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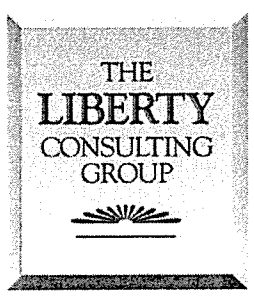
**Assessment
of
FairPoint's Cutover Readiness
Verification Plan**

ORIGINAL
N.H.P.U.C. Case No. <u>DT 07-011</u>
Exhibit No. <u>STAFF C-1</u>
Witness <u>Panel 2</u>
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Prepared for:

**The Staffs
of
the Maine Public Utilities Commission,
the New Hampshire Public Utilities Commission, and
the Vermont Department of Public Service**

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Background

On March 31, 2008, FairPoint Communications, Inc. ("FairPoint") closed a transaction with Verizon Communications Inc. ("Verizon") to assume ownership of most of Verizon's wireline business in Maine, New Hampshire, and Vermont. FairPoint plans to operate with an almost entirely new suite of systems, which will support operations across the full range of business functions. FairPoint has commissioned Capgemini to develop these systems. FairPoint has entered into a Transition Services Agreement ("TSA") with Verizon, under which Verizon will provide operational support functions for FairPoint until FairPoint is ready to transition ("cutover") to these new systems. FairPoint pays Verizon a monthly fee to provide through the existing Verizon systems and processes the functions that FairPoint will eventually self-supply with the new systems now under development. Pursuant to the TSA, FairPoint must provide Verizon with an irrevocable notice that FairPoint is ready to cutover from Verizon's systems at least 60 days prior to the cutover date. In addition, the cutover date is restricted (by Verizon) so that it may occur only at the end of odd-numbered months (January, March, May, July, September, and November). FairPoint's current schedule projects cutover in November 2008, with the irrevocable notice to be provided in September 2008.

During the regulatory proceedings in Maine, New Hampshire, and Vermont to obtain approval for this transaction, a number of parties raised concerns that failures in the transition from Verizon to FairPoint systems can produce adverse customer impacts, such as those that had occurred during a similar transaction in Hawaii. In response to these concerns, all three states imposed as a condition of approval of the transaction that careful monitoring of the cutover process be performed by an independent third party. The staffs of the Maine Public Utilities Commission, the New Hampshire Public Utilities Commission, and the Vermont Department of Public Service ("Regulatory Staffs") engaged the Liberty Consulting Group ("Liberty") to fulfill this role.

As part of this engagement, Liberty was asked to submit a series of reports:

1. Monthly status reports of FairPoint's progress
2. A review and assessment of FairPoint's planned testing and cutover readiness verification process
3. A pre-cutover readiness review and assessment
4. A post-cutover review.

Liberty began providing the monthly status reports (item 1) in December 2007. These reports have been made publicly available on the New Hampshire and Maine Public Utilities Commissions' websites. The present report addresses the second reporting requirement. As specified in the statement of scope for this engagement ("Scope Statement"), Liberty supplied this report in draft form ("Draft Report") on May 21, 2008, and the Regulatory Staffs subsequently released the draft for public comment. Liberty received formal comments from One Communications, the Maine Office of Public Advocate (OPA), and the New Hampshire Office of Consumer Advocate (OCA). In addition, the New Hampshire Public Utilities Commission Staff provided a copy of an email containing comments from Comcast. The comments from these parties are addressed later in this report.

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The Scope Statement specifically provides for the following components of this assessment:

- Review the systems testing strategy
- Review the systems testing plans
- Review the specific test cases
- Review the expected outcome of the test cases
- Review the testing acceptance criteria
- Analyze the testing strategy and plans for adequacy, feasibility, and comprehensiveness in addressing all necessary functions moving from Verizon to FairPoint
- Review the testing acceptance criteria for adequate classification and disposition of outcome defects (severity 1, severity 2, etc.). Analyze the test cases for completeness and accuracy in addressing the necessary functions
- Review staffing requirements and plans
- Review system training plans and schedules, both for FairPoint personnel and wholesale customers
- Review notice and readiness timetables given to wholesale customers for adequacy and reasonableness
- Notify FairPoint of issues and concerns exposed in the review and recommendations for FairPoint action
- Identify the key business processes and associated test criteria that FairPoint must use to demonstrate cutover readiness. Successful performance on these key test criteria by FairPoint should be necessary (although not necessarily sufficient) for proceeding with the final cutover.

The Five Key Components of a Cutover Readiness Plan

Liberty believes that five key components must be operating successfully at cutover and therefore must be addressed in a sufficient cutover readiness verification plan:

1. Operational support systems for all business functions (*e.g.*, ordering, provisioning, customer relationship management, maintenance and repair, billing, finance, human resources management)
2. Conversion of the data associated with all these business functions from the Verizon to the FairPoint systems (*e.g.*, billing records, network equipment inventory records, customer accounts, employment records for transferred employees)
3. Detailed definition of the processes associated with all these business functions
4. Staffing to support all necessary business functions
5. Training of the staff in the new business processes and the use of the new operational support systems.

For each of these components, the plans must specify in detail the individual tests and metrics that will be applied. In addition, the plans must specify the acceptance criteria to be applied to these tests and metrics.

This report examines each of the five components and assesses the sufficiency of the tests and metrics for each and the criteria for success FairPoint has proposed to apply to them. Appendix A, which Liberty will be referring to in this report, is based on a FairPoint-prepared document that displays FairPoint's proposed acceptance criteria in each of the five categories.

Component One: Operational Support Systems

Capgemini is in the process of developing and testing systems to support FairPoint's operations across the full range of telecommunications functions. In particular, these systems support such functions as:

- Finance
- Human Resources
- Supply Chain Management
- Billing
- Customer Relationship Management
- Order Management
- Wholesale Customer Interface
- Provisioning and Service Activation
- Inventory Management
- Maintenance and Repair
- Work Force Management
- Network Database Management (E911, Line Information Database, etc.)
- Network Monitoring
- Call Center Management
- Operator Services
- Regulatory Reporting
- Other required specialized functions (Internet Service Provider provisioning, Payphone, etc.).

Capgemini and FairPoint have used the Enhanced Telecom Operations Map ("eTOM") model, which was developed by the TeleManagement Forum, to assure full coverage of all the necessary telecommunications functions. Some of these functions can operate in isolation; however, most telecommunications processes and transactions will cross a number of functions. Capgemini has developed a hierarchical strategy to test the software. This strategy begins with unit testing within an individual system application, and then builds to cross-functional testing between systems. Capgemini has assembled a large team whose sole purpose is to test the operations

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support systems software developed by Capgemini or by other outside vendors contracted by FairPoint.

Capgemini's test plan includes three types of tests: functional testing, performance testing, and user acceptance testing ("UAT"). FairPoint and Capgemini also plan to conduct business simulation tests, which relate to UAT, but these tests will be discussed in the business process section below. The most extensive testing type is the functional testing, which is intended to test as much as possible all specific detailed functions to be performed by the systems either in isolation or working together as needed for an end-to-end process, such as new service provisioning. The performance tests are meant to test the systems' response times under load conditions, and the UATs are meant to assure that the systems properly perform the required business functions and that the ultimate users of the systems can successfully navigate them. Performance testing and UAT do not attempt to exercise every possible function, but instead are based on a subset of the functional test cases.

The functional testing uses the following hierarchy of tests:

1. Unit Tests. These are tests of individual components of an application. They are typically performed by the systems developers rather than the testing team.
2. Product Tests. These are tests of whole applications; for example, finance, ordering, or billing. These are tests of applications in isolation; therefore, the inputs will often be "stubs." That is, they are artificial simulations of data that would normally be supplied by another application. As an example, a test of the billing application might include "stubbed" customer account data that would normally be supplied by the customer relationship management database.
3. Shakeout Tests. These are initial tests of the connection between applications to determine whether they can communicate with each other. That is, some of the stubbing is removed to assure that data flows properly across interfaces between the systems.
4. Integration Tests. These are tests of the system interfaces; for example, ordering to provisioning, billing to finance, and trouble administration to workforce management.
5. System Tests. These are tests of transaction flows across multiple systems and interfaces; for example, ordering to work force management to provisioning to billing. The system tests includes the all important end-to-end ("E2E") tests, which trace a transaction from the initiation through all the downstream systems affected; for example, beginning with order entry and ending with all the affected systems, such as inventory management, billing, finance, and database updates (including operator services, E911, etc.).

To date, Capgemini has produced over 1,100 system test cases and thousands more test cases at the lower levels of the testing hierarchy. To create these test cases, Capgemini began with "use cases," which describe a basic functionality, such as ordering of a single-line residential POTS service with features. The test cases represent specific instances of these use cases, such as ordering the single-line POTS service with call forwarding. These test cases include those with both "positive" and "negative" results; that is, the test cases set includes both cases designed to lead to a correct result or ones with errors deliberately introduced to make sure that the systems can properly detect and process the errors.

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The Capgemini testing team performs functional tests above the unit testing level. The UATs are designed to be performed by actual FairPoint users of the systems under the guidance of the Capgemini testing team. There are two types of UATs: silo UAT and integrated UAT. Silo UAT is designed for testing isolated applications; the integrated UAT is designed to test the suite of systems needed to complete specified business processes. For both silo and integrated UAT, Capgemini and FairPoint use a selected subset of the functional test cases.

A special set of test scenarios that might be considered a type of UAT are the CLEC tests. These are tests performed either by volunteer CLECs using the FairPoint wholesale GUI interface application or by CLECs seeking certification for establishing an e-bonded connection with the FairPoint wholesale interface. FairPoint has provided for these tests a set of test scenarios covering a wide range of CLEC functions, from which the CLECs will choose a subset to include in their tests. FairPoint has also been holding monthly meetings with the wholesale carriers since November 2007, and Liberty has attended them. At these meetings, among other areas of interest to the wholesale carriers, FairPoint has provided information on and received and responded to input from the carriers about cutover status and the status of test plans and schedules. FairPoint has also provided information from these meetings and specific testing and training schedules on its wholesale website. In addition, the FairPoint wholesale account team has been in direct contact with the carriers to discuss their interface requirements, testing requirements, and other concerns. Liberty believes that through these means, FairPoint has provided adequate notice to the wholesale community about the cutover process and the testing plans and schedules.

There are also two types of performance tests: Application Performance Tests ("APTs"), which assess the performance of individual applications, and Integrated Performance Tests ("IPTs"), which address the performance of the integrated applications working together to process transactions. To determine the transaction volumes appropriate to these tests, Capgemini has created a performance model based in part on actual volumes that the systems are expected to experience in real operations. Capgemini derived the volumes by using historical Verizon data. The model allows the volumes to be varied to simulate both normal and peak volume situations and to simulate stress conditions for the systems.

The system functional tests, especially the E2E tests, and the related integrated UAT, CLEC tests, and IPTs are of crucial importance. Liberty has therefore focused its analysis principally on these tests. Liberty has reviewed test cases and provided feedback to Capgemini and FairPoint since last fall. Both FairPoint and Capgemini have been cooperative in responding to Liberty's observations and have made modifications and additions based on concerns Liberty raised. Liberty's Draft Report, released in May, noted a number of important functional areas that still were missing sufficient test cases. Since that time, Capgemini and FairPoint have added a large number of additional test cases and modified existing test cases in order to fill the gaps that Liberty noted. Liberty now believes the test cases provide sufficient coverage of the key functions to test the new systems. As the testing has proceeded, issues requiring a limited number of modifications, deletions, and additions to the test cases have arisen. This is to be expected and is likely to continue to some extent until the testing is complete. In order to control the process and assure that Liberty is fully aware of and agrees with the changes, Capgemini and FairPoint have been providing updates to the test cases lists along with explanations of the

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changes. When Liberty has raised concerns about such changes, Capgemini and FairPoint have responded with appropriate modifications.

As noted, in addition to defining the detailed readiness tests to be executed, a complete cutover readiness verification plan must specify what test results are acceptable to demonstrate cutover readiness. Appendix A shows FairPoint's proposed acceptance criteria for the tests. As detailed in the appendix, key elements of the acceptance criteria for software testing include:

1. A requirement for the completeness of test case execution.
2. A definition of the significance or "severity level" of the failure of a test case and how that severity level is determined.
3. A specification of the acceptable number of failures by severity level.
4. A specification of the acceptable level of manual workarounds for those failures that require manual workarounds to complete a business process.
5. A plan for correcting the software to fix the defects identified through the testing process.

Capgemini and FairPoint have defined five different severity levels for defects: level 1 – critical, level 2 – high, level 3 – moderate, level 4 – low, and level 5 – enhancements. Liberty has reviewed the definitions of these classifications, has commented on earlier versions, and believes the current definitions as shown on p. 4 of Appendix A are acceptable. Liberty also concurs with the process shown on p. 5 of the appendix for determining the severity levels. As the testing continues, Liberty plans to review the severity levels for all remaining defects that exist at the time that FairPoint believes it has met the acceptance criteria and is ready to issue its notice of readiness to Verizon. Liberty will also observe a sample of the live system and UAT testing to verify that the test cases are being executed as planned.

Given these severity level definitions, the acceptance criteria for the system tests, CLEC tests, UAT, and performance tests, as shown on pp. 6-9 of Appendix A, are:

- 100 percent of the test cases defined will be executed before providing the notice of cutover readiness
- There will be no open severity 1 defects (*i.e.*, all severity 1 defects will be resolved) and no open severity 2 defects without acceptable manual workarounds
- The effect of the manual workarounds will be cumulated across all non-performance software testing (systems, UAT, and CLEC) and will not exceed an incremental headcount of 50
- All open defects will be assigned target dates for correcting the software
- Any required manual workarounds will be tracked for methods and procedures development.

Liberty considers these to be appropriate and sufficient acceptance criteria for the software tests. They should provide a sufficiently stringent testing of FairPoint's systems. Liberty also agrees that it is important to place a limitation on the total amount of allowed manual workarounds that result from all the testing defects. This constraint will help to minimize customer impact. It means that if there are several defects requiring manual workarounds, they must be sufficiently minor so that the total incremental additions to the workforce across all the defects cannot

exceed the limit. Liberty notes that a headcount of 50 is a reasonable constraint, because it represents only about 1.5 percent of the total FairPoint workforce. Liberty also notes that these manual workarounds must be "acceptable." This issue is important because some manual processes, although possible, would have unacceptable customer impacts. An example might be manual processing of updates to the retail bills resulting from service order activity. Liberty will review all manual workarounds that are defined, in order to assure that we concur that: (a) they are truly acceptable workarounds from a customer impact perspective; and (b) adequate methods and procedures have been developed to support the manual processes.

As further clarification, Liberty notes that the input for the system testing, as noted on p. 6 of the Appendix, includes the requirement for successful completion of product and integration tests. Liberty believes this point is important and cannot be neglected. Not all functions supported by the newly developed software applications can or should be tested through the system test cases. The lower level product and integration tests provide a more thorough exercise of the full extent of the application functionality than the system tests can. Also, some functions are performed entirely within an application or only cross a single interface between applications. These functions are therefore more appropriately tested at the product or integration test level. Examples include a number of financial and human resources process and the interface between the FairPoint network management system and the FairPoint trouble reporting system. Therefore, Liberty understands that the condition for 100 percent execution of the test cases should encompass not only the test cases that are explicitly "system" test cases, but also the lower level product and integration test cases. Likewise, the limitation on the severity levels and the manual workarounds should be understood as encompassing those defects uncovered as part of the product and integration tests as well as the system tests. FairPoint and Capgemini have indicated to Liberty that they also agree with this interpretation.

To summarize Liberty's observations about the operations support systems testing, Liberty believes that FairPoint has defined a sufficient set of acceptance criteria.

Component Two: Data Conversion

The next key aspect of cutover readiness is an assurance that all Verizon systems' data necessary for FairPoint to operate the business will be properly transmitted and placed into the new FairPoint systems and databases at cutover. The data conversion process consists of the following steps:

- Verizon's extraction of the data from its systems into text files
- "Landing" of the Verizon data extract text files into a temporary landing database
- Transformation of the landed data into formats required by the FairPoint replacement systems and storage of the transformed data in temporary "staging area" databases
- Loading of the data from the staging area into the final destination application databases in the new FairPoint systems.

FairPoint and Capgemini recognize that data extracted from multiple Verizon source systems will often need to be merged into a single destination FairPoint system. This process often requires choices about which data to use when multiple source systems are inconsistent, as

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sometimes happens. In addition, FairPoint may not need to use all the data that Verizon transmits, because it may be difficult in all cases for Verizon to identify or isolate the specific data that FairPoint needs. Similarly, FairPoint may need to override some of the data received from Verizon so that it is usable in the FairPoint systems. Finally, it is important to note that some data in the Verizon systems may be erroneous. No data conversion process can account for this latter effect. FairPoint will need to accept that data as provided by Verizon, and then implement a data cleansing process after cutover to deal with source-data errors. The purpose of the data conversion process at cutover is restricted to assuring that the useful and necessary data as transmitted by Verizon are properly transformed and placed in the new destination FairPoint systems, rather than assuring that the data that Verizon transferred were correct.

Capgemini has established a data conversion team responsible to assure accurate conversion and transmission of data into the application databases. The data conversion team has developed automated tools to provide the necessary data transformations into the staging area databases. FairPoint has already obtained two trial data extracts from Verizon. The first came on August 31, 2007, and the second on February 29, 2008. The data conversion team has been using these extracts to test the data conversion tools and to produce data mock-ups to be used for testing the application software. A series of at least eight data mock-ups are planned, with more of the extracted data added to the target databases in each data "mock." Mock 8 includes a full set of all the test data from the February data extract. The final data extract from Verizon will be the production data that FairPoint will obtain at cutover.

Capgemini is using three different strategies for testing the data conversion:

1. Specific test cases of the data conversion routines
2. Successful operation of the operation support systems test cases using the converted data
3. Reconciliations of data before and after transmission and conversion.

The data conversion test cases were written especially to test data conversion routines and to verify at the data field level that the data have been properly converted. As with the operations support systems test cases, described in the last section, these test cases are written and applied at the unit, product, and integrated testing levels. This testing also includes execution of "sanity" tests, which check that the converted data can be found, accessed, and used in the destination systems.

In addition to executing the data conversion test cases, Capgemini executes the operation support systems test cases by using the mock-up data from the test data extracts obtained from Verizon. That is, the operation support systems test cases test the operation support systems software, and also assure that the converted data is useable in the target FairPoint systems. They also test whether there are any inconsistencies in the data content and formats among the various destination systems; for example, the customer relationship management, ordering, billing, and network systems.

The data reconciliations refer to cross comparisons of the data before and after the various steps in the process of loading the converted data into the destination databases. The reconciliation consists of comparing counts before and after each step of the process:

- Verizon source data extracts to the landing database

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- The landing database to the staging databases
- The staging databases to the destination databases.

In addition, Capgemini cross-compares destination databases to assure data consistency among them where appropriate (*e.g.*, customer relationship manager and billing).

Liberty's examination of Capgemini's data conversion testing approach consisted of a review of a sample of the data conversion test cases and the sanity test cases. As already noted in the operations support systems section of this report, Liberty reviewed the operations support systems test cases and provided its comments on them. Finally, Liberty reviewed the list of data reconciliation cross comparisons that Capgemini is using.

FairPoint's proposed acceptance criteria for data conversion are shown on p. 10 of Appendix A. The criteria are similar to those proposed for systems software testing:

- 100 percent of the data conversion test cases will be executed before providing the notice of cutover readiness
- There will be no severity 1 defects and no severity 2 defects without acceptable data correction tasks defined
- Any required manual data correction tasks will be tracked for methods and procedures development
- Use of the target systems capacity will not exceed 70 percent after loading the converted data.

Liberty believes that FairPoint's and Capgemini's data conversion validation approach and acceptance criteria are sound. At the time of Liberty's May Draft Report, Liberty was concerned that there was lack of full agreement between FairPoint and Verizon as to how to assure sufficient testing of the source-to-landing step of the data conversion. Since that time, Liberty has learned that Verizon is providing sufficient information on the number of records by record type extracted from the source systems. In addition, Liberty understands that FairPoint has asked Verizon to supply information on the quality assurance processes and controls Verizon employs to assure that it will supply a complete and accurate set of data to FairPoint at cutover. Liberty has not examined this information because any auditing of Verizon's systems and processes is outside of the defined scope for Liberty's cutover monitoring. Liberty understands that FairPoint is satisfied with the controls that Verizon has established in its source data extraction, but Liberty cannot verify or comment on this issue because of the limitations on our monitoring scope.

Component Three: Business Process Definition and Mapping

Prerequisites for a successful cutover include a full complement of working and tested systems and a complete set of transformed and properly loaded data on which the systems can rely. However, these prerequisites are not in themselves sufficient to assure a successful cutover. The systems must operate within the context of processes through which FairPoint operates the business. Therefore, it is important to determine whether these processes are in place and whether the new systems properly support these processes. For example, despite FairPoint's and

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Capgemini's best efforts to maximize the number of orders that can flow through to provisioning and billing without human intervention, not all orders can do so. Some orders that are more complex will be designed to fall out of the automated flow for manual processing and errors or other unexpected events can cause simpler orders to fall out. As a result, business processes need to be established to assure smooth order processing when this occurs. In addition, a FairPoint employee must manually process these orders. Part of the purpose of the UAT testing described above is to make sure the systems properly align with the business processes.

Each FairPoint team (*e.g.*, network operations, customer relations, engineering, wholesale, finance, human resources) has identified and has been developing processes, policies, methods and procedures, and scripts appropriate to its operations. These teams rely on the knowledge and experience of the team members, the generic eTOM model for telecommunications operations, and an analysis of functions provided by Verizon through the TSA as resources for the work. Senior management has been reviewing the key processes and those that interact with systems to be tested as part of UAT. In addition, FairPoint plans to conduct business simulation testing with the systems as an adjunct to the UAT. This testing will be less "scripted" than UAT. The testers will not follow specific step-by-step procedures but instead will be presented with a business problem to solve using the systems and business process definitions. As part of its analysis of the business process definition and mapping requirements, Liberty has sought and reviewed early versions of the business process documentation.

FairPoint's proposed criterion for acceptable business process definition and mapping to demonstrate cutover readiness is shown on p. 13 of Appendix A:

- 100 percent of key policies, processes, methods and procedures, and scripts will be documented, reviewed, and approved by senior management or their designee before a readiness notice is given.

Liberty considers FairPoint's proposed acceptance criterion to be sufficient. Liberty notes that FairPoint restricts the criterion to "key" policies, processes, methods and procedures, and scripts, and recognizes that the determination of what is "key" is subjective. Many processes are less crucial to the successful operation of the business and have limited impact on customers. In contrast, some processes, like those for successful processing of orders, are crucial. At a minimum these key processes should include those that can have significant customer impacts.

Since the time of Liberty's May Draft Report, FairPoint has defined a list of over 600 key policies, processes, methods and procedures, and scripts. These cover the following crucial customer impacting functional areas:

- Billing (Retail and Wholesale) and Collections
- Call Center Operations
- Customer Account Management (Retail and Wholesale)
- Order Management (Consumer, Business, and Wholesale)
- Wholesale and Intercarrier Operations
- Network Engineering and Operations
- Information Systems Support

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- E911 Operations
- Operator Services and Directory Assistance

In addition, FairPoint has included in the list of key processes some important processes in such areas as human resources, finance, and regulatory reporting. Although it is not tracked separately as a single key process, FairPoint has also produced, and Liberty reviewed and provided comments on, a disaster recovery plan that covers the full set of FairPoint's processes and operations.

Many of the processes that FairPoint has identified cross more than one functional area, such as the processes for initiating and disconnecting customer accounts, and FairPoint is generally developing single documents that address all the functional areas touched by the process, although FairPoint has counted each of the portions of the document within the different functional areas within its total process count. Liberty has reviewed and provided comments on the list of processes and individual documents for the processes, and FairPoint has responded by making changes. Liberty considers the resulting modified list of key processes that FairPoint has developed to be sufficient.

Liberty and FairPoint anticipate that some limited modifications and additions to the number of processes will occur as the documentation continues, through the identification of such things as missing processes, duplications, or consolidations of processes. As with the test cases list, FairPoint will be using a change management mechanism for such changes that will allow Liberty to be aware of and review any such changes.

Component Four: Staffing

FairPoint must also have sufficient staff to assure adequate operation of the business processes. Two categories of staffing must be considered. Most business operations will be performed by organizations that transferred from Verizon at the close of the transaction at the end of March. Approximately 2700 positions fit into this category. However, some functions were performed by Verizon in a centralized location outside of the three northern New England states. FairPoint must replace these out-of-region functions with newly staffed groups. These positions include those providing functions that Verizon is supplying now through the TSA. FairPoint has estimated that about 675 positions fit into this category.

Both staffing categories must be considered in assuring sufficient staffing. Although approximately 2700 positions transferred to FairPoint at close, not all of these positions were filled, partly because of retirements and resignations of some Verizon employees prior to the close of the transaction. Furthermore, the impact of these open positions has not been similar across all organizations. The 675 new positions present a somewhat different challenge; they represent organizations that, in most cases, need to be created from scratch. In both categories, FairPoint faces the challenge of identifying candidates, and hiring and assimilating a large number of new employees in a very short time. Liberty has been reviewing the status of FairPoint's staffing on a monthly basis. Liberty has also been reviewing FairPoint's staffing

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plans. Liberty recognizes that it is not necessary for FairPoint to fill all of these positions by the time FairPoint must declare cutover readiness, two months before the cutover date.

FairPoint's proposed cutover acceptance criterion for staffing is shown on p. 12 of Appendix A:

- 100 percent of key positions are filled before the readiness notice is given.

Liberty concurs that FairPoint's proposed acceptance criterion is sufficient. As with the business process readiness criterion, an important issue is to define "key." In assessing its staffing requirements after close, FairPoint determined that it needed to fill a total of 1,055 positions, combining the needs both from the new functions and the functions transferred from Verizon at close. Of these, FairPoint identified 228 as key, taking into account the necessity of providing sufficient quality of service for the projected business volumes and of meeting various service-level commitments stipulated as part of the regulatory approvals of the transaction. As an example of the distinction between key and other open positions, FairPoint has open positions in its finance organization that FairPoint does not consider to be key because they do not directly affect the quality of service provided to customers. Even in organizations that are more directly connected to customer service, such as network operations, FairPoint does not designate all positions as key. As an example, FairPoint has open positions in network operations to proactively address longstanding network quality issues; however, FairPoint does not need to hire all of these technicians by cutover to maintain the current level of service quality.

Liberty has reviewed and provided comments to FairPoint on the key positions, and agrees that FairPoint's list of key positions is sufficient to address the needs at cutover. FairPoint will need to continue to make progress in filling all of its open positions in order to be in a position to ultimately provide the level of service its customers need and expect. However, Liberty believes that it is appropriate for FairPoint to designate as key those that are specifically required at cutover, particularly those positions that are necessary to replace the functions that Verizon will no longer be providing through the TSA.

There have been and may continue to be minor changes in the positions identified as key, particularly as FairPoint continues to complete the key process documentation. As with the key processes and test cases, FairPoint has been keeping Liberty informed of any such changes along with explanations for Liberty's review. Although not part of the explicit cutover readiness criteria, Liberty notes that FairPoint is also in the process of arranging for a significant number of temporary employees that may be necessary during cutover to address unforeseen issues that may arise during the cutover processes, and Liberty agrees that it is prudent for FairPoint to do so.

Component Five: Training

The last important component of a successful cutover is adequate training in the use of the new systems. FairPoint has devoted significant effort to designing and developing training programs for employees in all organizations that will be using the new systems. These plans include schedules that stagger the training classes over time, in order to assure adequate coverage of the business operations while employees are in class. FairPoint will also hire temporary employees

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to backfill employees who are in training. FairPoint has hired an experienced outside vendor, United Information Technologies ("UIT"), to teach the courses, and has been identifying and securing training facilities and locations at which to hold the courses. Verizon has used UIT for its internal training programs; therefore a number of the FairPoint employees who have transferred from Verizon are familiar with their work. FairPoint has already begun "train-the-trainer" sessions to educate the trainers in the use of the new systems.

In addition to the training courses for employees, FairPoint is developing courses for wholesale users of the new systems. These courses include both live and web-based curricula.

In assessing FairPoint's training approach, Liberty has examined drafts of the training plan and held meetings with the training organization and with representatives from UIT. Liberty has also reviewed early drafts of training material.

FairPoint's proposed acceptance criteria for training are shown on p. 11 of Appendix A:

- 100 percent of the train-the-trainer courses will be executed and approved before providing the notice of cutover readiness
- The final version of the training documentation will be delivered, reviewed, and approved by FairPoint's management team
- The courses planned to have been conducted before the date of providing the notice of cutover readiness will have been completed with 90 percent of students demonstrating proficiency in the use of the systems
- There will be sufficient time for the remaining courses to allow for additional training if needed.

Liberty concurs that these proposed acceptance criteria are sufficient. Liberty fully recognizes that it is not sound to administer training too early, because the students are at significant risk of forgetting what they have learned by the time the systems they will use are available. However, at the time of the Draft Report in May, Liberty was concerned that the training schedule would not provide sufficient opportunity to demonstrate training readiness before FairPoint issued a notice of readiness. However, FairPoint has now scheduled trial courses sufficiently in advance of the cutover readiness date to allow FairPoint and Liberty to gain information on the adequacy of the training curriculum and training process.

Comments on the Liberty Draft Report

Liberty received comments on the May 21, 2008 Draft Report from Comcast, the Maine OPA, the New Hampshire OCA, and One Communications.

Comcast raised the concern that FairPoint's testing of the EDI wholesale ordering and provisioning interface was experiencing a large percentage of failures and suggested that this was due to inconsistencies between the business rules that FairPoint and Verizon are using. They suggested that Liberty should ensure that FairPoint is not changing the Verizon business rules in violation of the Maine, New Hampshire, and Vermont orders approving the FairPoint-Verizon

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transaction. They also want to make sure that FairPoint certify wholesale customers with the latest LSOG release (9.10.0), which contains new FCC rules reducing the validation criteria for local number portability.

The Maine OPA referenced the missing details in the cutover readiness acceptance criteria that Liberty noted in its May 21 Draft Report and concluded that without these details the FairPoint Cutover Readiness Verification Plan is not complete or sufficient. In addition, the OPA noted that at the time of the Draft Report, FairPoint had been planning to cutover in September, which would have required a notification of readiness in July. Based on the information Liberty had provided in the Draft Report and its monthly monitoring reports, the OPA concluded that this did not appear to be feasible; therefore, cutover was likely to be delayed.

The New Hampshire OCA listed a set of "thoughts and questions" about the Draft Report. In particular, like the Maine OPA, the OCA noted that Liberty had identified in the Draft Report some gaps in the test cases, other aspects of the operations support systems testing, in the data conversion testing, and in staffing and training. Similarly, the New Hampshire OCA was concerned about the fact that FairPoint's plans in May were to declare readiness in July. Therefore the OCA questioned when the gaps would be closed and hence when Liberty would be able to supplement its Draft Report with the additions of these missing items. The OCA also noted that Liberty had stated in the Draft Report that some of the dates in Appendix A were no longer applicable but that is was not clear which dates and what impact that would have had on FairPoint's ability to declare readiness in July.

Like the other commenters, One Communications was concerned about the fact that a July declaration of cutover readiness would not provide FairPoint enough time to adequately demonstrate its readiness. One Communications was particularly concerned with the ability of FairPoint to adequately complete the CLEC testing and training process. In addition, One Communications expressed concern about FairPoint's staffing plan and disagreed with Liberty's conclusion that only key positions need to be staffed by the time that FairPoint declares cutover readiness. The comments noted that One Communications' own experience suggested that FairPoint's staffing may be "light" in the wholesale area. Finally, One Communications expressed the concern that FairPoint might not be able to adequately train its own employees, particularly those engaged in wholesale services. One Communications disagreed with Liberty's conclusion that this training did not need to be complete before FairPoint issues its notice of cutover readiness.

In response to these comments, Liberty notes that many of them were motivated by concern over FairPoint's schedule in May, calling for a declaration in July of readiness for cutover in September. Indeed, this schedule proved to be unrealistically aggressive, and FairPoint has now changed its schedule to anticipate a November cutover, which will require an irrevocable notification of cutover readiness in September. In the interim, as Liberty has noted in this report, FairPoint has successfully filled in the Cutover Readiness Verification Plan details that were missing at the time of the May Draft Report.

Liberty believes that the additional specific concerns associated with wholesale operations raised by Comcast and One Communications are being adequately addressed through FairPoint's plans

and through the current cutover readiness verification and monitoring process. FairPoint continues to communicate with the CLECs about its wholesale plans, as Comcast has noted. The CLECs have had the opportunity to express any concerns to FairPoint, and Liberty's monitoring of these communications indicates that they have been doing so. In particular, FairPoint is making provisions to test with the CLECs later this year the updated LSOG business rules that Comcast references. Liberty believes that Comcast's concerns about the inconsistency between the Verizon and FairPoint wholesale business rules is being addressed through: (a) the channels of communication that FairPoint has opened with the CLEC and (b) through the CLEC testing process. Liberty agrees with One Communications' concerns that the CLEC testing and training and the FairPoint staffing and training must be sufficient to adequately support the wholesale market after cutover. However, Liberty is carefully monitoring this situation and believes the FairPoint Cutover Readiness Verification Plan, with the missing details now filled in, addresses the concerns that Liberty had noted in the May Draft Report regarding verification that key staff positions will be filled and training will be ready to execute. Liberty respectfully disagrees with One Communications that it is necessary for FairPoint to fill all open positions and complete all training before declaring cutover readiness.

Summary and Overall Assessment

Liberty has concluded that FairPoint has considered all the important aspects of cutover readiness including:

1. Operation support systems
2. Data conversion
3. Business process definition and mapping
4. Staffing
5. Training.

Furthermore, FairPoint has identified acceptance criteria that are sufficient for determining readiness in each of these five categories. FairPoint has now provided the additional details that Liberty noted in the Draft Report in May related to the system test cases, the data conversion process, and training, that were necessary for the acceptance criteria to be sufficiently complete. Liberty anticipates that a few components of the acceptance criteria, such as the specific system test cases, key business processes, and key staffing positions, will be subject to minor and appropriate modifications going forward. However, FairPoint and Capgemini have introduced appropriate change management procedures to track these minor changes and allow Liberty to monitor and comment on them.

Some of the acceptance criteria necessarily include subjective aspects. Liberty's analysis of whether FairPoint has met these criteria will examine whether FairPoint and Capgemini have appropriately applied the criteria. In particular, Liberty will continue to investigate whether:

- The manual workarounds proposed to address any systems failures are acceptable, particularly with respect to potential customer impact
- The severity levels of test failures have been properly applied

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- FairPoint has properly identified those processes that are key processes for application of the business process acceptance criterion
- FairPoint has properly identified those positions that are key positions for the application of the staffing acceptance criterion.

Liberty believes that FairPoint now has a plan to verify cutover readiness that is sufficient to indicate that they have followed the steps necessary to significantly reduce the customer affecting issues that may arise as a result of the cutover process. Nevertheless, Liberty notes that no verification process or monitoring process can guarantee that there will be no impacts on customers during or after the cutover. In fact, this transition is of such magnitude and complexity that some issues are very likely to arise during cutover. It is important that FairPoint, its customers, and the Regulatory Staffs recognize this and not assume that the cutover risks will be completely eliminated by following this plan. Liberty notes that FairPoint appears to be taking prudent steps to mitigate any such unexpected events.

Liberty appreciates the level of cooperation that FairPoint and Capgemini have provided in helping us to complete our assessment of the Cutover Readiness Verification Plan and to monitor FairPoint's progress toward cutover readiness.

Appendix A

FairPoint's Proposed Cutover Readiness Acceptance Criteria

**FairPoint Proposed Acceptance Criteria
Systems and Business Readiness**

Table of Contents

- **Acceptance Criteria Overview**
- **Defect Severity Definition**
- **Acceptance Criteria Review – Systems Readiness**
 - System Test**
 - CLEC Certification**
 - User Acceptance Test**
 - Performance Test**
 - Data Conversion**
 - Product Definition & Configuration**
- **Acceptance Criteria Review – Business Readiness**
 - Training**
 - Staffing**
 - Processes**

Acceptance Criteria - Overview

- Goal:

 - To establish a collaboratively developed set of criteria upon which the determination will be made to cutover

- Objectives:

 - Focus on core fundamentals of IT System Readiness

 - Code maturity (both functional and operational) and Data Quality

 - Focus on core fundamentals of Business Readiness

 - Training, Staffing, and Processes

 - For these core categories, define the measurements and success targets

 - Identify critical milestones and dependencies enabling each effort and closely monitor progress

System Acceptance Criteria

➤ System Quality

- System Testing

- CLEC Testing

- User Acceptance Testing

- Performance Testing

➤ Data Quality

- Data Conversion Status

System Acceptance Criteria - Defect Severity Classification

- **Severity classification** for ALL outstanding defects will be reviewed and severity agreed upon collaboratively between FRP and Capgemini
- **M/W/F updates** will be provided on progress against targeted defects
- **All new defects** will be reviewed for appropriate severity classification
- **Final review** of all open defects will be conducted prior to authoring Preliminary Notice of Readiness
 - Assigned target fix dates
 - Define manual workaround
 - Prioritized assigned by:
 - Business Impact
 - Frequency
- **“Open”** defect status includes:
 - New, Open, Reopen
 - Fixed, Work in Progress, and Retest

Severity	Description
1 - Critical	<p>System Inoperable - No work can be performed or processed capacity is so limited that the probability of a serious operational backlog is imminent. This also includes instances which stop the business from performing critical detail work and a manual workaround is not feasible. Typically, Severity 1 Defects require an emergency fix.</p> <p>Examples of this includes:</p> <ul style="list-style-type: none"> - OM Environment is down - Unable to create new order in Siebel - Unable to schedule an install appointment - Unable to perform service eligibility check
2 - High	<p>Module/Feature is Inoperable / Data Corrupted - Either processing capability is limited and the defect has significant adverse impact on end customer or data is being corrupted and work must be stopped to avoid further corruption / loss of data. Typically, Severity 2 Defects require an emergency fix.</p> <p>Examples of this includes:</p> <ul style="list-style-type: none"> - Unable to post check payment via the Self Care client - Unable to book appointment greater than 3 weeks out - Unable to perform service eligibility check for DSL speeds greater than 1.5M
3 - Moderate	<p>Module/Feature Not Working as Documented - This includes program defects that affects system users but do not stop end customers from performing daily business or for which there is a reasonable workaround. After fixes for higher rated defects are placed into production. Typically, Severity 3 Defects should be considered for inclusion in the next available release.</p> <p>Examples of this includes:</p> <ul style="list-style-type: none"> - Clear button does not function properly - Customer suffix is not being sent in Create Billing Acct message
4 - Low	<p>Operational Question / Cosmetic Issue - Defects / questions with day-to-day operational issues, cosmetic defects with user interface, problem in or issue with documentation. These defects should be resolved after more serious defects have been fixed and scheduled for release accordingly.</p> <p>Examples of this includes:</p> <ul style="list-style-type: none"> - Shortcut / Hot Keys not functional - Tab order is incorrect
5 - Enhancement	Any additional enhancements that can be made to a system.

System Acceptance Criteria - Defect Severity Classification

FairPoint and Capgemini will use the following process to classify defect severity:

- **Testing team will provide a description of the defect that should address:**
 - Which system is directly impacted
 - How is the system impacted
 - Which system(s) are indirectly impacted (if any)
 - How are the system(s) indirectly impacted
 - Which processes and subsequent organizations are impacted
 - How are the processes and subsequent organizations impacted
 - What is the corrective action
 - What is the timing of the corrective action
- **FairPoint and Capgemini will review and discuss the above items and assign a severity level as indicated on the previous slide**

System Acceptance Criteria – System Test

Key Milestones and Dependencies	Start Date	End Date	Duration
M: System Test Cases Complete	-	-	-
M: Acceptable Workarounds by Functional Area Defined	-	-	-
M: System Test Execution	-	-	-
M: Regression Test Execution Complete	-	-	-
D: Network Element Access	-	-	-

➤ Key Inputs

- Completion of Interface specifications, system interaction diagrams, business processes documentation
- Completion of successful Product & Integration Test
- Completion of Product Catalog deployment in systems prior to Integrated UAT
 - FRP regulatory personnel have conducted a full review and approval of the Product Catalog
 - FRP product development group review and approval of Product Catalog

➤ Approach

- System test scenarios to cover end to end tests, as well as a regression of product and integration test cases
- System test cases to encompass all User Acceptance Tests
- All System test cases to be used in UAT will be completed prior to UAT
- Set expectation that executed tests exceed a 95% pass rate

➤ Acceptance Criteria

- 100% of tests executed
- No open severity 1 defects and no open severity 2 defects without acceptable business workaround
- Cumulative effect across all testing (Systems, CLEC Certification, User Acceptance) resulting in necessary workarounds must be quantified and not to exceed 50 incremental headcount
- All open defects have been assigned target fix dates
- Required workarounds are subsequently tracked under M&P development

System Acceptance Criteria – CLEC Testing

Key Milestones and Dependencies	Start Date	End Date	Duration
M: CLEC Phase 1 - Internal Testing	-	-	-
M: CLEC Phase 2 - CLEC Integration Testing	-	-	-
M: CLEC Phase 3 - CLEC E-bonding Certification Testing	-	-	-
D: CLEC Environment Built	-	-	-

➤ Key Inputs

- Completion of CLEC test requirements, CLEC test data specifications
- Validation of CLECs that wish to participate in e-bonding and subsequent e-bonding certification

➤ Approach

- All CLEC certification tests are tested internally in Phase 1 of CLEC testing
- In Phase 2, FRP and a small # of CLEC's work collaboratively to define and execute integration tests with FRP systems
- Phase 3 is the actual certification phase in which all e-Bonded CLEC's will participate
- Provide CLECs with an opportunity to participate in the CLEC GUI UAT
- Set expectation that executed tests exceed a 95% pass rate

➤ Acceptance Criteria

- 100% of tests executed
- No open severity 1 defects and no open severity 2 defects without acceptable business workaround
- Cumulative effect across all testing (Systems, CLEC Certification, User Acceptance) resulting in necessary workarounds, for FairPoint operations, must be quantified and not to exceed 50 incremental headcount
- All open defects have been assigned target fix dates
- Required workarounds are subsequently tracked under M&P development

System Acceptance Criteria – User Acceptance Testing

Key Milestones and Dependencies	Start Date	End Date	Duration
M: User Acceptance Testing - Silo	-	-	-
M: User Acceptance Testing - Integrated Scripted	-	-	-
M: Business Readiness Testing Approach and Plans Complete	-	-	-
M: Business Readiness Testing	-	-	-

➤ Key Inputs

- Completion of Business process flows & System Interaction diagrams
- Operational Processes reviewed and approved by FairPoint IT Organization
- Completion of Product Catalog deployment in systems prior to Integrated UAT
 - FRP regulatory personnel have conducted a full review and approval of the Product Catalog
 - FRP product development group review and approval of Product Catalog

➤ Approach

- UAT scenarios based on business process flows, business simulation and system test cases
- Manual procedures will be validated as part of larger end to end processes simulating business processes
 - i.e. - complex orders that fallout by design

➤ Acceptance Criteria

- 100% of tests executed
- No open severity 1 defects and no open severity 2 defects without acceptable business workaround
- Cumulative effect across all testing (Systems, CLEC Certification, User Acceptance) resulting in necessary workarounds, for FairPoint operations, must be quantified and not to exceed 50 incremental headcount
- All open defects have been assigned target fix dates
- Required workarounds are subsequently tracked under M&P development

System Acceptance Criteria – Performance Testing

Key Milestones and Dependencies	Start Date	End Date	Duration
M: Application Performance Test (APT)	-	-	-
M: Integrated Performance Test (IPT)	-	-	-
M: Performance Model Releases	-	-	-
D: Performance Environment Available	-	-	-

➤ Key Inputs

- Performance Model

➤ Approach

- Develop and refine a model effectively capturing the performance characteristics of the integrated system
- Model maps business processes to system transaction and drives APT expected results
- Validate the model based upon performance test results
- Demonstrate capability to support average, peak, peak + 25%, and longevity scenarios
- Review results in conjunction with the model with FRP over 4 iterative drafts
- Set expectation that executed tests exceed a 95% pass rate

➤ Acceptance Criteria

- 100% of tests executed
- No open severity 1 defects and no open severity 2 defects without acceptable business workaround to address the system performance issue
- All open defects have been assigned target fix dates

System Acceptance Criteria – Data Conversion

Key Milestones and Dependencies	Start Date	End Date	Duration
M: MOCK 7 Data Conversion Testing	-	-	-
M: MOCK 8 Data Conversion Testing	-	-	-
M: Target Metric Definition	-	-	-
Critical extracts and entities identified	-	-	-
Target entity expected row counts finalized	-	-	-

➤ Key Inputs

- 2nd Data Extracts
- Target Platform finalized
- Draft approach for converting any pending service orders, work orders, engineering jobs, etc. at cutover. This includes the approach for reducing the pending activities prior to cutover.

➤ Approach

- Account for all VZ source data extracts including source extracts which are not loaded to targets (and signed off)
- Enable target data models with required VZ extract data
- Account for the need to merge account data that is found in multiple source systems
- Account for the need to isolate Verizon system specific data which has no use in our systems
- Account for the need to override Verizon system specific data in order for it work within in our systems
- Perform field level and row level validations
- Relevant cross section of accounts will be validated at the entity level across systems
- Data conversion output feeds the system test environment with only converted data.
- Establish Pass rate for target entities (e.g., Customer Accounts, Services, etc.)

➤ Acceptance Criteria

- 100% of tests executed
- No open severity 1 or severity 2 defects without acceptable automated or manual data correction tasks defined
- Required manual data correction tasks are subsequently tracked under M&P development
- Target systems capacity not to exceed 70% as measured after loading converted data

Business Acceptance Criteria – Training

Key Milestones and Dependencies	Start Date	End Date	Duration
M: Conduct Train-the-Trainer Sessions	-	-	-
M: Conduct End User Training	-	-	-

➤ **Key Inputs**

- Completion of Training Plan
- Completion of Training Courses & Materials
- Completion of Program Schedule
- Secured Training Facilities including PCs, network connectivity, instructor tools

➤ **Approach**

- Identify the level of training preparation and development that must take place prior to notice of readiness.
- Identify the level of acceptable retraining, refresher or follow up needs
- Validate that resources, facilities, trainers and end-user training plan can meet training objectives
- Facilitate training classes early in the schedule to validate the effectiveness of the training curriculum and approach

➤ **Acceptance Criteria**

- 100% of train-the-trainer courses executed and approved
- Final Version of training documentation delivered, reviewed and approved
- Planned training courses completed with 90% of students demonstrating proficiency
- Remaining training courses have time allotted to absorb additional training if needed

Business Acceptance Criteria – Staffing

Key Milestones and Dependencies	Start Date	End Date	Duration
M: May Staffing Level Report	-	-	-
M: Identify Key Positions	-	-	-
M: June Staffing Level Report	-	-	-
M: July Staffing Level Report	-	-	-

➤ **Key Inputs**

- As Current Staffing Plans
- Documented Job Descriptions
- Defined Work Loads
- Established Service Quality Indexes

➤ **Approach**

- Identify key positions that must be in place by notice of readiness
- Validate Service Quality levels are being met and that staffing levels are not causing them to be missed
- Validate that staffing plans account for manual processes that might be in place

➤ **Acceptance Criteria**

- 100% of key positions filled

Business Acceptance Criteria – Processes

Key Milestones and Dependencies	Start Date	End Date	Duration
M: Identify Sr. Management (or designee) Approvers	-	-	-
M: User Acceptance Testing - Integrated Unscripted	-	-	-

➤ **Key Inputs**

- Current BPI/BPP Tracking Spreadsheets
- Completed and Approved Process Flows, Policy Documents, Process Documents, Scripts and Methods and Procedures

➤ **Approach**

- Identify policies, processes, scripts and M&Ps utilizing eTOM, TSA and staff experience.
- Identify and document processes, scripts and M&Ps that will be in affect when systems are not available.
- Classify and document KEY policies, processes, scripts and M&Ps utilizing eTOM, TSA and staff experience.
- All KEY policies, processes, scripts and M&Ps will be reviewed and approved by Sr. Management.
- Processes that interact with systems will be validated during system test activities.

➤ **Acceptance Criteria**

- 100% of key policies, processes, scripts and M&Ps documented, reviewed and approved by Sr. Management or their designee.