# Bandwidth Upgrades for UNI/EVC

**Contents**

Frontier Wholesale
Rochester, NY

Jurisdiction: All
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# Overview

The purpose of this document is to provide guidance for a bandwidth upgrade to the Ethernet circuit.  There are several different order types that may be needed depending on the existing NC (Network Channel) code on the circuit.  Following are examples of NC codes and the type of orders needed for a bandwidth upgrade. For valid NC code combinations, please refer to the
Job Aid: Switched Ethernet (Layer 2) NC/NCI/SECNCI & SPEC Codes located on the Frontier website
https://wholesale.frontier.com/resources/access-services/ethernet-ordering/ethernet-nc-nci-secnci-job-aids.html

**Note: Bandwidth Upgrade orders MUST use existing Circuit data where noted in this document.**

# Rate Adjustable Codes UNI/EVC Bandwidth Upgrade

Rate Adjustable NC codes are used for incremental increases in the bandwidth. As long the UNI upgrade is within the original ordered speed, then order activity used is C for Change because the first two positions of the NC code are not changing and the circuit ID will remain the same.

**NOTE:** PNUM and VTA changes should not be done on the upgrades. Submit an R for Record Activity order for PNUM/VTA changes.

- **Exception to NOTE above:** Customer has signed a new contract for existing services (new PNUM) and UNI/EVC BDW are increasing but does not require a new UNI circuit ID. Circuit IDs should be listed on the contract. ACT=C ASRs can be issued to increase BDW along with PNUM and/or VTA. Typically these will be ICB contracts.

Example:

- 1G connection speed with 8M CIR (BDW) upgrading to 1G connection speed with 15M CIR (BDW). Requires C ACT Order on the UNI to change the 4th position of the NC code and C ACT order on the EVC to change the Bandwidth.

| EVPL Example | UNI/EVC BDW Speed | NC | NCI | SECNCI | Order Types |
|---|---|---|---|---|---|
| UNI Current Speed | 1G/8M | KRB8 | 02LNF.A02 | 02CXF.1GE | **Activity of C on the UNI** |
| UNI Upgrade | 1G/15M | KRBC | 02LNF.A02 | 02CXF.1GE | |
| EVC Current Speed | 8M | VLP- | Original NCI | Original SECNCI | **Activity of C on the EVC** |
| EVC Upgrade Speed | 15M | VLP- | Original NCI | Original SECNCI | |

Example:

- 100M connection speed with 90M CIR (BDW) upgrading to 1G connection speed with 1G CIR (BDW). Requires D and N ACT orders on the UNI to change the 1st, 2nd and 3rd positions of the NC code. C ACT order on the EVC to change the Bandwidth.

| EVPL Example | UNI/EVC Speeds | NC | NCI | SECNCI | Order Types |
|---|---|---|---|---|---|
| UNI Current Speed | 100M/90M | KQE9 | 04LN9.1CT | 04CX9.1CT | **Activity of D/N on the UNI** |
| UNI Upgrade | 1G/1G | KRE0 | 02LNF.A02 | 02CXF.1GE | |
| EVC Current Speed | 90M | VLP- | Original NCI | Original SECNCI | **Activity of C on the EVC** |
| EVC Upgrade Speed | 1G | VLP- | Original NCI | Original SECNCI | |

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## Full Rate Codes UNI/EVC Bandwidth Upgrade

Full Rate Codes require Disconnect and New connect orders.  The circuit ID will be changing based on the Service Code Modifier.

Example:

- 10M connection speed, CIR (BDW) is based on the speed of the EVC.  Upgrading to 1G connection speed, CIR (BDW) is based on the speed of the EVC

| EVPL | UNI/EVC Speeds | NC | NCI | SECNCI | Order Types |
|---|---|---|---|---|---|
| UNI Current Speed | 10M | KDE- | 04LN9.10T | 02CXF.100 | **Activity of D/N on the UNI** |
| UNI Upgrade | 100M | KEE- | 04LN9.1CT | 02CXF.100 | |
| EVC Current Speed | 10M | VLP- | Original NCI | Original SECNCI | **Activity of C on the EVC** |
| **EVC Upgrade Speed** | 100M | VLP- | Original NCI | Original SECNCI | |

**\*\*On the FULL Rate EVC Bandwidth Upgrade, the upgrade speed can be from 1M to 100M if the UNI Circuit is VLAN Based\*\*\***

**Determine if the NC code on the existing circuit is Rate Adjustable or Full Rate using the following table.**

| Service | NC |
|---|---|
| 10 Mbps Full Rate | KD |
| **10 Mbps Rate Adjustable** | **KP** |
| 100 Mbps Full Rate | KE |
| **100 Mbps Rate Adjustable** | **KQ** |
| 1 Gbps Full Rate | KF |
| **1 Gbps Rate Adjustable** | **KR** |
| 10 Gbps Full Rate | KG |
| **10 Gbps Rate Adjustable** | **KS** |

# UNI Bandwith Upgrade ASR Fields

Service Type: END USER SWITCHED ETHERNET

| ASR FORM - ADMINISTRATIVE | | |
|---|---|---|
| FIELD | ENTRY | ASR Activity Type |
| CCNA | Populate what is existing currently on Circuit | N - Required<br>D - Required<br>C - Required |
| PON | Customers PON | N - Required<br>D - Required<br>C - Required |
| REQTYP | ED = End User | N - Required<br>D - Required<br>C - Required |
| ACT | N, D or C | N - Required<br>D - Required<br>C - Required |
| EXP | Populated if Expedite is requested | N - Optional<br>D - Optional<br>C - Optional |
| RTR | F - Send FOC only<br>S – Send FOC and DLR (Prohibited when ACT = D)<br>N - No response required | N - Required<br>D - Prohibited<br>C - Required |
| SEI | Y | N - Required<br>D - Required<br>C - Required |
| QSA | 01 | N - Required<br>D - Optional<br>C - Required |
| PIU | 100 | N - Required<br>D - Prohibited<br>C - Required |
| BAN | E or Fully Populated Current BAN | N - Required<br>D - Required<br>C - Required |
| RPON | Place RPON on ACT N and D | N - Required<br>D - Required<br>C - Optional |
| ECCKT | ECCKT of the UNI CKT ID | N - Prohibited<br>D - Required<br>C - Required |
| QTY | 1 | N - Required<br>D - Required<br>C - Required |
| TSP | Example: TSP12345C-E1<br>**Required** if existing on original Circuit | N - Required<br>D - Required<br>C - Required |
| SPEC | Populate what is existing currently on Circuit | N - Required<br>D - Optional<br>C - Required |
| ASC-EC | Prohibited | All Activities<br>Prohibited |

| BILLING | | |
|---|---|---|
| FIELD | ENTRY | ASR Activity Type |
| ACNA | Populate what is existing currently on Circuit | N - Required<br>D - Required<br>C - Required |
| FUSF | Populate what is existing currently on Circuit | N - Required<br>D - Prohibited<br>C - Required |
| VTA | Populate what is existing currently on Circuit or new VTA if circuit ID is listed on the new contract | N - Required<br>D - Optional<br>C - Required |
| VTAI | A – New Term Agreement (Acitivity of N only)<br>C – Retain existing Variable Term Agreement with No Changes (Reterms must be done on Activity of R only) | N – Required<br>D – Prohibited<br>C - Required |
| PNUM | Populate what is existing currently on Circuit or new PNUM if circuit ID is listed on the new contract | N - Required<br>D - Optional<br>C - Required |
| CONTACT | | |
| FIELD | ENTRY | ASR Activity Type |
| INIT | Example: Jane Smith | N - Required<br>D - Required<br>C - Required |
| INITIATOR TEL | Example: 9999999999 | N - Required<br>D - Required<br>C - Required |
| INIT EMAIL | Example: Jane.Smith@abc.com | N - Optional<br>D - Optional<br>C - Optional |
| DSGCON | Example: Jane Smith | N - Required<br>D - Prohibited<br>C - Required |
| DSGCON TEL | Example: 9999999999 | N - Required<br>D - Prohibited<br>C - Required |
| IMPCON | Example: Jane Smith | N - Required<br>D - Required<br>C - Required |
| IMPCON TEL | Example: Jane Smith | N - Required<br>D - Required<br>C - Required |
| SES FORM – Switched Ethernet Services | | |
| FIELD | ENTRY | ASR Activity Type |
| NC/NCI/SECNCI | Refer to Ethernet NC/NCI and SPEC codes Job Aid at:<br>https://wholesale.frontier.com/resources/access-services/ethernet-ordering/ethernet-nc-nci-secnci-job-aids.html | N - Required<br>D - Required<br>C - Required |
| ESP | 11 character CLLI from original Circuit | N - Optional<br>D - Prohibited<br>C - Required |

| SES FORM – Service Address Information | | |
|---|---|---|
| **FIELD** | **ENTRY** | **ASR Activity Type** |
| PI | Y | N - Required<br>D - Optional<br>C - Required |
| EUNAME | End User's Name | N - Required<br>D - Optional<br>C - Required |
| SANO | Populate if field was populated on original order | N - Conditional<br>D - Optional<br>C - Conditional |
| SASN | End User's Street | N - Required<br>D - Optional<br>C - Required |
| SATH | Populate if field was populated on original order | N - Required<br>D - Optional<br>C - Required |
| SASS | Populate if field was populated on original order | N - Conditional<br>D - Optional<br>C - Conditional |
| LD1 | Populate if field was populated on original order | N - Conditional<br>D - Optional<br>C - Conditional |
| LV1 | Populate if field was populated on original order | N - Conditional<br>D - Optional<br>C – Conditional |
| LD2 | Populate if field was populated on original order | N - Conditional<br>D - Optional<br>C - Conditional |
| LV2 | Populate if field was populated on original order | N - Conditional<br>D - Optional<br>C - Conditional |
| LD3 | Populate if field was populated on original order | N - Conditional<br>D - Optional<br>C - Conditional |
| LV3 | Populate if field was populated on original order | N - Conditional<br>D - Optional<br>C - Conditional |
| CITY | Populate if field was populated on original order | N - Required<br>D - Optional<br>C - Required |
| STATE | Populate if field was populated on original order | N - Required<br>D - Optional<br>C - Required |
| JS | D | N - Required<br>D - Optional<br>C - Required |
| LCON | Identifies the local contact name for access | N - Required<br>D - Optional<br>C - Required |
| ACTEL | Identifies the telephone number to be used for the purpose of arranging access to the service address location for installation purposes | N - Required<br>D - Optional<br>C - Required |
| LCON_EMAIL | Identifies the electronic mail address of the local contact | N - Required<br>D - Optional<br>C - Required |

# Stand Alone EVC Bandwidth Upgrade ASR Fields Activity of C

UNI CKT ID NOT CHANGING - EVCI = A

| ASR FORM - ADMINISTRATIVE | |
|---|---|
| FIELD | ENTRY |
| CCNA | Populate what is existing currently on Circuit |
| PON | Customers PON |
| REQTYP | SD |
| ACT | C |
| EXP | Populate if Expedite is requested based on contract agreements |
| RTR | F - Send FOC only<br>S – Send FOC and DLR<br>N -No response required |
| EVCI | A (Will be prepopulated on PON when choosing Stand Alone EVC Service) |
| PIU | 100 |
| BAN | E or Fully Populated Current BAN |
| QTY | 1 |
| BILLING | |
| FIELD | ENTRY |
| ACNA | Populate what is existing currently on Circuit |
| VTA | Populate what is existing currently on Circuit or new VTA if circuit ID is listed on the new contract |
| VTAI | C – Retain existing Variable Term Agreement with No Changes (Reterms must be done on Activity of R only) |
| PNUM | Populate what is existing currently on Circuit or new PNUM if circuit ID is listed on the new contract |
| CONTACT | |
| FIELD | ENTRY |
| INIT | Example: Jane Smith |
| INITIATOR TEL | Example: 9999999999 |
| INIT EMAIL | Example: Jane.Smith@abc.com |
| DSGCON | Example: Jane Smith |
| DSGCON TEL | Example: 9999999999 |
| IMPCON | Example: Jane Smith |
| IMPCON TEL | Example: Jane Smith |

| EVC FORM ETHERNET VIRTUAL CONNECTION | |
|---|---|
| FIELD | ENTRY |
| EVCNUM | 0001 |
| NC | VLP- |
| EVCID | EVC Circuit ID |
| NUT | 02 |

| EVC FORM – ETHERNET VIRTUAL CONNECTION UNI MAPPING DETAIL [ 1 ] | |
|---|---|
| FIELD | ENTRY |
| **UREF - 01** | 01 |
| UACT | C |
| NCI | Use existing code from original Circuit |
| EVCSP | 11 character CLLI Code from original Circuit |
| RUID -1 | Existing RUID that is requesting the Bandwidth upgrade |

| EVC FORM – CUSTOMER EDGE VIRTUAL LOCAL AREA NETWORK MAPPING DETAIL [1] | |
|---|---|
| **FIELD** | **ENTRY** |
| VACT | N = New (If a New CE-VLAN is requested)<br>E = Retain Existing (Retain CE-VLAN from existing circuit) |
| CE_VLAN_START | VACT = E, Populate original VLAN from circuit which can be found on the FOC from the original order<br>VACT = N, if changing to a New VLAN then populate with New value |

| EVC FORM –  ETHERNET VIRTUAL CONNECTION LEVEL OF SERVICE MAPPING DETAIL | |
|---|---|
| **FIELD** | **ENTRY** |
| **LREF – 1** | 1 |
| LOSACT | C |
| LOS | Enter existing product specific code (Populate only if not using SPEC field) |
| SPEC | Enter existing product specific code (Populate only if not using LOS field) |
| BDW | Enter New Bandwidth value for the upgrade |

| EVC FORM – ETHERNET VIRTUAL CONNECTION UNI MAPPING DETAIL [ 2 ] | |
|---|---|
| **FIELD** | **ENTRY** |
| **UREF -02** | 02 |
| UACT | C |
| NCI | Use existing code from original Circuit |
| EVCSP | 11 character CLLI Code from original Circuit |
| RUID | Existing RUID that is requesting the Bandwidth upgrade |

| EVC FORM – CUSTOMER EDGE VIRTUAL LOCAL AREA NETWORK MAPPING DETAIL [1] | |
|---|---|
| **FIELD** | **ENTRY** |
| VACT | N = New (If a New CE-VLAN is requested)<br>E = Retain Existing (Retain CE-VLAN from existing circuit) |
| CE_VLAN_START | VACT = E, Populate original VLAN from circuit which can be found on the FOC from the original order<br>VACT = N, if changing to a New VLAN then populate with New value |

| EVC FORM –  ETHERNET VIRTUAL CONNECTION LEVEL OF SERVICE MAPPING DETAIL | |
|---|---|
| **FIELD** | **ENTRY** |
| **LREF - 01** | 1 |
| LOSACT | C |
| LOS | Enter existing product specific code from original Circuit (Populate only if not using SPEC field) |
| SPEC | Enter existing product specific code from original Circuit (Populate only if not using LOS field) |
| BDW | Enter New Bandwidth value for the upgrade |

# Stand Alone EVC Bandwidth Upgrade ASR Fields Activity of C

## UNI CKT ID CHANGING - EVCI = A

| ASR FORM - ADMINISTRATIVE | |
|---|---|
| **FIELD** | **ENTRY** |
| CCNA | Populate what is existing currently on Circuit |
| PON | Customers PON |
| REQTYP | SD |
| ACT | C |
| EXP | Populate if Expedite is requested based on contract agreements |
| RTR | F - Send FOC only<br>S – Send FOC and DLR<br>N -No response required |
| EVCI | A (Will be prepopulated on PON when choosing Stand Alone EVC Service) |
| PIU | 100 |
| BAN | E or Fully Populated Current BAN |
| QTY | 1 |
| **BILLING** | |
| **FIELD** | **ENTRY** |
| ACNA | Populate what is existing currently on Circuit |
| VTA | Populate what is existing currently on Circuit or new VTA if circuit ID is listed on the new contract |
| VTAI | C – Retain existing Variable Term Agreement with No Changes (Reterms must be done on Activity of R only) |
| PNUM | Populate what is existing currently on Circuit or new PNUM if circuit ID is listed on the new contract |
| **CONTACT** | |
| **FIELD** | **ENTRY** |
| INIT | Example: Jane Smith |
| INITIATOR TEL | Example: 9999999999 |
| INIT EMAIL | Example: Jane.Smith@abc.com |
| DSGCON | Example: Jane Smith |
| DSGCON TEL | Example: 9999999999 |
| IMPCON | Example: Jane Smith |
| IMPCON TEL | Example: Jane Smith |
| **EVC FORM ETHERNET VIRTUAL CONNECTION** | |
| **FIELD** | **ENTRY** |
| EVCNUM | 0001 |
| NC | VLP- |
| EVCID | EVC Circuit ID |
| NUT | 03 |
| **EVC FORM – ETHERNET VIRTUAL CONNECTION UNI MAPPING DETAIL [ 1 ]** | |
| **FIELD** | **ENTRY** |
| **UREF - 01** | 01 |
| UACT | C |
| NCI | Use existing code from original Circuit |
| EVCSP | 11 character CLLI Code from original Circuit |
| RUID -1 | Existing RUID that is requesting the Bandwidth upgrade (Typically the NNI) |

| EVC FORM – CUSTOMER EDGE VIRTUAL LOCAL AREA NETWORK MAPPING DETAIL [1] | |
|---|---|
| **FIELD** | **ENTRY** |
| VACT | N = New (If a New CE-VLAN is requested)<br>E = Retain Existing (Retain CE-VLAN from existing circuit) |
| CE_VLAN_START | VACT = E, Populate original VLAN from circuit which can be found on the FOC from the original order<br>VACT = N, if changing to a New VLAN then populate with New value |

| EVC FORM –  ETHERNET VIRTUAL CONNECTION LEVEL OF SERVICE MAPPING DETAIL | |
|---|---|
| **FIELD** | **ENTRY** |
| **LREF – 1** | 1 |
| LOSACT | C |
| LOS | Enter existing product specific code from original Circuit (Populate only if not using SPEC field) |
| SPEC | Enter existing product specific code from original Circuit (Populate only if not using LOS field) |
| BDW | Enter New Bandwidth value for the upgrade |

| EVC FORM – ETHERNET VIRTUAL CONNECTION UNI MAPPING DETAIL [ 2 ] | |
|---|---|
| **FIELD** | **ENTRY** |
| **UREF -02** | 02 |
| UACT | N |
| NCI | Use existing code from original Circuit |
| EVCSP | 11 character CLLI Code from original Circuit |
| RUID | New RUID Circuit ID that is requesting the Bandwidth upgrade |

| EVC FORM – CUSTOMER EDGE VIRTUAL LOCAL AREA NETWORK MAPPING DETAIL [1] | |
|---|---|
| **FIELD** | **ENTRY** |
| VACT | N = New (If a New CE-VLAN is requested)<br>E = Retain Existing (Retain CE-VLAN from existing circuit) |
| CE_VLAN_START | VACT = E, Populate original VLAN from circuit which can be found on the FOC from the original order<br>VACT = N, if changing to a New VLAN then populate with New value |

| EVC FORM –  ETHERNET VIRTUAL CONNECTION LEVEL OF SERVICE MAPPING DETAIL | |
|---|---|
| **FIELD** | **ENTRY** |
| **LREF - 01** | 1 |
| LOSACT | N |
| LOS | Enter existing product specific code from original Circuit (Populate only if not using SPEC field) |
| SPEC | Enter existing product specific code from original Circuit (Populate only if not using LOS field) |
| BDW | Enter New Bandwidth value for the upgrade |

| EVC FORM – ETHERNET VIRTUAL CONNECTION UNI MAPPING DETAIL [ 3 ] | |
|---|---|
| **FIELD** | **ENTRY** |
| **UREF -03** | 03 |
| UACT | **D** |
| RUID | Existing RUID (UNI RUID that was Disconnected) |

# Change Log

| Date | Page Number | Change |
|------|-------------|--------|
| 02/09/2018 | | Initial document |
| 05/19/2020 | 5 | Added Service Type. END USER SWITCHED ETHERNET |
| 04/15/2020 | 7,10,11,13 | Added CE-VLAN,VACT and VTAI |
| 05/19/2021 | 2, 7 | Update embedded URLs |
| 11/24/2021 | All | Formatting |
| 3/7/2023 | 3, 6, 8, 10 | Updated PNUM/VTA info to allow ACT=C ASR to change PNUM and/or VTA in some circumstances |
| | | |
| | | |