



# Connecticut UNE Services Overview

## Carrier Services

Frontier Communications  
Rochester, NY

Effective: 10/25/2014

Revised: 08/05/2021

## Contents

Unbundled Network Elements .....	3
Overview .....	3
Loop Types .....	3
PSD Types for xDSL .....	4
Loop Conditioning .....	4
Loop Conditioning SPEC Code Values .....	5
Pre-Order .....	5
NC/NCI/SEC NCI Codes .....	6
UNE Loop Descriptions .....	6
2-Wire Voice Grade .....	6
(Simple) .....	6
2-Wire Voice Grade (Complex) .....	6
2-Wire Basic Rate ISDN (BRI) Digital Loop .....	7
xDSL Capable Loop .....	7
Line Share .....	7
Sub-Loops .....	8
Change Log .....	9

## Unbundled Network Elements

---

### Overview

An Unbundled Local Loop is a dedicated transmission between a Main Distribution Frame (MDF) or Digital Cross-connect Bay (DSX) in the Frontier Serving Wire Center and the Minimum Point of Presence/Entry (MPOP/E) at an end user location.

---

### Loop Types

CLECs purchasing loop elements from the Telephone Company agree to operate each loop type within the technical descriptions and parameters accepted within the industry. The following local loop element types are available to customers on a Local Service Request (LSR):

- 2-Wire Voice Grade Simple (non-designed) – *Changes and disconnects only (07/19/2020)*
  - 2-Wire Voice Grade Complex (designed) – *Changes and disconnects only (07/19/2020)*
  - 2-Wire Basic Rate ISDN (BRI) Digital Loop
  - Digital Subscriber Line xDSL Capable Loop
  - High Frequency Portion of the Loop (HFPL)/Line Share
  - xDSL Capable Sub-Loop
  - Sub-Loops
-

## UNE Services Overview - Connecticut

### PSD Types for xDSL

For each of the xDSL loop types, a CLEC will, at the time of ordering, notify the Telephone Company as to the Power Spectral Density (PSD) mask of the technology the CLEC will deploy.

Type	Definition
PSD # 1	2-Wire ISDN_DSL (IDSL) Capable Loop
PSD # 2	2-Wire Low-band Symmetric Technology
PSD # 3	2-Wire Mid-band Symmetric Technology
PSD # 4	4-Wire Mid-band Symmetric Technology
PSD # 5	2-Wire High-band Symmetric Technology
PSD # 6	2-Wire ADSL Capable Loop
PSD # 7	2-Wire Short Reach Very High-band Symmetric Technology
PSD # 8	2- Wire SDLS Short Reach High Band Symmetric Technology

### Loop Conditioning

Loop conditioning is the process that may be used in conjunction with loop qualification for the provisioning of DSL Capable Loops. After receipt of loop make-up data, it is the customer's option to request loop conditioning.

The following Loop Conditioning is available on xDSL loop types:

- Removal of repeaters
- Incremental additional removal of repeaters same location/different cable
- Removal of bridged taps and repeater
- Incremental additional removal of bridged taps and repeaters same location/different cable
- Removal of bridged taps
- Incremental additional removal of bridged taps same location/different cable
- Removal of bridged taps and load coils
- Incremental additional removal of bridged tap and load coil same location/different cable
- Removal of load coils
- Incremental additional removal of load coils same location/different cable

## UNE Services Overview - Connecticut

Loop  
Conditioning  
SPEC Code  
Values

The SPEC Code field on the Local Service Request (LSR) form will be populated with one of the following valid values for Loop Conditioning

Valid Value	Description
UALRLT	Unbundled (x)DSL Capable Loop -Remove Load Coils & Bridge Tap
UALRLX	Unbundled (x)DSL Capable Loop -Remove Load Coil (s)
UALRRX	Unbundled (x)DSL Capable Loop -Remove Repeater (s)
UALRTR	Unbundled (x)DSL capable Loop -Remove Bridge Tap & Repeater
UALRTX	Unbundled (x)DSL Capable Loop -Remove Bridge Tap (s)

Valid Value	Description
UALNLC	Unbundled (x)DSL Capable Loop - No Loop Conditioning
UALNOX	Unbundled (x)DSL Capable Loop ~ Loop not Qualified "Authorized As Is." Recognize that Loop may require Conditioning to be capable of supporting Loop requested but will take Loop as is without Conditioning.

Pre-Order

Before submitting your UNE order, review the [Location and Product Qualification \(frontier.com\)](https://www.frontier.com)

## NC/NCI/SEC NCI Codes

NC/NCI/SEC NCI codes are required when ordering specific services from Frontier. These codes are used to identify the channel being ordered and electrical conditions on the circuit. These codes are commonly referred to as network channel codes (NC), network channel interface codes (NCI) and secondary channel interface codes (SECNCI).

For a complete list, see the [UNE Loop NC/NCI/SECNCI Matrix \(Connecticut\)](#).

## UNE Loop Descriptions

---

### 2-Wire Voice Grade

(Simple)

Simple-Process Loop is a single purpose non-designed local loop element designated for the specific application of delivering a local loop, through a 2-wire cross-connect termination, to a customer's collocated Point of Termination. The customer's collocated Point of Termination must be within the same central office building as the loop.

Changes and disconnects only are accepted (7/19/2020)

---

### 2-Wire Voice Grade

(Complex)

Complex-Process Loop is a designed local loop element provisioned according to the customer's specifications (e.g., in conjunction with inter-wire center transport) and is equipped with the Telephone Company's remote access testing capabilities. Trouble isolation and/or line testing are features of the Complex-Process Loop.

The Complex-Process Loop may be used in conjunction with inter-wire center transport and/or multiplexing. Collocation in the same central office as the requested loop is not required.

Changes and disconnects only are accepted (7/19/2020)

---

**2-Wire Basic  
Rate ISDN  
(BRI) Digital  
Loop**

2-Wire ISDN Digital Grade 160 Kps supports digital transmission of two 64 Kbps bearer (B) channels and one 16 Kbps data (D) channel. This is a 2B+D basic rate Integrated Service Digital Network (BRI-ISDN) type of loop which meets National ISDN standards.

---

**xDSL Capable  
Loop**

2 and 4-wire xDSL loops are copper loops over which a CLEC may provision various DSL technologies. This copper loop will meet basic electrical standards, such as metallic connectivity and capacitive and resistive balance. Removal of load coils, repeaters or excessive bridged taps on an existing loop is optional, and subject to conditioning charges.

---

**Line Share**

Line Sharing is the provisioning of an xDSL-based service by a DLEC and Voice-band service by the ILEC over the same physical Loop. Frontier Communications provides unbundled access to a new network element: the high frequency portion of the loop (HFPL).

To provision Line Sharing, xDSL service is added to a local loop that is being used for "traditional" voice service by deploying passive signal filters, or "splitter", at each end of the end user's local loop. A splitter divides the digital and voice-band signals concurrently traveling the local loop, directing the voice-band signals to the local Central Office, and directing the digital traffic to a DSLAM (Digital Subscriber Line Access Multiplexer) attached to the packet-switch network.

**Note:** A Lineshare Commercial Agreement is required to order this service

---

### Sub-Loops

An unbundled sub-loop is a portion of the loop that can be accessed at specific terminals in the Telephone Company's outside plant. An accessible terminal is a point on the loop where technicians can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within.

Prior to submitting a sub-loop service order, a CLEC will be required to establish a collocation arrangement or a sub-loop interconnection arrangement depending upon the sub-loop type and where the circuit originates and terminates. A collocation arrangement and/or associated Connecting Facility Arrangement (CFA) will be required for sub-loops.

The following sub-loops are available to a CLEC for use in the provisioning of a telecommunications service

Sub-Loop Type	Description
2-Wire Analog	Facilities transmission of voice grade signals - <i>Changes and disconnects only (7/19/2020)</i>
xDSL	Any distribution portion of a copper xDSL Loop that is comprised entirely of copper wire or copper cable, that acts as a transmission facility between any distribution point of technically feasible access in the Telco's outside plant and the demarcation point at an end user premise.
ISDN	A digital facility capable of supporting 160kps, Basic Rate ISDN (BRI) service.



## Change Log

---

**Purpose** The purpose of this section is to provide updates made to this document since the initial posting.

Date	Revision
10/20/2014	Remove DS1 information from page 7 – DS1 not available via LSR
6/12/2020	Changes and disconnects only on UNE analog loops
08/05/2021	Update embedded links

---

DISCLAIMER: THIS DOCUMENTATION IS FOR INFORMATIONAL PURPOSES ONLY AND DOES NOT OBLIGATE FRONTIER TO PROVIDE SERVICES IN THE MANNER DESCRIBED IN THIS DOCUMENT. FRONTIER RESERVES THE RIGHT AS ITS SOLE OPTION TO MODIFY OR REVISE THE INFORMATION IN THIS DOCUMENT AT ANY TIME WITHOUT PRIOR NOTICE. IN NO EVENT SHALL FRONTIER OR ITS AGENTS, EMPLOYEES, DIRECTORS, OFFICERS, REPRESENTATIVES OR SUPPLIERS BE LIABLE UNDER CONTRACT, WARRANTY, TORT (INCLUDING BUT NOT LIMITED TO NEGLIGENCE OF FRONTIER), OR ANY OTHER LEGAL THEORY, FOR ANY DAMAGES ARISING FROM OR RELATING TO THIS DOCUMENT OR ITS CONTENTS, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.