Lumen[®] VoIP Enhanced Local and Local Inbound Services

Porting and ordering guide | March 2022



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Setting up a portal login account

After your VoIP account has been set up for our wholesale Enhanced Local Service (ELS) and/or our Local Inbound (LI) voice products and has successfully completed testing, your Lumen account/sales team will request port process training and login access from our Portal Support team for your designated administrator and your order-entry local number portability (LNP) agents who need to submit port-in orders, manage and edit orders, or activate orders in Control Center (our self-service portal) on SPID 8824. Supported browsers are Google Chrome and Firefox—other browsers may not display information correctly.

Relationship to master service agreement

The provision of ELS and/or LI Services to Customer by Lumen is governed by the terms and conditions of the master service agreement between your organization and Lumen, and nothing in this guide alters or supersedes the obligations of either party set forth in the agreement, nor does anything here create new contractual obligations between Lumen and you.

Introduction and porting overview

This guide shows how to perform a telephone number (TN) portability check, and an up-front customer service record (CSR) request for a TN prior to submitting a port-in order. We also review how to enter, view, edit, and cancel a telephone number port-in order, and how to manually trigger a port-in order on the day of port to activate the TN on your account if you don't want to wait for the automated activation time.

The ELS product differs from the LI product in that it supports both inbound and outbound traffic for 2way calling and has all the features that most end-users want (Directory Listing, Directory Assistance, Caller ID, CNAM/LIDB, and Enhanced 911). Our LI product has in-bound 1-way traffic only, with no supported features, though it can be set up with an outbound trunk as well to support outbound calls. The TN and service address must be in the same rate center in order to establish a Directory Listing for ELS. The same rule is true for e911 service unless the customer account has been set up with the ability to provide e911 service via a third-party vendor independent of Lumen.

The porting and ordering of new TN processes are similar, and differences will be noted throughout this guide.

Porting process outline start-to-finish for ELS and LI TNs

This is a high-level overview of steps a Lumen customer LNP agent completes to port-in a TN from another carrier to their Lumen account using Control Center.

- 1. Customer LNP agent receives port request from end-user, letter of authorization (LOA), and copy of bill (COB).
- 2. **Customer login:** use this URL to sign in to Control Center (using your username and password): <u>https://www.lumen.com/login/</u>.
- 3. Customer LNP agent does **up-front TN portability check** to ensure that the TN is portable to the service address you're using, and to identify who the current carrier is at this path:

Orders > **ELS & LI Orders** > **Individual Order Request** > **Enhanced Local** link > [select account] > **Apply to Entire Session** > **Service Availability for Local Number Portability** radio button > select the customer service name (trunk group for routing voice traffic)> select the 911 option> enter the TN and service address > **Search**.

Note: Lumen LI port validation requires only the TN be checked and no service address.

4. Customer LNP agent does an up-front CSR request if the TN is porting internally from another Lumen customer or an e-bonded carrier we're automated with at this path:

Orders > **ELS & LI Orders** > **CSR Requests** > **Submit CSR** link > enter end-user name, TNs, and service address > click **Submit**.

Note: Internal ports reference TNs already on our Lumen network. E-bonded carriers refer to those we're directly linked to for porting automation (Qwest, BellSouth, SBC/ATT, Verizon, Ameritech, Frontier, Bandwidth, and CenturyLink). Validates from TN only—use the end-user name and service address from the COB or LOA. If CSR records are available, they will be returned with the donor carrier end-user information associated with that TN within a few minutes.

5. Customer LNP agent submits port-in order; **Note:** no porting is supported for weekends or holidays; receives 9-digit Parent Order Number (e.g., PON **248527206**):

Orders > ELS & LI Orders > Individual Order Request > Enhanced Local link > Port Telephone Numbers From Existing Carrier radio button > select the customer service name (trunk group for routing voice traffic) > select the 911 option > enter the TN > enter LOA sign date > Type of Service – Residential or Business > enter service address > Search. If portable, click the New Site link to proceed to the next screen.

- 6. Enter the authorized person's name who signed the LOA in the **Notes** field before submitting the order to avoid getting rejected for needing an LOA—it is a required field on the LSR we send to the donor carrier. (For bulk orders, use the **Comments** field.)
- 7. Customer LNP agent checks status on order to ensure it's not rejected, receives a FOC, and that the LNP status is in the desired *Pending Activation* at least a day or more prior to the estimated port date.

Orders > ELS & LI Orders > Search Orders and Services link > enter PON in the Customer Order ID field > click the View link to see order details. (LNP status will be *New* for internal ports, but the Customer Commit Date field will be populated with the FOC date)

8. Highly recommend customer LNP agents use the LNP Status Report option to check status daily on ALL orders using one spreadsheet to see all ports-in-progress submitted during the past 30 days. You can choose any 30-day query based upon order-entry dates, so if the report is too large, reduce the query date range.

Orders > ELS & LI Orders > Create LNP Status Report link> Product = LI or ELS> LNP Status = Any> Order Submit Date = to and from dates for the past 30 days

9. Customer LNP agent edits order if needing to push out the requested port date.

Orders > ELS & LI Orders > Search Orders and Services > enter PON in the Customer Order ID field > click Edit link to change/push out requested port date from 5-30 days (1-30 days for internal ports)

10. Customer LNP agent opens LNP ticket for order if rejected and assistance or advice is needed to proceed.

Orders > ELS & LI Orders > LNP Tickets > click the **New LNP Ticket** button> select category and type > provide info in fields.

11. Customer LNP agent cancels order if rejected and no corrective action can be done to current order. (i.e., add or remove TNs, or change service address)

Orders > ELS & LI Orders > Search Orders and Services > enter PON in the Customer Order ID field > click Cancel link to cancel port request

- 12. Once order is in a *Cancel Complete* status, a new replacement port-in order can be placed with the corrected information. SLA is typically within five minutes for an internal port or from an e-bonded carrier, but is next business morning for a manual-based carrier.
- 13. On the day of port, Lumen will automatically trigger the port order: at 9:00am MT for LI, at 10:00am MT for ELS.

Note: Activation times are staggered from 1 minute up to 29 minutes to prevent server delays in activation times. Please check LNP Status Report for exact activation time.

Note: If you have enabled ADoPT (Active Day of Port Triggering), you may have a different default auto-port time, and you can manually trigger ports in real-time on the day of port from 4 am MST up to your default auto-port time.

Here are the three phases of porting-in from a manual based carrier and actions taken on a port leading up to the trigger, and post-port activities.

- <u>Phase 1</u>: Order-entry by customer; Lumen determines who the donor carrier is and requests a CSR.
 - Donor carrier sends Lumen the CSR within two business days or less; if matching, we go to the next phase.
- <u>Phase 2</u>: Lumen sends the LSR requesting to port the TNs to the donor carrier.
 - Donor carrier sends Lumen a FOC date within two business days or less if there are no rejections.
- <u>Phase 3</u>: Is typically 3-business days, with concurrence typically received within 6-18 hours after FOC is issued. Order is then in a *Pending Activation* status until day of port.
 - On day of port, either the customer or Lumen triggers the port to activate the TNs.
 - Within 30 minutes, the order status changes to *Installed* and the end-user now has service with our customer on the Lumen network. You should see traffic flowing through your internal switch.
 - Behind the scenes, Lumen performs additional testing and initiates the billing within the next 24 hours which has no effect on the end-user's voice service. When billing assignment is finished, the status will change from *Installed* to *Completed*.

Note: If the TN is porting in from an e-bonded carrier (Qwest, BellSouth, SBC/ATT, Verizon) or internally from another Lumen customer, the total port time will typically be between 3–4 business days for a clean order. Porting in from one of the 200+ manual based carriers will typically take a total port time of 4–6 business days from start to finish for a clean order. There are a few manual-based carriers who have extended 3-day porting intervals for each of the three phases, so can take up to nine business days.

LNP Migration Project ports are for complex ports of 50–10,000 TNs or multiple accounts or BTNs, multiple voice products, multiple carriers, and multiple RCs and are processed outside the Portal manually with the donor carrier(s) by our LNP Projects team. Customer submits a special projects bulk order form via an LNP Ticket to our Projects team along with the LOA signed and dated by our customer, or the end-user signed LOA. These migration project ports take 15-20 business days to process for a clean order. Internal project ports of 1,000–10,000 TNs can be completed in 10 business days.

Chapter 1: Sign in to Control Center

Here's how to access Control Center to enter port orders, view LNP status, or to edit, cancel, or trigger cancel ports in progress.

Sign in: use this Control Center site for direct login using your current portal email and password: <u>https://www.lumen.com/login/</u>.

On the login page, sign in with your login credentials: username and password. You will be redirected to Control Center.



Chapter 2: Up-front portability check

In this section of the guide, we will review how to perform an up-front telephone number (TN) portability check.

To check portability for phone numbers, you can test them one at a time via the Portal. Here is the path to perform these tests.

- 1. First, sign in to Control Center, click Orders, ELS & LI Orders, Individual Order Request, and the Enhanced Local link. (or Local Inbound)
- 2. Select Service Availability for Local Number Portability radio button; click Next.
- 3. If you have more than one trunk group (Customer Service Name), you must select the correct option on the Customer Information screen. Select the desired CSN/trunk group if more than one option is available. (This is where we route the voice traffic for the TN.) Click **Next**.
- 4. On the Service Availability screen, select **E911 Static** as your option for providing 911 service to the TN if Lumen is providing it. Or select **Customer Provided 911** if you are providing this service through a third-party vendor.
- 5. The TN and service address must be in the same rate center to establish a directory listing.
- 6. Populate only the NPA, NXX, and Start Range fields with the TN you would like to check on.
- 7. Select the Type of Service Business or Residential.
- 8. Enter the service address and click **Search**. This should be the end-user's service address where the TN rings from the copy of bill (COB), must match what the donor carrier has on file, and is typically in the same rate center as the TN. For the LI product, no address is needed for portability validation purposes.
- 9. A summary screen shows the local number portability validation results in either the **Portable TN** section or the **Non-Portable TN** section.
- 10. In most scenarios, the TN is portable as an ELS product with Lumen providing the 911 service. If the results show the TN as not portable for ELS, try portability as an LI number instead if you have this product enabled and without entering the service address. If results show TN as not portable for either voice product, Lumen cannot port this number to our network SPID 8824. There are typically two reasons – either Lumen doesn't have a switch and trunks built out in that rate center, or the TN is not a valid number.

Chapter 3: Up-front CSR request

In this section, we will review how to perform an up-front customer service records request.

In Control Center, you can pull a basic up-front "customer service record" or CSR for some TNs depending on the donor carrier. This allows you to view what the donor carrier has on file for this enduser prior to submitting the port order. This feature helps eliminate name or service address mismatch rejections. This functionality is only available for internal ports where the TN is already on our Sonus network, and with the e-bonded carriers that Lumen is networked directly with. These carriers are Qwest, Bell South, SBC/ATT, Verizon, Ameritech, Frontier, Bandwidth, and CenturyLink/Lumen. This functionality is not available for any of the other 200+ manual-based carriers we port from.

With Lumen networks included in this carrier group, we process 65% of all ports in the United States. Internal ports are when a TN is ported from one Lumen/Level 3 customer Local Service Provider (LSP) to another, all on the same Lumen Sonus (aka NASS or Vector) network. We will next demonstrate how to conduct an up-front CSR request. This is only a basic service image reflecting the end-user name and service address needed for validating a port order, and will not display features, trunks, or circuit information as a detailed carrier CSR might provide.

- 1. Sign in to Control Center.
- 2. Click Orders, click ELS & LI Orders, then click CSR Requests.
- 3. Click the Submit CSR link.
- 4. Fill out the end-user information completely from the copy of bill as you would on an order; click Submit.
- 5. Other than with internal ports, the summary screen first displayed is not the CSR—it is only a summary of the end-user data you just entered. The actual CSR request is pending and will take a few minutes, due to real-time validation sent to the donor carrier via automation. Click the **Check Results** button at the bottom frequently until the CSR from the current carrier is displayed.
- 6. Depending on the donor e-bonded carrier, all TNs associated with this end-user and BTN with the current carrier may or may not be displayed if the CSR is available.
- 7. If the CSR has a feature that may potentially cause a problem with the port, it will be displayed on the CSR as Jeopardy Code warning. The most common warnings would be for an end-user name and/or address mismatch, or that this is an internal port. A more complex example would be for high-speed broadband internet service, such as DSL service. In these cases, an additional TN is used to support DSL and is also associated with the BTN and porting TN. If you receive this type of feature warning, convey instructions via the Notes field during actual orderentry to the donor carrier to retain this DSL feature until the day of port, or that you are retaining the DSL with the current carrier but splitting off and porting the voice TN only.
- 8. When the customer service record has been returned, check to make sure all the information is correct and matches what your end-user gave you on your port-in order and LOA. Remember that we must match what the donor carrier has on file to port the TN into your account here at Lumen. If your end-user has moved and you need to update the service address, you can do that post-port using our change order process if the number is an ELS voice product. For the LI product, there is no mechanism available in the Control Center to update the end-user name and address, though our voice API does support that.

Chapter 4: ELS & LI order-entry process

In this section, we will review how to submit an ELS TN port-in order using Control Center, with the process being the same for LI other than there are no supported features (DL, DA, Caller ID, CNAM, LIDB, e911). This would be for quantities of 1-49 TNs if porting in from another carrier, or 1-999 TNs if porting internally from another Lumen customer already on the same SPID 8824 network. For quantities of TNs greater than 50, please use our migrations project port process conducted directly with our LNP Projects team via an LNP Ticket submitted in the Portal as an LNP Project category for what are considered complex projects.

Once you have done the up-front work to ensure that the TN is portable to the desired service address, and if porting from an e-bonded carrier, have pulled an up-front CSR from the Portal, you should be ready to place an actual port-in order. A clean port-in order from an e-bonded donor carrier typically takes 3-4 business days to complete. If porting in from a manual-based donor carrier, these typically take 4-6 business days from start to finish. For end-user data, please refer to the Letter of Authorization and Copy of Bill, though the COB is never as accurate as a carrier CSR if available.

To enter an ELS TN port-in order via the Portal order-entry screens, follow these steps.

- 1. First, sign in to Control Center, click **Orders**, **ELS & LI Orders**, **Individual Order Request**, and the **Enhanced Local** link.
- 2. Under the **Choose an Action** heading, click on the **Port Telephone Numbers from Existing Carrier** radio button; click **Next**.
- 3. Read the general information screen to see what features could possibly cause porting rejects; click Next.
- 4. On the Customer Information screen under the **Service Package** and **Customer Service Name** headings, select the following options:
 - Under Service Package, select Usage, Flat Rate or whatever billing option your account is set up for. If your account is set up with one billing model, this screen will not display and will default to the correct option.
 - Under **Customer Service Name** (CSN), select the trunk group option that you need typically geographically close to the TN. This is critical because it tells us what trunk groups and IP addresses to route voice traffic to; click **Next**.
- 5. Select the correct e911 option from the list for your account. **E911 Static** means that Lumen is providing the enhanced 911 service, and **E911 Customer Provided** means that you have a special legal liability waiver form signed with Lumen and are providing 911 service to this TN via a third-party vendor. The basic LI voice product does not support this feature.
- 6. The TN and service address must be in the same rate center to establish a directory listing for an ELS port. The same rule is true for e911 service unless the customer account has been set up with the ability to provide e911 service via a third-party vendor.
- 7. Enter the porting TN in the NPA/NXX and Start Range fields and click the Add button if you need additional TNs listed under this single BTN. You can enter up to 49 TNs for this single end-user, but all TNs must be in the same rate center and for the same service address. Separate port-in orders must be submitted for each BTN, RC, or service address if different. Or if needing to all port on the same date, and LNP ticket can be opened, and a project port can be submitted that does support complex ports.

- 8. Under **Letter of Authorization**, the LOA Date is the date that the LOA was signed by the enduser to authorize the porting of their numbers. This date should be within 30-60 days of when you submit the port order; this is not the desired port date.
- 9. Select your Type of Service Business or Residential.
- 10. Enter the service address, including any secondary address information such as a suite number, or building, floor and room number needed by emergency responders; click **Search**.
- 11. On the Service Availability Results screen, **Portable TN** section, check to ensure you have selected **Yes** to keep the directory listing for ELS if the current listing is correct. If the current listing is not correct, select **No** to wipe out the current listing, then once the TN ports in, for an ELS number you would submit a change order in Control Center using a special bulk order form to update the end-user name and address for directory listing. For LI this is not an option as this DL feature is not supported.
- 12. In the **Address List** section at the bottom of this screen, check the service address for errors. If the address is correct, click the blue **New Site** link in the **Customer Name** column to advance to the next page.
- 13. On the Subscriber Name screen, enter the business end-user's name in the **Company Name** field. If this is a residential end-user, enter their first and last name instead; click **Next**.
- 14. On the Additional Information screen, enter the 10-digit billing telephone number. This should be the primary account number on the CSR and COB, but may not always be the porting TN. If not known, use the lead number of the TNs you're porting as a starting point to get the port order submitted.
- 15. We always request the soonest possible port date, so the customer request date (CRD) will be auto-populated for you. This CRD is based on the donor carrier's posted porting intervals with the FCC, so it cannot be changed to request a sooner port date. However, it can be pushed out up to 30 days at this time if the CRD is too soon and you need more time to schedule equipment shipping or airline tickets for your technician.

Note: You cannot request a port date for a weekend or holiday.

- 16. Enter your name in the **Customer's Internal Order ID** field, or any special internal tracking or ticket number if that is preferred to help you quickly find your port orders; click **Next**.
- 17. In the **Notes** field on the Customer Order Summary screen, you must enter the authorized person's name that is listed with the donor carrier as the person who is authorized to request a port of their TNs to another carrier. If you don't do this, your order will be rejected for needing an LOA.
- 18. You can also enter additional helpful information in the **Notes** field, such as a PIN (Personal ID number) if associated to this end-user's account. If porting the BTN, note that as well, and what the new BTN should be from the remaining TNs left on the account, if any.
- 19. Review order summary. If you need to make edits, click the **Previous** button at the bottom of the screen to go back to the previous screen and correct the data. Once everything is correct, click the **Submit Order** button at the bottom of the screen.
- 20. On the Customer Order Summary screen update, you will receive a new 9-digit customer order ID displayed in bright blue bold text. (e.g., 248527206) This is the parent order number (PON)

that you can use to easily search for LNP status updates during the porting progress through order activation on day of port.

Troubleshooting: If at any point you receive an error during your order-entry process, try closing your browser and open a new session. If you cannot advance with submitting a port-in order, please open a portal support ticket (**Support > Portal Support Tickets**) to give instruction on the 4-digit error code and message you received. You can provide a screen capture as an attachment if you have one available. You can also click the **Chat with an Expert** button on the Portal Support Tickets screen if preferred.

Bulk order-entry option: An alternative to submitting port orders individually is to utilize the bulk orderentry form that can be downloaded from Control Center's **Bulk Order** section, **New Requests** folder, **LNP Requests** link. With this form, you can submit multiple port-in orders on one spreadsheet order form, though this form is more complex than the single order-entry method. To use this form, you will need to complete and then export the spreadsheet file as an XML file to your desktop, then submit this XML file via the **Bulk Ordering** tab in Control Center. You will receive a 10-digit bulk order ID and if successful, you will be able to see the individual order numbers on your LNP status report. If your submittal fails, correct the LNP bulk order form and resubmit.

Path: Orders > ELS & LI Orders > Bulk Order Request > New LNP Request > Next > browse to your desktop to find and attach the new XML file > Submit.

Wireless (cell) TN order-entry: We can port wireless/ cell TNs in two business days if the port order is submitted using the LNP bulk order form listed above. Additional required fields are the combination fields of the PIN# and the password. If submitted like a standard landline port-in order, the timing will be longer as the order will initially be rejected.

Chapter 5: How to view, edit, and cancel ports in progress

In this section, we will review how to view, edit, and cancel an ELS or LI TN port-in order.

Once you have successfully submitted a port-in order and received a 9-digit customer order ID or parent order number (PON), please check on this order daily to ensure that you receive a firm order commit (FOC) date and concurrence from the donor carrier so that your order is in a desired *Pending Activation* status a few days prior to the requested port date.

If you receive any rejections during the process, your order will be stopped until you correct the rejection. If you do not know how to correct the rejection, please contact the LNP Help Desk team to request assistance by opening a ticket in Control Center under **Orders > ELS & LI Orders > LNP Tickets**, or by phone at 866-697-5881, option 1.

Viewing individual ELS or LI TN port orders in progress

- 1. First, sign in to Control Center, then select **Orders**, **ELS & LI Orders**, **Search Orders** and then **Search Orders and Services**.
- 2. Under the **Search Customer Orders and Services** heading, enter the parent order number (PON) in the **Customer Order ID** field; click **Search**.
- 3. In the high-level search results overview, you will see action option links to view, edit, or cancel your order.
- 4. Click the View option to check on an individual order status.
- 5. To see if you've received a firm order commitment or FOC date from the donor carrier, check the **Customer Commit Date** field in the **Customer Information** section. If the field is blank; you have not received a FOC date yet. If it is populated, that means we have received a FOC date, but we still need concurrence from the donor carrier. This concurrence is issued and received 6–18 hours after the FOC is issued.
- 6. To check the order LNP Status, scroll down to the **Telephone Number Porting Information** section. The desired status of *Pending Activation* occurs when the order has received both a FOC and concurrence and is typically within the three days prior to the customer requested port date, or CRD.
- 7. If the LNP Status has a *Rejected* status, scroll down to the **Porting Information** section to view what the rejections and fix-actions are. If you need assistance in resolving a rejection, please open an LNP Ticket under the **Orders** > **ELS & LI Orders** section of the navigation bar.

Viewing all your TN port orders in progress

This is our primary order management tool—an LNP status report spreadsheet option that will enable customers to view all their ELS and LI ports-in-progress in one spreadsheet and will show any orders in reject status and what the fix-action would be. We recommend that you run a search at least once a day.

1. First, sign in to Control Center, then select **Orders**, **ELS & LI Orders**, **Search Orders**, and click the **Create LNP Status Report** link.

- 2. To view all ELS and LI orders in the system for your company, select **any** from the Product options.
- 3. In the **LNP Status** field search criteria, again select the **any** option to show all orders with rejections, with FOC received, and those which are in a desired *Pending Activation* status.
- 4. For the **Order Submit** date fields, there is a 2-day minimum and a 30-day maximum search limit because of report file size limitations, so set your search time frame accordingly. To speed up the search process, narrow down the search dates when the port orders were submitted. If running this report daily, select yesterday and today's date as your order submit dates.
- 5. When the search has completed, a dialogue prompt box will appear asking if you want to open the spreadsheet LNP report or save it to your hard drive. We recommend that you save it to your PC and open from there.
- 6. Click the triangle icon on the top row and first number column to highlight/select everything and double-click between columns B & C to auto-expand all columns. Highlight row 1, and under the **View** heading, freeze the top row. As with any spreadsheet, you can sort the data in the columns, such as by LNP status.

Editing an ELS or LI TN port-in order

To edit or supplement (supp) your order information, such as pushing out the port CRD (customer request date), or correcting a rejection for "Subscriber Name," or "Billing TN," perform an individual search for the order and click the red **Edit** link. Click **Submit** when you have made your changes, including pushing out the requested port date if needed to meet the donor carrier's porting intervals when correcting a rejected order. There is no charge incurred to supp an order to push out the port date, but if needing to pull-in the port date, you would need to contact our LNP Help Desk to make this expedited port request on your behalf with the donor carrier, and there would be a charge incurred to do this whether successful or not. If you can provide the contact information from the donor carrier's port-out team agent who has agreed to expedite the port-out FOC from their end, then there would be no expedite fee charged.

Canceling an ELS or LI TN port-in order

If the rejection is for an incorrect service address, or for needing to add or remove TNs from the port order, you must cancel the order with the **Cancel** link. Once the order LNP status is displaying *Cancel Complete*, you may submit a new corrected order and you will receive a new 9-digit parent order number (PON).

The timing to receive the Cancel Complete notification back from the donor carrier depends on their response time SLA (service level agreement). If the donor carrier is one of the e-bonded carriers we're directly linked to for full automation, we should receive the cancellation acknowledgement back within five minutes or so. If the donor carrier is a manual-based carrier, the response time can be 24 hours, but is usually received by the next business morning. There is a charge incurred from the donor carrier per TN when cancelling an order—please refer to your Lumen contract or contact your account team for fees. The standard cancellation fee is reasonable, but an expedited cancellation of a TN port within 48 hours of the FOC date incurs a larger fee from the donor carrier which we pass through to you.

Activating an ELS or LI TN

If your LNP status is displaying *Pending Activation* on the day of the port, an LI TN will auto-port at 9:00 am (MT), and an ELS TN will auto-port at 10:00 am (MT) by system default unless you have the Active Day of Port Triggering (ADoPT) functionality in place.

If ADoPT is enabled, you can click the **Port Triggering** tab on the port date any time after 4:00 am (MT), search for the order (PON), and manually trigger the activation for all TNs on that order up to your default auto-port time. ADoPT enables you to change your Lumen default auto-port time for all your orders to a time that works better for your business model (up to 9:00 pm MT) and allows real-time activation of port orders on the day of port.

To sign up for the free ADoPT functionality, please contact our Portal Support team or LNP Help Desk team and they will have this functionality set this up for you. It's changed at an account and product level, so the default auto-port time change affects all ports submitted under that account and product.

Chapter 6: Manually activating a port-in TN on the day of port

In this section, we will review how to manually activate a Port-in TN on the day of port in real-time utilizing a free Lumen application called ADoPT (Active Day of Port Triggering). To sign up for ADoPT functionality, please contact our Portal Support team or LNP Help Desk team and they will get this set up for you.

Once your account profile has been updated to enable manual activations, this is how you trigger your port-in orders in the Control Center/ Portal on the day of port. The possible activation window with Lumen is from 4:00 am up to 9:00 pm MT, though you may wish to have your default auto-port time to be earlier than the 9:00 pm MT maximum allowed.

- 1. Sign in to Control Center.
- 2. Click Orders, click ELS & LI Orders, then click Port Triggering.
- 3. Enter the TN or Order ID (PON), then click Search.
- 4. Review the order; if everything is correct and the LNP Status is in a *Pending Activation* status and it is the day of port, click **Submit** (at the bottom of the screen) to trigger your port.
- 5. Please note that if you attempt to trigger the order prior to or after the day of port, you will receive a message stating that the order cannot be ported at this time.
- 6. Once the TN has ported successfully, the LNP status will change from *Pending Activation* to *Installed* within a few minutes after activation. Your end-user will now have service on the Lumen network through your systems if you have programmed that number to complete the call path. You should start seeing traffic for this TN.
- 7. The average time for activation is under five minutes, but due to heavy network traffic, it can take up to 30 minutes, or in some unusual circumstances even longer. If your LNP status has not changed to *Installed* after 40 minutes, call our LNP Help Desk (866-697-5881, option 1, then 1) to see if there are any incomplete tasks or if there are any other issues preventing a speedy activation.
- 8. Within 24–48 hours of activation, Lumen associates the billing for this TN to your account and the LNP status will change once again—this time to *Complete* and your port-in TN order is finished.

Chapter 7: Opening a ticket

In this section, we will review how to create, view, and manage tickets in Control Center to the correct support team for whatever issue or status your TN or order may be in. Our support teams make it a top priority to address customer-initiated tickets, so please try this process for the fastest possible resolution and status on your issue first.

Order-entry ticket for an ELS or LI TN (Portal Support Ticketing)

This ticket would be for assistance needed in setting up agent login permissions, report issues, or order-entry rejections.

- 1. Sign in to Control Center.
- 2. Click Support, then click Portal Support Ticketing.
- 3. Click New Portal Ticket.
- 4. From the Category list, select Orders ELS & LI; from the Request Type list, select Order Entry Errors/ Issues.
- 5. In the **Issue Description** field, list the error message, TNs, service address, LI or ELS product, and any other pertinent notes that would help our Portal Support team troubleshoot the issue for you.
- 6. Attach any supporting files if needed.
- 7. Enter your customer internal ID (e.g., order-entry error).
- 8. Select your customer number (account BusOrg ID); your associated billing account number will auto-populate.
- 9. Add a secondary contact and phone and email if desired to get ticket updates too.
- 10. Submit ticket. Control Center shows the ticket ID (e.g., # 22745259).

Ticket status is viewed by the customer who would check in Control Center (**Support > Portal Support Tickets**) where tickets will be displayed for 30 days. Also, when a ticket issue is updated, resolved, or closed by our team, an automated update email is sent to the customer agent who opened the ticket.

Port in progress ticket for an ELS or LI TN (LNP Ticketing)

This ticket would be for assistance needed with ports-in-progress rejections or status.

- 1. Sign in to Control Center.
- 2. Click Orders, click ELS & LI Orders, then click LNP Tickets.
- 3. Click New LNP Ticket.
- 4. Select the appropriate category. (e.g., Order Action/ Status Request).
- 5. Select your customer number (account BusOrg ID); your associated billing account number will be automatically associated do not select anything.

- 6. Choose the appropriate request type (e.g., CSR/ LSR SLA Exceeded).
- 7. Enter any helpful additional information.
- 8. Enter the associated 9-digit PON (e.g., 248527206).
- 9. Enter your customer internal ID (e.g., order status).
- 10. Attach any supporting files if needed.
- 11. Add a secondary contact and phone and email if desired to get ticket updates too.
- 12. Submit ticket. Control Center provides the ticket ID (e.g., 22745259).

Ticket status is viewed by the customer who would check in Control Center under **Orders > ELS & LI Orders > LNP Tickets** where tickets will be displayed for 30 days. Also, when a ticket issue is updated, resolved, or closed by our LNP team, an automated update email is sent to the customer agent who opened the ticket.

Post port ticket for an ELS or LI TN (Technical Service Center / Repair)

- 1. Sign in to Control Center.
- 2. Click **Support**, then click **Ticketing**.
- 3. Click the **Create New Ticket** button, then select **Repair Ticket** or **Activation Ticket** from the list.
- 4. Select or search for the service with an issue: type in ELS or LI.
- 5. Click the associated service ID link for your voice product (i.e., BBML9677).
- 6. Type of call issue: Call origination/termination.
- 7. **Issue:** call Looping/routing.
- 8. Problem for specific TNs?: Yes.
- 9. Originating TN 720-888-xxxx and Terminating TN 303-582-xxxx.
- 10. When did the problem start?: Today's date and Time Zone.
- 11. Is problem still occurring?: Yes.
- 12. What is the impact to your business?: TN is out of service.
- 13. Describe issue in detail in the **Notes** section (e.g., TN is routing to old CSN/trunk group xxx, and should be routing traffic to new CSN/trunk group xxx).
- 14. Complete the Trouble Information, Test Authorization, and Contact sections.
- 15. Click Submit.

Ticket status is viewed by the customer who would check in Control Center under **Support** > **Ticketing** where you opened the ticket – all current tickets are automatically displayed. Also, when a ticket issue is updated, resolved, or closed by our TSC/Repair team, an automated update email is sent to the customer agent who opened the ticket.

Billing ticket for an ELS or LI TN (Billing Requests)

- 1. Sign in to Control Center.
- 2. Click **Billing**, then click **Billing Requests**.
- 3. Click Create New Request.
- 4. Select the desired option: Invoices, Past Invoices, Payment History, Billing Requests, Bill Analyst, or Account Settings.

Tickets and status for any tickets opened within the past 30 days may be obtained automatically by customers in Control Center under **Billing > Billing Requests** option where you opened the ticket. Also, when a ticket issue is updated, resolved, or closed by our Billing team, an automated update email is sent to the customer agent who opened the ticket.

Chapter 8: Submitting an LOA, CSR, or COB for a rejected port order

In this section, we will review how to manually submit a letter of authorization (LOA), customer service record (CSR), or copy of bill (COB) if needed to correct a rejected port-in order. If including the authorized person's name who signed the LOA in the **Notes** field (or **Comments** field for bulk form) during initial order-entry, you typically would not need to submit the LOA unless our LNP team requests it to help dispute a rejected order, or if an end-user/ subscriber files a slamming complaint post-port.

This ticket would be for assistance needed with ports-in-progress LOA rejections.

- 1. Sign in to Control Center.
- 2. Click Orders, click ELS & LI Orders, then click LNP Tickets.
- 3. Click the New LNP Ticket button.
- 4. Select Category: Jeopardy Resolution.
- 5. Select your customer number (account BusOrg ID); your associated billing account number will be automatically associated—do not select anything.
- 6. Choose Request type: Dispute a Jeopardy.
- 7. Enter any helpful additional information.
- 8. Enter the associated 9-digit PON (e.g., 248527206).
- 9. Enter your customer internal ID (e.g., LOA).
- 10. Attach the LOA, CSR, or COB to dispute the port rejection.
- 11. Add a secondary contact and phone and email if desired to get ticket updates too.
- 12. Submit ticket. (Your ticket ID (e.g., # 22745259) will be displayed).

Ticket status is viewed by the customer who would check in Control Center under **Orders > ELS & LI Orders > LNP Tickets** where tickets will be displayed for 30 days. Also, when a ticket issue is updated, resolved, or closed by our LNP team, an automated update email is sent to the customer agent who opened the ticket.

Chapter 9: Enhanced 911 as related to porting for ELS product

In this section, we will review how Enhanced 911 works with ELS TN porting and our 911 team contact information for customers to use. The Enhanced 911 feature is not supported with our Local Inbound (LI) product.

Order Entry Process for ELS TN with 911 Static (Lumen provided) – validation occurs to ensure that the service address is in a rate center that has both a switch and PSAP (public safety answering point) agreement needed to support static 911 service, and that the TN is also in the same rate center. at this time, civic validation (postal, municipalities, GIS, etc.) is done as well. No MSAG (Master Street Address Guide) database validation is done at this time.

Day of TN Install (New or Port in)—Once the TN is provisioned and active on the Lumen/Level 3 network, 911 activities are triggered.

911 Routing—Once this is triggered the routing will go into effect the following day.

911 ALI—Once this is triggered, the ALI (automatic location identifier) record will be sent out the door to the national ALI database on business days only. The addresses are MSAG validated at this time.

- The ALI database usually is updated within 48-72 hours on an error free record. However, it can take up to seven calendar days for the Lumen system to see the update in our system.
- If the ALI record comes back in Error, the ALI team will work to correct it. Sometimes, that will require them to reach out to the customer for help.
- Customers will NOT have E911 (Enhanced 911) until their ALI record is complete in the ALI database.

911 overview for resellers

- 1. Definitions
 - NRF = No Record Found end-user has called 911 from their VoIP line, and no address information was presented
 - Misroute = 911 call misrouted to the incorrect agency
 - ALI Discrepancy = presented 911 end-user info was incorrect
 - CP911 = 911 information is presented through a shell record, and end-user address is maintained by a third party. 911 calls can be made from locations other than the maintained service address
 - PSAP = Public Safety Answering Point
 - PS ALI = 911 vendor who "owns" the 911 record in ALI and is the only authorized editor of ALI record
 - pFlag = Lock of 911 ALI record that must be removed by PS ALI vendor before Lumen can make updates to record

2. Industry standards, and SLAs

• Updating of 911 record to show Lumen as owner for porting numbers can take from 2-10 days depending upon the losing carrier and 911 LEC

- 911 route provisioning on new and porting numbers takes 30 minutes to 2 hours for your 911 testing
- Resolving errors from the Lumen record updates normally process in 1 day
- Secondary location information, such as building or office #, should be included on 911 ALI record
 - Should be submitted by customer on order during initial order entry or install process in Control Center

3. CP911 reseller requirements

- Lumen/Level 3 is the carrier of record when PSAPs report NRFs, etc. Lumen is considered the service provider or owner of the TN record. We are held accountable for the ALI presented at the PSAP; however, for CP911 numbers, it is required to involve the reseller who is responsible for the 911 record.
- We will field the requests, forward them to the reseller, and they will work with the PSAP/LEC for resolution and correspondence.
- A dedicated 911 contact or e-mail DL is needed to be provided by reseller to field NRF requests.

4. PS ALI reseller requirements

- Lumen must control the ALI record per MSA unless otherwise authorized by Lumen Product and Regulatory.
- If PS ALI is used for numbers, then the direct customer of the 911 vendor MUST request them to remove the pFLAG prior to the porting of the numbers to Lumen.
- Porting of the number does not automatically remove the pFLAG
- 5. Support
 - For any 911 call problems first contact is to Technical Support Center at 877-453-8353 option 3, option 2
 - They will involve 911 ALI Provisioning group or other 911 support groups if needed.

911 overview for Carrier Cloud Voice

911 functionality

Subject to customer's performance of its obligations hereunder, a 911 call will be routed from the customer IP gateway to the VPC for routing to the selective router associated with the registered location. The LEC or next-generation 911 provider owns and operates the selective router and the facilities which deliver the 911 call to the PSAP. Lumen does not control or have responsibility for routing or facilities provided by the LEC, next-generation 911 providers or other third parties.

911 service limitations

911 service is subject to the limitations stated herein. 911 services will not function, or will not function properly: (i) if the subscriber's current location is not registered with the VPC in the VPC database; (ii) if the subscriber's registered location is not within an area served by a covered PSAP; (iii) during any disruption of power at the subscriber's location; (iv) during any disruption of Internet connectivity to the subscriber's location; (v) during any period where service to a subscriber has been cancelled or suspended for any reason (including suspensions or cancellations for failure to pay or other default); (vi) if incorrect or invalid subscriber address information is provided, or if such information is not updated in the event of a change in primary location; or (vii) if equipment provided to or used by the subscriber or customer in connection with the service fails to function or is improperly (or is not) installed or configured; and (viii) 911 services will not function until correct and valid address information has been input into the appropriate database(s), which occurs shortly after activation of the DID/DOD (including following port-ins under section 8(A) below). Customer agrees to notify its subscribers of the foregoing restrictions set forth in section (i) – (vii) herein (and the restriction in section (viii) if customer makes DID/DODs available to subscribers prior to such address validation).

If 911 service limitations or requirements are different than those stated herein, are in Lumen's reasonable opinion, necessary or advisable based on Lumen's interpretation of currently evolving 911 service laws, rules, regulations or industry standards, customer agrees to negotiate modifications to this section 7 as requested by Lumen, and if agreement respecting the same cannot be reached, Lumen may terminate the service without liability.

911 functionality

Call success/ failure responsibilities: when a 911 call is routed to the 911 selective router and the 911 selective router has accepted the 911 call for delivery to the covered PSAP, the IP network will notify the customer IP gateway via call signaling that the 911 call has been so delivered. In the event that (i) the VPC receives a 911 call where subscriber's location is not registered within the VPC database, (ii) the subscriber's location is not within an area served by a covered PSAP, or (iii) the IP network is unable to complete the 911 call to the 911 selective router because the 911 call has timed out or has received a failure code response from the selective router, then the 911 call will be handled in accordance with industry standard and accepted backup procedures (which may include re-routing the call to an emergency call response center). The parties will work cooperatively and expeditiously to isolate, manage, resolve and restore 911-service-related problems including, but not limited to, any 911 service failure, disruption or outage.

Chapter 10: Submitting a change order for an ELS TN

In this section, we will review how to submit a change order for any ELS TN already in service under your account on our Lumen/Level 3 network. This can be done to update the end-user's name if needed, the service address if they've moved within the same rate center, the directory listing/ directory assistance, CNAM/ LIDB/ caller ID, and the 911 service.

If an end-user has moved out of the original rate center, our customer must provide the e911 service, and only the CNAM, LIDB, and caller ID features can be supported. Industry standards dictate that DL, DA, and 911 features can only be supported if the TN and service address are in the same rate center.

This applies only to the ELS product since no features are supported for our LI product; no changes can be made on any LI TN on our network.

CNAM / caller ID change

If needing to change the caller ID info **post-port**, please fill out a change request bulk order form to make this request. To ensure you have the current version, always download a new form from the **Bulk Order** section of Control Center each time you need to do this.

- 1. For CNAM/ Caller ID changes after a port has successfully occurred, in Control Center choose the Orders > ELS and LI Orders > Bulk Order Request > Submit Bulk Load.
- Choose the appropriate Excel version Bulk Load Templates folder, then the Change Requests folder and Change_Requests link to download the spreadsheet template (NEW_CHANGE_REQUEST.xlsm) to your computer.
- 3. Fill in the first gray General section required fields, including the TN.
- 4. Update the two yellow **CNAM** fields with the new caller ID info.
- 5. In the second gray **General** section, choose the next business day as your customer requested date.
- 6. Save to your desktop.
- Click the blue Export button on the spreadsheet template which creates an XML file; save to your desktop.
 (Note: Set your Excel internet securities to "Low" or you won't be able to export the file as the needed XML file.)
- 8. Return to Control Center, then choose the **Submit Bulk Load File** heading option, click the **Change Requests** radio button, then the **Submit** button.
- 9. Click the **Browse** button to locate your new XML file on your desktop and click the **Submit** button to finish.
- 10. You'll receive a 10-digit bulk order ID number. Use this number to do a search under the **Search Bulk Requests** tab, or you can wait to receive the automated email notification of *Success, Partial*, or *Failure*.



- 11. Your search results will show the bulk order submittal as either *Success*, *Partial*, or *Failure*. If a successful change order has been submitted, the CNAM/ caller ID update should be completed in 2–3 business days.
- 12. If status is *Failed*, you'll need to click on the **Error** link and see why your order failed, correct the Excel form, export as XML and resubmit again. You'll receive a new bulk order ID.

If needing field entry clarification, you can click the **Documentation** tab at the bottom of the form.

If you need help filling out the xhange form, please contact our Portal Support at 877-853-8353, option 2 or open a ticket in Control Center to our Portal Support team for a quick response.

Directory listing change

If needing a directory listing change of some type **post-port**, please fill out a Directory Listing Change Request bulk load form to make this request using Control Center. Only one DL per TN per service address is supported by Lumen. Always download a new template each time you need to do this to ensure you have the current version. Because directory listings for LI numbers are not supported, these instructions for changing an end-user's address or name will only apply to an ELS number.

The TN and service address must be in the same rate center to establish a directory listing. The same rule is true for e911 service unless the customer account has been set up with the ability to provide e911 service via a third-party vendor.

- 1. Sign in to Control Center.
- 2. Click Orders, click ELS and LI Orders, click Bulk Order Request, then click Submit Bulk Request.
- Choose the appropriate Excel 2003 or 2007 Bulk Load Templates folder > Change Requests folder > and <u>Change Requests</u> link to download the Excel spreadsheet template to your computer.
- 4. Every DL order needs to have all fields filled in, including first/ last name and service address.
- 5. For business directory listing, just put the entire company name in the Last Name field.
- 6. Save to your desktop.
- 7. Click the blue **Export** button on the spreadsheet template which creates an XML file; save to your desktop, or just do a **File** > **Save-As** to export as an XML file instead.

Note: You'll need to set your internet securities to "low" first to enable the automation macro programming to function.

- 8. Return to Control Center, choose the **Submit Bulk Load File** heading option, click the **Change Requests** radio button; click **Submit**.
- 9. Click the **Browse** button to locate your new XML file on your desktop, then click the **Submit** button to finish.

<u>ISSUE 1</u>: The change form is used for multiple change type requests, but the gray **General** fields on the form are always required to tell Lumen what TN is being changed (columns B-H), and what date is requested (column W should always be the next business day). If your team is using the change form primarily for updating the directory listing info for your end-user after a local move within the same RC, you would have to update anything related to that in the aqua **Change Directory Listing** section, and in the pink **Change Address** section.

To export as the required XML file, another option is to do a **File** > **Save-As** > **Other Formats** > **Type** = **XML Data** and save to your desktop. Doing it this way matches the new XML file to your change order spreadsheet form.

<u>ISSUE 2</u>: Regarding 911 updates to an end-user's address when a change order has been made for the address only, it's implemented right away but you wouldn't see the update until about five business days typically. A change request for floor or suite only (like an apartment change in the same building) would require a street address change as well currently, though this is a known issue and is on our IT development enhancement list.

If you need help filling out the change form, please contact our Portal Support team at 877-853-8353, option 2 or open a ticket in Control Center to our Portal Support team for a quick response. They will ask you to send them the form so they can troubleshoot and assist you.

Chapter 11: Submitting a disconnect order for an ELS TN

In this section, we will review how to submit a disconnect order for any ELS TN already in service under your account on your Lumen account.

Here's the process a customer would use for permanently disconnecting numbers from their account, however it's different for the LI and ELS voice products. This process hard-disconnects the TNs from the customer's account and will no longer be available to our customer or their end-user. This process is not to be used by our customers for collections purposes—that process should include a soft-disconnect and automated voicemail installed on the customer's switch stating that the TN is out of service to inbound callers.

Individual ELS TN disconnects

- 1. The customer would use Control Center to search for a specific assigned and active ELS TN or range.
- 2. Sign in to Control Center.
- 3. Click Orders, click ELS and LI Orders, click Search Orders, then click Search Orders and Services.
- 4. Under Search Criteria, enter your 8-digit parent order number in the Customer Order ID field.
- 5. When displayed in Control Center, click the red **Disconnect** link to view and submit the disconnect request.
- 6. TN will be removed from customer's TN utilization inventory on the next business day, and the next cycle of billing to the customer.

Unassigned inventory and assigned ELS TNs using bulk disconnects

- 1. The customer would use Control Center to request bulk disconnects for both assigned and inventory TNs. You should ensure that you don't have active end-users assigned to any of the TNs you're requesting to be disconnected.
- 2. Sign in to Control Center.
- 3. Click Orders, click Disconnect Requests, then click Create Disconnect Request.
- 4. Under **Select Account**, select your Lumen account number that the TNs are listed under; click **Next**.
- 5. Under **Select Billing Account Number**, choose your Lumen billing account number that the TNs are listed under; click **Next**.
- 6. Under Select Disconnect Request Type, choose Telephone Numbers, then click Next.
- 7. Under **Disconnect Request Information**, enter the bill stop date (mm/dd/yy) must be 30 days out and is disconnect date; click **Next**.
- 8. Enter the Disconnect Reason (e.g., Billing Issues); click Next.

- 9. Under **Telephone Number Information**, select radio button **Yes** or **No** if porting out the TNs; click **Next**.
- 10. Enter single TN to disconnect, or if multiples, download the disconnect_remove_tns_template.xls and save to desktop. (see attached)
- 11. Fill out the TNs and the associated service address for each on the disconnect request template.
- 12. Click the **Browse** button and locate the completed disconnect request template on your desktop; click **Next**.
- 13. Ensure that the Primary Contact Name, Phone, and Email fields are complete.
- 14. Enter a customer identifier, such as the submitting agent's name, plus any additional pertinent comments; click **Next**.
- 15. Review the disconnect request summary; click **Submit Request** button.
- 16. TNs will be removed from customer's TN utilization inventory on the next 30-day cycle of billing to the customer.

Chapter 12: Submitting a disconnect order for an LI TN

In this section, we will review how to submit a disconnect order for any LI TN already in service under your account on your Lumen account.

Here's the process a customer would use for permanently disconnecting numbers from their account. This process hard-disconnects the TNs from the customer's account and will no longer be available to our customer or their end-user. This process is not to be used by our customers for collections purposes—that process should include a soft-disconnect and automated voicemail installed on the customer's switch stating that the TN is out of service to inbound callers. This soft-disconnect process will enable our customer to restore service to their end-user upon receiving payment by the end-user to bring their account current without involving Lumen.

OPTION ONE: The easiest way is to send a spreadsheet of LI TNs to be disconnected to our Light'em Up (LEU) team at <u>LEUorders@lumen.com</u> and request that these unused LI TNs be disconnected from your account.

OPTION TWO: Another method is by following the path below:

Assigned and Inventory LI TNs (inventory TNs show as assigned in Lumen systems)

- 1. The customer would use Control Center to submit a disconnect request for single LI TNs or multiple LI TNs.
- 2. Sign in to Control Center.
- 3. Click Orders, click Disconnect Requests, then click Create Disconnect Request.
- 4. Under **Select Account**, select your Lumen account number that the TNs are listed under; click **Next**.
- 5. Under **Select Billing Account Number**, choose your Lumen billing account number that the TNs are listed under; click **Next**.
- 6. Under Select Disconnect Request Type, choose the Telephone Numbers option; click Next.
- 7. Under **Disconnect Request Information**, enter the bill stop date (mm/dd/yy) must be 30 days out and is disconnect date; click **Next**.
- 8. Enter the disconnect reason (i.e., Billing Issues); click Next.
- 9. Under Telephone Number Information, select radio button Yes or No if porting out the TNs; click Next.
- 10. Enter single TN to disconnect, or if multiples, download the disconnect_remove_tns_template.xls and save to desktop. (see attached)
- 11. Fill out the TNs and the associated service address for each on the disconnect request template.
- 12. Click the **Browse** button and locate the completed Disconnect Request template on your desktop; click **Next**.
- 13. Ensure that the Primary Contact Name, Phone, and Email fields are complete.
- 14. Enter a customer identifier, such as the submitting agent's name, plus any additional pertinent comments; click **Next**.

- 15. Review the disconnect request summary; click **Submit Request** button.
- 16. TNs will be removed from customer's TN utilization inventory on the next 30-day cycle of billing to the customer.

Chapter 13: Checking your port-out report

In this section, we will review how to check your account to see if any TNs have ported away, whether those TNs ported to another carrier or ported internally to another LSP or have been disconnected by your team.

We also have an automated email notification available if desired through customer management as part of your Portal Support team, but this report only includes TNs than have ported away to another carrier and does not include any internal ports.

Here are the steps for creating a port-out report via the portal, plus an additional spreadsheet export option. This portal port-out report includes numbers for both external and internal port-outs, and shows numbers that have been disconnected internally by your team.

The reporting window in the portal has been narrowed from 48 hours (as is the case with the daily email report) to about six hours, so these reports are now near real-time.

- 1. Sign in to Control Center.
- 2. Click Orders, click ELS and LI Orders, click Search Orders, then click Search Orders and Services.
- 3. Click the **+ button** next to the **Advanced Search Options** heading at the bottom of the **Search** box.
- 4. Choose the **Completed** option from the **Order Status** list.
- 5. Choose the **New** option from the **Order Type** list.
- 6. Choose the Disconnect option from the Order Action list.
- 7. Choose the **Service Delivery Date** range. (These are the TN port-out/ disconnect dates; max search for 30 days)
- 8. Click **Search** and a search results summary page will be displayed if there are any port-outs. If there are too many TNs (500+), you'll receive an error and will need to reduce the date range. If there have been a large quantity of TNs that have ported away from your account and you cannot pull the port-out/ disconnect report, please open a ticket in Control Center to our Portal team and request a port-out/ disconnect report for the desired time period.
- 9. Click the blue underlined View text to see TN details.
- 10. Remove TN from your system to stop billing to the end-user.

You can also export this as a detailed spreadsheet report and see why the TN was disconnected.

- 1. Scrolling to the bottom of the page and clicking **Export Query Results**.
- 2. Click **Open** or **Save Spreadsheet** on pop-up window.
- 3. When spreadsheet opens, scrolling right to **Reason Code** column, to see if TN was a port-out disconnect or a customer initiated disconnect.

Here's a simple break-down of the Reason Codes (column AY).

- **Port Out Disconnect** = this TN ported away from you either as an external port-out (port-out went to another carrier).

- <u>All caps **PORT OUT**</u> indicate that it's an internal port-out to another Lumen customer.
- **Customer Initiated Cancel** = this means that the disconnect order was cancelled and the TN is still in your inventory.
- **Channel Partner Initiated** = this means that you (Lumen direct customer) disconnected this TN internally.

Chapter 14: Checking your TN utilization report

In this section, we will review how to find and pull an inventory management TN utilization report that shows the quantity of all the TNs you have on your account, both as a Summary Report and also a detail report separated by switch/ Customer Service Name and Product. This report won't show you the actual TNs, but does show you the number quantity and what RCs they're assigned to.

Here's the process for pulling a TN inventory report on the quantity of ELS or LI numbers that you have active on the Lumen network per RC.

- 1. Sign in to Control Center.
- 2. Click Monitoring, click Voice Reports, then click ELS, LI, and Related.
- 3. In the **TN Utilization** section, select **Enhanced Local** or **Local Inbound**.
- Choose the most recent report to download (top of list) e.g., 3VoIPEnhancedLocal_TN_Utilization_Report_CustomerName_1-XO1234_20150429.xls.
- 5. Open and review the summary on Tab 1 of all RCs; save to your desktop.
- 6. Click on Tab 2, Tab 3, etc. to see the break-out of TNs per rate center in each switch/CSN.
- 7. Click the last tab to see the report definitions.

Chapter 15: Checking the LI phonebook report

In this section, we will review how to find and pull an LI Phonebook Report showing all the active LI TNs on your account that Lumen is billing you for. This report will not show the end-user name or address, but will show what rate center the TN is in, what switch/CSN it's pointing to, and when the install date was.

To see a phonebook for all the Local Inbound (LI) TNs you have on your Lumen account, access the latest version from Control Center using the following path:

- 1. Sign in to Control Center.
- 2. Click Monitoring, click Voice Reports, then click ELS, LI and Related.
- 3. In the Inventory/Phone Book section, click Enhanced Local or Local Inbound.
- 4. Choose the most recent report to download (top of list) e.g., 3vm_cust_dly_phbk.20150429.1-XO1234.csv.
- 5. Open the spreadsheet and review; save to your desktop.

For ELS customers, there is no standard ELS phonebook available in Control Center, however an LNP status report can be pulled for a specific date range query that will show all the ELS TNs that were ported in or new ELS TNs that were assigned in that date range. If an ELS phonebook is required to support your business model, contact your account team to see if your account is eligible to set this up as a contract addendum.

Chapter 16: Checking the Lumen local network footprint report

In this section, we will review how to find and pull the current local network footprint report that shows all 18,000 rate centers in the USA, and whether we have a switch built in each or not, and a YES or NO indicator for each RC and the LI, ELS, and customer provided 911 ELS products. If we have a switch built in a RC on our Sonus network, it is open for both porting and ordering of new LI inventory TNs.

If a customer is set up with ELS and the option to provide 911 service through a third-party vendor, the RC would also be open for that cp911 ELS product. We currently cover over 87% of the USA population with our LI and cp911 ELS product.

If Lumen is providing the 911 service for ELS, that requires us to have a contract set up with the local public safety answering point (PSAP) provider, so the footprint covers more than 75% of the USA population with this product.

Here's the process for pulling a report from Control Center on currently available rate centers for either ELS or LI numbers:

- 1. Sign in to Control Center.
- 2. Click Monitoring, click Voice Reports, then click ELS, LI, and Related.
- 3. In the **VoIP Local Network Footprint** section, select **Enhanced Local** or **Local Inbound** (it's the same report).
- 4. Click the red VoIP Local Network Footprint option link LocalFootprint_Sonus.xls.
- 5. Open the file to review the summary of all rate centers in the United States there will be either a "Y" or "N" in each of the three columns to the far right (ELS, cp911ELS, LI) indicating whether or not Lumen has a switch in that RC and can provide LI or ELS service for new or ported TNs there.

Note: The three columns with the "NEW" heading by the three products only indicate whether there has been a change made in that RC within the past seven days. This is so that customers who have downloaded this large spreadsheet to their pc can easily track updates made to the rate centers each week.

Tip: Put a pale background color in the columns of the voice products that apply to your account to make it easier to find as you're scrolling down through all the states and RCs. Keep in mind that every RC is not necessarily the name of the city you're looking for. If you "freeze" the header bar, this will also make working with this report much easier.

This is a large 30 MB Excel spreadsheet report that most customers just open and download to their desktop for quick reference and download a new updated version once a month or so to pick up any updated RC changes.

Chapter 17: Ordering new ELS inventory TNs—phase 1

In this section, we will review how to order new ELS inventory TNs as Phase 1 initially, and then how to assign them to your end-user/ subscribers later when needed via the Portal as Phase 2.

Lumen does not support requests for specific NPA/NXX's, though we do support requests for consecutive number blocks if we have them available – you have to make these requests via a special TN inventory order form also sent to our LEU team along with your quantity request form.

The TN and service address must be in the same rate center in order to establish a Directory Listing. The same rule is true for e911 service unless the customer account has been set up with the ability to provide e911 service via a third-party vendor.

Our TN inventory systems are automated and randomly select available inventory from what's available for that specific RC. If that happens to be a combination of two different valid NPA/NXX options, we have no manual override on that selection process.

- 1. Please obtain the latest "ELS_AddInvtyOrder" form from your Lumen account team for ordering and reserving new ELS inventory TNs.
- 2. Check the Lumen Footprint report to help you determine what RC covers the area you want to order new TNs for. You'll look up the RC and the Market Tier name from the Footprint report to fill out the second page of the ELS inventory order form to request quantities of 1-200 per RC.
- 3. When you send the Lumen Light'em Up (LEU) team an order for new ELS TNs, they need the spreadsheet version of the order form which you can legally digitally sign at the bottom like this.../s/ Joe Smith.
- 4. Please forward this "New ELS TN" order request form to <u>LEUOrders@lumen.com</u> (and copy your account team) to request a new inventory TNs to be populated to the desired RC inventory pool that you're wanting to provision new end-users to. The SLA to provide new TNs is 3-business days from order-entry date to available inventory date for the customer if our Number Warehouse team has available inventory on the shelf.
- 5. When ordering new inventory TNs, customers should request the standard SLA and our collective teams will process the order in about 3-business days. If customers need a new TN sooner than that, they should just put "URGENT" or "EXPEDITE" in the subject line on their request to our LEU team and they'll try to expedite that for you with the other two teams involved, but it's done as a best-effort and no guarantees there is no "rush" charge on these requests.
- 6. When we don't have enough new inventory TNs available in a specific RC to fulfill their order, we have to put them on back order, which would typically be two weeks or more to receive.
- 7. You will receive an email confirmation that the new ELS inventory TNs are reserved and are ready to activate using Control Center. After an overnight system refresh, you can also see the quantity of new TNs available per RC through your ELS TN Utilization Report. We cannot tell you what your new ELS inventory TNs are just the quantity, because the TNs are "hot" and must be assigned via random selection in Control Center.

Chapter 18: Assigning an ELS inventory TN to an end user—phase 2

In this section, we will review how to assign new Enhanced Local Service (ELS) inventory TNs as Phase 2 to your end-user/ subscribers using Control Center.

After your Lumen Light'em UP (LEU) or account team notifies you that the new ELS TNs that you ordered from them are now populated to the rate center you requested and are ready to assign to endusers as needed, keep in mind that they are only in inventory status currently and need to be assigned to an end-user and activated.

The TN and service address must be in the same rate center to establish a directory listing. The same rule is true for e911 service unless the customer account has been set up with the ability to provide e911 service using a third-party vendor.

Once you are ready to assign and activate a new ELS TN to your end-user, you can do so one at a time using Control Center—like the port-in process, but you'd select the **Order New TN** radio button instead and our systems will randomly select and assign a new ELS TN from your available inventory for you.

There is also a bulk form available for assigning multiple new inventory ELS TNs to a single end-user in one shot if they're all using the same service address (NEW_TN_INSTALL.xls).

If your account has been approved and set up with TNUF functionality, you would use the special bulk order form (NEW_TN_INSTALL_TN.xls) to assign specific inventory TNs to end-users via the Bulk Order section of the Portal instead of the GUI screens with random TN selection/ assignment.

To assign and activate new ELS TNs:

- 1. Sign in to Control Center.
- 2. Click Orders, click ELS and LI Orders, then click Individual Order Request.
- 3. Click Enhanced Local.
- 4. Under the Choose an Action heading, select the first radio bullet "Assign a New Telephone Number;" click Next.
- 5. If you have more than one option for a service package (billing model) and customer service name (switch), you'll need to select them on this screen. If you only have one option for both, the fields are automatically filled by default and this screen will not be displayed; click **Next**.
- 6. Select **E911** option: **E911 Static** (indicates Lumen is providing service) or **Customer Provided E911**.

Note: If Lumen is providing the 911 service, the service address must be in the same rate center as the new inventory TN you're getting ready to assign.

- 7. Select Type of Service Business or Residential.
- 8. Enter the street number, street name, suite # if appropriate, city, state, zip; click **Search**.
- 9. If you have TNs available in your rate center inventory that matches up with the service address you just entered, you'll see a screen displaying the info you just entered. Click the <u>New Site</u> link

to advance to the next screen. If you don't have any inventory TNs available in that RC, an "Insufficient quantity of TNs available" error message appears.

- 10. Enter your end-user's company name that the new TN will be listed under in the white pages directory listing; click **Next**.
- 11. Enter the directory listing information that you'd like to have for the TN. **List and Publish** is the most common for white pages listings and directory assistance operator 411.
- 12. Select **Yes** or **No** to include the end-user's service address in the white pages listing and DA.
- 13. Double-check the business name listing to be used for the white pages and DA information; click **Next**.
- 14. Note that the assignment and activation date is right now the TN is already in a "hot" status and will have service immediately once you complete this process and program the TN in your own switch.
- 15. Enter your name as the submitting agent for the new TN assignment/ activation; click Next.
- 16. Review the customer order summary. If everything is correct, click **Submit Order**.
- 17. You'll receive the TN that our systems randomly just selected for you and it'll be displayed in bright blue. This TN is now in service on our network under your account and is pointing to the switch it as ordered under. Don't forget to program the TN into your own switch to complete the call path.
- 18. Repeat the process for the other new TNs you want to assign and activate.
- 19. If you have a large quantity of new ELS TNs that you want to assign to a single end-user at a single service address all in one order, we have a special bulk order form that you can use.
- 20. Billing for an ELS TN does not start until you assign it to an end-user using Control Center. This action also initiates all the bundled features included with the ELS product (DL, DA, Caller ID, and e911).

Chapter 19: Ordering and assigning new LI inventory TNs

In this section, we will review how to order new Local Inbound (LI) inventory TNs from Lumen as Phase 1 to populate to specific RC inventory pools, but then as Phase 2 you would assign them to your enduser/ subscribers from your own switch with no further interaction to Lumen. LI TNs are considered "geo-independent," which means that they don't have to be in the same RC as the service address this applies to both assigning new LI inventory TNs as well as porting-in TNs.

- 1. Please obtain the latest LI_AddInvtyOrder form from your Lumen account team for ordering and reserving new LI inventory TNs.
- 2. Check the Lumen Footprint report to help you determine what RC covers the area you want to order new TNs for. You'll look up the RC and the Market Tier name from the Footprint report to fill out the third page of the LI inventory order form to request quantities of 1–200 per RC.
- 3. When you send the Lumen Light'em Up (LEU) team an order for new LI TNs, they need the spreadsheet version of the order form which you can legally digitally sign at the bottom like this.../s/ Joe Smith.
- 4. Please forward this "New LI TN" order request form to <u>LEUOrders@lumen.com</u> (and copy your account team) to request a new inventory TNs to be populated to the desired RC inventory pool that you're wanting to provision new end-user's to. The SLA to provide new TNs is 3-business days from order-entry date to available inventory date for the customer if our Number Warehouse team has available inventory on the shelf.
- 5. When ordering new inventory TNs, customers should request the standard SLA and our collective teams will process the order in about 3-business days. If customers need a new TN sooner than that, they should just put "URGENT" or "EXPEDITE" in the subject line on their request to our LEU team and they'll try to expedite that for you with the other two teams involved, but it's done as a best-effort and no guarantees there is no "rush" charge on these requests.
- 6. When we don't have enough new inventory TNs available in a specific RC to fulfill their order, we must put them on back order, which would typically be two weeks or more to receive.
- 7. You will receive an email confirmation that the new LI inventory TNs are reserved and are ready to activate.
- 8. ACTIVATIONS are done using your own switch this is not done in Control Center.
- 9. After an overnight system refresh, you can also see the quantity of new TNs available per RC through your LI TN Utilization Report. You will also see these new LI inventory TNs in your LI Phonebook.
- 10. Billing for all these LI TNs will start immediately once available in the desired RCs, as they are already pre-provisioned and live and will be instantly active and usable to the end-user once you program the TN in your switch.
- 11. Due to TN reporting requirements by the FCC, we're now required to provide new LI inventory TNs in a "customer inventory" status, so you will need to generically assign these TNs in the Portal under the Bulk Orders section to change the status from "customer inventory" to "assigned," though no end-user info is associated.

Chapter 20: Submitting a migration project port

This LNP Projects Porting Guide has been developed to help answer questions about what type of orders qualify as project migration ports versus single order-entry via the Portal. This short guide provides project facts, evaluation constraints and qualification, request procedure, and process flow for project-based porting with Lumen.

Port-in orders should only be submitted to our LNP Projects team if they fit the complex migration project port criteria:

- 50+ external TNs porting in from another carrier (maximum of 10K TNs per project per day)
- 1,000+ internal TNs porting from another Lumen customer on our Sonus network (max of 10K TNs per project per day)
- Multiple voice products (ELS, LI) for one end-user
- Multiple BTNs and associated WTNs porting on the same coordinated port date
- Multiple rate centers porting on the same coordinated port date
- Multiple carriers (maximum of three per project)

Total turnaround time for clean orders on a migration project port is 15 business days for 50–750 TNs, 20 business days for 750–10K TNs, and 10 business days for internal ports of 1K-10K TNs on our Sonus network.

An end-user signed LOA, or a Reseller LOA signed by our Lumen customer must be sent with your project migration port order for each carrier that we'll be porting TNs from.

LNP project submittal process

- 1. Sign in to Control Center.
- 2. Click **Support**, then click **LNP Ticketing**.
- 3. Click New LNP Ticket.
- 4. Category = New Project Request.
- 5. Billing Account Number = choose one from the list; it's not critical which one for this ticket.
- 6. Request Type = Partial, Full, or Unknown Port Request (are you porting all the end-user TNs or just some of them?).
- 7. Authorized Name = end-user who signed the LOA.
- 8. Acct/PIN = if required by donor carrier (e.g., Windstream).
- 9. Customer Request Date = select a date from the soonest possible dates displayed on the calendar in blue (typically 15–20 business days).
- 10. Customer Internal Request ID = enter your name or internal order number.
- 11. Additional Info = any helpful contact info, reseller info, special processing needed, etc.
- 12. Add Attachments = browse to your desktop and add your LOA and Migration Project Port order spreadsheet (You can download forms if needed. Project order must be the required Excel Macro-Enabled Workbook file).
- 13. Add Secondary Contact if desired.
- 14. Submit LNP Ticket.

All project port status updates will be provided using this project ticket. If you have additional projectbased porting questions, please contact the LNP Projects team by calling 866-697-5881, option 1, then 3. **Note:** Any request to push out the port date after FOC has been received must be sent using this LNP Project ticket and not done directly on each individual TN PONs in Control Center.

Note: You cannot cancel a project port using this ticket. Your cancel request will be submitted, and the ticket will be closed after review by a Lumen project manager. For same or next day cancels please make sure you call the projects group at 1-866-697-5881, option 1, then 3.

LNP project request

To help us process your migration project port request as efficiently as possible, please adhere to the following process:

- Customer requests each individual project by opening an LNP ticket in Control Center and choosing the LNP Projects category, downloading a migration project port form (Project_Migration.xlsm), completing, and attaching to the ticket along with the LOA.
- 2. A single signed and dated reseller LOA (letter of authorization) must be provided for each donor carrier involved. This LOA should be signed by our customer giving Lumen the authorization to port the TNs. An individual LOA for each end-user is not required for a migration port where our customer is acting as the managing company representing all the end-users and will continue to bill the end users, but the traffic will move from multiple donor carriers to the single Lumen network account.
- 3. A recent COB (copy of bill) must be provided to validate the customer's request to port the TNs.
- 4. A CSR (customer service record) should be provided, if possible, as this shows exactly what the donor carrier has on file for the TNs to be ported, which we must match on our port request.
- 5. During the porting process, our Projects team will provide status updates via this LNP Projects ticket this is preferred versus calling in. If the order is rejected or needs more information, the customer can see that in the ticket.
- 6. Differing from the normal LNP process, the Projects team will request a FOC date up-front from the donor carriers involved in a project port. Therefore, we need 21–28 calendar days to work with as most carriers will agree on a coordinated port date that far in advance.
- 7. If customers "upp" (supplement or change) an order more than three times to push the desired port date out, the project will be cancelled until the end-user and customer have everything in place and are ready to port. At that time, the customer would resubmit the project and receive a new port date.
- 8. After a FOC is received from the donor carriers involved, customers cannot add or remove TNs from the project. In that event, the migration project order would be cancelled and resubmitted with a new port date after corrections are made.

Chapter 21: Snap-back requests to return TN to the donor carrier

In this section, we will review how to submit a snap-back request to return a TN to the donor carrier after porting the TN to your account at Lumen if absolutely needed. This is typically only possible within a few hours of the port activation on the day of port if the donor carrier will even allow it. This situation can almost always be avoided if you're managing your port-in orders and notify your end-user when the TN is scheduled to port once a FOC is received. From your end, you should ensure that you have the necessary equipment in place to provision the TN once ported. If not, please supp the order the day prior to the FOC date to push the requested port date out a few days.

Be aware that due to the complexities and escalated nature of the process, there is a significant charge per TN to snap a TN back. Please contact your account team for actual cost (generally ~\$300) and is a pass-through charge from the donor carrier that we are assessed.

If the port is activated and the TN is out of service due to the end-user not being ready or your equipment not being in place, we would highly recommend an alternative to a snap-back. This is referred to as a "win-back" which is nothing more than a reverse port order placed by the end-user with the donor carrier, which we can then expedite with a next day port-out FOC at no cost to you and will achieve the same results and ensures that all the carrier and customer records are in-synch.

Snap-back process:

- 1. If an end-user contacts their new LSP (Lumen customer) and wishes to return to their previous LSP/carrier within a few hours after porting, please call the Lumen LNP Help Desk (1-866-697-5881, opt 1) and request that this be done if possible. Timing is very critical as snap-backs must be same-day and usually by close of business, if at all.
- 2. The LNP Help Desk will check to see if the donor carrier will allow a snap-back and let you know right then: yes or no.
- 3. If yes, the LNP Help Desk will call our CSR/LSR processing team and request the snap-back on your behalf.
- 4. Our CSR/LSR processing team will send the Supp 1 cancellation and call the previous carrier with a request to return the TN back to their network.
- 5. Our CSR/LSR processing team will track who they speak to for the order number and the subscription activation and will update your order with a "cancel completed" status. This status will show up in the Portal where our customer can see it when doing a search on that specific TN.
- 6. If the previous carrier will not allow a snap-back, the end-user must submit a new port request with their previous LSP/carrier to port their TN back to them this is called a "win-back" order. You can contact our LNP Help Desk team with this new win-back order to port the TN back to the original carrier, and we will expedite that port-out order at no charge to you.

This policy is subject to change at any time and is beyond our control, so Lumen has made it a policy to limit the snap-back attempts to day of port and by 5:00 pm (MT) for those carriers who will even allow it.

Chapter 22: TN product change from ELS to LI (or LI to ELS)

In this section, we will review how to change product types from LI to ELS, or ELS to LI.

Customers can do a TN product change under their own Lumen account (BusOrg ID) if they've been set up for both ELS and LI products. This is accomplished by simply placing a port order for the TN under the desired product type.

There are no changes to the order-entry process. The product change order will be placed by the customer as a normal LNP order under the desired ELS or LI product using Control Center and our systems will recognize it is an internal port. All TNs in an order must be for the same product.

When changing a product from ELS to LI, there should never be any problems. However, when changing products from LI to ELS, the requirements are much more stringent as Lumen is providing the Enhanced 911 service typically and the TN and the service address must be in the same rate center. The TN and service address must also be in the same rate center to establish a Directory Listing.

If the TN is currently an LI product, the RCs may not match and the request to convert the LI TN to an ELS TN will fail.

Escalation contacts for Lumen Support

To view the Lumen Technical Support Escalation List, go to https://www.lumen.com/repairescalations.

Lumen terms & acronyms

The following is a list of common terms and acronyms used by Lumen and in the telecommunications industry.

Term	Definition
800 number	Toll free number; porting is supported by an internal RespOrg change process
9-1-1	The three-digit number reserved for use as an emergency telephone number throughout the United States.
ACD	Automatic call distributor
ACK	Acknowledgement
activation interval	Amount of time needed to port-in a TN, or to activate a new inventory TN
AFT	Address format type
ALI	Automatic Location Identification; a 9-1-1 feature by which the name, address, and responding agencies associated with the number of the telephone used to dial 9-1-1 is displayed at the PSAP (Public Safety Answering Point) at the time the call is answered
ANI	Automatic Number Identification; a service that provides the receiver of a telephone call with the number of the calling phone
API	Application programming interface to enable electronic commerce between Lumen and our customers
ATN	Account TN
BAN	Billing account number
BNA	Billing name and address
Broadband	A transmission facility that has bandwidth (capacity) greater than a voice grade line of 3 kHz, which is used for high-speed internet traffic like VoIP and content delivery
BSD	Billing start date
BTN	Billing telephone number; the primary telephone number used for billing regardless of the number of lines associated with that number
СА	Call appearance
CALEA	Communications Assistance for Law Enforcement Act; a 1994 law granting law enforcement agencies the ability to wiretap new digital networks and requiring wireless and wire line carriers to enable eavesdropping equipment used in digital networks
САМА	Centralized automatic message accounting
CARE	Customer account record exchange; the process of exchanging customer account information between local and long-distance carriers
СС	Company code
CCD	Customer commit date

Term	Definition
ССМ	Customer care manager
CDR	Call detail record; a billing record provided to customers showing information such as time and duration of telephone calls made by an end-user
Central Office	A telecommunications office centralized in a specific locality to handle the telephone service for that locality
Centrex	Business telephone service or feature offered by the local phone company; normally a contracted service and termination charges apply
CIOC	Competitive independent operating company
CLASS Features	CLASS 5 refers to a category of large PSTN switches local exchange carriers use to deliver local telephone service to their customers; CLASS 4 services are those offered by Long-Distance Interexchange providers
CLEC	Competitive local exchange carrier; a company authorized to provide local exchange services in competition with an ILEC (incumbent local exchange carrier)
Click-to-Dial feature	Click one of the dial buttons on your Contacts list, or Missed Call, Incoming Call, or Outgoing Call logs to initiate a call to the original caller
CMTS	Cellular mobile telephone system
CNAM	Customer name database used to provide caller ID
CNR	Customer not ready
Codec	A contraction of coder and decoder; a device that encodes analog signals into digital signals, for transmission through a network in digital format, and decodes received digital signals back into analog signals
Colocation	A competing local phone company can locate its switches within a local exchange company's (LEC) central office
Connect Modem service	Provides the complete dial-up infrastructure to ISPs, including modems, local access, and local phone numbers
Contracted Service	Services (e.g., Centrex) that are contracted where the LSR is rejected for termination charges
СР	Channel partner, or Lumen wholesale voice customer
CPE	Customer premises equipment
СРІ	Carrier proprietary information
СРМ	Customer program manager
CR	Customer record
CRD	Customer requested date
CRM	Client relationship manager
CSC	Customer Service Center

Term	Definition
CSM	Customer service manager
CSR	Customer service record
CSV	Comma separate value (File extension type used to export spreadsheet data)
СТІ	Customer type indicator ("Residential" versus "Business")
CTT	Call through tester / customer type indicator
DA	Directory assistance
Dark Fiber	New, unused fiber optics through which no light is transmitted or installed fiber optic cable not carrying a signal
DD	Due date
DDD	Desired due date
Delay Service Level	Measured as an average one-way delay over a calendar month for IP traffic on the Lumen Network between gateways
DHCP	Dynamic host configuration protocol
DID	Direct inward dialing (e.g., Lumen VoIP Local Inbound)
DISCO	Disconnect TN order
Distinctive Ring	Different ringing pattern feature on a TN; used for multiple numbers in the same location
DL	Directory listing
DNIS	Dialed Number Identification Service
DOD	Direct outward dial
DTMF	Dual tone multi frequency; the signal to the phone company that is generated when pressing an ordinary telephone's touch keys
ECRC	Emergency Call Relay Center
E-911	Enhanced 9-1-1; a method of routing 9-1-1 calls to a PSAP that uses a customer location database to determine the location to which a call should be routed
Edge Proxy Server	Owned and managed by our customers and is where our customers define and manage all routing rules associated with handling calls
ELS	Enhanced Local Service
EMI	Exchange message interface; industry standard CDR format for billing
EMS	Expanded memory specification
End-user	Subscriber person or business who uses the phone service
EPS	Edge proxy server
EOY	End of year

Term	Definition
ESN	Emergency service number; the number assigned to each residence, business, and coin telephone, which is determined by a specific law enforcement, fire station, and emergency medical service zone; number used to deliver calls to the proper PSAP
ESP	Enhanced service provider
FCC	Federal Communications Commission: a government agency that regulates telecommunications and other broadcast mediums
FIPS	Federal information processing standard
FOC	Firm order confirmation / commitment – the date a donor carrier agrees to port a TN
Foreign Central Office	Telephone service received from a central office other than the one service would normally be received from
Foreign Exchange	Provides local telephone service from a central office that is outside the subscriber's exchange area
G.711	Describes the 64-kbps PCM voice-coding technique for digital voice delivery in the PSTN or through PBXs; G.711 provides lower bandwidth and slightly higher quality of service and G.729 provides much higher bandwidth with minimal change in service quality
GCR	Global change request
Hunting Feature	Phone line will roll over to an additional line in the event the primary is busy
ICA	Interconnection agreement established for porting between carriers – more detailed than a simple porting profile
IDDD	International direct distance dialing
ILEC	Incumbent local exchange carrier is the dominant phone service provider in a geographic area
IMT	Intermachine trunk
IP	Internet Protocol is used to provide internet traffic and keep track of internet addresses for sending and receiving messages
ISDN	Integrated Services Digital Network; available in PRI (24 channel) or BRI (2 channel)
ISP	Internet service provider
(i)Structure	Provides managed IT infrastructure services and enables businesses to outsource IT operations
IVR	Interactive voice response
IXC	Inter exchange carrier
Jeopardy Code	Rejection error occurring either in the CSR or LSR phase of porting a TN
Jitter Service Level	Measured independently between two Lumen gateways
LATA	Local access transport area

Term	Definition
LCA	Local calling area
LDS	Local Digital Service used by long distance companies to describe the last mile of service provided by the local phone company. Also generically describes dedicated internet services
LEC	Local exchange carrier is the local phone company
LERG	Local Exchange Routing Guide
LI	Local Inbound – a geo-independent VoIP product with 1-way inbound calling enabled
LIDB	Line Information Database; databases owned by ILECs and other entities that provide data such as calling card validation for TN cards
LifeLine	Minimal phone support for emergency situations; subsidized at the national level
LNP	Local number portability - defined in the Telecommunications Act of 1996 as the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another
LOA	Letter of agency / authorization / agreement / authentication
LPIC	Intra-LATA PIC
LSP Freeze	Customer has made arrangements with their telephone provider to prevent slamming (an unauthorized changing of their long distance telephone carrier)
LRN	Local routing number
LSMS	Local support and maintenance system
LSP	Local service provider, such as a wholesale Lumen customer who is reselling our service
LSR	Local service request is the second phase of porting a TN, the actual port request
MACD	Moves, adds, changes, disconnects
Media Gateway	The media gateway will accept PSTN-originated calls and convert them to VoIP to be transported over the Lumen Communications network to terminate the customer's IP endpoint
MMAE	Managed modem activity engine
MOU	Minutes of use
MPLS	Multi-protocol label switching
MSA	Metropolitan Statistical Area; areas defined by the U.S. Census Bureau with counties that have cities and surrounding regions with populations of 50,000 or more
MSAG	Metropolitan Street Address Guide; a listing of all streets and number ranges within a 9-1-1 service area
MSO	Multiple system operator

Term	Definition
MTTR	Network mean time to repair
NACK	Negative acknowledgment
NANP	North American Numbering Plan; a numbering architecture in which every station in the area served by the plan is identified by a unique 10-digit address
NAT	Network address translation; the translation of an IP address used within one network to a different IP address known within another network
NATA	North American Telecommunications Association
NCTA	National Cable and Telecommunications Association
NDA	Non-disclosure agreement
NENA	National Emergency Number Association
NOC	Network Operations Center
NPA	Numbering plan area; also called area code
NPAC	Number Portability Administration Center; a neutral entity that supports the implementation of LNP by interacting with LSOAs systems of all carriers in order to effect the transportation of the end user's telephone number from the legacy LEC to the new LEC of choice
NRC	Non-recurring charge
NRF	No record found; an incident in which a PSAP receives an E9-1-1 call and no ALI information displays on their equipment for the calling telephone number
NuMS	Number management system
NXX	Geographically bounded area designated as the area within which a LEC or CLEC may provide local exchange telecommunication services bearing a particular NPA-NXX designation
OA	Operator assistance
OCN	Operating company number
OCSC	Online Customer Service Center
OS	Operator services
OSA	Open services architecture
OSS	Operations support system
OWATS	Outward Wide Area Telephone Service; discounted toll service provided by all long distance and phone companies; similar to an 800 number; porting is supported by an internal RespOrg change process
Packet Delivery Service Level	Average number of IP packets that transit the Lumen Network and are delivered by Lumen to the intended on-net destination in a calendar month
PBX	Private branch exchange

Term	Definition
PIC	Primary interexchange carrier / Pre-subscription indicator code
PIC Freeze	Prevents the unauthorized changing of your long-distance carrier
Ports Completed	A port is counted as completed when the bill start date has been set
POTS	Plain old telephone service; refers to the standard telephone service that most homes use
PRI	Dedicated voice circuits that have 23 voice channels plus 1 B channel for signaling
Project Port	If the porting request contains more than 49 TNs hosted at the same service address
PS	Paging system
PSAP	Public safety answering point; an answering location for 9-1-1 calls originating in an area
PSTN	Public Switched Telephone Network; the international telephone system based on copper wires carrying analog voice data
QOS	Quality of service
Rate Center	Geographically specified area used for determining mileage - and/or usage - dependent rates in the PSTN. Where a TN and service address are located. There are 18K RCs in the USA.
RBOC	Regional Bell operating company
RC	Rate center
remote call forwarding feature	Allows the customer to have a local telephone number in a distant city; similar to call forwarding
Routing Proxy Server	The DEMARC point between the Lumen Network and our customer's network
RT-CSR	Real-time CSR. See CUSTOMER SERVICE RECORD.
RTP	Real time protocol
SA	Service activation / system administrator
SAW	Service Activation Workbench (aka SLDB and MOAB)
SBU	Small Business unit
SE	Sales engineer
Service Image	End-user/ subscriber name and service address per TN
Service Location	Address in which the phone service is installed, not necessarily the billing address
SIP	Session initiation protocol; a protocol that provides telephony services similar to MGCP, but is less complex and uses fewer resources
SLA	Service level agreement established to perform a task
SLDB	Subscriber line database
SM	Switch module

Term	Definition
Snap-back	Returning a just-ported TN back to the donor carrier (expensive)
SOA	Service order administration
Softswitch	A next-generation communications system that employs open standards to create integrated networks with a decoupled service intelligence; see Sonus networks
SOI	Service order interface; service order information is extracted from the telephone company's service orders and submitted in NENA-2, 512 byte format
SONUS	Lumen's proprietary Softswitch with Industry's leading packet voice infrastructure, enabling a full range of carrier applications and enhanced services
SR	Selective routing; the rolling of 9-1-1 calls to the correct PSAP regardless of PSAP serving boundaries and government jurisdiction boundaries
SS7	Signaling system 7; a telecommunications protocol defined by the ITU as a way to offload PSTN data traffic onto either a wireless or wire line digital broadband network
STI	Synchronoss Technologies, Inc.
STP	Shielded twisted pair
Subscriber	A person or company who has telephone service provided by a phone company. See also END-USER.
Super Jeopardy	Critical error occurred in either the CSR or LSR phase of porting a TN
Supp	Supplementing, or editing, an order to correct a rejection or to push out the port request date; an "in-flight" order change
SYLANTRO	Class 5 Softswitch; applications server built from the ground up for telco-grade reliability, offering a complete range of hosted PBX and IP Centrex communications services
ТА	Terminal adaptor – equipment installed at the end-user site used to convert old analog line signal to digital signal for VoIP
ТСАМ	Technical customer account manager – technical support monitoring Lumen networks 24/7
ТСР	Transmission control protocol
TDM	Time division multiplexer
TN	Telephone number
TPV	Third party verification typically utilized by Lumen customers in obtaining audio LOAs
TSC	Technical Service Center – technical support team monitoring Lumen networks 24/7
UDP	User datagram protocol
VERI	Voice emergency routing interface
VIPER (Softswitch)	Lumen's proprietary Softswitch
VM	Voicemail

Term	Definition
Voice Termination	VT provides routing of traffic from switched-based service providers to the PSTN using Lumen's VoIP backbone network; completes the suite of services with domestic and international long distance
VoIP	Voice over Internet protocol; voice delivered using the IP address
VoIP Enhanced Local service (ELS)	Lumen voice product bundled with all the features an end-user would want (DL, DA, Caller ID, e911), providing 2-way VoIP calling with both inbound and outbound call traffic
VoIP Local Inbound service (LI)	Lumen geo-independent voice product with 1-way inbound call traffic and no supported features
VoIP Toll Free	Utilizes the Lumen VoIP network to offer 800-number call origination to customer's IP applications
VSS	Voice and SoftSwtich
WTN	Working telephone number; all of the TNs associated to the BTN