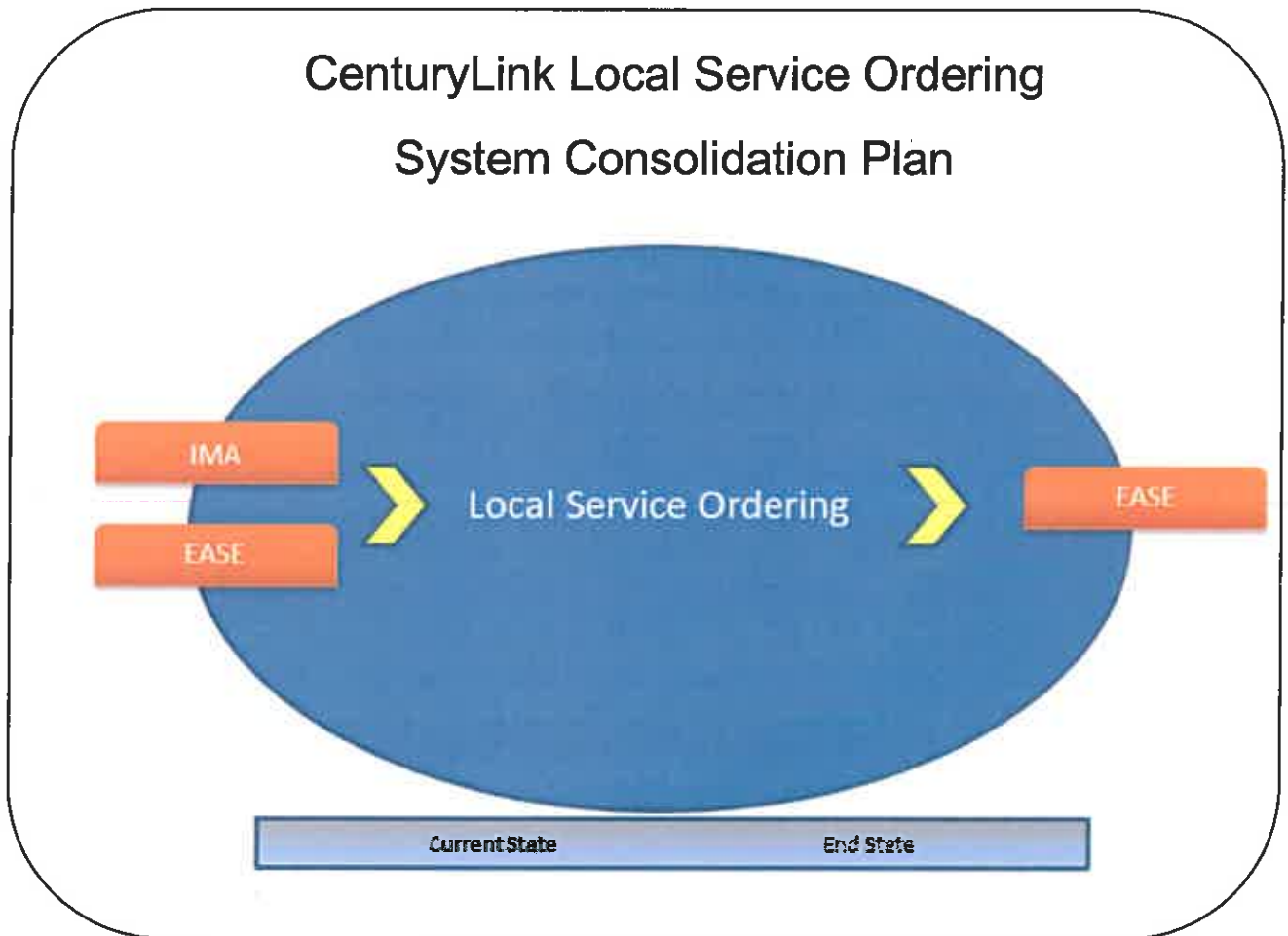


CenturyLink Local Service Ordering and Billing System Consolidation Plan



Document Modification Log

All revisions to this document are in chronological order.

Version	Date	Description of Change

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Contents

CenturyLink Local Service Ordering and Billing System Consolidation Plan	1
1 Executive Summary	5
1.1 Scope	6
1.1.1 Items Not in Scope:	6
1.2 Assumptions	6
2 Ordering and Billing System Description	8
2.1 Current State System View	8
2.1.1 IMA ordering platform	9
2.1.2 EASE ordering platform	9
2.2 End State System View	10
2.2.1 Transition to common processes and system infrastructure.....	10
2.3 Local Service Ordering End State System - EASE.....	11
2.3.1 Service Ordering Comparison – IMA to EASE (LSOG 2Q19)	12
2.3.1.1 Pre-Ordering.....	13
2.3.1.2 Ordering	13
2.3.1.3 Post Order Functionality	14
3 Consolidation Plan Implementation.....	15
3.1 Consolidation Plan Schedule and Milestones	15
3.1.1 Conversion Approach	15
3.1.2 Schedule and Milestones.....	15
3.2 Consolidation Plan Implementation.....	16
3.2.1 Internal CenturyLink Consolidation Testing.....	16

Version 3

01/08/2020

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3.2.2 Training and Process Plan..... 17

3.2.3 Customer Testing 17

3.2.4 Load & Performance (L&P) Testing 17

3.2.5 Production Conversion Plan 17

3.2.6 Post Conversion Support..... 18

3.2.7 Contingency Plan 18

Appendix A: Regulatory Organizations, Guidelines and Standards..... 19

Appendix B: Glossary 20

1 Executive Summary

CenturyLink is consolidating Local Service ordering to streamline procedure and systems across CenturyLink's markets (hereafter, Consolidation). Due to Acquisitions (see Section 1.3), CenturyLink currently operates two different ordering systems for purchase of Local Services. As a result, customers who operate in multiple locations within CenturyLink's network utilize both systems making this inefficient for the customer and for CenturyLink.

During Consolidation, CenturyLink will move all Local Service Request ordering to Electronic Administration & Service Order Exchange (EASE). (Refer to Section: 2:

Ordering and Billing System Description for more information.) This Consolidation will migrate ordering off the Interconnect Mediated Access (IMA) system and onto the EASE system across all markets and geographies.

The benefits are:

- Single standardized order entry channel for Local Service Request submission
- Standardized process for Local Service Request handling
- Single view of all Local Service Requests
- One set of training requirements

1.1 Scope

The CenturyLink Local Service Ordering System Consolidation Plan (hereafter; the Consolidation Plan) document provides CenturyLink's wholesale customers, (hereafter; Customers) with further information about the Consolidation and how they will be affected.

The purpose of this document is to cover the scope of the Consolidation Plan to fulfill specific requirements of settlement agreements with various parties, as well as associated state commission and FCC orders, related to the CenturyLink/Qwest merger (hereafter, Merger Requirements). This document summarizes the critical milestones that will occur when CenturyLink consolidates the Current State Ordering System into the End State solution. The Consolidation is planned to begin no earlier than April 2020

1.1.1 Items Not in Scope:

Items that are not in-scope for this project include, but are not limited to:

- Future system enhancements to EASE resulting from Local Service Ordering Guidelines (LSOG) updates beyond the upgrades specified in this project
- Merger of End State Billing Systems.

1.2 Assumptions

The following is a list of assumptions that are applicable during implementation and upon completion of the Consolidation:

- CenturyLink will utilize the existing Qwest Corporation d/b/a CenturyLink Change Management Process (CMP) to communicate system and product/process changes in the appropriate timing and format. CenturyLink will fully utilize CMP post Consolidation. To view the complete CMP document, visit the [CMP Website](#) or click on the [Wholesale Change Management Process Document](#) link

- Customers will enter new Local Service Requests in EASE.
- Customers will populate Local Service Requests in LSOG (Issue 2Q19 Dated June 30, 2014) standard format and in the 2nd version of XML format
- In-Flight Local Service Requests will continue ordering processing through the IMA system.

In-Flight Local Service Requests are:

When Customers submit Local Service Requests and CenturyLink acknowledges acceptance, but the processing of the Local Service Requests are not complete before the Consolidation weekend.

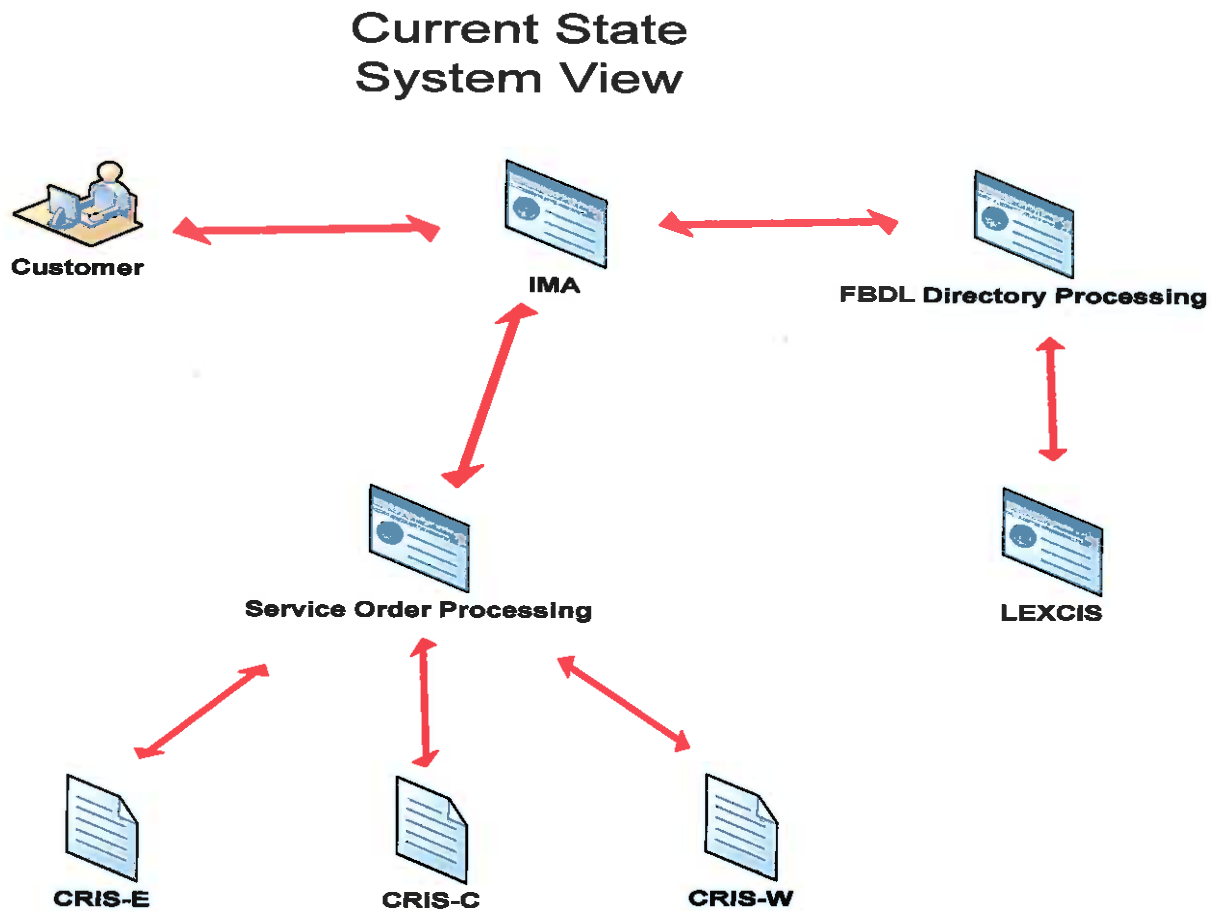
- IMA will retain inquiry capability of historical information on-line for 24 months from the completion of the IMA request.
- The LSR Consolidation will support the regulatory requirements for PID/PAP reporting. Data sourced in the retiring applications will be replaced with data from the newly introduced applications.
- As the project progresses, analysis and design activities may result in modifications to the Consolidation Plan.
- CenturyLink will comply with all applicable Merger Requirements

2 Ordering and Billing System Description

This section provides Customers with Current State and End State Ordering system views, common features, and information about the differences between Current State and End State systems. It also provides information about the functionality and applications that CenturyLink uses to facilitate Customer and system interfaces.

2.1 Current State System View

Century Link currently requires Customers, based on end user location, the use of two different systems to submit Local Service Requests, EASE and IMA.



2.1.1 IMA ordering platform

IMA is the current Local Service Request application supporting Local Service Requests for wholesale customers in the Legacy Qwest markets of CenturyLink. IMA includes a GUI application for direct order entry of Local Service Requests, pre-order inquiry and review of statuses and notifications. IMA also provides an electronic bonding gateway using XML to support system-to-system integration.

2.1.2 EASE ordering platform

EASE is the end-state Local Service Request ordering application to be used by Customers, as well as CenturyLink, allowing Local Service Request processing via a GUI, batch files, and real-time XML transactions.

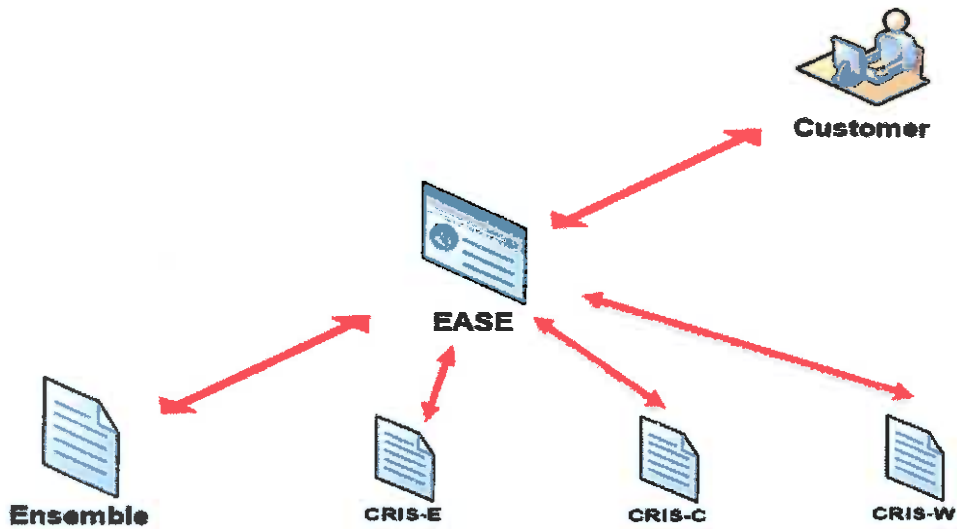
Included within EASE are:

- Edits
- Validations
- Pre-order information queries
- Status information

2.2 End State System View

2.2.1 Transition to common processes and system infrastructure

Customers will submit the Local Service Request via the EASE system. EASE will determine the area



2.3 Local Service Ordering End State System - EASE

EASE is an industry-compliant order entry and workforce management system that allows end-to-end review and management of Local Service Requests. The system consists of GUI and UOM/XML ordering capabilities. The system is robust and table driven with extensive business rule capabilities.

EASE follows industry-standard ordering business rules, including LSOG-based updates. EASE provides the following:

- Single, centralized platform for all Local Service Request processing
 - Supports both eBonding and Portal (Virtual Front Office (VFO) GUI) capabilities.
- Compliance with LSOG/Local Service Request industry standards and standard Local Service Request configurations
 - Manages all LSOG updates going forward.
- Integration with back office systems
 - Platform Application Programming Interface (API) to support additional integrations as needed for all Local Service Request volumes.
- Platform Expandability
 - Local Number Portability (LNP) / Local Service Request (Local Service Request) / Receive custom transaction types.

2.3.1 Service Ordering Comparison – IMA to EASE (LSOG 2Q19)

The following matrices provide a comparison of current IMA functionality and EASE Local Service Request functionality that will be available in user acceptance testing and deployed prior to conversion including planned development.

General Functionality	IMA	EASE
Support eBonding and portal for Local Service Request requests	Yes	Yes
LSOG Ver 2Q19 Compliant	No	Yes*
Auto-populate initiator information from User Profile	Yes	Yes*
Field Level Help	Yes	Yes*
Error messaging – identifies form and fields	Yes	Yes*
Auto navigation to fields in error	No	Yes
Recapping from pre-order to Local Service Request	Yes	Yes*
Multiple versions of XML	Yes	Yes*
Manage Users	Yes	Yes
Agent owner relationships	Yes	Yes

*Indicates some development may be required prior to testing

2.3.1.1 Pre-Ordering

Pre-Order Functionality	IMA	EASE
Address Validation (by Street Address or TN)	Yes	Yes*
Appointment Scheduler Query (Select, Change, or Cancel)	Yes	Yes*
Carrier Facility Assignment Validation (Cable Facility, CFA Groups or Units queries)	Yes	Yes*
Customer Service Inquiry & Virtual Customer Service Inquiry Retrieval (by Street Address or TN)	Yes	Yes*
Directory Listing Inquiry (by Account TN, Listed TN, Non-Standard TN, Caption Name, or SLU Header TN)	Yes	Yes*
Design Layout Record Query (by Serial Number Circuit, TN Circuit, Carriers Facility Circuit, or Message Trunk Circuit)	Yes	Yes*
Facility Availability Validation (by TN, Address, or Circuit)	Yes	Yes*
Loop Qualification Query (by TN or Circuit)	Yes	Yes*
Meet Point Query (POTS Splitter or Cable Connection queries)	Yes	Yes*
Raw Loop Data Query (by TN, Address, or Circuit)	Yes	Yes*
Service Availability Query (by State and Service Type)	Yes	Yes*
TN Reservation Query (by Address and Custom TN selection criteria)	Yes	Yes*

*Indicates some development may be required prior to testing

2.3.1.2 Ordering

Order Functionality	IMA	EASE
Create and submit a request	Yes	Yes*
Revise and resubmit a rejected request	Yes	Yes
Supplement a request	Yes	Yes
Up front order editing	Yes	Yes
Search Local Service Requests	Yes	Yes
Wildcard search	Yes	Yes
Local Service Request replication and template creation	Yes	Yes

2.3.1.3 Post Order Functionality

Post Order Functionality	IMA	EASE
Viewing and retrieving line loss information (by Account Number, Working TN, Circuit, Order number, PON, or Completion Date)	Yes	Yes
Status by Local Service Request and/or Service Orders		
Error	Yes	Yes
Issued FOC	Yes	Yes
Jeopardy (Local Service Request)	Yes	Yes
Jeopardy (Internal Service Order)	Yes	Yes*
Order Completed	Yes	Yes*
Physical Work Completed	Yes	Yes
Posted to be billed	Yes	Yes*
Rejected	Yes	Yes*
Request Completed	Yes	Yes*
Notification Inquiries		
BCN	Yes	Yes*
Bulk	Yes	Yes*
Completion	Yes	Yes*
Confirmation	Yes	Yes*
Error	Yes	Yes*
Jeopardy	Yes	Yes*
PSON	Yes	Yes*
Reject	Yes	Yes*
CFA Inventory	Yes	Yes*
Query for technician status and trouble ticket status	Yes	Yes*

*Indicates some development may be required prior to CLEC testing

Note: Technical, legal and regulatory changes may affect information provided in the above table. Changes made following the introduction of this document in CMP are not reflected in the table above. This section is not intended to provide a complete listing of all capabilities.

Follow the link to access LSOG: <http://www.atis.org/obf/download.asp>

3 Consolidation Plan Implementation

3.1 Consolidation Plan Schedule and Milestones


3.1.1 Conversion Approach

All customers will be required to submit all LSR requests into the EASE LSR Platform on October 16, 2020. If desired, customers may work with CenturyLink prior to conversion to begin utilizing the platform as early as May of 2020.

3.1.2 Schedule and Milestones

Consolidation completion is targeted for September 2020. CenturyLink will follow the CMP process where it applies. This document will be updated when target dates are available for later phases.

The following table shows milestones that reflect the Consolidation Plan trajectory. CenturyLink will communicate updated milestones per the CMP process.

 = A milestone, established by the Merger Requirements, that alters the established CMP milestones schedule.

Consolidation Plan Milestone	Date
CMP CR Issuance: SCRxxxx	11/4/15
These can be found at: http://www.centurylink.com/wholesale/cmp/cr/crnumber_system_index.html	
CR Presentation at CMP Meeting	12/18/19
Local Service Request Consolidation Plan due	1/16/2020
Local Service Request Consolidation Plan Review Meeting	1/16/2020
Extended Customer Comment Window for Initial Release Notification, Initial Retirement Notice and Consolidation Plan	
CenturyLink issues response to CLEC comments and Final Retirement Notice, including the Final version of the Local Service Request Consolidation Plan	
Draft Interface Tech Specs	
Tech Specs Walk-through	
CLEC Comments for Interface Tech Specs	

Consolidation Plan Milestone	Date
Final Interface Tech Specs	
Product Process Notification associated with Level 2 OSS changes	
CLEC comments due on (New) GUI Release Notes	
CLEC comments due on Level 2 OSS Product Process changes	
Training available	
GUI Final Release Notice	
Final Notice For Level 2 OSS Product/Process Changes	
Customer Testing Begins with Local Service Request Consolidation Functionality (120 Days)	
Customer Testing Ends	
Customer Go/No Go Vote	

3.2 Consolidation Plan Implementation

This section provides further details on the Consolidation Plan implementation, including testing, training, the conversion weekend consolidation plan, and contingency planning.

3.2.1 Internal CenturyLink Consolidation Testing

CenturyLink will execute test Local Service Requests through EASE to ensure that proper billing codes assignment occurs and the Local Service Requests flow successfully into billing. CenturyLink business SMEs (Subject Matter Experts) will check for accuracy and completeness.

The following is the standard process for this system consolidation:

- First, internal testing, fulfilling ‘mock’ orders from inputprocessing through billing, will occur prior to the Customer testing period.
- Test bills will be generated and compared to production bills for accuracy.

Comparisons will be reviewed for all circuits/products that are on the account, all monthly recurring charges, taxes, and any in-flight activity such as pending payments, one-time charges and disputes. CenturyLink resources will investigate fall-out during the comparison process and update the processes/programs to assure billing accuracy.

CenturyLink subject matter experts familiar with the EASE/IMA and CRIS/Ensemble systems and processes will participate in testing and validation. In addition, contract resources will supplement internal resources to ensure intense focus on Consolidation activity and to allow 24-hour cycles.

3.2.2 Training and Process Plan

Per the Merger Agreement, CenturyLink will provide Customer training and education without charge.

During the migration, CenturyLink will provide:

- A Customer walk-through prior to the onset of Customer testing
- An additional Customer walk-through of the training before Consolidation
- Updated external documentation prior to Customer testing

3.2.3 Customer Testing

In accordance with the Merger Agreement, CenturyLink will make available a testing environment at the appropriate time for the Customers to test submission of Local Service Requests via the EASE ordering system. A testing schedule will allow the generation of test bills and Customer Service Records at scheduled intervals during the testing window. Before testing begins, the process to log and track defects will be communicated.

3.2.4 Load & Performance (L&P) Testing

CenturyLink completed an analysis of the increased demand on EASE to process IMA transactions. To meet the peak expected volume from this Consolidation, EASE processing capability was increased. CenturyLink modifies processing capacity by using internal virtual server environments allowing CenturyLink to respond quickly to capacity issues.

In addition to the completed performance analysis, CenturyLink will perform a Load & Performance test on EASE based on the anticipated volume after the IMA volume is included. Specifically:

- The Load & Performance test will be conducted prior to Consolidation.
- The combined Local Service Request transaction volume for the preceding 36 months will be made available to Customers
- The highest monthly volume of aggregate transactions for the preceding 12 months will serve as the testing baseline
- Using the highest monthly volume, a single day's average transaction volume of Local Service Requests will be calculated
- 125% of the single day's transaction volume will be processed and performance metrics captured
- These metrics will be available to Customers

3.2.5 Production Conversion Plan

The Consolidation will begin April 2020. The EASE Local Service Request and Ensemble applications will then be in use for that region post-conversion. This

means that Customers will submit Local Service Requests via IMA pre-Consolidation weekend and new Local Service Requests post-Consolidation will go into EASE. The weekend Consolidation cutover will be for all properties in the impacted regions. The Consolidation weekends will be scheduled near the end of a month following the completion of all billing cycles for that month, and before any billing cycles executed in the following month.

Customers will receive notifications of the Consolidation's extended weekend maintenance window. There will be a live bridge open at CenturyLink with key CenturyLink resources to immediately investigate and address concerns once production systems are back online. Customers will receive issue ticket logging and escalations processes prior to the Consolidation weekend. At Consolidation, all existing products billed in CRIS will convert and all new bills will be generated from Ensemble for the impacted region.

3.2.6 Post Conversion Support

Post-conversion support staff will be available to assist key operational functions including ordering centers, care functions, provisioning operation centers and billing teams with any post-conversion issues. The support team will include program, IT and functional SMEs. Internal status meetings will be conducted regularly to monitor progress. Customers will be supported by their normal operations centers. CenturyLink will ensure its staffing and training will accommodate post conversion demand.

3.2.7 Contingency Plan

In the event of catastrophic issues with the production system during migration weekend, customers would continue to utilize the IMA ordering platform. The implementation of this plan would only occur in the event of catastrophic issues with the production system during that weekend.

Once the consolidation is complete, source databases will be modified to 'read only' where applicable.

Appendix A: Regulatory Organizations, Guidelines and Standards

The following is a list of regulatory organizations, guidelines and industry standards mentioned in this document.

- LSOG (Local Service Ordering Guidelines)
 - <http://www.atis.org/obf/download.asp>
- CMP (CenturyLink Change Management Process)
 - <http://www.centurylink.com/wholesale/cmp/review.html>
- FCC (Federal Communications Commission)
 - www.fcc.gov/
- PUC (Public Utility Commissions)
 - The following link is to the National Association of Regulatory Utility Commissioners. You will be able to obtain information about Public Utilities Commissions by State
<http://www.naruc.org/Commissions/>

Appendix B: Glossary

The glossary lists terms and acronyms used in this document with descriptions and definitions.

Term/Acronym	Description/Definition
API	Application Programming Interface
BAN	Billing Account Number
CFA	Carrier Facility Assignment
CLEC	Competitive Local Exchange Carrier
CMP	Change Management Process
CRB	Customer Records and Billing
CRIS	Customer Records and Information System
CSR	Customer Service Records
Current State System View	Denotes CenturyLink's existing systems and their functionality pre-Consolidation
EASE	Electronic Administration & Service Order Exchange
End State System View	Denotes CenturyLink's systems and functionality post Consolidation
FBDL	Facility Based Directory Listing
FCC	Federal Communications Commission (USA)
GUI	Graphical User Interface
ILEC	Incumbent Local Exchange Carrier
IMA	Interconnect Mediated Access
LEC	Local Exchange Carrier
LEXCIS	Local Exchange Carrier Invoice System
LNP	Local Number Portability
LSOG	Local Service Ordering Guidelines
LSR	Local Service Request
NC	Network Channel
NCI	Network Channel Interface
OSS	Operating Service System
PUC	Public Utility Commissions

Version 3

01/08/2020

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RLEC	Rural Local Exchange Carrier
S.O.	Service Order
SOE	Service Order Entry
UOM	Uniform Ordering Model
USOC	Universal Service Order Code
VFO	Virtual Front Office
WTN	Working Telephone Number