# 3. ETHERNET VIRTUAL CONNECTION (EVC) FORM ENTRIES

The EVC Form with each of the entry fields numbered is depicted in Section 4 of this practice. These numbers correspond to the field definitions in Sections 3.1 - 3.3. Section 3.4 contains an alphabetic listing of the EVC Form fields cross referenced to the field numbers depicted in the numbered form.

# 3.1 ADMINISTRATIVE SECTION

## 1. CCNA - Customer Carrier Name Abbreviation

Identifies the COMMON LANGUAGE IAC code for the customer submitting the ASR and receiving the Confirmation Notice (CN) Form.

**NOTE 1:** The format and structure of this field is defined by ANSI in document ATIS-0300251 Codes for Identification of Service Providers for Information Exchange.

**NOTE 2:** This entry must be identical to the CCNA field on the ASR Form.

## **VALID ENTRIES:**

IAC Code

CUS = Casual customer or end user billing

**NOTE 1:** Valid IAC codes are maintained by Telcordia Technologies.

**USAGE:** This field is required.

**DATA CHARACTERISTICS:** 3 alpha characters

**EXAMPLE:** |U|T|C|

# 2. PON - Purchase Order Number

Identifies the customer's unique purchase order or requisition number that authorizes the issuance of this request or supplement.

**NOTE 1:** This entry must be identical to the PON field entry

on the ASR Form.

**USAGE:** This field is required.

**DATA CHARACTERISTICS:** 16 alpha/numeric characters

**EXAMPLE:** [R|K|7|5|M|R|7|4|2|0|0|4|-|1|3|

# **3. VER -** Version Identification

Identifies the customer version number.

**NOTE 1:** This entry must be identical to the VER field entry

on the ASR Form.

**USAGE:** This field is required.

**DATA CHARACTERISTICS:** 2 alpha/numeric characters

**EXAMPLE:** A

# **4. ASR NO -** Access Service Request Number

Identifies the number that may be generated by the provider mechanized systems, pre-assigned to the customer by the provider, or manually assigned by the provider to identify a customer's request for service.

**NOTE 1:** This entry must be identical to the ASR NO field entry on the ASR Form.

**USAGE:** This field is conditional.

**NOTE 1:** Required when ASR NO is pre-assigned.

**NOTE 2:** Required on all supplements when PON is not unique.

**NOTE 3:** Otherwise optional.

**DATA CHARACTERISTICS:** 18 alpha/numeric characters

maximum

**EXAMPLE:** |3|1|2|3|4|5|6|7|8|9|1|1| | | | |

## 3.2 ETHERNET VIRTUAL CONNECTION DETAIL SECTION

The Ethernet Virtual Connection Detail Section provides entries for the specification of the overall service configuration. Only one Ethernet Virtual Connection may be ordered on one ASR.

# **5. EVC NUM –** Ethernet Virtual Connection Reference Number

Identifies a unique number associated with the Ethernet Virtual Connection.

**NOTE 1:** The EVC NUM is customer assigned and is returned on the confirmation notice to the ordering customer.

## **VALID ENTRIES:**

0001

**USAGE:** This field is required.

**DATA CHARACTERISTICS:** 4 numeric characters

**EXAMPLE:** |0|0|0|1|

### 6. NC - Network Channel Code

Identifies the network channel code for the circuit(s) involved. The NC code describes the channel provided by the provider.

- **NOTE 1:** The NC code on the EVC Form is used specifically for the ordering of the Ethernet virtual connections. The NC code will specify options such as EVC Type (point to point (E-Line), or multi-point (E-LAN), etc.).
- NOTE 2: The format and structure of this field is defined by ANSI in document T1.223, Structure and Representation of Network Channel (NC) and Network Channel Interface (NCI) Codes for the North American Telecommunications System or by COMMON LANGUAGE in BR-795-403-100. A brief summary of the format can be found in ATIS-0404000 Section 2.14.6.

## **VALID ENTRIES:**

NC Code

**NOTE 1:** Valid NC codes are maintained by Telcordia Technologies.

**USAGE:** This field is conditional.

**NOTE 1:** Required when the ACT field on the ASR Form is "N", "C" or "R", otherwise optional.

**DATA CHARACTERISTICS:** 4 alpha/numeric characters

**EXAMPLE:** |V|L|P|-|

## 7. EVCID - Ethernet Virtual Connection Identifier

Identifies the provider assigned Ethernet virtual connection identifier.

- **NOTE 1:** The provider assigning this EVCID determines the content of this field in accordance with COMMON LANGUAGE standards maintained by Telcordia Technologies.
- **NOTE 2:** When a component within the format is purposely omitted, the component should still be delimited and compressed to eliminate any spaces.
- **NOTE 3:** All components within the EVCID should be delimited by either virgules or periods.
- **NOTE 4:** If all positions in a component within the EVCID are not populated, the component should be compressed to eliminate any spaces.
- **NOTE 5:** The format and structure of the field is defined by ANSI standards.

## **VALID ENTRIES:**

- 1. COMMON LANGUAGE Special Service Circuit Codes (CLCI S/S Codes) Serial Number Format. This format is defined in ANSI T1.266, Structure for the Identification of Telecommunications Circuits for the North American Telecommunications System and consists of the following elements:
  - 1. **Prefix** A non-standard code populated according to the special services circuit coding methodology of each carrier or network operator assigning the circuit identification (1-2 alpha/numeric characters).

- **7. EVCID** Ethernet Virtual Connection Identifier (continued)
  - 2. **Service Code** A standardized code that represents a tariff offering that requires special services circuit provisioning. Valid entries are outlined in Telcordia Technologies practice BR 795-402-100 (2 alpha/numeric characters).
  - 3. **Service Code Modifier** A standardized code that designates the jurisdiction, networking application, and additional technical information of the service identified in the service code. Valid entries are outlined in Telcordia Technologies practice BR 795-402-100 (2 alpha/numeric characters).
  - 4. **Serial Number** A serial number type code that uniquely identifies a special services circuit having the same prefix, service code, and service code modifier within a network operator or carrier assigning the circuit identification (1-6 numeric characters).
  - 5. **Suffix** A serial number type code that relates a group of special services circuits having the same service code for the same customer, and with similar termination equipment at each end (1-3 numeric characters).
  - 6. **Assigning Company ID** A standardized code that uniquely identifies the network operator or carrier assigning the circuit identification. Valid entries are outlined in Telcordia Technologies practice BR 751-100-112 (2-4 alpha characters).
  - 7. **Segment Number** A serial number type code that uniquely identifies each termination point of a special services circuit, when the circuit has more than two termination points, i.e. multi-point circuit (1 3 alpha/numeric characters).

7. **EVCID** - Ethernet Virtual Connection Identifier (continued)

**USAGE:** This field is conditional.

**NOTE 1:** Required when the ACT field on the ASR Form is

"C", "D" or "R", otherwise optional.

**DATA CHARACTERISTICS:** 28 alpha/numeric characters

**EXAMPLE:** |9|2|/|V|L|X|X|/|1|2|3|4|5|6|/|/|O|B| |

# **8. NUT -** Number of UNI/ENNI Terminations

Reflects the number of UNI/ENNI termination occurrences being affected by the service request.

## **VALID ENTRIES:**

01-20

**NOTE 1:** When the EVCI field on the ASR form is "B" the

quantity of "01" is not valid.

**USAGE:** This field is conditional.

NOTE 1: Optional when the ACT field on the ASR Form is

"D", otherwise required.

**DATA CHARACTERISTICS:** 2 numeric characters

**EXAMPLE:** 0 | 7 |

## **9. SVP –** SVLAN ID Preservation

Identifies that the customer is requesting S-VLAN ID preservation on a requested OVC.

**NOTE 1:** Preservation means that the S-VLAN values provided to an OVC at the ingress ENNI will be retained and the same values will be handed off from the OVC at the egress ENNI.

## **VALID ENTRIES:**

Y = Preservation is being requested

**USAGE:** This field is conditional.

NOTE 1: Optional when all RUIDs indicate an ENNI,

otherwise prohibited.

DATA CHARACTERISTICS: 1 alpha character

**EXAMPLE:** Y

## 10. MSFS - Maximum Service Frame Size

Identifies the Maximum Service Frame Size allowed (in bytes) for the EVC.

- **NOTE 1:** This attribute may be specified by the provider as part of their product offering.
- **NOTE 2:** More information regarding this field can be found in the Metro Ethernet Forum (MEF) Technical Specification MEF 10.3.

## **VALID ENTRIES:**

EVC Maximum Frame Size Value (numeric value expressed in bytes)

**NOTE 1:** The value of the EVC Maximum Service Frame Size must be less than or equal to the smallest of the UNI Maximum Service Frame Sizes.

**USAGE:** This field is optional.

**DATA CHARACTERISTICS:** 5 numeric characters

**EXAMPLES:** | |1|5|1|8|

9000

## **11. CEV-P –** CE-VLAN Identification Preservation

Identifies if the VLAN ID portion of the Customer Edge VLAN Tag is preserved.

**NOTE 1:** A Service Frame is defined to have its CE-VLAN Identification preserved when the relationship between the ingress Service Frame and its corresponding egress Service Frame(s) is as described in the table below:

Ingress Service Frame	Egress Service Frame(s)
Untagged Service	Untagged Service Frame
Frame	
Tagged Service Frame	Tagged Service Frame with
	VLAN ID equal to the
	VLAN ID of the Tag on the
	ingress Service Frame

**NOTE 2:** More information regarding this field can be found in the Metro Ethernet Forum (MEF) Technical Specification MEF 10.3.

**NOTE 3:** This attribute may be specified by the provider as part of their product offering.

## **VALID ENTRIES:**

E = Enabled
D = Disabled

**USAGE:** This field is optional.

DATA CHARACTERISTICS: 1 alpha character

**EXAMPLE:** E

# **12. CEV-CP –** CE-VLAN Class of Service Preservation

Identifies if the VLAN Class of Service (CoS) portion of the Customer Edge VLAN Tag is preserved.

- **NOTE 1:** More information regarding this field can be found in the Metro Ethernet Forum (MEF) Technical Specification MEF 10.3.
- **NOTE 2:** This attribute may be specified by the provider as part of their product offering.

# **VALID ENTRIES:**

E = Enabled
D = Disabled

**USAGE:** This field is optional.

**DATA CHARACTERISTICS:** 1 alpha character

**EXAMPLE:** D

13.	<b>EVCCKR</b>	_	Ethernet	Virtual	Connection	Customer	Circuit
	Reference						

Identifies the circuit number used by the customer.

**NOTE 1:** EVCCKR is used by the customer as a cross reference to the provider EVC ID(s) and in many cases to identify the customer's end-to-end service.

**USAGE:** This field is optional.

**DATA CHARACTERISTICS:** 53 alpha/numeric characters

#### 3.3 UNI MAPPING DETAIL SECTION

The UNI Mapping Detail Section provides entries for describing the information relative to the level of service ordering options and associated bandwidth profiles for each User Network Interface (UNI) termination point or External Network to Network Interface (ENNI) termination point. UNI mapping detail must be provided for each termination point on the network for the specified EVC.

# **14. UREF** - User Network Interface (UNI) Reference Number

Identifies the reference number associated to the UNI port or ENNI termination point to which EVC mapping requirements will be applied.

- **NOTE 1:** On the initial transmittal of this ASR request, the UREF is a consecutively assigned customer value beginning with "01".
- NOTE 2: On a supplemental transmittal of this ASR request, the UREF can be reassigned if previously cancelled. If the UREF has not been previously cancelled, it must retain the original value for the life of the ASR request.
- **NOTE 3:** The total number of UREFs must equal the value specified in the Number of UNI Terminations (NUT) field.

# **VALID ENTRIES:**

01 - 20

**USAGE:** This field is conditional.

**NOTE 1:** Optional when the ACT field on the ASR Form is "D", otherwise required.

**DATA CHARACTERISTICS:** 2 numeric characters

**EXAMPLE:** 1 0

# **15. EI –** ENNI Indicator

Identifies when the UREF is an ENNI.

# **VALID ENTRIES:**

Y = Indicates that the UREF is an ENNI

**USAGE:** This field is conditional.

**NOTE 1:** Optional when the UACT field on the EVC Form is

"N" or "C", otherwise prohibited.

**DATA CHARACTERISTICS:** 1 alpha character

**EXAMPLE:** Y

# **16. AUNT –** Associated UNI/ENNI Termination

Identifies the UREF termination point associated with the physical port being requested on the ASR.

#### **VALID ENTRIES:**

A = Associated

**NOTE 1:** Only one UREF can be designated as the Associated Termination Point.

**USAGE:** This field is conditional.

**NOTE 1:** Required when the EVCI field on the ASR Form is "B", the associated UREF field is populated and it is the termination point associated with this UNI/ENNI, otherwise prohibited.

**DATA CHARACTERISTICS:** 1 alpha character

**EXAMPLE:** A

# **17. UACT** - User Network Interface (UNI) Activity Indicator

Identifies the activity that is taking place at this UNI/ENNI termination point.

#### **VALID ENTRIES:**

C = Change

D = Disconnect

K = Cancel

N = New

R = Record Activity

**NOTE 1:** Valid entry of "K" is not permitted on initial issuance of request. An entry of "K" will indicate that all LOS activity associated with this UNI/ENNI termination is also cancelled.

**NOTE 2:** Use of "C" versus "D" and "N" activity is based on provider/tariffs/contracts/negotiations.

**USAGE:** This field is conditional.

**NOTE 1:** Required when the associated UREF field is populated, otherwise prohibited.

**DATA CHARACTERISTICS:** 1 alpha character

**EXAMPLE:** N

## **18. RPON -** Related Purchase Order Number

Identifies the PON of a related Access Service Request.

- **NOTE 1:** The RPON specified in this field identifies the PON which is establishing the physical connection (UNI) for this end of the EVC.
- **USAGE:** This field is conditional.
  - **NOTE 1:** Required when the associated UREF field is populated and the associated RUID and the associated AUNT fields are not populated.
  - **NOTE 2:** Prohibited when the associated AUNT field is populated.
  - **NOTE 3:** Otherwise optional.

**DATA CHARACTERISTICS:** 16 alpha/numeric characters

**EXAMPLE:** |8|2|4|Z|9| | | | | | | | | |

### **19. NCI** - Network Channel Interface Code

Identifies the interface characteristics on the circuit at the ACTL/Primary Location.

- **NOTE 1:** Identifies the mapping conditions between the EVC and UNI/ENNI at each EVC termination location.
- NOTE 2: The format and structure of this field is defined by ANSI in document T1.223, Structure and Representation of Network Channel (NC) and Network Channel Interface (NCI) Codes for the North American Telecommunications System or by COMMON LANGUAGE in BR-795-403-100. A brief summary of the format can be found in ATIS-0404000 Section 2.14.7.

## **VALID ENTRIES:**

NCI Code

**NOTE 1:** Valid NCI codes are maintained by Telcordia Technologies.

**19. NCI -** Network Channel Interface Code (continued)

**USAGE:** This field is conditional.

**NOTE 1:** Required when the associated UACT field is "N", "C"

or "R", otherwise optional.

**DATA CHARACTERISTICS:** 7 alpha/numeric characters

minimum, 12 alpha/numeric

characters maximum

**NOTE 1:** For Ethernet Virtual Services the seven character minimum includes the first delimiter and one

protocol option.

**EXAMPLE:** |0|2|V|L|N|.|U| | | | | |

Effective November 4, 2006 Implemented November 4, 2006

#### **20. EVCSP** – Ethernet Virtual Connection Switch Point

Identifies the Ethernet switching point, in CLLI code format, at the UNI/ENNI termination.

- NOTE 1: The format and structure of this field is defined by ANSI in document T1.253, Identification of Location Entities for the North American Telecommunications System. The CLLI Code consists of the following elements:
  - 1. **Geographical Code** Positions 1 through 4 describe the designation for a single geographical locality within a state, province, territory, country, or distinct region of the world (e.g., municipality) (4 alpha characters).
  - 2. **Geopolitical Code** Positions 5 and 6 describe the designation of a state or territory of the United States, a province or territory of Canada, another country having a national federal government, or a unique designation (2 alpha characters).
  - 3. **Network Site Code** Positions 7 and 8 describe the designation of a site of an existing or proposed structure within a geographical location where there is a need to identify one or more telecommunications equipment entities, facility terminations, nodal locations, or administrative operations (2 alpha or 2 numeric characters).
  - 4. **Network Entity Code** Positions 9 through 11 describe the functional category of equipment or work center that is contained in a structure. Equipment categories, including central office switching and ancillary equipment or non-switching or access terminations, are associated with a building or network site for purposes of maintaining equipment inventories and for identifying facility and circuit terminations and nodal locations (3 alpha/numeric characters).

# **20. EVCSP** – Ethernet Virtual Connection Switch Point (continued)

# **VALID ENTRIES:**

Valid Ethernet Switch CLLI

**NOTE 1:** Valid CLLI Codes are outlined in Telcordia Technologies practice BR 795-(100-186)-100.

**NOTE 2:** The use of an 8 character CLLI code is based on customer provider negotiations.

**USAGE:** This field is conditional.

**NOTE 1:** Prohibited when the ACT field on the ASR Form is "D", otherwise optional.

**DATA CHARACTERISTICS:** 8 or 11 alpha/numeric characters

**EXAMPLES:**  $M \mid L \mid N \mid T \mid N \mid M \mid A \mid 6 \mid 8 \mid 6$ 

MILNTNMA

# **21. BUM-FD** - Broadcast, Unicast and Multicast Frame Delivery

Identifies the service frame delivery disposition for Broadcast, Unicast and Multicast service frames outside of the provider's specified throttling defaults for those providers who bill and/or provision at the port level.

Character Position 1 = Broadcast Frame Delivery disposition Character Position 2 = Unicast Frame Delivery disposition Character Position 3 = Multi-cast Frame Delivery disposition

**NOTE 1:** More information regarding this field can be found in the Metro Ethernet Forum (MEF) Technical Specification MEF 10.3.

## **VALID ENTRIES:**

C = Conditional

D = Discard

U = Unconditional

- **NOTE 1:** Valid entry of "C" indicates the Broadcast, Unicast and/or Multicast service frames that will be delivered if certain product descriptions and/or provider specific conditions are met.
- **NOTE 2:** Valid entry of "D" indicates the Broadcast, Unicast and/or Multicast service frames that will be discarded.
- **NOTE 3:** Valid entry of "U" indicates the Broadcast, Unicast and/or Multicast service frames that will be delivered unconditionally.
- **NOTE 4:** All positions are optional and an entry in one position does not require an entry in any other position.

**21. BUM-FD** - Broadcast, Unicast and Multicast Frame Delivery (continued)

**USAGE:** This field is conditional.

**NOTE 1:** Optional when the ACT field on the ASR Form is

"N" or "C", otherwise prohibited.

**DATA CHARACTERISTICS:** 3 alpha characters

**EXAMPLES:** |C|U|D|

U

#### **22. RUID** - Related UNI Identifier

Identifies the provider's related circuit ID for a UNI or ENNI (circuit or Link Aggregation Group) against which the EVC activity is requested.

**USAGE:** This field is conditional.

- **NOTE 1:** Required when the associated UREF field is populated and the associated RPON field and the associated AUNT field are not populated.
- **NOTE 2:** Prohibited when the associated AUNT field is populated and the ACT field on the ASR Form is "N".

**NOTE 3:** Otherwise optional.

**DATA CHARACTERISTICS:** 28 alpha/numeric characters

**EXAMPLE:** 92/KDFN/123456//OB

# **23. R/L** – Root/Leaf

Indicates that the UNI is either a root or a leaf in a rooted multipoint EVC.

**NOTE 1:** At least one UNI must be designated as a Root.

**NOTE 2:** More than one Root is allowed per EVC.

## **VALID ENTRIES:**

L = Leaf UNI R = Root UNI

**USAGE:** This field is conditional.

**NOTE 1:** Required for a rooted multipoint EVC as designated by the NC Code when the ACT field on the ASR Form is "N".

**NOTE 2:** Optional for rooted multipoint EVC as designated by the NC Code when the ACT field on the ASR Form is "C", "D", or "R".

**NOTE 3:** Otherwise prohibited.

**DATA CHARACTERISTICS:** 1 alpha character

**EXAMPLE:** R

# **24. S-VACT –** Service Virtual Local Area Network Activity

Identifies the activity requested for the S-VLAN.

## **VALID ENTRIES:**

N = New

D = Disconnect

E = Retain Existing

- **NOTE 1:** Use of this field is based on customer provider negotiations.
- **NOTE 2:** Entry of "N" shall be used when adding a new S-VLAN. An entry of "N" is not valid when UACT is "D".
- **NOTE 3:** Entry of "D" shall be used when removing an existing S-VLAN. An entry of "D" is not valid when the UACT is "N".
- **NOTE 4:** Entry of "E" shall be used for those providers that require a reiteration of all existing S-VLANs that will be retained, otherwise existing S-VLANs are retained by default. An entry of "E" is not valid when the UACT is "N" or "D".
- **NOTE 5:** When changing a S-VLAN from one value to another, an entry of "N" shall be used for the S-VLAN to be added and an entry of "D" shall be used for the S-VLAN to be removed.

**USAGE:** This field is conditional.

**NOTE 1:** Optional when the associated S-VLAN field is populated, otherwise prohibited.

**DATA CHARACTERISTICS:** 1 alpha character

**EXAMPLE:** N

#### **25. S-VLAN –** Service Virtual Local Area Network

The identifier found within the service tag (commonly referred to in MEF as S-Tag) which is typically associated with OVC end points at an ENNI.

- **NOTE 1:** This is the top tag in the stacked or Q in Q arrangement, or may be the sole identifier when customer frames are untagged (no underlying CE-VLAN).
- **NOTE 2:** This is usually provider assigned but may be negotiated between provider and customer.
- **NOTE 3:** When this field is populated, if the provider can not accommodate the requested value(s), it may be further negotiated between provider and customer.
- **NOTE 4:** When this field is blank and the associated NCI code specifies an S-VLAN based map, the value will be assigned by the provider.
- **NOTE 5:** When allowed by the provider product definition, S-VLANs may be specified in a range.

## **VALID ENTRIES:**

0001-4095

- **NOTE 1:** A single value may be entered or multiple four numeric S-VLANs are allowed to describe a noncontiguous list and/or ranges.
- **NOTE 2:** Based on customer/provider negotiations, if a provider does not require a reiteration of all existing S-VLANs that are to be retained, the existing S-VLANs are retained by default when not provided.

**25. S-VLAN** – Service Virtual Local Area Network (continued)

**USAGE:** This field is conditional.

**NOTE 1:** Prohibited when the associated NCI code specifies anything other than an S-VLAN based map.

**NOTE 2:** Prohibited when the associated VPN-ID field is populated.

**NOTE 3:** Required when the associated UACT field is "C" and the associated NCI code specifies an S-VLAN based map.

**NOTE 4:** Otherwise optional.

**DATA CHARACTERISTICS:** 9 numeric characters (including 1 pre-printed hyphen)

**EXAMPLES:** [0|7|5|2|-| | |

0 7 5 0 - 0 7 5 9

#### **26. EVCMPID** – EVC Meet Point ID

Specifies the physical facility ID interconnecting the two service providers in an EVC meet point configuration.

- MEF 26 defines the basic architecture of Metro Ethernet Services that cross more than one service provider domain. However, it assumes that the EVC customer interacts with only one provider who in turn places "access" orders (ENNI for the physical interconnect and OVCs for the virtual service instance) to all other providers in the path. The EVC customer receives a single circuit ID. Also in the MEF 26 model, this "EVC Meet Point" would actually be an ENNI and the EVC customer would have no visibility to it. The EVC Meet Point ID field supports an alternative, pre-MEF 26 model whereby the EVC customer places the EVC order simultaneously to both service providers in the end path and refers to the physical interconnection point between the two providers.
- **NOTE 2:** Established during pre-order negotiations outside of the ASR process.
- **NOTE 3:** The interconnecting facility requires that an Ethernet port be dedicated to it in order to carry Ethernet service, when the EVC involves the territories of more than one provider.
- **NOTE 4:** The format and structure of this field is defined by ANSI in document ATIS-0300097 Structure for the Identification of Telecommunications Connections for the North American Telecommunications System or by COMMON LANGUAGE in BR-795-450-100. A brief summary of the format can be found in ATIS-0404000 Section 2.14.5.

# **26. EVCMPID** – EVC Meet Point ID (continued)

## **VALID ENTRIES:**

CLFI Code

**NOTE 1:** The facility type code and CLLI codes used in the location elements of the CLFI code are maintained by Telcordia Technologies.

**USAGE:** This field is conditional.

**NOTE 1:** Optional when the ASC-EC field on the ASR form is populated, otherwise prohibited.

**DATA CHARACTERISTICS:** 42 alpha/numeric characters

# **27. OTC** – Other Exchange Company (Terminating) (EVC)

Identifies the EC or Company Code of the network facing switch of the provider in an EVC Meet Point service arrangement.

**NOTE 1:** The format and structure of this field is defined by ANSI in document T1.251, Identification of Telecommunications Service Provider Codes for the North American Telecommunications System.

# **VALID ENTRIES:**

**COMMON LANGUAGE EC Code** – A four alpha character code, which identifies providers in North America, maintained by Telcordia Technologies.

**COMMON LANGUAGE EC Code** – A two alpha character code, which identifies the former Bell companies maintained by Telcordia Technologies.

**Company Code** – A four alpha/numeric character code structure assigned and maintained by NECA for North America and certain U.S. territories.

**NOTE 1:** Valid EC codes are outlined in Telcordia Technologies practice BR 751-100-112.

**NOTE 2:** Valid Company Codes are available from NECA.

**USAGE:** This field is conditional.

**NOTE 1:** Required when the associated EVCMPID field is populated, otherwise prohibited.

**27. OTC** – Other Exchange Company (Terminating) (EVC) (continued)

**DATA CHARACTERISTICS:** 4 alpha/numeric characters

**EXAMPLES:** GTPA

2034

|S|W

1 2 A 3

# 28. ASN – Autonomous System Number

Indicates the unique number identifying the customer Internet network ordering the Border Gateway Protocol (BGP) service.

**NOTE 1:** An ASN is assigned to each network on the Internet.

#### **VALID ENTRIES:**

A valid ASN

**NOTE 1:** An entry in this field must comply with the Internet Engineering Task Force (IETF) standards for an ASN. The ASN is provided by the Internet Assigned Numbers Authority (IANA).

**USAGE:** This field is conditional.

**NOTE 1:** Required when ordering BGP, otherwise prohibited.

**DATA CHARACTERISTICS:** 5 numeric characters

EXAMPLES: 4

1 2 3 4 5

## 29. VPN-ACT - Virtual Private Network Identifier Activity

Identifies the activity requested for the VPN-ID.

#### **VALID ENTRIES:**

N = New

D = Disconnect

E = Retain Existing

- **NOTE 1:** Entry of "N" shall be used when adding a new VPN-ID. An entry of "N" is not valid when UACT is "D".
- **NOTE 2:** Entry of "D" shall be used when removing an existing VPN-ID. An entry of "D" is not valid when the UACT is "N".
- **NOTE 3:** Entry of "E" shall be used for those providers that require a reiteration of the VPN-ID that will be retained, otherwise existing VPN-ID is retained by default. An entry of "E" is not valid when the UACT is "N" or "D".

**USAGE:** This field is conditional.

**NOTE 1:** Required when the associated VPN-ID field is populated, otherwise prohibited.

**DATA CHARACTERISTICS:** 1 alpha character

**EXAMPLE:** N

## **30. VPN-ID –** Virtual Private Network Identifier

Indicates a unique identifier for the virtual private network that creates a secure network connection over a public network.

**NOTE 1:** When this field is populated, if the provider cannot accommodate the requested value(s), it may be further negotiated between provider and customer.

#### **VALID ENTRIES:**

1-9999999999

**USAGE:** This field is conditional.

**NOTE 1:** Optional when the associated ASN field is populated and all of the associated S-VLAN fields are not populated, otherwise prohibited.

**DATA CHARACTERISTICS:** 10 numeric characters

**EXAMPLES:** 4 5 6 7 8 9 0

1 2 3 4 5 6 7 8 9 0

# **31. VACT –** Customer Edge Virtual Local Area Network Activity Indicator

Identifies the activity requested for the CE-VLAN.

#### **VALID ENTRIES:**

N = New

D = Disconnect

E = Retain Existing

- **NOTE 1:** Use of this field is based on customer provider negotiations.
- **NOTE 2:** Entry of "N" shall be used when adding a new CE-VLAN. An entry of "N" is not valid when UACT is "D".
- **NOTE 3:** Entry of "D" shall be used when removing an existing CE-VLAN. An entry of "D" is not valid when the UACT is "N".
- **NOTE 4:** Entry of "E" shall be used for those providers that require a reiteration of all existing CE-VLANs that will be retained, otherwise existing CE-VLANs are retained by default. An entry of "E" is not valid when the UACT is "N" or "D".
- **NOTE 5:** When changing a CE-VLAN from one value to another, an entry of "N" shall be used for the CE-VLAN to be added and an entry of "D" shall be used for the CE-VLAN to be removed.
- **USAGE:** This field is conditional.
  - **NOTE 1:** Optional when the associated CE-VLAN field is populated, otherwise prohibited.

**31. VACT** – Customer Edge Virtual Local Area Network Activity Indicator (continued)

**DATA CHARACTERISTICS:** 1 alpha character

**EXAMPLE:** N

## **32. CE-VLAN –** Customer Edge Virtual Local Area Network

An identifier derivable from a content of a service frame that allows the service frame to be associated with an EVC at the UNI.

**NOTE 1:** This is usually provider assigned but may be negotiated between provider and customer.

## **VALID ENTRIES:**

0001-4095

- **NOTE 1:** For a VLAN based map with many to one bundling, multiple four numeric CE-VLANs are allowed to describe a list and/or ranges. Each UNI termination point must contain the same set of CE-VLAN values.
- **NOTE 2:** Only one four numeric CE-VLAN entry is allowed for all other VLAN based map types.
- **NOTE 3:** Based on customer/provider negotiations, if a provider does not require a reiteration of all existing CE-VLANs that are to be retained, the existing CE-VLANs are retained by default when not provided.
- **USAGE:** This field is conditional.
  - **NOTE 1:** Prohibited when the associated NCI code specifies anything other than a VLAN based map, otherwise optional.
- **DATA CHARACTERISTICS:** 9 numeric characters (including 1 preprinted hyphen)

**32. CE-VLAN** – Customer Edge Virtual Local Area Network (continued)

**EXAMPLES:** 0 7 5 0 - | | |

**NOTE 1:** This example depicts a single CE-VLAN entry. Multiple single entries may be populated to comprise a list of non-contiguous CE-VLANs.

0 7 5 0 - 0 7 5 9

**NOTE 1:** This example depicts a range of CE-VLANs.

## **33. LREF** – Level of Service Reference Number

Identifies the reference number associated to the level of service mapping configuration being requested.

- **NOTE 1:** On the initial transmittal of this ASR request, the LREF is a consecutively assigned customer value beginning with "1".
- **NOTE 2:** On a supplemental transmittal of this ASR request, the LREF can be reassigned if previously cancelled. If the LREF has not been previously cancelled, it must retain the original value for the life of the ASR request.

## **VALID ENTRIES:**

1-5

**USAGE:** This field is conditional.

**NOTE 1:** Required when the associated UACT field is "C" or "N".

**NOTE 2:** Optional when the associated UACT field is "K".

**NOTE 3:** Otherwise prohibited.

**DATA CHARACTERISTICS:** 1 numeric character

**EXAMPLE:** 1

# **34. LOSACT** – Level of Service Activity Indicator

Identifies the activity for the level of service at this UNI termination occurrence.

# **VALID ENTRIES:**

C = Change

D = Disconnect

K = Cancel

N = New

**NOTE 1:** Valid entry of "K" is not permitted on initial issuance of request.

**USAGE:** This field is conditional.

NOTE 1: Required when the associated LREF field is

populated, otherwise prohibited.

**DATA CHARACTERISTICS:** 1 alpha character

**EXAMPLE:** N

## **35. LOS –** Level of Service Name

Identifies a name for a provider defined level of service performance associated with the Ethernet product offering.

- **NOTE 1:** This field is analogous to the Class of Service (COS) attribute as defined by the Metro Ethernet Forum as outlined in Technical Specification MEF 23.1.
- **NOTE 2:** Examples of Ethernet LOS names are Gold, Silver, Premium, Best Effort, A, B, C etc.
- **NOTE 3:** Technical parameters for a given LOS name are defined by the provider tariffs.
- **NOTE 4:** This is an alternative identifier for the level of service performance.
- **NOTE 5:** Unique entries are required per UREF.
- **USAGE:** This field is conditional.
  - **NOTE 1:** Required when the associated LREF field is populated and the associated SPEC field is not populated, otherwise prohibited.

**DATA CHARACTERISTICS:** 20 alpha/numeric characters

#### **36. SPEC –** Service and Product Enhancement Code

Identifies a specific product or service offering.

- **NOTE 1:** SPEC may be applicable for virtual service level features and options other than those already identified by the Network Channel (NC) and Network Channel Interface (NCI) codes.
- **NOTE 2:** Telcordia Technologies, Inc. is the intellectual property owner and administrator of SPEC. The SPEC code structure and use are outlined in Telcordia Technologies special report SR-2491.
- **NOTE 3:** This is an alternative identifier for the level of service performance.
- **NOTE 4:** Unique entries are required per UREF.

## **VALID ENTRIES:**

Positions 1-7 = Any alpha character except "I" or any numeric character except "0".

**USAGE:** This field is conditional.

**NOTE 1:** Required when the associated LREF field is populated and the associated LOS field is not populated, otherwise prohibited.

**DATA CHARACTERISTICS:** 5 alpha/numeric characters minimum, and 7 alpha/numeric characters maximum

**EXAMPLE:** |F|R|D|S|3|2|3|

## **37. P-BIT** - Priority Bit

An optional parameter within the Ethernet frame to specify priority. In this application it will be used to map certain traffic to a given level of service on an EVC when the provider supports multiple levels of service per EVC.

## **VALID ENTRIES:**

0-7

**USAGE:** This field is conditional.

EXAMPLES: |1| | |

**NOTE 1:** Required when the associated LREF field is populated and the NCI code specifies a P-Bit based map, otherwise prohibited.

**DATA CHARACTERISTICS:** 8 numeric characters

0 4 6 | | | |

**NOTE 1:** Single values are typical but multiple P-Bit values may be associated to a single level of service.

4 5 6 7

**NOTE 1:** The above example shows the proper format when requesting a range of P-Bit values.

#### **38. BDW** - Bandwidth

Identifies the average rate in bits per second of ingress service frames up to which the network delivers service frames and meets the performance objectives defined by the LOS service attribute.

## **VALID ENTRIES:**

Bandwidth specified at the EVC or LOS levels = numeric value followed by kilobits (K), megabits (M) or gigabits (G).

Bandwidth specified at the UNI level = "UNI".

**NOTE 1:** Use of "UNI" in this field is contingent upon customer/provider negotiations.

**USAGE:** This field is conditional.

**NOTE 1:** Required when the associated LOSACT field is "C" or "N", otherwise optional.

**DATA CHARACTERISTICS:** 7 alpha/numeric characters

**NOTE 1:** When the bandwidth specification is not "UNI", the last character of this entry is always expressed in kilobits (K), megabits (M) or gigabits (G).

EXAMPLES:	1	6	K					
	1	•	0	8	G			j
	1	0	•	8	0	8	M	
	U	N	Ι					l

## **39. DSCP** – Differentiated Services (DiffServ) Code Point

Identifies an integer value encoded in the DiffServ field of an Internet Protocol header.

- **NOTE 1:** The DSCP is an example of traffic marking whose value corresponds with a preferred Quality of Service as the packet traverses the network.
- **NOTE 2:** The DSCP and TOS fields are mutually exclusive as they utilize the same byte position in the Internet Protocol header.
- **NOTE 3:** When allowed by provider product definition, DSCP values may be specified in a range whereby any data containing those values will become a member of the same level of service.

#### **VALID ENTRIES:**

- **NOTE 1:** When populated for a single value, the first six positions must contain a "0" or a "1".
- **NOTE 2:** When populated for ranging all 12 numeric characters must be populated with a "0" or a "1".
- **USAGE:** This field is conditional.
  - **NOTE 1:** Optional when the associated LREF field is populated and the associated TOS field is not populated, otherwise prohibited.
- **DATA CHARACTERISTICS:** 12 numeric characters not including pre-printed hyphen.

## **40. TOS –** Type of Service

Identifies the quality of service desired.

- **NOTE 1:** The TOS provides an indication of the abstract parameters which characterize the service choices provided in the network.
- **NOTE 2:** The TOS and DSCP fields are mutually exclusive as they utilize the same byte position in the Internet Protocol header.

## **VALID ENTRIES:**

- **NOTE 1:** TOS is an 8 position field but positions 7 and 8 are reserved for future use.
- **NOTE 2:** When populated the first six positions must contain a "0" or a "1".
- **USAGE:** This field is conditional.
  - **NOTE 1:** Optional when the associated LREF field is populated and the associated DSCP field is not populated, otherwise prohibited.

**DATA CHARACTERISTICS:** 8 numeric characters

**EXAMPLE:** |0|0|0|0|1|0|

## **41. CIR-I** - Committed Information Rate (Ingress)

Identifies the average rate (bits per second) up to which service frames are delivered as defined in the provider's service level specification.

**NOTE 1:** CIR is tracked for frame loss by the MEF Ethernet Operations, Administration, and Maintenance (OAM) Protocol, unlike EIR.

## **VALID ENTRIES:**

Valid CIR expressed as a numeric value followed by "K", "M" or "G" representing Kilobits, Megabits or Gigabits per second respectively.

**USAGE:** This field is conditional.

**NOTE 1:** Optional when the associated LREF field is populated and the LOSACT is not "D", otherwise prohibited.

**DATA CHARACTERISTICS:** 7 alpha /numeric characters

10.808M

## **42. CBS-I** - Committed Burst Size (Ingress)

Identifies the Bandwidth Profile parameter that limits the maximum number of bytes available for a burst of Service Frames sent at the UNI/ENNI that will be delivered by the service provider based on the level of service performance.

**NOTE 1:** Level of service performance will be identified in either the SPEC field or the LOS field.

## **VALID ENTRIES:**

Maximum Committed Burst Size Value (numeric value expressed in bytes)

**USAGE:** This field is conditional.

**NOTE 1:** Optional when the associated LREF field is populated and the LOSACT field is not "D", otherwise prohibited.

**DATA CHARACTERISTICS:** 7 numeric characters

**EXAMPLES:** | | | 1 | 5 | 2 | 2 |

9999999

# **43. EIR-I** - Excess Information Rate (Ingress)

Identifies the average rate (bits per second) up to which service frames may be delivered but will not be guaranteed per the provider's service level specification.

**NOTE 1:** EIR-I is not tracked for frame loss by the MEF Ethernet OAM Protocol, unlike CIR.

## **VALID ENTRIES:**

Valid EIR expressed as a numeric value followed by "K", "M" or "G" representing Kilobits, Megabits or Gigabits per second respectively.

**USAGE:** This field is conditional.

**NOTE 1:** Optional when the associated LREF field is populated and the LOSACT field is not "D", otherwise prohibited.

**DATA CHARACTERISTICS:** 7 alpha /numeric characters

**EXAMPLES:** 1 6 K

1 . 0 8 G

1 0 . 8 0 8 M

# **44. EBS-I** – Excess Burst Size (Ingress)

Identifies the Bandwidth Profile parameter that limits the maximum number of bytes available for a burst of Service Frames associated with the EIR-I sent at the UNI/ENNI that will be delivered by the service provider based on the level of service performance.

**NOTE 1:** Level of service performance will be identified in either the SPEC field or the LOS field.

## **VALID ENTRIES:**

Maximum Excess Burst Size Value (numeric value expressed in bytes)

**USAGE:** This field is conditional.

**NOTE 1:** Optional when the associated LREF field is populated and the LOSACT field is not "D", otherwise prohibited.

**DATA CHARACTERISTICS:** 7 numeric characters

**EXAMPLES:** | | | | | 1 | 6

## **45. CMI-I** – Color Mode Identifier (Ingress)

Identifies when the provider configuration will use the specific customer Class of Service (CoS) markings when applying the Bandwidth Profile CIR/EIR.

- **NOTE 1:** MEF color-aware mode indicates the provider is using customer CIR/EIR markings.
- **NOTE 2:** MEF color-blind mode indicates the provider ignores customer CIR/EIR markings.

## **VALID ENTRIES:**

E = Enable color-aware

D = Disable color-aware (change to color-blind mode)

- **NOTE 1:** When this field is blank and the ACT field on the ASR Form is "N", color-blind will be utilized.
- **NOTE 2:** When this field is blank and the ACT field on the ASR Form is "C", the existing value will be retained.

**USAGE:** This field is conditional.

**NOTE 1:** Optional when the ACT field on the ASR Form is "N" or "C", the associated LREF field is populated and the LOSACT field is not "D", otherwise prohibited.

**DATA CHARACTERISTICS:** 1 alpha character

**EXAMPLE:** E

# **46. BCF-I** – Bandwidth Coupling Flag (Ingress)

Identifies when color-aware markings for customer marked service frames EIR traffic should use available CIR Bandwidth.

#### **VALID ENTRIES:**

E = Enabled

D = Disabled

**USAGE:** This field is conditional.

**NOTE 1:** Optional when the ACT field on the ASR Form is "N", the associated LREF field is populated, and the CMI-I field is "E".

**NOTE 2:** Optional when the ACT field on the ASR Form is "C", the associated LREF field is populated, the LOSACT field is not "D" and the CMI-I field is "E" or blank.

**NOTE 3:** Otherwise prohibited.

**DATA CHARACTERISTICS:** 1 alpha character

**EXAMPLE:** E

# **47. REMARKS** - Remarks

Identifies a free flowing field, which can be used to expand upon and clarify other data on this form.

USAGE:	This field is optional.
DATA CHAP	RACTERISTICS: 124 alpha/numeric characters
EXAMPLE:	DISC ONE EVC

# **48. PG\_of\_** - Page\_of\_

Identifies the page number and total number of pages contained in this transaction.

**USAGE:** This field is required.

**DATA CHARACTERISTICS:** 6 numeric characters

**EXAMPLE:** PG | 1 of 2 0