

From: Dobesh, Mary [mailto:Mary.Dobesh@qwest.com]
Sent: Monday, January 21, 2008 9:35 AM
To: Isaacs, Kimberly D.
Subject: RE: ESCALATION - [CUSTOMER INFO REDACTED]munity -- WA customer R131.0

QWEST FINAL SUPPLEMENTAL RESPONSE – January 18, 2008

Qwest regrets our delay in responding to your inquiry. However, Qwest has completed a thorough review of the requirements for the LX-N product offering before responding to your questions. The answers to your specific questions are below. If you require more information on this topic, please let us know, and we will schedule a call to discuss the technical parameters for this product with you.

Thank you,

Mary Dobesh

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[NOTE: Responses below - in red/bold - were inserted by Qwest (see Qwest email above)]

From: Isaacs, Kimberly D. [mailto:kdisaacs@integratelecom.com]
Sent: Wednesday, November 14, 2007 8:13 AM
To: Dobesh, Mary; Isaacs, Kimberly D.
Subject: RE: ESCALATION - [CUSTOMER INFO REDACTED]-- WA customer R131.0

Hello Mary,

After further review of Qwest's response Integra/Eschelon has some follow up questions.

1. In Qwest's response indicates that the Qwest Technical Publication states: "The NCIs do not affect transport designs or performance." If this is the case, why are the NCI codes required on the LSR when requesting a 2 Wire Non-Loaded Loop?

The Technical Publication (Tech Pub) 77384, Chapter 3, Section 3.4.3, and Section 3.8.3 states that: "For Unbundled Loop LX-N and LXR-, Network Channel (NC) codes, the Network Channel Interface (NCI) codes are informative to Qwest. The customer specifies the NCIs to communicate to Qwest the character of the signals the customer is connecting to the network at each end-point of the metallic circuit. The NCIs do not affect transport designs or performance."

In Section 3.5, the document states that "The NCI code is an encoded representation used to identify five interface elements located at a Point of Termination (POT) at the CO or the End User (EU's) location. The interface elements are physical conductors, protocol, impedance, protocol options and Transmission Level Points (TLPs). Only the first four components are used for Unbundled Loop service."

The Tech Pub contains additional information in Section 3.6.1 which states again that "The first three fields of the NCI code are required. The last two are generally optional but may be required in certain situations. Only the first four components are used for

Unbundled Loops.” This same information is also provided in Chapter 6 of the Tech Pub document. Because either the first four or all components of the NCI code is used in provisioning the circuit, the code is required on the LSR as standard information.

2. Please define “excessive bridge tap” as it pertains to a 2 Wire Non-Loaded Loop with HDSL NCI codes. The Tech Pub does not define “excessive bridge” tap. I am assuming the “excessive bridge tap” is the amount of bridge tap that would interfere with the circuit’s ability to perform at the HDSL technical specifications as this outline in ANSI T1E1?

According to ANSI standards, excessive is the same as interfering BT. Excessive or interfering BT for the Unbundled 2 Wire Non-Loaded Loop, according to ANSI standards, and the TR028 Document, would be no single BT greater than 2000 feet and total BT of 2500 feet or less.

3. Qwest’s response indicates that the “CLEC shall determine whether the available loop satisfies their service requirements”. My assumption is that Qwest feels that it is the Integra/Eschelon’s responsibility to review the available raw loop data at a given address to see if the loop will meet the HDLS technical specifications outline in ANSI T1E1. If this is the case a few questions arise. If the raw loop data indicates that there are 3 loops available with the following loop makeup: Loop 1 has no load coils and no bridge tap, Loop 2 has no load coils and 1000 ft of bridge tap and Loop 3 has no load coils and 3000 ft of bridge tap. Using the above example of raw loop data please answer the following questions:

- a. Because we know that Loop 1 would most likely meet the ANSI T1E1 technical specifications for HDSL, how would Integra/Eschelon request Loop 1 on our LSR? It has always been my understanding the CLECs can not “reserve” available loops.

Integra/Eschelon cannot specifically request a facility, unless you request a Reuse of facilities on the LSR, according to the guidelines for Reuse. The CLEC cannot “reserve” available loops. The Qwest Assignment system will automatically look for a spare facility that is already qualified for the service requested. If the assignment system cannot assign the order to a qualified facility, the order will fall out for Manual Handling. At that point, a Qwest employee will look for spare facilities that can be “conditioned”. Even though Qwest highly recommends that the CLEC use the Loop Qualification tools, e.g. Raw Loop Data Tool (RLDT) and Facility Check, it is noted on page 14 of the Loop Qualification and Raw Loop Data CLEC Job Aid, that “A response to a Facility Availability or Loop Qualification query does not reserve facilities nor does it guarantee that they will be available at the time a request for service is processed by the Service Center Representative. Loop Qualification information is reloaded or refreshed on a 20-business-day cycle”.

- b. If we request conditioning (populating the SCA = Y) what conditioning would Qwest perform on Loop 1, Loop 2 and Loop 3.

If QWEST loop inventory records do not identify any non-loaded, metallic loops: the CLEC has the option of requesting to unload an available loop or order a finished transport, private line service. The CLEC must clearly specify the type of conditioning that needs to occur. Such conditioning would include the removal of load coils and interfering bridged tap.

Loop1 - No load coils and no Bridge Tap (BT) - No conditioning required.

Loop 2 – No load coils and 1000 feet of BT - No conditioning required, because 1000 feet of BT is within ANSI standards for an Unbundled 2 Wire Non-Loaded Loop.

Loop 3 – No load coils and 3000 feet of BT – Conditioning would be required to remove the interfering BT. As defined above in Question No. 2, excessive or interfering BT for Unbundled 2 Wire Non-Loaded Loop, according to ANSI standards, and the Qwest Technical Publication 77384, would be no single BT greater than 2000 feet and total BT of 2500 feet or less.

- c. Based on the HDSL NCI codes we provide on our LSR would Qwest automatically assign Loop 1 or Loop 2 because they are more likely to meet the HDSL technical specifications?

No, the assignment system would NOT automatically assign Loop 1 or Loop 2 because they are more likely to meet HDSL technical specifications. The assignment system would first look for a spare loop that meets the Loop Qualification codes for the product LX-N or Unbundled 2/4 Wire Non-Loaded Loop, i.e. copper facilities with no loads and limited bridge tap. The assignment system always looks for pairs that meet the standard requirements for the product requested. If the system cannot automatically assign a qualified spare pair to the service request, the order will fall out for manual handling. At that time, a Qwest employee will look for other spare facilities that either qualify for the circuit, or that may require “conditioning”. Additional information on the Manual Steps for Loop Assignment may be found on the Qwest Wholesale Website.

Qwest does not provision requests to meet a specific facility or technology, but rather provisions a class of service, based on the NC codes the CLEC orders. The Network Channel Interface (NCI) codes for the Unbundled Loop LX-N and LXR- products are informative to Qwest. The customer uses the NCI codes to communicate to Qwest the character of the signals the customer is connecting to the network at each end-point of the metallic circuit. The NCI codes do not affect transport designs or performance.

According to the Unbundled 2 and 4 Wire Non-Loaded Product Catalog:

“This unbundled offering is a metallic, wire cable pair with no Load Coils, and some limited length of Bridged Taps, depending on the Network Channel/Network Channel Interface (NC/NCI™) codes specified by you. Digital Transport systems require facilities of this type to function. Characteristics associated with Unbundled Non-Loaded Loops are in accordance with the following end-user interfaces:

- 1. 2-wire digital interfaces support Digital Subscriber Line (DSL)**
- 2. 4-wire digital interfaces support Digital Data Services (DDS) or High-Bit-Rate Digital Subscriber Line (HDSL)**

4. Qwest’s Repair department will often indicate that the amount of bridge tap is the causing the service issues on a 2 Wire Non-Loaded Loop but also indicate that it is within Qwest specification. The Qwest Testers will often state that an order needs to be submitted to remove the bridge tap on the existing circuit. I am not familiar with a change order LSR process that would allow a CLEC to remove bridge tap on an existing circuit. Please outline the LSR process, if there is an LSR process to request bridge tap removal.

Qwest does not offer a product or service in which a CLEC can request the removal of all bridge tap on a new circuit or an existing circuit. Therefore, Qwest employees should not be recommending that a CLEC place an order to remove bridge tap on an existing circuit. The Qwest employees have been retrained on the correct process.

From: Isaacs, Kimberly D. [mailto:kdisaacs@integratelecom.com]
Sent: Wednesday, November 14, 2007 9:13 AM
To: Dobesh, Mary; Isaacs, Kimberly D.
Subject: RE: ESCALATION - -- [CUSTOMER INFO REDACTED] WA customer R131.0

Hello Mary,

After further review of Qwest's response Integra/Eschelon has some follow up questions.

1. In Qwest's response indicates that the Qwest Technical Publication states: "The NCIs do not affect transport designs or performance." If this is the case, why are the NCI codes required on the LSR when requesting a 2 Wire Non-Loaded Loop?
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4. Qwest's Repair department will often indicate that the amount of bridge tap is the causing the service issues on a 2 Wire Non-Loaded Loop but also indicate that it is within Qwest specification. The Qwest Testers will often state that an order needs to be submitted to remove the bridge tap on the existing circuit. I am not familiar with a change order LSR process that would allow a CLEC to remove bridge tap on an existing circuit. Please outline the LSR process, if there is an LSR process to request bridge tap removal.

Kim Isaacs
Eschelon an Integra Telecom company
ILEC Relations Process Specialist
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From: Dobesh, Mary [mailto:Mary.Dobesh@qwest.com]
Sent: Tuesday, October 30, 2007 1:03 PM
To: Isaacs, Kimberly D.
Subject: RE: ESCALATION - [CUSTOMER INFO REDACTED]-- WA customer R131.0

Kim,

Thank you for your response. I will see that your concerns are addressed as soon as possible.

Mary Dobesh

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From: Isaacs, Kimberly D. [mailto:kdisaacs@integratelecom.com]
Sent: Tuesday, October 30, 2007 11:38 AM
To: Dobesh, Mary; Isaacs, Kimberly D.
Cc: Johnson, Bonnie J.
Subject: RE: ESCALATION – [CUSTOMER INFO REDACTED] -- WA customer R131.0

Mary,

Thank you for the response. Integra/Eschelon will review in more detail and let you know if an ad hoc call is needed. After my initial review of the response, I would like to get clarification on a couple of points to confirm that Qwest addressed my action item. Action item: Please see that the Qwest test centers and repair centers are provided training to ensure this type of confusion does not continue to impair the resolution of 2 Wire Non-Loaded HDSL repairs.

It appears that Qwest agrees that an LX-N (2 Wire Non-Loaded Loop) is not the same as an LX— (2 Wire Analog Voice Grade Loop). Therefore it would be inappropriate for Qwest to apply the 2 Wire Analog Loop repair intervals to a LX-N loops, please confirm that the centers have been trained to recognize the difference between LX—circuits and LX-N circuits.

Additionally Tech Pub 77384 indicates that Unbundled Voiceband Channels (NC Code LX--) terminate using analog interfaces (Page 4-1) while the Unbundled xDSL loop (NC code LX-N) terminate to a digital interface, so I assume that it would be inappropriate for Qwest to state that an LX-N loop is an analog (voice grade) circuit during the repair process, please confirm.

Thank you.

Kim Isaacs
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ILEC Relations Process Specialist
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From: Dobesh, Mary [mailto:Mary.Dobesh@qwest.com]
Sent: Monday, October 29, 2007 4:29 PM
To: Isaacs, Kimberly D.
Cc: Johnson, Bonnie J.; Petersen, Richard J.
Subject: RE: ESCALATION - [CUSTOMER INFO REDACTED] -- WA customer R131.0

Kim,
Below is Qwest's response to R131.0.

QWEST RESPONSE - October 29, 2007:

Our testers and OSP techs perform tests for the product requested, which is an UBL 2Wire Non-Loaded loop. The ticket was closed to CPE by Qwest, because the loop meets ANSI standards for the LX-N product. According to Qwest documentation, this product is not expected to meet T1 transmission parameters.

The NCI codes Eschelon has referenced are for the CLEC to tell us what equipment they plan to put on the circuit. Qwest does not provision an LX-N circuit to be HDSL compatible.

Following are some references that point out that the actual physical characteristics of a loop may impact the data signal for a individual circuit. Qwest offers the LX-N product without any loop length limitations. However, we do not guarantee that every copper loop will support the equipment that a CLEC may provision at their end-user location.

Qwest would also like to point out that the TR028 document recommends that ILECS meet CSA (Carrier Serving Area) standard guidelines in deployment of new infrastructure. Qwest standards require that new cable construction meet industry guidelines. The document also points out that not all loops will necessarily meet the parameters to deliver the data signal.

The core tests Qwest performs are the same for both analog and digital signals. The primary difference is checking for loads and bridge tap for the non-loaded loops, i.e. LX-N. Qwest will provision to meet core standards, i.e. less than 2500 total bridge tap, with no single bridge tap greater than 2,000 feet. If your end-user equipment requires a different facility, with less bridge tap, then you may need to order a different product.

Please feel free to contact Service Delivery to schedule an ad hoc call to discuss this further.

Thanks,
Evelyn Montez
Staff Advocate
Regulatory Compliance
Qwest Communications, Inc.

FCC TRO 243

Upgrading telecommunications loop plant is a central and critical component of ensuring that deployment of advanced telecommunications capability to all Americans is done on a reasonable and timely basis and, therefore, where directly implicated, our policies must encourage such modifications. Although a copper loop can support high transmission speeds and bandwidth, it can only do so subject to distance limitations and its broadband capabilities are ultimately limited by its technical characteristics.

Unbundled Local Loop - 2-Wire or 4-Wire Non-Loaded Loop - V20.0

Product Description

Unbundled Local Loop-2-Wire or 4-Wire Non-Loaded Loop is a basic 2-wire or 4-wire non-loaded loop with a transmission path from the Qwest Central Office (CO) Distribution Frame, or equivalent, to the loop demarcation point at the end-user premises.

This unbundled offering is a metallic, wire cable pair with no Load Coils, and some limited length of Bridged Taps, depending on the Network Channel/Network Channel Interface (NC/NCI™) codes specified by you. Digital Transport systems require facilities of this type to function. Characteristics associated with Unbundled Non-Loaded Loops are in accordance with the following end-user interfaces:

- 2-wire digital interfaces support Digital Subscriber Line (DSL)
- 4-wire digital interfaces support Digital Data Services (DDS) or High-Bit-Rate Digital Subscriber Line (HDSL)

The Non-Loaded 2-Wire or 4-Wire loop has the following characteristics:

- Metallic facilities only, no carrier segments
- No Load Coils or build out capacitance, may have limited amount of remaining Bridged Taps
- Loop may be comprised of mixed gauges of cable
- Transmission characteristics of the two pairs making up the 4-wire facility may not be identical

Tech Pub 77384 Information

For Unbundled Loop LX-N and LXR-, Network Channel (NC) codes, the Network Channel Interface (NCI) codes are informative to QWEST. The customer specifies the NCIs to communicate to QWEST the character of the signals the customer is connecting to the network at each end-point of the metallic circuit. **The NCIs do not affect transport designs or performance.**

The associated NC codes require that the service use non-loaded, metallic facilities. Those facilities shall be free of faults. The customer has responsibilities to inspect the character of the facilities, e.g. gauge, length, etc., and determine that it is appropriate for their application.

Each digital service and the specific transport equipment applied by the Competitive Local Exchange Carrier (CLEC) have its own tolerance to loop loss and bridged-tap. The CLEC shall determine whether the available loop satisfies their service requirements. A CLEC may use any method to make such a determination such as available raw loop data or by ordering and reviewing a QWEST provided Design Layout Record (DLR). The DLR provides information to the CLEC on items such as loop gauge make-up, bridged tap and the loop's total length. CLEC personnel shall determine if the available loop falls within the technical requirements of the service they intend to transport over the loop. For this unbundled service the NCI's are informative to QWEST and shall not affect the QWEST transport designs or performance.

Mary Dobesh

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From: Isaacs, Kimberly D. [mailto:kdisaacs@integratelecom.com]
Sent: Thursday, October 11, 2007 1:43 PM
To: Dobesh, Mary
Cc: Johnson, Bonnie J.; Isaacs, Kimberly D.
Subject: RE: ESCALATION - [CUSTOMER INFO REDACTED] -- WA customer R131.0

Hello Mary,

I have added this issue to the issues log Network/Repair tab as issue number R131.0. I would like Qwest to address this issue globally. The Qwest Testers need to know that while 2 Wire Non-Loaded HDSL circuits have a circuit id with a service code modifier (LXFU) that is the same as a regular 2 Wire Analog Voice Grade circuit. The technical specifications, testing perimeters and repair intervals for the 2 types of circuits are vastly different. When we order NC – LX-N and NCI code 02QB9.OOH we are requesting a 2 Wire Non-Loaded HDSL compatible loop, according to the Qwest Tech Pub this loop should meet the ANSI T1E1 Report Number 28 technical specifications. When Eschelon opens a repair ticket on a 2 Wire Non-Loaded HDSL compatible loop, Qwest should not use the technical specifications, testing and repair intervals for 2 Wire Analog circuits.

Action Needed:

Please see that the Qwest test centers and repair centers are provided training to ensure this type of confusion does not continue to impair the resolution of 2 Wire Non-Loaded HDSL repairs.

Thank you.

Snap Shot of Tech Pub 77384 NC/NCI Code information:

HIGH-BIT-RATE DIGITAL SUBSCRIBER LINE (HDSL) COMPATIBLE *			
LX-N	02QB9.00H	02DU9.00H	HDSL Compatible Loop, Metallic Facility ONLY per ANSI T1E1 Technical Report Number 28
LX-N	04QB9.00H	04DU9.00H	HDSL Compatible Loop, Metallic Facility ONLY per ANSI T1E1 Technical Report Number 28

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ILEC Relations Process Specialist
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From: Petersen, Richard J.
Sent: Thursday, October 11, 2007 12:03 PM
To: 'Dobesh, Mary'
Cc: Isaacs, Kimberly D.; Petersen, Richard J.
Subject: ESCALATION - [CUSTOMER INFO REDACTED] -- WA customer
Importance: High

Mary -

We have a trouble ticket open on the above customer, and we need to escalate it with you.

[CUSTOMER INFO REDACTED]
Circ IDs: 4/LXFU/871632/PN and 4/LXFU/871633/PN
CEMR # OW094124

We ordered the T-1 for this customer with HDSL2 technology, thus two circuit IDs. The NCI code for both circuits is: 02QB9/00H, which, as Kim tells me, identifies the circuits as HDSL2 T-1 circuits. The problem is that Qwest (I had conversations with both a hi-cap person and a designed circuit person), per CEMR OW094124, does not recognize these circuits as hi-cap or HDSL2. They see the circuits as straight DS0, 2-wire circuits, although they agree that we ordered the circuits as unbundled, non-loaded loops (LX-N), that have a 4-hr. commit time. But they don't seem to recognize or understand what the 00H means in the circuit nomenclature. And the testing reported in the CEMR ticket shows copper testing, not HDSL2 testing.

Would you please work this issue within Qwest so that Qwest Repair recognizes this customer as having HDSL2 T-1 service and proceeds accordingly?

CEMR OW094124 was bonded back to us yesterday at 15:29, and we have not yet closed it.

Let me know if you have any questions.

Thank you!!

Rick Petersen
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