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July 29, 2011

Vikie Bailey-Goggins  
Oregon Public Utility Commission  
P. O. Box 2148  
Salem, Oregon 97308-2148

Re: UM 1431 – Joint Application for an Order Declining to Assert Jurisdiction or, in the alternative, to Approve the Indirect Transfer of Control of Verizon Northwest Inc.;  
Notice - Operations Support Systems Integration Report

Dear Ms. Bailey-Goggins :

In compliance with its commitments under the Federal Communications Commission's (FCC's) May 21, 2010 Order approving the transfer of certain Verizon Communications operations to Frontier Communications Corporation,<sup>1</sup> Frontier Communications Northwest Inc. ("Frontier") is submitting this Operations Support Systems Integration Report ("Integration Report") to the Oregon Public Utility Commission ("Commission"). Specifically, Condition # 8 in Appendix C of the FCC's Order provides:

*If, within three years after the Transaction Closing Date, Frontier plans to transition from any of the support systems transferred from Verizon to Frontier's legacy systems, or to any new systems, subject to appropriate confidentiality protections, Frontier will prepare and submit a detailed operations support system ("OSS") integration plan to the Wireline Competition Bureau, and the state commission of any affected state. . . . Frontier also will commit to provide this OSS integration plan to the Wireline Competition Bureau and commission of any affected state no less than 180 days prior to implementing the system transition, subject to appropriate confidentiality protections.*

Frontier has prepared the attached Integration Report to fulfill this condition and in anticipation of the systems conversion in which Frontier will migrate customers located in Arizona, California, Idaho, Illinois, Nevada, Ohio, Oregon, Washington and Wisconsin from the Verizon-replicated OSS to the Frontier legacy OSS. The planned conversion is scheduled to occur on or after February 1, 2012.

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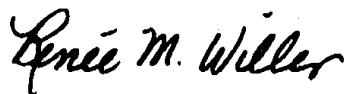
<sup>1</sup> Applications Filed by Frontier Communications Corp. and Verizon Communications Inc. For Assignment or Transfer of Control, Memorandum Opinion and Order, WC Docket 09-95, FCC 10-87 (Rel. May 21, 2010).

In accordance with Condition # 8, Frontier concurrently is providing the Integration Plan to this Commission, the FCC and other state commissions in Arizona, California, Idaho, Illinois, Nevada, Ohio, Oregon and Wisconsin. Also, in accordance with Condition # 9 in the FCC's Order,<sup>2</sup> Frontier is making this Integration Plan available to competitive local exchange carriers in its service territory to provide these carriers with an opportunity to review and provide input to Frontier regarding the Integration Plan.

In addition to the FCC conditions identified above, this filing fulfills the requirement in condition 28a and b, Appendix A of the Commission's Order in UM 1431 directing Frontier to submit its wholesale operations support system transition plan to the Commission at least 180 days prior to implementing the transition.<sup>3</sup>

If the Commission has any questions regarding this informational submission, please contact me.

Very truly yours,



Renee Willer

Manager Government Relations

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<sup>2</sup> Condition # 9 in Appendix C of the FCC's Order provides: "At least 180 days before transition of any of the support systems transferred from Verizon that support wholesale services to any other wholesale operations support systems, Frontier will file its proposed transition plan with the Commission, as described in Commitment 8, above and seek input from CLECs on any changes in wholesale functionality or e-bonding."

<sup>3</sup> The Commission's Order, at page 8, Appendix A provided:

Frontier will not replace [the Verizon operational support systems] during the first three years after close of the transaction without providing 180 days notice to the Commission and the CLECs... At least 180 days before transition of the replicated OSS system to any other wholesale operations support systems ("2<sup>nd</sup> Transition"), Frontier Northwest will file its proposed transition plan with the Commission and seek input from interested carriers.

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# **OPERATIONAL SUPPORT SYSTEMS INTEGRATION PLAN**

**ARIZONA, CALIFORNIA, IDAHO, ILLINOIS, NEVADA,  
OHIO, OREGON, WASHINGTON AND WISCONSIN**

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**July 29, 2011**

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## **I. INTRODUCTION AND PROJECT SUMMARY.**

Frontier Communications Corporation (“Frontier”) is submitting this Operations Support Systems Integration Report (“Integration Report”) on behalf of its operating subsidiaries in Arizona, California, Idaho, Illinois, Nevada, Ohio, Oregon, Washington and Wisconsin, which were acquired from Verizon Communications Inc. in the transaction approved by the Federal Communications Commission (“FCC”) in Docket 10-87 on May 21, 2010. The transaction with Verizon closed on July 1, 2010 and since that time, Frontier has utilized the replicated Verizon (formerly GTE) operating support systems (OSS) to service customers in the former Verizon properties in thirteen states now operated by Frontier (also referred to in the document as Frontier13). Under the terms of the transaction agreements with Verizon, Frontier must work with and utilize Verizon IT personnel to support and implement any changes in the OSS. This arrangement has limited Frontier’s flexibility and resulted in increased costs and delays associated with Frontier expanding customer service options and bundled services.

Frontier currently utilizes its legacy OSS to provide service to approximately 2.5 million customer access lines in 24 states, including approximately 500,000 customer lines that were converted to Frontier’s legacy OSS in the former Verizon West Virginia territory as part of the conversion that occurred at the closing of the Verizon transaction on July 1, 2010. In the planned conversion, which is scheduled to occur on or after February 1, 2012, Frontier plans to migrate customers located in nine of the Frontier13 states from the Verizon-replicated OSS to the Frontier legacy OSS. Frontier will undertake the system conversion in the following states during this phase of the conversion: Arizona, California, Idaho, Illinois, Nevada, Ohio, Oregon, Washington and Wisconsin. The process for completing the integration in each phase of the conversion will be similar to the process that Frontier utilized in successfully transitioning approximately 500,000 Verizon West Virginia customers over to Frontier at the closing of the Verizon transaction on July 1, 2010. In addition, on April 1, 2011, Frontier prepared and submitted to FCC and the four impacted states an Integration Report describing its plans to complete the conversion from the Verizon-replicated OSS to Frontier systems in Indiana, Michigan, North Carolina and South Carolina on or after October 1, 2011. Frontier has built on its prior experience in completing successful system conversions, as well as the West Virginia conversion, in preparing this Integration Report. In addition, Frontier will build its experience in

completing the conversion in Indiana, Michigan North Carolina and South Carolina to successfully complete the system conversion described in this Integration Report.

This Integration Report is a planning document that was developed by Frontier's IT professionals to identify the OSS to be replaced, why the integration is proceeding, the surviving OSS and to describe Frontier's prior experience in completing system integrations. The Integration Report identifies the organizations, approach, deliverables and tasks necessary for successfully completing the OSS conversion. The Integration Report also identifies contingency plans and responsibilities in the event Frontier encounters any significant delays or difficulties in completing the integration.

## **II. RATIONALE FOR SYSTEM INTEGRATION.**

Frontier is undertaking the integration from the Verizon-replicated systems to Frontier systems in order to improve its ability to service its customers and to enhance Frontier's flexibility and efficiency. At the closing of the transaction with Verizon, Verizon transferred replicated operations support systems to Frontier to enable Frontier to serve its new customers in 13 states. However, Verizon retained and continues to retain the exclusive right to make changes to the proprietary software system's source code for the replicated systems. Verizon also provides Frontier with maintenance services related to the Verizon replicated systems. Frontier pays Verizon fees for these maintenance services.

As a result, if Frontier seeks to introduce a new service or bundle of services that are not currently included in the Verizon-replicated customer support systems, Frontier must "contract" with Verizon for Verizon's IT staff to complete the necessary programming and system changes to accommodate Frontier. In the year since the Verizon transaction closed, Frontier has identified a number of system modification changes that it is interested in undertaking to better serve its customers. However, Verizon controls the timing for completing its review of any proposed changes and develops the cost estimate and timeline for undertaking the project. Frontier has very little flexibility in terms of limiting the cost estimates proposed by Verizon or expediting the timeline for completing the requested system changes. Over the last year, Frontier

has decided not to implement certain proposed system modifications because Frontier viewed the project costs as unreasonably high and/or the timing for completing the project to be too long.

In order to more effectively serve its customers and ensure it has the needed flexibility to offer products and services to its customers, Frontier is seeking to transition the customers served by the Verizon-replicated systems over to Frontier's legacy OSS systems. Frontier controls the OSS source code and has had extensive experience in making modifications to its systems to offer robust and competitive products and service to its approximately 2.5 million customer access lines served utilizing the legacy Frontier OSS. Frontier also has the ability to maintain and service its OSS.

With customers served on the Frontier OSS, Frontier will also be able to implement system changes without going through the review and approval process with Verizon. This will greatly enhance Frontier's flexibility in terms of expeditiously expanding the types of products and services it can offer to customers because Frontier will not be forced to limit product choices as a result of the Verizon-replicated system limitations. Frontier also believes migrating customers over to the Frontier systems will improve its quality of service in that all customers will be served with a single consistent customer support platform across its service territory. Serving all markets on a single support system will provide Frontier the flexibility to efficiently rollout products and promotions to company wide at the same time. In addition, the use of consistent systems will increase Frontier's competitive and customer responsiveness in that Frontier will be able to react to market forces more quickly with its control over the timing for implementing a system change. Finally, Frontier believes that its team of IT professionals will be able to review and implement the requested system modifications in a more cost effective manner.

### **III. FRONTIER'S OSS INTEGRATION EXPERIENCE.**

Frontier has had significant previous experience in completing the integration of OSS. Over the ten years prior to completing the Verizon transaction in July 2010, Frontier has converted and integrated approximately 1.7 million access lines onto this single scalable company-wide system platform. In the case of West Virginia, Frontier converted approximately 500,000 access lines to

Frontier systems as part of the conversion completed in conjunction with the closing of the Verizon transaction.

In terms of specific OSS integration experience, the chart below shows successful conversions that Frontier completed prior to the Verizon transaction. In each of the conversions, Frontier successfully integrated and consolidated different customer service systems. Prior to the completion of the Verizon transaction on July 1, 2010, each of Frontier’s more than 50 different operating ILECs utilized the same customer service and billing platform.

Conversion	Year	Size
GTE MN Access Line Acquisition	2000	150K A/Ls
GTE IL Access Line Acquisition	2000	100K A/Ls
GTE NE Access Line Acquisition	2000	60K A/Ls
Qwest ND Access Line Acquisition	2000	15K A/Ls
Global Crossing Hosted LD Billing to Arbor	2002	85K A/Ls
Commercial Account Billing (Saville) to Arbor	2003	72K A/Ls
Hosted Commercial Account Billing (CBP) to Arbor	2003	30K A/Ls
Rhineland, WI End User Billing (4 systems) to DPI	2003	25K A/Ls
Ogden, NY (Comsoft) to DPI	2003	20K A/Ls
Hosted End User Billing Alltel/CABS to DPI/CDG	2004	900K A/Ls
Commonwealth Acquisition to DPI/CDG	2007	425K A/Ls
GVN Acquisition	2008	15K A/Ls semi-automated
Frontier DPI to Citizens DPI	2008	400K A/Ls
Rochester, NY (CARS) to DPI	2008	400K A/Ls

Frontier utilized this prior experience to successfully complete the conversion of the approximately 500,000 access lines in West Virginia previously served by Verizon onto Frontier’s OSS systems. The system conversion occurred in a significant state where Verizon had served as the Regional Bell Operating Company and in conjunction with the closing of Frontier/Verizon transaction on July 1, 2010. Prior to the conversion to Frontier’s systems from the Verizon systems in West Virginia, Frontier had utilized multiple data extracts to test and validate the quality and completeness of the conversion in advance of the live conversion. Each extract was used as a “mock” or trial conversion to confirm that the test conversion data was correct and complete and that the systems operated correctly. These mock conversions simulate



a full conversion process and with extensive testing and quality assurance safeguards, Frontier completed the system conversion in West Virginia with a minimal number of manageable conversion issues.

#### **IV. 2010 WEST VIRGINIA CONVERSION EXPERIENCES.**

In any system conversion, IT and operational issues arise that must be addressed and resolved in completing the integration. Based on its prior system integration experience, Frontier has endeavored to identify issues that arose in the West Virginia system conversion and identify actions or steps to be taken to avert those issues in the planned system conversion. While no two conversions are exactly the same, it is important to note two key differences between this planned conversion and the West Virginia conversion that occurred in July 2010. First, this phase of the conversion is not being completed in the context of a larger merger or transaction closing that will involve new management and transfer of operations and employees from one company to another. As a result, the distractions and complexities associated with a transaction closing will not impact this conversion. Second, because this conversion is occurring “within” Frontier and will be utilizing customer data and information that is fully available to Frontier, Frontier will not be dependent on another organization for the data that will be extracted from the source systems and transferred to the target legacy systems as part of the conversion. This will greatly enhance Frontier’s flexibility and ability to ensure the accuracy and completeness of the extracted data.

Approximately 30 to 60 days after the closing of the Verizon transaction and the conversion from the Verizon systems to Frontier’s legacy systems in West Virginia, the Frontier IT team overseeing the system conversion and operations management groups undertook a detailed review of the issues identified and the experience gained from the West Virginia conversion. The project leaders from the key areas discussed their issues and potential improvements for future projects. The key experiences and actions to be taken to avert similar problems in the proposed conversion are summarized below. Frontier will utilize the experience it gained in completing the West Virginia conversion and the experience it gains in completing the conversion of the additional four states (Indiana, Michigan, North Carolina and South Carolina)

on or after October 1, 2011 to effectively complete the OSS integration from the Verizon-replicated systems to the Frontier systems in this conversion.

**A. Information Systems (IS) Experiences.**

Frontier’s IS project team involved in the West Virginia system integration identified the following key issues and actions to avert similar issues in this conversion. The experience gained by Frontier in completing the West Virginia conversion are categorized into one of the following areas:

Area	Description
Communication	Ability to deliver approved messages in a manner that can be successfully acted upon and tasks completed.
Command Center	Control of the conversion execution.
Customer Care and Billing (CC&B) Conversion	Conversion of retail and wholesale customer data required to provide service using the long term processes and systems.
Implementation	Tasks required to complete the production conversion.
Release Management	Tasks to coordinate and complete the implementation of application modifications to support the required system functionality and the inclusion of converted customer data.
Carrier Access Billing System (CABS) Conversion	Conversion of wholesale customer data required to provide service using the long term processes and systems.

The following chart summarizes the issues Frontier’s IS team identified in the West Virginia conversion and the actions and improvements to avert similar issues from occurring in this conversion.

Area	Feedback	Improvement
Communication	Improve communication across multiple levels of Frontier business owners and project team members.	<ul style="list-style-type: none"> <li>• Establish more frequent, regularly scheduled meetings with an agenda agreed upon by both the business and IT owners.</li> <li>• Establish additional meetings related to specific topics especially those that are customer-impacting.</li> <li>• Maintain an updated conversion requirements document with associated decisions, including who made the decision, to clearly understand and confirm the business requirements for conversion.</li> <li>• Have Team Leads/Team Members repeat direction given to ensure complete understanding and follow-up with email summarizing decisions.</li> </ul>
Communication	Improve root cause analysis to ensure reporting on facts and not on impressions.	<ul style="list-style-type: none"> <li>• Team leads to reinforce the appropriate and timely gathering of facts to support positions and determine issue resolutions.</li> </ul>
Command Center	Command Center primarily focused on CC&B Conversion.	<ul style="list-style-type: none"> <li>• Update Command Center plan to include details from other teams. Assign a Point of Contact from each IT team.</li> </ul>
Command Center	Staff changed between mock conversions and final conversion impacted status reporting.	<ul style="list-style-type: none"> <li>• Staff Command Center with same resources for each mock conversion and the final production conversion.</li> <li>• Communicate the plan to all team members.</li> </ul>
CC&B Conversion	Conversion team was not sufficiently trained in the production update processes and expended additional time to get production scrubs approved to run in production.	<ul style="list-style-type: none"> <li>• Schedule team training by the production team for the conversion team with sufficient time prior to conversion.</li> <li>• Provide access to production support tools for the conversion team with sufficient time prior to conversion.</li> <li>• Include the Data Warehouse in production scrub planning meetings.</li> </ul>
CC&B Conversion	Mapping team had business understanding but insufficient technical skills, which slowed analysis.	<ul style="list-style-type: none"> <li>• Include some mapping team members with technical background including SQL skills.</li> </ul>

Area	Feedback	Improvement
CC&B Conversion	Conversion team coordination issues between the functional gap development and business-as-usual development teams caused additional time to address conversion impacts of functional gaps and understanding of the mapping requirements.	<ul style="list-style-type: none"> <li>Establish a process to engage the BAU and Gap development teams in a review process and approval/signoff process for the business requirements and technical specifications.</li> </ul>
CC&B Conversion	Conversion coders were assigned as available across account and plant mapping functions which caused a learning curve for each sub-function move.	<ul style="list-style-type: none"> <li>Dedicate conversion coders to either account or plant mapping.</li> </ul>
CC&B Conversion	Length of conversion code execution time limits the number of test cycles that can be performed.	<ul style="list-style-type: none"> <li>Create ability to subset data for faster re-runs to support Quality Assurance.</li> <li>Identify performance improvements to reduce overall run time.</li> </ul>
Release Management	Test team expended too much effort re-running basic test cases which reduced capacity to execute more complex test cases.	<ul style="list-style-type: none"> <li>Automate test case execution wherever possible.</li> </ul>
Release Management	Multiple test environments across multiple applications require more effort to coordinate to reduce down time.	<ul style="list-style-type: none"> <li>Assign dedicated resources to environment management.</li> </ul>
CABS	Initial focus on Billing Data Tapes and Customer Service Records as source of data was insufficient. Changed to data extract from production data base.	<ul style="list-style-type: none"> <li>Use CABS production application data extracts as the source of conversion data.</li> </ul>

**B. Frontier Operations Groups Experiences.**

Frontier’s Operations Management team involved in the West Virginia system integration identified the following key issues and actions to avert similar issues in future integrations. The lessons learned are categorized into one of the following areas:

Area	Description
Call Center	Ability of customer to reach a customer service representative to initiate on order, answer questions about service or submit a trouble ticket.

Area	Description
Training	The education and preparation for employees to work with the Frontier legacy systems.
Provisioning/Repair	The task of providing service or repairing a trouble (retail and wholesale).
Wholesale	Ability of wholesale customers to submit orders.

The following chart summarizes the issues Frontier’s IS team identified in the West Virginia conversion and the actions and improvements to avert similar issues from occurring in this conversion.

Area	Feedback	Improvement
Call Center	A significant number of calls into the call center following the West Virginia conversion related to the look and new company name on the new Frontier bill.	<ul style="list-style-type: none"> <li>• Unlike West Virginia, there will be no company name change to the bill.</li> <li>• The customer will see a new bill format, but the new format will be easier to understand.</li> </ul>
Call Center	Questions regarding the email migration increased call volumes into the Call Center.	<ul style="list-style-type: none"> <li>• Frontier has completed the email migration to the frontiernet.net address for all customers.</li> <li>• This was a one-time issue as a result of the Verizon transaction that coincided with the West Virginia conversion.</li> </ul>
Call Center	Ease of customer reaching the right person. Frontier did not receive a full inventory of business office phone numbers and as a result, customers were calling numbers and reaching a dead end.	<ul style="list-style-type: none"> <li>• Frontier now owns all the business office phone numbers and has a full inventory. Contact phone number changes will be minimal.</li> <li>• Frontier is moving to a universal call center. This means a customer can call a single number to initiate or change service, report a trouble or address a credit and collections situation.</li> </ul>

Area	Feedback	Improvement
Training	In conjunction with the WV system conversion, Frontier was acquiring a new work force and experienced a high level of employee turnover prior to the conversion. Frontier had very limited access to train the workforce and was not able to complete sufficient training.	<ul style="list-style-type: none"> <li>• The employee base for the next system integration will be accessible. Employees are already with Frontier and the company will provide robust and comprehensive training.</li> <li>• Frontier will engage technical supervisors prior to the conversion specifically so that they can get into the “new” systems and get hands on experience.</li> </ul>
Training	Wholesale customers experienced issues regarding work detail on hot cuts.	<ul style="list-style-type: none"> <li>• Frontier has set up the RCCC (Retail CLEC Coordination Center) as a single point of contact for coordinating a hot cut.</li> <li>• The process will not change at the time of the system integration.</li> </ul>
Training	Wholesale customers experienced issues on vendor meet procedures. The CLEC were phoning in or emailing requests instead or creating a request in VFO.	<ul style="list-style-type: none"> <li>• Frontier has created better process documentation and shared it with the CLECS.</li> <li>• Many CLECs are now familiar with VFO. The process will not change at the time of the system integration.</li> </ul>

Area	Feedback	Improvement
Provisioning/Repair	<p>Service backlogs resulted in lengthy mean time to repair and longer intervals to install service.</p> <p>At the time Frontier converted West Virginia, there was a backlog of service orders and troubles. Frontier did not have access to the “live” systems prior to the conversion and was not fully aware of the backlog to be inherited.</p>	<ul style="list-style-type: none"> <li>• In the upcoming system integration, Frontier will have access to existing service order and trouble data in systems and will a solid understanding of the volume of “in flight” activity and will be prepared to effectively manage the pending orders and backlog.</li> </ul>
Provisioning/Repair	Problems with dispatch on loop orders to remote switches were experienced as a result of Frontier not having access to information regarding the locations of remote	<ul style="list-style-type: none"> <li>• Unlike the West Virginia conversion, Frontier will have full access to the systems prior and post integration so that any cross reference to remote location will not be lost.</li> </ul>

	switches to provision loop orders in West Virginia.	
Provisioning/Repair	As a result of firewall issues between Verizon and Frontier, the circuit inventory information did not transfer to Frontier’s M6 system. This resulted in CLECs experiencing longer provisioning and repair intervals due to missing circuit inventory.	<ul style="list-style-type: none"> <li>• The former GTE systems maintain circuit inventory in AAIS, not TIRKS where West Virginia circuit inventory was maintained.</li> <li>• AAIS is more compatible with the Frontier M6 system and since the conversion is within the same company, the firewall issues will not exist.</li> <li>• In addition, at the time of conversion, Frontier will retain access to data in AAIS so that if data does not effectively transfer, Frontier will still be able to retrieve it.</li> </ul>
Wholesale	Fallout of Orders. When automated orders “fell out” for manual processing, there were interdepartmental communication on errors and who/how to fix.	<ul style="list-style-type: none"> <li>• Frontier has taken steps to improve root cause analysis and improve interdepartmental partnering/accountability to resolve issues.</li> </ul>
Wholesale	Delays in resolving issues escalated to the OSS Help Desk.	<ul style="list-style-type: none"> <li>• The OSS Help Desk has gained experience in VFO and the linkages to backend provisioning systems.</li> </ul>
Wholesale	Order Notifications & Status. The absence of information communicated to carriers created uncertainty in understanding the status of orders.	<ul style="list-style-type: none"> <li>• The Frontier service centers have gained experience in knowledge in understanding the systems and the various codes that form the basis for communication with the carriers on orders.</li> <li>• Frontier is already working to cross train reps on the legacy systems, well in advance of the conversion</li> </ul>
Wholesale	Contact Lists. Information regarding Escalation Lists and contact information was not immediately available following the conversion.	<ul style="list-style-type: none"> <li>• Frontier has taken steps to standardize the escalations lists and to reinforce the process with the carriers</li> </ul>

**V. CONVERSION FROM REPLICATED VERIZON SOURCE SYSTEMS TO TARGET FRONTIER SYSTEMS.**

Frontier is currently utilizing several Verizon-replicated systems to provide service in the

operations it acquired from Verizon, excluding West Virginia. These systems are primarily operated out of a data center in Fort Wayne, Indiana with support from Frontier’s centralized IT team in Rochester, New York. With its legacy OSS Frontier already has existing, proven operations, business and customer billing and support systems which are used to serve approximately 2.5 million customer access lines and Frontier has a successful track record of integrating the operations of various operating companies. These existing Frontier systems are fully scalable and will enable Frontier to migrate customers on the Verizon-replicated systems over to Frontier’s existing systems and processes. Post conversion the systems will be primarily operated out of Frontier’s data center in Rochester, New York, with continuing secondary support from the data center in Fort Wayne, Indiana.

In preparing for the conversion Frontier has developed a detailed data conversion plan to migrate from the Verizon-replicated source systems to the Frontier target systems and processes. The key Verizon system applications were mapped to key Frontier target applications to identify the location of operational data stored and used by the Verizon systems and where the data will be maintained in the Frontier systems. The key Verizon source application to Frontier target application maps are summarized below.

The system applications are categorized into one of the following areas:

<b>Domain</b>	<b>Key Functional Area</b>	<b>Description</b>
Billing Support Systems (BSS)	Customer Care and Billing (CC&B) Conversion	Conversion of retail and certain wholesale customer data required to provide service using the long term processes and systems.
Billing Support Systems (BSS)	Carrier Access Billing System(CABS) Conversion	Conversion of carrier customer data required to provide service using the long term processes and systems.
Operations Support Systems (OSS)	Trouble Ticketing	Conversion of trouble ticket data required to support repair related activities using the long term processes and systems.
Operations Support Systems (OSS)	Plain Old Telephone Service (POTS) Plant	Conversion of switched services network data required to provide service using the long term processes and systems.



<b>Domain</b>	<b>Key Functional Area</b>	<b>Description</b>
Operations Support Systems (OSS)	Network Inventory	Conversion of switched and special services network inventory data required to provide service using the long term processes and systems.
Operations Support Systems (OSS)	Network Equipment Management	Conversion of switched and special services network equipment data required to provide service using the long term processes and systems.

**A. Frontier Target Applications.**

The Frontier target system applications that Frontier currently utilizes to service its legacy Frontier customers and customers in West Virginia are summarized below:

<b>Domain</b>	<b>Key Functional Area</b>	<b>Target Application Name</b>	<b>Target Application Description</b>
Billing Support Systems (BSS)	Retail Customer Care and Billing (CC&B)	DPI	Manages customer account and billing information. Invoices most retail and certain wholesale products and services.
Billing Support Systems (BSS)	Carrier Access Billing System(CABS)	CABS	Bills switched and special access services to Interexchange carriers, CLECs, and Wireless Carriers.
Billing Support Systems (BSS)	Customer Relationship Management	Sterling Product Catalog	Manages residential products, bundles, and promotions.
Operations Support Systems (OSS)	Trouble Ticketing	DPI	Manages switched access services trouble tickets.
Operations Support Systems (OSS)	Trouble Ticketing	M6	Manages special access services trouble tickets
Operations Support Systems (OSS)	Plain Old Telephone Service (POTS) Plant	DPI	Interfaces with service activation applications to provision switched and special access services.
Operations Support Systems (OSS)	Network Inventory	M6	Inventories and assigns Network Locations, Network Equipment and Circuits.
Operations Support Systems (OSS)	Network Equipment Management	M6	Inventories and assigns Network Locations, Network Equipment and Circuits.

Domain	Key Functional Area	Target Application Name	Target Application Description
Operations Support Systems (OSS)	Carrier Ordering	Synchronoss	Order gateway for ASR, LSR, and Trouble Tickets

**B. Replicated Verizon Source Application to Fronter Target Application Map.**

The replicated Verizon source applications that will be converted to Frontier systems are summarized below:

#	Source Application	High Level Business Functional Description	Target Application
1	Customer Billing Services System (CBSS)	Manages customer account and billing information. Invoice system for most retail products and services.	DPI
2	Product Catalog (PCAT)	Products/Reference data used by the billing systems.	DPI, Sterling Product Catalog
3	VADI ARBOR	Vendor supplied billing system used to bill wholesale data products and services that are not handled by CBSS.	DPI
4	VOL ARBOR	Invoice system for On-Line and Third Party products and services that are not handled by CBSS system.	DPI
5	Bundle Qualification / Back End Engine (BBE/BQT)	Determines products and promotions for which a customer may be qualified.	DPI
6	National Account Cross Reference (NACR)	Links customer service records across multiple business and residential ordering and billing systems (CBSS, VOL Arbor, SSP). Other applications may read or use this data.	DPI
7	Nat Ref Tables (CBSS)	Tables used for reference data in building target system products, services, and tables.	DPI
8	National Order Collection Vehicle (NOCV)	Order processing engine that edits order, performs rate calculations based on the products and services selected, provides real time telephone number assignment, mechanized work queuing, online credit scoring, due date management, and third party verification.	DPI

#	Source Application	High Level Business Functional Description	Target Application
9	Single Service Provider (SSP) FLOW	Provides order routing, workflow and fallout management functionality.	DPI
10	Value Added Services Integration Platform (VASIP)	Integrates third party ordering and billing into the Frontier Online systems.	DPI
11	Document Management System (DMS)	Store and manage FiOS deposits.	DPI
12	ICollect	Collections on live accounts.	DPI
13	IFinal	Collections on final accounts.	DPI
14	Universal Measured Services (UMS)	Collection process and rating for local switch data.	DPI
15	VOL REMEDY	OnLine and Business customer repair tracking system. Also used for billing notes from Arbor.	DPI
16	VZ Order Service Engine (VOSE)	Service order workflow. Works in conjunction with NOCV.	DPI
17	Assignment Inventory Management (AAIS) – Core	Switched POTS Plant Inventory	DPI
18	AAIS - Design Services(DS)	Inventory, design, and provisioning for message trunks, special services, and carrier access circuits across both switched and SONET networks. It also manages the inventory of assignable network equipment.	M6
19	Broadband Assignment Inventory Management (BAAIS 2)	Inventory, design, and provisioning for broadband services such as ADSL, FRAME RELAY, ATM and DSL. This system does End-to-End Provisioning for Broadband Services	DPI, M6

#	Source Application	High Level Business Functional Description	Target Application
20	Broadband Assignment Inventory Management (BAAIS 3)	Inventory, design, and provisioning for national broadband provisioning architecture for DSL, FP, TLS, and FTTP.	DPI, M6
21	National Street Address Guide (NSAG)	Address ranges used for provisioning and activation of service.	DPI
22	Carrier Access Billing System (CABS) – WEST	Bills switched and special access services to Interexchange carriers (i.e. AT&T, Sprint), CLECs, and Wireless Carriers.	CABS
23	Enterprise Recent Change (ERC)	Generates and delivers recent change to the GTE SPC (Stored Program Control) electronics switches.	DPI
24	NTAS	Repository for service addresses. NTAS also provides service negotiation support for address validation, as well as telephone number sequence.	DPI, M6
25	RequestNet (vImpact)	Enables central office engineers to place, modify, and cancel plug-in card orders and to track them up to the delivery.	M6
26	CLEC Profile DB (CPSST)	Central repository of information relating to CLEC Profiles.	Synchronoss, M6, CWP
27	IOM Order	Process TLS orders, ATM-UNI, Frame Relay-UNI, ATM-PVC, Frame Relay-PVC, TLSUNI and TLSEVC orders.	M6
28	IPrice	Source of pricing data for enterprise portal.	DPI, Sterling Product Catalog
29	Integrated Verizon Advanced Provisioning Platform. (IVAPP)	Order system for Verizon FiOS services (Voice, Data, Video).	DPI
30	vRepair-DS	Trouble management system for Fast Packet and DSL.	DPI
31	VRepair Core	Trouble Management and Work Force Support system.	DPI, ViryaNet

## **VI. CONVERSION IMPLEMENTATION.**

Frontier's approach to systems integration and conversion involves testing at many different levels and in many areas, including the following:

- Intensive regression testing (repeated start to finish testing until all testing branches execute without errors) and forced business process exercise;
- Standard conversion tasks and specific conversion testing for existing Verizon source system data;
- Functional testing of all order, acknowledgment and transaction types;
- Integration testing from order to billing;
- Performance testing of both online response time and any batch related testing (e.g., billing);
- User acceptance testing;
- CLEC testing.

Frontier's approach to the conversion will be precise and encompassing. The approach, in simple terms, involves a data mapping team whose focus is divided by application area. Frontier has developed reusable data mapping template documents that contain all required target system data and formats. Each data mapping analyst is assigned one or more of the data mapping templates for a certain application area (pending service orders, customer accounts, product information, directory information, plant, etc). The analyst then systematically identifies the corresponding source system data for each field required in the existing systems, defines conversion rules (expand or contract field size, convert specific code values and descriptions to predetermined values, etc), and documents this for development. Frontier then utilizes reusable conversion programs from previous conversions to "read" the source data from the extract files, convert the data using the data mapping conversion rules, and then load the converted data to the appropriate Frontier systems. All required data must be located, converted and populated, and all source data must be accounted for.

Multiple data extracts will be used to test and validate the quality and completeness of the conversion in advance of the live conversion. Upon completion of each test data extracts, basic controls are executed to confirm that all expected extract files have been received and are complete. Once validated, a mock conversion process is executed to convert the test extract data

and load it into the appropriate Frontier systems. This mock conversion simulates a full conversion process test. Once the mock conversion is executed, extensive tests are performed on the data and applications. Frontier has developed automated quality testing tools for conversion testing that allow focused views of the quality of the conversion. The most important of these processes involves the systematic comparison of actual source system data with corresponding trial extract “mock” converted data for a series of key business metrics (such as access lines, accounts, payments, cable ID, terminal ID, cable pairs, in-service-pairs, bad pairs, etc.). These comparisons are critical among many other gating criteria for internal approval to convert. Upon analysis, refinements are made to the data mapping rules and programs, the mock conversion from the data extract is rerun, and the metrics quality reporting is rerun. This process iterates until near perfection is reached.

In addition to the above metrics testing, Frontier has developed a “comparative rating and billing” system, which allows the systematic comparison of the customer usage and recurring charges rated in the source system versus that same usage and recurring charges rated in the target mock conversion systems. After numerous refinement iterations post-conversion rating and billing accuracy is extremely high. This rating and billing test effectively validates both the conversion and any necessary enhancements to the systems. The techniques described above, combined with stable production systems, result in conversion quality improvements that maximize the accuracy and completeness of the conversion.

#### **A. Information Systems (IS) Functional Team Tasks.**

To complete the conversion, Frontier’s Information Systems (IS) group has identified and separated the system conversion work into several parallel work streams that will be performed by five (5) IS Functional Teams. Frontier has created and focused these teams on a particular function or related set of functions. The individual work streams are coordinated through an overall IS Project Management Office (PMO) led by a senior executive and supported by program and project managers. The following is a list the IS functional teams and a summary description of the IS Functional Team’s responsibilities:

#	Team	Description
1	Extract Development	Creation of data extracts from source systems.
2	CC&B Conversion	Conversion of Customer Care, Billing and Plant data.
3	OSS Conversion	Conversion of data and resolution of functional requirements for Operational Support Systems.
4	Wholesale Systems	Conversion of data and resolution of functional requirements for wholesale support functions.
5	Infrastructure	Implementation of IS support applications for, user ids and IS security. Planning for additional system size requirements.

Each Functional Team will assist in the execution of the three key phases of the OSS Conversion:

*Pre-Conversion* - Necessary procedures to prepare for the live conversion.

*Conversion* - Transfer of the data from former Verizon-replicated source systems to Frontier's target systems and the transition of business processes to Frontier's standards.

*Post Conversion* – Ensuring the accuracy of the data conversion, the operations of the systems, and the appropriate staffing and training after the transfer of data.

Frontier has identified the following Functional Team specific pre-conversion, conversion and post-conversion milestones and deliverables for the five Functional Teams.

**i. Extract Development Team.**

**Scope**

Creation of data extracts from the source applications. Activities include extracting data in defined format, identifying control reports, and removing converted data from use in the source production system.

## Summary

The Extract Development team will extract the data from the replicated Verizon source systems for loading into the Frontier target systems. The team will work with the Frontier IS group to determine the source applications and priority of the extract. The team will work with the business to determine the control reports to validate the extracts are complete and accurate. The team will also determine the methods to make the converted data no longer usable in the production source systems after the conversion.

## Pre Conversion Tasks

Tasks required to prepare for the conversion:

Seq	Task	Description / Comment
1	Identify replicated-Verizon system applications	Develop list of applications, owners, purpose, and technology.
2	Identify Source Systems	Review source systems with IT and business teams to understand which systems will provide source data.
3	Infrastructure Requirements	Determine infrastructure requirements for extracts. Communicate requirements to the Infrastructure Lead.
4	Develop data extract software to convert the data from the source systems	Developers provide data needed for the conversion in a consistent and repeatable format.
5	Identify Control Reports	Identify existing business reports to determine accuracy and completeness of the data extracts. If necessary, create reports where there is no comparable report in use.
6	Update Source Systems for Data Conversion	Determine method to prevent business from updating converted data in the source application after the production conversion is executed.
7	Support Data Conversion Teams	Develop tasks and timing to support the conversion teams.
8	Plan Conversion Testing	Plan timing and number of mock conversion runs. Develop detailed level plan for mock conversion runs with specific hour by hour tasks.
9	Execute Conversion Testing	Execute several mock/test conversion runs to fine-tune the conversion processes. Supply data to quality assurance team for functional testing and comparative rating and billing testing.



<b>Seq</b>	<b>Task</b>	<b>Description / Comment</b>
10	Assess Compliance Impact	Assess changes to compliance requirements driven by the integration.

### **Conversion Tasks**

Tasks required at conversion:

<b>Seq</b>	<b>Task</b>	<b>Description / Comment</b>
1	Execute Data Extract Processes.	This includes the extract of the data and control reports.
2	Update Source Systems	Execute processes and procedures to prevent business from updating converted data in the source application after the production conversion is executed.

### **Post Conversion Tasks**

Tasks required after the conversion:

<b>Seq</b>	<b>Task</b>	<b>Description / Comment</b>
1	Save Data	Save and place into offsite storage all data to be retained.
2	Post Conversion Support	Frontier IS to provide on-going support for a pre-defined period (1-2 months) to include table correction or modification, post conversion scripts to correct data if required, etc.

## **ii. Customer Care & Billing Conversion Team.**

### **Scope**

Conversion of customer care and billing, inside plant, trouble tickets, and service orders for residential, business, wholesale, and carrier. Activities include data mapping, table set-up, and conversion.

## Summary

The Customer Care & Billing Conversion team will convert the customer data from the replicated Verizon source systems to the Frontier target systems. The team will work with the business owners to determine data locations and business rules to enable the data to work in the Frontier applications. The team will obtain approval from the business owner representatives to launch the converted data into production at conversion and support the business for a period of time post conversion.

## Target Systems

DPI Customer Care & Billing, Plant, and Repair

CRM Ordering

CABS Carrier Access Billing

## Pre Conversion Tasks

Tasks required to prepare for the conversion:

Seq	Task	Description / Comment
1	Identify Replicated Source Systems	Review replicated Verizon source systems with IT and business teams to understand which systems will provide source data.
2	Infrastructure Requirements	Determine infrastructure requirements for conversion development and testing (number and size of environments). Communicate requirements to the Infrastructure Lead.
3	Develop Data Mapping detail documents and processes.	Define data elements in the replicated Verizon source systems and their corresponding location in the target systems. For example, product codes and rates, AR/GL codes, etc.
4	Identify and Load all Table Values	Gather replicated Verizon source systems table values for reference and control tables and enter the data. Sources such as product code mapping docs will be used to identify the data needed to load the tables in DPI and CRM.
5	Develop Data Conversion software to convert the data from the Verizon-replicated Source systems to Frontier Target systems.	Provide the pseudo code instructions to the conversion coders to develop conversion software.

Seq	Task	Description / Comment
6	Adjust conversion software for changes based on business function requirements.	Participate in Functional requirement-setting sessions to identify functionality differences between former Verizon and Frontier target applications. Make changes to the data mapping processes and software to account for changes in requirements.
7	Plan Conversion Testing	Plan timing and number of mock conversion runs. Develop detailed level plan for mock conversion runs with specific hour by hour tasks.
8	Execute Conversion Testing	Execute several mock/test conversion runs to fine-tune the conversion processes. Supply data to quality assurance team for functional testing and comparative rating and billing testing.
9	Error Corrections	Adjust conversion software and table values for changes due to errors found during conversion testing.
10	Assess Compliance Impact Update Disaster Recovery Strategy	Assess changes to compliance requirements driven by the integration. Account for changes to systems and processes.

### Conversion Tasks

Tasks required at conversion:

Seq	Task	Description / Comment
1	Develop command center	Establish process to control the extract, transformation, loading, and business owner validation of converted data.
2	Start Application Suspension	Working with the PMO and the Business, team will identify a period when applications will not be available to end-users for data processing.
3	Execute Data Conversion Processes.	This includes receipt of the data and running the conversion processes. Extensive validation will be performed after defined checkpoints to ensure the success of the conversion.
4	Validate Conversion.	Once the conversion is complete additional validation will take place first by the IS group and then a detailed checkout and signoff by the business will be performed.
5	After Checkout and business owner validation, release systems for "live" activity	The converted environment is released to the business.

Seq	Task	Description / Comment
6	Validation and Approval of Conversion Activities and Data	As a part of the conversion schedule, validation steps will be performed to ensure that object migration, data loads and other conversion tasks were performed correctly. Once the conversion validation steps have been completed the appropriate stakeholders will approve the release of the applications to the user population.
7	End Application Suspension	Once the conversion tasks have been completed and approved, the suspension period will be over.

### Post Conversion Tasks

Tasks required after the conversion:

Seq	Task	Description / Comment
1	Save data	Save and place into offsite storage all data to be retained.
2	Post Conversion Support	Frontier IS to provide on-going support for a pre-defined period (1-2 months) to include table correction or modification, post conversion scripts to correct data if required, etc.

### iii. Operations Support Systems (OSS) Conversion Team.

#### Scope

These include switch provisioning, circuit inventory and technician dispatch. Activities include data mapping, table set-up, and conversion.

#### Summary

The OSS Conversion team will convert the OSS data from the replicated Verizon Source systems to the Frontier target systems. The team will work with the business owners to determine data locations and business rules to enable the data to work in the Frontier applications. The team will obtain approval from the business owner representatives to launch the converted data into production at close and support the business for a period of time post close.

## Target Systems

DPI	Customer Care, Billing, Plant, and Repair
TC	Switch and HSI DSLAM Provisioning
MetaSolv – M6	Circuit Inventory and Provisioning
Viryanet	Field Technician Dispatching

## Pre Conversion Tasks

Tasks required to prepare for the conversion:

Seq	Task	Description / Comment
1	Identify Systems that contain “Golden Source” Data.	Data may be redundant across multiple applications. Identify where “golden” data resides.
2	Gather Network Configuration for CO Switches and DSLAM’s.	Identify all Host and Remote Switches, the switch type, release level and network connectivity. Identify breakdown of DSLAM’s by type, service area and equipment location.
3	Develop Data Mapping detail documents.	Define data elements in the Golden Source systems and their corresponding location in the target systems.
4	Develop Data Conversion software to convert the data from the Golden Source systems to Frontier systems.	Provide the pseudo code instructions to the conversion coders to develop conversion software.
5	Identify required functionality in Dispatching and Provisioning Systems.	Identify functionality differences between replicated Verizon (Telcordia) and Frontier OSS applications.
6	Adjust conversion software for changes due to functionality mediation.	Make changes to the data mapping processes and software to account for changes due to functionality differences.
7	Develop data value mapping processes and documents	These are value mapping documents and will be used in the process to translate data values. For example, we will need to map employee ID's from legacy Verizon to their new Frontier ID.
8	Gather Product code mapping docs and load the tables that control switch provisioning and dispatch.	All product codes (S&E) that pertain to dispatch and provisioning must be identified and loaded the appropriate tables.

Seq	Task	Description / Comment
9	Control Table Setup.	Set up control tables. For example, field technicians and their skill sets, work schedules (clocks) and order-flow staging paths.
10	Conversion Testing	Hold mock/test conversion runs to fine-tune the conversion processes.
11	Identify and setup all necessary user access to Frontier applications.	Set up all end users with appropriate access and security levels to the Frontier applications.
12	Assess Compliance Impact	Assess changes to compliance requirements driven by the integration.

### Conversion Tasks

Tasks required at conversion:

Seq	Task	Description / Comment
1	Develop command center	Control the extract, transformation, loading, and business owner validation of converted data.
2	Execute Data Conversion Processes.	This includes, receipt of the data, and running the conversion processes. Extensive validation is necessary after defined checkpoints to ensure the success of the conversion.
3	Validate Conversion.	Once the conversion is complete, the conversion needs to be validated.
4	After Checkout and business owner validation, release systems for “live” activity	The converted environment is released to the business.

### Post Conversion Tasks

Tasks required after the conversion:

Seq	Task	Description / Comment
1	Save data	Save and place into offsite storage all data to be retained.
2	Provide Post Conversion support.	

#### iv. Wholesale Systems Team

##### Scope

Conversion of customer care and billing, inside plant, trouble tickets, and service orders for carrier customers. Activities include data mapping, table set-up, and conversion.

##### Summary

This team will convert the customer data from the former Verizon source systems to the Frontier target systems to support carrier customers. They will work with the business owners to determine data locations and business rules to enable the data to work in the Frontier applications. The team will obtain approval from the business owner representatives to launch the converted data into production at conversion and support the business for a period of time post conversion.

##### Target Systems

DPI	Customer Care & Billing, Plant, and Repair
Synchronoss	Carrier Ordering
MetaSolv – M6	Circuit Inventory and Provisioning
Viryanet	Field Technician Dispatching
CABS	Carrier Access Billing

##### Pre Conversion Tasks

Tasks required to prepare for the conversion:

Seq	Task	Description / Comment
1	Identify Source Systems	Review source systems with IT and business teams to understand which systems will provide source data.
2	Infrastructure Requirements	Determine infrastructure requirements for conversion development and testing (number and size of environments). Communicate requirements to the Infrastructure Lead.
3	Develop Data Mapping detail documents and processes.	Define data elements in the source systems and their corresponding location in the target systems. For example, product codes and rates, AR/GL codes, etc.

Seq	Task	Description / Comment
4	Identify and Load all Table Values	Gather source systems table values for reference and control tables and enter the data. Sources such as product code mapping docs will be used to identify the data needed to load the tables in DPI and M6.
5	Develop Data Conversion software to convert the data from the source systems to Frontier systems.	Provide the pseudo code instructions to the conversion coders to develop conversion software.
6	Adjust conversion software for changes based on business function requirements.	Participate in functional requirement-setting sessions to identify functionality differences between former Verizon and Frontier target applications. Make changes to the data mapping processes and software to account for changes in requirements.
7	Communicate changes to Carriers	Work with Frontier business to coordinate and communicate changes with carriers.
8	Plan Conversion Testing	Plan timing and number of mock conversion runs. Develop detailed level plan for mock conversion runs with specific hour by hour tasks.
9	Execute Conversion Testing	Execute several mock/test conversion runs to fine-tune the conversion processes. Supply data to quality assurance team for functional testing and comparative rating and billing testing.
10	Plan Carrier Testing	Work with Frontier business to communicate with carriers for their testing.
11	Support Carrier Testing	Work with Frontier business to communicate with carriers for their testing.
12	Error Corrections	Adjust conversion software and table values for changes due to errors found during conversion testing.

Frontier has initiated and will continue to host a series of monthly meetings with its Carrier customers to provide information and an opportunity for input regarding the systems conversion. Conversion system testing for Carriers is currently planned for December 2011. Ongoing information regarding the Carrier meetings and testing, including testing processes and dates, will be communicated to Carriers on a regular basis during the conversion process.

### **Conversion Tasks**

Tasks required at conversion:



<b>Seq</b>	<b>Task</b>	<b>Description / Comment</b>
1	Develop command center	Establish process to control the extract, transformation, loading, and business owner validation of converted data.
2	Start Application Suspension	Working with the PMO and the Business, team will identify a period when applications will not be available to end-users and carriers for data processing.
3	Execute Data Conversion Processes.	This includes, receipt of the data, and running the conversion processes. Extensive validation will be performed after defined checkpoints to ensure the success of the conversion.
4	Validate Conversion	Once the conversion is complete additional validation will take place first by the IS group and then a detailed checkout and signoff by the business will be performed.
5	After Checkout and business owner validation, release systems for “live” activity	The converted environment is released to the business.
6	Validation and Approval of Conversion Activities and Data	As a part of the conversion schedule, validation steps will be performed to ensure that object migration, data loads and other conversion tasks were performed correctly. Once the conversion validation steps have been completed the appropriate stakeholders will approve the release of the applications to the user population.
7	End Application Suspension	Once the conversion tasks have been completed and approved, the suspension period will be over.

### **Post Conversion Tasks**

Tasks required after the conversion:

<b>Seq</b>	<b>Task</b>	<b>Description / Comment</b>
1	Save data	Save and place into offsite storage all data to be retained.
2	Post Conversion Support	Frontier IS to provide on-going support for a pre-defined period (1-2 months) to include table correction or modification, post conversion scripts to correct data if required, etc.

## **v. Infrastructure Team**

### **Scope**

Integration of IT infrastructure into the Frontier environment. Infrastructure includes data center capacity, private corporate data network, security, Active Directory, messaging, back office, desktop, system administration, remote access, help desk, and disaster recovery. Activities include account creation, network planning and integration, system upgrades, capacity planning and upgrades, information security measures, and hardware, software and licensing inventory.

### **Summary**

This team will create a strategy for migrating the former Verizon IT infrastructure to the Frontier IT infrastructure. At conversion, the business unit will be fully functional within the Frontier IT infrastructure, and the team will work closely with production support to ensure a successful conversion.

The team will assess the current and planned transaction volume and data storage. They work with the application teams and third parties to evaluate the hardware sizing required to meet business needs. They then develop a plan and timeline to install the new hardware in advance of the conversion.

### **Target Systems**

Corporate network and security platforms

Active Directory

Messaging platforms

Back-office platforms

DPI

CABS

M6

CRM

Others

## Pre Conversion Tasks

Tasks required to prepare for the conversion:

Seq	Task	Description / Comment
1	Assess current hardware capacity and future growth.	Measure current transactions and data storage. Work with application teams to determine end state transactions and data storage. Conduct volume testing on critical applications.
2	Determine hardware requirements.	Work with hardware vendors to determine optimal configuration to meet the growth needs.
3	Scalability Testing	Setup a replicated environment for key applications and perform load testing to ensure platform's ability to scale.
4	Implement hardware upgrades	Order, schedule, deliver, and configure new hardware into existing infrastructure.
5	Identify corporate network topology / inventory	Includes circuit types and providers, logical IP addressing scheme, DNS, DHCP systems, perimeter security architecture, remote access, Internet access, vendor connectivity, and Active Directory layout.
6	Scale related systems	Includes messaging platforms, remote access appliances, network and AD management systems, DNS/DHCP platform, and content filter appliance capacity.
7	Identify Requirements and Roadblocks	Communicate to the business, and devise a mitigation strategy and timeline.
8	Help Desk Structure	Identify a plan for help desk support, in preparation for, during and after conversion.
9	Conversion Plan	Develop an hour by hour plan leading up to and through the conversion process – network connectivity and e-mail access will be most important and visible.
10	Security Requirements	Develop plans to account for security requirements for employees, vendors, and customers including requirements for the data migration.
11	Assess Compliance Impact	Assess changes to compliance requirements driven by the integration.

## Conversion Tasks

Tasks required at conversion:

Seq	Task	Description / Comment
1	Develop command center	Control the rollout of the Frontier Integration Plan.
2	Implement Conversion Plan	Upon agreement with the business to proceed.
3	Confirm Success	Test to prove that systems are fully functional as intended within the scope of the Frontier Integration Plan.

## Post Conversion Tasks

Tasks required after the conversion:

Seq	Task	Description / Comment
1	Documentation and turnover	Ensure full documentation and turnover is provided to production support.
2	Decommission Legacy Systems	Decommission or disconnect any unneeded legacy IT Infrastructure systems or connectivity.
3	Confirm expected transaction volume and data storage results are achieved.	Review application performance, identify any additional actions.

## B. Business Group Team Tasks.

In addition to the work performed by Frontier's IS organization and IS Functional Teams, the Frontier's business units will assist in ensuring the successful completion of a system conversion. These groups provide assistance ranging from planning and scope of the systems in the business to providing training for employees to make sure they are ready to use the new systems when the conversion is completed. The following is a list of some of the primary business operations groups that will be involved in the conversion:

#	Business Groups
1	Call Center Operations
2	Field Operations
3	Engineering
4	Billing
5	Carrier (Wholesale) Services

## Scope

The actions to be undertaken by the business groups include OSS requirements analysis, product mapping, order provisioning, process development, training, reporting requirements and all other activities related to providing service to the customer base.

## Summary

Frontier will ensure all tasks required to support the customers are completed in the appropriate timeframes. The assigned team will work with IT and downstream functional areas to determine requirements, business rules, and implementation of solutions.

## Pre Conversion Tasks

Tasks required to prepare for the conversion:

Seq	Task	Description / Comment
1	Requirements Gathering	Work with other functional areas and IT to assess the requirements (system or process) needed to be met in order to achieve a successful conversion.
2	Internal Communication	Develop enhancement plan and implement tools for internal communications (i.e., Customer Contact Lists, Rep Handbook, etc).
3	Customer and Carrier Communications & Notices	Develop communication plan for communications with end user customers and carriers pre and post conversion, including communication of key contacts, Conversion Plans, Carrier forums.
4	Carrier Conversion Planning	Development and implementation of detailed conversion deliverables, timelines, and dependencies. Plan will address internal/external training, test decks, validation, etc.

<b>Seq</b>	<b>Task</b>	<b>Description / Comment</b>
5	Policies, procedures & documentation	Documentation of all Methods & Procedures.
6	Design & Development	Support IT through Design & Development.
7	Testing	System Testing/ UAT Testing/ Regression Testing/CLEC testing.
8	Support Data Conversion	Mock conversions & Data Mapping.
9	Training	Develop and implement necessary training programs, documentation and scheduling for both internal and external users.

### **Conversion Tasks**

Tasks required at conversion:

<b>Seq</b>	<b>Task</b>	<b>Description / Comment</b>
1	Establish command center	Establish support on site for day of conversion.
2	Execute In Flight Migration Plans	Ensure continuity of pending orders at time of conversion.
3	Establish Bubble Force	Additional staffing to mitigate any potential disruption.

### **Post Conversion Tasks**

Tasks required after the conversion:

<b>Seq</b>	<b>Task</b>	<b>Description / Comment</b>
1	Post Conversion Support (“Hyper Care”)	Provide on-going support to ensure continuity and customer satisfaction. Care Centers established for both internal and external customers.
2	Process Improvements	Institute process/system improvements as necessary or appropriate.
3	Expedited Training	Identify areas requiring additional “quick hit” training to improve quality and response times.

### **C. Quality Assurance Process.**

In addition to the tasks described above, the IS Functional Team and Frontier Business Groups will undertake specific conversion quality assurance actions. This will include specific activities to assess the quality of the loaded data and the functionality of the systems. As part of the pre-conversion, conversion and post-conversion work each Functional Team will be responsible for reporting on the quality of the data conversion and ensuring variances are either explained or corrected. This conversion quality assurance work will be grouped into four coordinated phases: (i) Comparative Rating and Billing; (ii) Converted Data Quality Assessment; (iii) System Tests; and (iv) User Acceptance Test (UAT). These four phases are summarized below:

#### **i. Comparative Rating and Billing**

Frontier will mechanically compare source system invoices to DPI Customer Care and Billing system invoices. Comparative Rating and Billing consists of following processes:

- Gather information for comparison;
- Run conversion;
- Execute bill cycles in DPI;
- Mechanically compare DPI invoices to record data at the lowest level possible;
- Reconcile any inconsistencies; and
- Review the results with the user groups.

#### **ii. Converted Data Quality Assessment**

Frontier will confirm that the data is converted according to expectations and verify that all the data to be converted from the source system is appropriately addressed. Testing will include data such as customer counts, accounts receivable amounts, aging buckets, and notes history. The project team will coordinate with the business groups to identify required quality levels and reporting categories.

### **iii. System Tests**

System Testing is the process of gauging that the systems maintains operational stability as changes are made and conversions are run. A plan and strategy will be created to successfully complete system test. The plan includes the entrance criteria for the start of testing, the functions that will be tested, the management of defects while in testing, and the exit criteria for the successful end of testing. There are two system testing components: Functional Testing and Volume Testing, which are described below:

- **Functional Testing**: The goal of this phase of the test is to confirm that the data is converted according to expectations. Functional enhancements are tested for each software release and regression testing is done for each release. The testers perform month-to-month processing to confirm that the system functions in its entirety.
- **Volume Testing**: The goal of the volume test is to identify on-line transaction response time and batch job run times to determine how the system will perform under varying load conditions. The goal of volume test is to process large numbers of transaction records through key batch and on-line functions in order to observe and record the response and run times. Performance data will be collected, if required, for further analysis. Systems will be re-configured, upgraded or tuned, if necessary, to enhance performance. The volumes will be estimated to address growth over the next several years.

### **iv. User Acceptance Test (UAT)**

User Acceptance Testing is the process of coordinating with the Frontier internal business community to participate in the testing of the conversion. The business community includes the Call Center Operations (CSRs, Tables, Message Processing and Bill Verification), Plant Service Centers, E-911, Collections, Revenue Assurance, Accounting, and Finance. The coordination of these efforts is the responsibility of the project Quality Assurance (QA) team. The team member will act as the liaison with the UAT Lead. The UAT Lead will facilitate the required testing and documentation activities to support User Acceptance Testing.



## **VII. INTEGRATION CONTINGENCY PLANNING.**

Unlike some prior conversions, including Frontier's conversion in West Virginia in July 2010, Frontier will control both the data extracts from the source replicated Verizon OSS and the loading of the extracted data into the Frontier systems. This gives Frontier more control over the integrity of the data and the overall quality of the entire conversion process.

Frontier has a proven system conversion methodology and has developed productivity, control, and quality tools to aid work. Frontier will implement a series of control checks starting with completion of the data extracts through validation of conversion to Frontier systems and final approval to release the systems for production use. Once the live conversion data extract files are completed, and in advance of converting and loading the live data into the production systems, control oriented tests will be performed against the extract files to confirm that all expected files have been extracted and that each file contains the number of records expected. Once confirmed, the data extract files will be converted and loaded to the offline production systems. As a final accuracy verification of the data extracts, the same metrics quality comparisons will be run to ensure that the converted data produces the expected business metrics that are reported from the source systems.

Frontier will develop "day by day," and "hour by hour" plans leading up to and through conversion, detailing every step that must be taken. These plans will be executed in dry run numerous times in advance of the integration. After all testing has been completed and approved, the key business owners will meet to confirm that all checklist items have been satisfied, to discuss any open issues, and make a "Go / No Go" decision. This decision is the final trigger for the start of the actual system conversion and integration.

However, it is important to note that there is no larger corporate transaction that will be impacted or delayed as a result of a delay or "No Go" in the conversion on a specific date. Frontier is targeting completing the conversion on or after February 1, 2012; however, Frontier has flexibility in completing the integration of its systems. An important part of Frontier's contingency plan is that if Frontier identifies any issues that pose a significant risk or problem to serving its customers, Frontier will delay the conversion until it has successfully resolved the

identified risk or problem. Frontier has a significant business interest in ensuring that it properly implements the integration and transition from Verizon operational support systems to Frontier's systems, without any conflicting business requirements surrounding transaction closing dates. Frontier will undertake a detailed review to ensure that the transition will go smoothly and will not proceed with the integration until the Company is confident that the transition can occur without disruption to Frontier's customers. Until Frontier is satisfied that the conversion will be successful, Frontier has the flexibility and will continue to use the OSS that is currently being utilized to serve customers.

In addition, Frontier will make additional personnel available prior to and following the conversion to respond to any unanticipated issues. Specifically, Frontier will have additional personnel trained prior to the closing and who will be available to assist in resolving customer service issues and requests for information. Similar to past conversions, Frontier will deploy several mechanisms in key areas to minimize the impact of any potential disruption. These mechanisms will include staffing a "bubble" work force to assist in managing potential increases in workload and command centers to field issues and coordinate back with IT. Frontier has also contracted with several IT consulting companies to supplement its internal staff resources on an as needed basis. Having this additional work force in place following system transitions is a commonly used contingency action and will allow Frontier to minimize and resolve issues that may arise during and following the conversion.

## **VIII. CONCLUSION.**

Frontier has prepared this Integration Report in preparation for its migration from Verizon-replicated OSS to Frontier's OSS currently utilized to serve approximately 2.5 million customer access lines in 24 states. This conversion, which is scheduled to occur on or after February 1, 2012, will involve migrating customers located in Arizona, California, Idaho, Illinois, Nevada, Ohio, Oregon, Washington and Wisconsin from the Verizon-replicated OSS to the Frontier legacy OSS systems. The process for completing the conversion will be similar to the process that Frontier utilized in successfully transitioning approximately 500,000 Verizon West Virginia customers over to Frontier at the closing of the Verizon transaction on July 1, 2010 and will build on the experience Frontier gains in completing the conversion in Indiana, Michigan, North

Carolina and South Carolina on or after October 1, 2011. Frontier and its team of IT professional and business operations leaders have built on Frontier's prior experience in completing successful system conversions, as well as the West Virginia conversion, and identified in this Integration Report the OSS to be replaced, why the integration is proceeding, the surviving OSS and to describe Frontier's prior experience in completing system integrations. The Integration Report also identifies the organizations, approach, deliverables, planned tasks and contingency plan for successfully completing the OSS conversion. Frontier has undertaken a detailed review and is prepared to successfully implement the planned conversion in a highly professional and efficient manner without disruption to Frontier's customers.

CERTIFICATE OF SERVICE  
UM 1431

I certify that on the 29<sup>th</sup> day of July 2011, I served the foregoing Operations Support Systems Integration Report in the above entitled docket on the following persons via e-mail and U.S. Mail.

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Dated this 29<sup>th</sup> day of July, 2011