's needs relative to CALEA and that our decision today will not prejudice the outcome of that proceeding.

Today's decision, however, also raises many of the difficult questions that arise regarding VoIP's potential to displace traditional telephony services. I encourage all interest parties to comment on these issues. In particular, I will look with great interest, at how we should address many of the important public safety, law enforcement and consumer protection functions in a VoIP world.

I am also pleased that today's item recognizes the many different types of VoIP service offerings that currently exist, and that may potentially develop in the marketplace. The NPRM acknowledges that VoIP offerings, at times, may or may not need to use the public switch network ("PSTN") and asks how we should take their key distinctions into account. The item also makes clear that functionally equivalent services should be subject to similar obligations and that the cost of the PSTN should be born equitably among those that use it in similar ways.

As we move forward, we must ensure that our policies treat similar services in a similar fashion and that we do not create a regulatory framework that promotes potential arbitrage opportunities.

**STATEMENT OF COMMISSIONER JONATHAN S. ADELSTEIN
APPROVING IN PART AND CONCURRING IN PART**

Re: IP-Enabled Services, WC Docket No. 04-36.

Re: Petition for Declaratory Ruling that pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service, Memorandum Opinion and Order, WC Docket No. 03-45.

Today, we consider two items – a comprehensive Notice of Proposed Rulemaking and a declaratory ruling on a specific service – related to Voice over Internet Protocol (VoIP) and Internet Protocol (IP)-enabled services.

NPRM

With this Notice, we examine the extent and legal significance of the telecommunications industry's growing adoption of IP-enabled services. This technological evolution stems from the development of a common digital protocol, the "IP" in "VoIP." It is integral to an explosion of choices for consumers, such as phones in PDAs, voice through Instant Messaging-like services, not to mention lower prices on the services we are accustomed to. I am struck by the wealth of innovation occurring under the banner of "VoIP." As a consumer, I think we all have much to look forward to.

As a Commissioner, I think we take an important and responsible step today by opening a comprehensive Notice of Proposed Rulemaking on the regulatory issues associated with IP-enabled services. VoIP services have matured recently and it is apparent that VoIP providers have their sights set on that most mainstream of telecommunications markets – the residential consumer. VoIP providers point out that their services have the potential to provide a rich and diverse array of complementary non-voice applications that will stir demand. All indications are that IP is becoming the building block for the future of telecommunications.

Questions about what this evolution means for consumers, providers, and this Commission are far from simple. What they present, though, is an opportunity – indeed a necessity – for this Commission to facilitate that evolution. Today's items herald the Commission's role in promoting innovative technologies. At the same time, though, we are charged under the Communications Act with ensuring that the goals set out by Congress are fulfilled. Forging the right regulatory scheme to achieve these goals is our task and it is fundamental that we begin to wrestle with these issues in earnest.

I would like to thank Chairman Powell for his leadership on VoIP. The Chairman convened a forum on these issues in December that I found extremely useful. I have also appreciated his willingness to engage his colleagues in the deliberations over these items. We do not agree on every detail about how to move forward, but I appreciate his willingness to accommodate so many of my concerns as we start this larger rulemaking.

I fully expect that this Notice will allow us to develop a comprehensive record about the development of IP-enabled services. Chief among our tasks is to determine how the adoption of IP-enabled services affects those most fundamental telecommunications policies embodied in the Communications Act. The Act charges us to maintain universal service, which is crucial in delivering communications services to our nation's schools, libraries, low income consumers, and rural communities. We will need to look closely at how IP-enabled services affect our ability to fund and deliver those services. The support that our universal service programs bring to our nation's rural communities is critical, so I am particularly glad that this Notice seeks direct comment on issues of concern to Rural America.

As we go forward, we also must understand how IP-enabled services will affect the provision of 911, E911, and other emergency services; the ability of people with disabilities to access communications services; the application of our consumer protection laws; the ability of our law enforcement officials to rely on CALEA to protect public safety and national security; and other national priorities such as consumer privacy and network reliability. We must understand that our decisions can have disparate impact on particular communities. We raise many issues in today's NPRM, and we will need to reach out to the many and diverse interests of consumers, network providers of all types, hardware and software manufacturers, and federal, state and local policymakers.

I agree with my colleagues that there may be some questions that we need to answer about the regulation of VoIP services sooner rather than later. There are time sensitive issues on the table for us, such as the erosion of the base of support for universal service. This Commission has not hesitated in the past to address issues of regulatory arbitrage, and I think that we will have to look closely and quickly at some of the concerns that have been brought to our attention.

Pulver.com

In approaching these monumental tasks, however, I am concerned that we not get too far ahead of our record. The rapid and dynamic pace of the migration to IP and broadband services counsels for a full consideration of the issues wherever possible.

Many persuasive arguments were made as to why Pulver.com's Free World Dialup (FWD) is not telecommunications or a telecommunications service. I concur that this service is not telecommunications or a telecommunications service and in practice should remain largely unregulated. In particular, the peer-to-peer nature of FWD differs in significant respects from traditional "telecommunications services" that traditional phone companies have offered. However, I cannot fully join today's pulver.com Order because it reaches far beyond the petition filed by pulver.com and, regrettably, speaks prematurely to many of the important questions raised in today's NPRM.

Despite attempts to characterize this Order as limited to the specific facts of pulver.com's FWD, I am concerned that the decision speaks much more expansively. By deciding the statutory classification of pulver.com's service as an interstate information service, the Order raises a host of questions about the continuing relevance of those most fundamental

telecommunications policy objectives that Congress has entrusted to this Commission. At last December's VoIP forum, I talked about these concerns and was struck by how widely-held those concerns seemed to be.

Today's Order does not fully address these widely-acknowledged concerns. One might read this Order as silent on many of these ultimate issues, which strikes me as curiously dismissive given the magnitude of the responsibilities entrusted to us. Parsing more closely, the declarations about jurisdiction and the "unregulated" nature of the service seem to presume the outcome of the very rulemaking we launch today. Pulver.com's petition did not request a ruling on the appropriate jurisdictional classification, and many parties may be unaware that we planned to reach that question in this Order. With both the jurisdictional finding and the unaddressed implications of the statutory classification, I would have preferred that we defer these important policy considerations until the Commission has a more comprehensive record with the benefit of the participation of the many stakeholders who should be part of this debate.

One area where we did have participation was in the critical area of law enforcement. Legitimate concerns were raised by the Federal Bureau of Investigation and the Department of Justice. While the Department of Justice has acquiesced to the desire to open this inquiry, its clearly stated preference was to resolve CALEA matters as soon as possible. While I dissented from today's ruling that FWD is an information service, I am pleased that we commit to opening a CALEA proceeding very soon, and that the Justice Department has not objected to our moving forward in the interim.

For these reasons, I can only concur in part and dissent in part on the pulver.com Order and thus I can only concur in those portions of the NPRM where that item imports this overreaching analysis.

Finally, I would like to thank the Wireline Competition Bureau, and in particular, the Competition Policy Division. Bureau staff members, as well as my own staff, have spent countless hours and long nights working through complex issues. They are truly public servants of the highest caliber.

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