



OSS Interface Change Management Process

Frontier Wholesale
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Introduction

This document serves as a reference for the processes by which Telecommunications Companies (TCs) ordering local communications services and Frontier communicate about changes to interfaces offered by Frontier for access to Operating Support Systems (OSS) supporting its provision of resold telecommunications services, unbundled network elements (UNE), and facilities, as applicable. These OSS interfaces include pre-ordering, ordering/provisioning, and trouble reporting and maintenance. The Change Management Process described in this document describes how Frontier and TCs will work together to implement changes to OSS interfaces, associated business rules and applicable business processes and applies throughout the region served by Frontier.

Questions for the Change Management Team should be directed to FTR-CMP-Team@ftr.com.

Change Classifications

Type 1 Maintenance Change

A Type 1 change corrects problems in production versions of an OSS interface. Either Frontier or the TC may initiate the Change Request. Typically, this type of change reflects instances where a technical implementation is faulty or inaccurate, such as to cause incorrect or improperly formatted data. Instances where Frontier or TCs misinterpret interface specifications and/or business rules must be addressed on a case-by-case basis. All parties will take all reasonable steps to ensure that any disagreements regarding the interpretation of a new or modified business process are identified and resolved during change management review of the Change Request. Type 1 changes will be processed on an expedited basis.

Additionally, once a Type 1 change is identified, the Change Management Team must determine the nature and scope of the problem. Type 1 changes should be categorized in the following manner:

Severity 1: Interface Unusable - Interface discrepancy results in totally unusable interface. TC Orders/Pre-Orders/Maintenance Requests cannot be submitted or will not be accepted by Frontier. Manual work-arounds are not feasible. Change is considered essential to continued operation. Frontier and TCs should work to resolve the discrepancy as quickly as possible.

Severity 2: Interface Affecting - Orders/Pre-Orders/Maintenance Requests require work-around on the part of Frontier or TC(s). Change is considered significant to operations. Frontier and TCs should work to resolve the discrepancy in a timely manner.

Severity 3: Process Impacting – Orders/Pre-Orders/Maintenance Requests can be submitted and will be accepted through normal process/interfaces. Clarification or correction is considered critical to ongoing operations. Frontier should work to provide appropriate documentation on an expedited basis.



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Type 2 Regulatory Change

Changes affecting the interfaces between the TC's and Frontier's operational support systems required in order to comply with state or federal law, orders or specific directives by regulatory authorities (such as the Federal Communications Commission (FCC)), state or federal court orders, or required to meet standards, metrics, or other obligations imposed by, or under agreement with, the FCC or state commissions. Either Frontier or, as applicable, the TC may initiate the Change Request.

Type 3 Industry Guidelines Change

Changes affecting interfaces between the TC's and Frontier's operational support systems requested to bring these interfaces in line with agreed upon telecommunications industry guidelines are Type 3 changes. Either Frontier or the TC may initiate the Change Request. These are industry guidelines defined by trade groups, such as the Alliance for Telecommunications Industry Solutions (ATIS). Guidelines of particular relevance are those for OSS interfaces and local services ordering as defined by the Ordering and Billing Forum (OBF), EDI standards defined by the Telecommunications Industry Forum (TCIF), and trouble reporting interfaces defined by the Electronic Commerce Interexchange Committee (ECIC).

Type 4 Frontier Originated Change

A Type 4 change is a change affecting the interfaces between the TC's and Frontier's operational support systems initiated by Frontier other than a Type 1, 2 or 3 change. These changes might reflect a business process improvement which Frontier is seeking to implement within its own internal operational support system and that implies a change in the way the TC will interact with Frontier.

Type 5 TC Originated Change

A Type 5 change is a change affecting interfaces between the TC's and Frontier's operational support systems initiated by a TC other than a Type 1, 2 or 3 change. These changes might reflect a business process improvement which the TC is seeking to implement within its own internal operational support system and that implies a change in the way the TC wishes to interact with Frontier. Type 5 changes are changes intended to primarily benefit the TCs. The [Change Request Form](#) should be completed to submit a Type 5 Change Request.



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Industry Change Control Meeting

The Industry Change Control Meeting will be scheduled as needed on ad-hoc basis. The meeting is a forum attended by the Frontier Change Control Manager, Frontier Support Group's subject matter experts (as needed), and TC Change Management representatives. The Industry Change Control Meeting's main objectives are to:

- Present outlook for future releases
- Introduce newly initiated Frontier and TC originated Change Requests.

Notification Timelines

Notification and confirmation of the scheduled implementation of Change Requests will be accompanied by the appropriate documentation (business rules, technical specifications).

Type 1

Notification and confirmation timelines for Type 1 are determined on an individual case basis based on the severity of the problem.

Type 2

Timelines for Type 2 Change Requests are, in general, determined based on applicable law/regulatory rules. If the notification timeline is not specified by the regulatory action and business rules are impacted, then unless the implementation timeline specified or required by the applicable regulatory action is inconsistent with use of the same notification intervals employed for Type 4 and Type 5 Change Requests (e.g, the change must be implemented by law in 30 days from the date of an order), or Frontier and the TCs reach consensus on different intervals, Frontier will follow, for Type 2 Change Requests, the same notification intervals for Type 4 and Type 5 Change Requests. Subject to the same conditions listed above, Frontier will provide 45 days notification prior to implementation of Type 2 Change Requests that do not impact business rules.

Type 3

Type 3 timelines are based upon mutual agreement in conjunction with the rollout of national guidelines subject to any overriding regulatory obligations. Where practical, Frontier will supply a level overview of how Frontier intends to implement major changes in the new industry guideline 180 days in advance of implementation. Draft business rules may also be provided. Subject to regulatory requirements, implementation notification will be no less than the timeline used for Type 4 and Type 5 Change requests.



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Type 4 and Type 5

Generally, notification of the scheduled implementation of Type 4 and Type 5 changes will follow the schedule below:

- 73 days prior to implementation draft business rules are published.
- 66 days prior to implementation draft technical specifications are published.
- TCs have 15 business days from publication of documents to provide comments.
- 45 days prior to implementation change confirmation occurs through the publication of final business rules, technical specifications and error message documentation.

For Type 4 and Type 5 Change Requests, in some instances, it will make sense to provide more notification, or less notification, based upon the severity and the impact of the change. For example, if the change has a benefit and has little material impact on the interface, Frontier will bring the Change Request to the TCs with for implementation with shortened notification timelines. An example of such a change is the introduction of new functionality that does not impact existing functionality. More notification would be provided in the case of a major backend system introduction that significantly impacts the OSS interface.

Versioning of LSR Preorder and Order Application-to-Application Interfaces

Versioning refers to the introduction of a new version (as defined by standards bodies) of an interface and the retirement (decommissioning) of an earlier version.

Beginning with the decommissioning of LSOG 9, Frontier will maintain a single version of the LSOG preorder and order interfaces. As the industry publishes new issues/LSOG versions, Frontier will review the changes it plans to implement with the industry participants at Change Management meetings and will implement any changes and enhancements as incremental Type 3 initiatives in TC impacting releases as soon as possible after the industry issue is published.

There are two (2) situations when Frontier would maintain two (2) LSOG versions simultaneously. The first is when OBF publishes a new set of issues/LSOG version that causes Frontier to implement substantial changes that result in the creation of pipeline orders in the existing version. The second is when the ATIS industry body publishes changes to an application-to-application platform standard, which, if adopted by Frontier, would require Frontier to make substantial system changes to the structure of the application-to-application platform. If either of these situations arises, Frontier will review its plans to implement a second version of LSOG with industry participants via Change Management meetings. If Frontier and the industry agree that two (2) LSOG versions are necessary, Frontier will follow the Type 3 implementation process and will maintain two (2) LSOG versions for users of that application-to-application platform through the two (2) TC impacting releases following implementation, unless the application-to-application users participating in Change Management agree to a shorter time frame.

As changes are introduced to an existing LSOG version, a dot version of the Business Rules and Technical Specifications will be introduced. The previous dot version will be decommissioned



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immediately with the introduction of the new dot version. The TC will be required to move to the new dot version upon implementation.

When two (2) versions are required, the process to return to a single LSOG version will be accomplished using either a phased cutover or flash cut approach:

With a phased cutover, the oldest version will remain active for 30 days to receive LSRs for services with a date due no later than 30 days from the implementation date of the newest version. No LSRs including supplements will be accepted after 30 days. The oldest version will remain active up to an additional 30 days to allow for the return of notifies associated with completed LSRs previously submitted via the oldest version.

With a flash cutover, the oldest version will be retired immediately upon the implementation of the newest version.

Six months prior to implementation, Frontier will declare if it will be using the phased cutover or flash cut approach in implementing the newest version. At that time, Frontier will provide an overview of how the newest version will be implemented so that a CLEC who is familiar with the newest version can evaluate the degree of change caused by the implementation of the newest version. CLECs have two weeks to express valid objections to the method chosen via an e-mail to Change Control. Valid objections: (a) the differences between the release to be discontinued and the next current release are so great that a CLEC cannot practically migrate from the discontinued release to the next current release without the additional time provided by a phased approach; or (b) the next current release is unstable and not practically usable. If necessary, the objections will be resolved via the Change Control escalation process (see section XV).

Further, if between the six (6) month checkpoint described above and the time for discontinuing the release to be retired, an emergency circumstance arises that precludes a CLEC from completing the migration to the next current release, the impacted CLEC may notify Frontier of the circumstances and request a phased cutover approach. Frontier will consider the request in good faith and if it agrees that a phased approach is warranted for that CLEC, will employ a phased cutover approach to the extent then practical. Prior to agreeing to a phased cutover, Frontier may request the CLEC to undertake additional activity on its part.

In addition to the above procedure, at any time that all CLECs have migrated off of the oldest release, Frontier may retire that release.

Absent exceptional circumstances, enhancements and increases in functionality will only be made in the highest available LSOG version.

Preorder Interface

For the preorder application to application interface, the previous version will be decommissioned when the new version is implemented. During the time when two (2) LSOG versions are maintained, Frontier will support the current and previous versions until the previous version is retired.

Miscellaneous

During the time when two (2) LSOG versions are maintained, for both the order and preorder application to application interface, Frontier will ensure that both the current and previous versions of the interface may be used to order all offered products intended for ordering through the interface and that the versions remain compatible with all backend systems. However, functional enhancements, such as fielded completions, may only be made to the current version.

During the time when one (1) LSOG version is maintained, in the event significant errors are introduced into the code base during a release causing multiple TCs to have an inability to transact business with Frontier for more than one (1) day and a workaround or fix is not available



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in the short term, Frontier will determine the appropriate course of action. One possible option might be to back out the error causing code and implement the previous version of code.

Web GUI Version Control

The Web GUI will support the same LSOG version that is then available through application-to-application interfaces. When two (2) LSOG versions are maintained for application-to-application interfaces, the Web GUI will support only the newest LSOG version. There will be no impact on the TC pipeline orders. Orders transmitted in the previous version will be responded to in the new version.

Additionally, there are many changes that could be made to both the content and look and feel of the interface that would enhance utility and ease of use without impacting the application of business rules. Such changes would include adding pull-down menus to a field with multiple inputs. The actual inputs would be unchanged while the interactive capabilities of the environment would be enhanced. Frontier will provide 30 days advance notice of such changes. These changes will result in a new dot phase of the GUI (i.e., Phase III.1).

Only one phase of the Web GUI interface will be maintained unless the changes are so significant as to require extensive training on the part of the TC.

Electronic Bonding Interface

Upon request, Frontier will develop and deploy an Electronic Bonding Interface (EBI) that supports the maintenance/repair of resold local services and UNEs. The requesting TC and Frontier will enter into a Joint Implementation Agreement (JIA) describing the precise nature of the EBI implementation.

The requesting TC will pay Frontier for the cost of the development of any enhancements to the EBI in advance of industry standards. This money will be refunded to the TC if the enhancement becomes industry standard within 12 months of deployment by Frontier.

Versioning of the EBI interface will be part of the JIA. Enhancements will be managed through the Change Management Process and will be flash cut.



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System Availability Notification

When Frontier systems implementing or supporting the OSS interfaces are subject to an availability change, Frontier must provide appropriate notification to the TCs of the change. Availability changes are categorized as follows:

System Outage

A Frontier system outage has occurred that prevents connectivity or prevents transaction processing, rendering the TCs unable to connect to Frontier through one of the production interfaces (e.g., Web GUI, EDI), and extends more than 20 minutes.

System Slow Response

Frontier systems are responding to TCs in a manner substantially slower than typical transaction processing through one of the production interfaces (e.g., Web GUI, EDI), over a period extending more than 60 consecutive minutes.

System Availability Schedule Changes

A change in System Availability that is to occur that differs from the published System Availability Schedule. System Availability Schedule and Exceptions are published on our website at: <https://wholesale.frontier.com/notifications-and-news/system-availability-exceptions>.

While the notification process for System Availability closely resembles the Type 1 Change Management notification process, these changes have a separate notification process.



Process Descriptions for System Availability Changes

The following provide detailed descriptions of the steps followed in the notification of system availability changes.

System Outage

1. Reporting of a System Outage

Either Frontier or a TC reports a system outage incident to the LSR VFO Helpdesk email: Local.Carrier.Services.Support@ftr.com

2. Assign a trouble ticket number and work to resolve the problem

The LSR VFO Helpdesk logs a trouble ticket for the reported system outage incident. A trouble ticket number is assigned to the reported incident. Once the incident is logged, the LSR VFO Helpdesk works with Frontier and TC support groups to resolve the problem.

3. Send initial industry notification

Within 1 hour of the TC reporting the system outage to the LSR VFO Helpdesk, when the incident is related to connectivity, or within 2 hours when the incident is related to transaction processing, Frontier sends a System Outage Bulletin.

If the issue has been resolved, the bulletin is marked "Final" in the subject field. If the issue is not resolved, the bulletin is marked "Initial" in the subject field.

4. Send final industry notification

Until the system outage issue is resolved, Frontier will continue to distribute System Outage Bulletins (marked "Update") in time intervals.

Once the system outage issue is resolved, Frontier creates a final System Outage bulletin to notify TCs of a final resolution to the system outage incident. The bulletin is marked "Final" in the subject field.

Slow Response

1. Reporting of a Slow Response Incident

A Slow Response incident is reported by either Frontier or a TC through the LSR VFO Helpdesk email: Local.Carrier.Services.Support@ftr.com

2. Assign a trouble ticket number and work to resolve the problem

The Frontier support group representative logs a trouble ticket for the reported slow response incident. A trouble ticket number is assigned to the reported incident. Once the incident is logged, the helpdesk works with Frontier and TC support groups to resolve the problem.

3. Send initial industry notification

Within 2 hours of the TC reporting the slow response Frontier will send a Slow Response Bulletin to notify TCs of a slow response incident. If the issue has been resolved, the bulletin is marked



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“Final” in the subject field. If the issue is not resolved, the bulletin is marked “Initial” in the subject field.

4. **Send final industry notification**

Until the slow response issue is resolved, Frontier continues to distribute Slow Response Bulletins (marked “Update”) in time intervals.

Once the slow response issue is resolved, the Frontier support group representative creates a final Slow Response bulletin to notify TCs of a final resolution to the slow response incident. The bulletin is marked “Final” in the subject field.

System Availability Change

1. **Post System Availability Schedule**

Frontier publishes the System Availability Schedule for the OSS Applications at:
<https://wholesale.frontier.com/notifications-and-news/system-availability-exceptions>.

2. **Identification of System Availability Schedule Exception**

System Availability Schedule changes are communicated via customer bulletin notification. Subscription to this type of notification can be requested at:
<https://wholesale.frontier.com/notifications-and-news/subscribe-to-wholesale-notifications>.



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Change Log

Date	Page #	Change
03/05/2020	23	Update email address to report system issues
06/09/2021	All	Update embedded links
08/15/2022	All	General adjustments to process, Add contact email address

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