



**ATIS-0404000-0050 - ATIS-0404025-0050**

**ACCESS SERVICE ORDERING  
GUIDELINES (ASOG)  
Version 50  
March 21, 2015**

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## ASOG V50 SYNOPSIS OF CHANGES

| ISSUES INCLUDED IN THIS SYNOPSIS |  |
|----------------------------------|--|
| ISSUE NUMBER                     | DESCRIPTION  |
| 3503                             | ASOG: Modify MUXLOC and SMUXLOC usage rules for multiple circuit occurrences.  |
| 3506                             | ASOG: Update Practice ATIS0404025 (ECI)  |
| 3508                             | ASOG: Enhance the ASOG to incorporate gaps between ASOG and MEF EVC and UNI Service Attributes                           |
| 3509                             | ASOG: Add new valid entry to SR field  |
| 3510                             | ASOG: Prohibit CIC related fields when placing Wireless service requests.  |
| 3512                             | ASOG: Update to BI Field on Switched Ethernet Services Form (008) and Additional Circuit Information Form (Practice 007) |
| 3513                             | ASOG: Add HVP to the Switched Ethernet Services Form (008)   |
| 3514                             | ASOG: Clarify Working Telephone Number   |

| ISSUES CLOSED IN THIS RELEASE, DETAILS IN MECH SPEC |  |
|---|--|
| ISSUE NUMBER  | DESCRIPTION  |
| 3491  | ASR Mechanized Specifications: Sunset the use of MECH SPEC practice ATIS-0404100<br>(NOTE: SUNSET WILL BE EFFECTIVE DECEMBER 31, 2016) |

## ASOG V50 SYNOPSIS OF CHANGES

| The following table depicts the type of change category definitions: |   |  |
|--|---|--|
| TYPE OF CHANGE   | = | CATEGORY DEFINITIONS   |
| NEW  | = | Adding a new field   |
| REM  | = | Removing an existing field   |
| FN   | = | Field/Tag name change (e.g., EXEMPT REASON changed to ER)  |
| FORMAT   | = | Field format change (e.g., moved to another section of the form, etc.)                                       |
| DEF  | = | Definition change  |
| DEFN   | = | Definition notes addition, change, deletion  |
| VE   | = | Valid entries addition, change, deletion   |
| VEN  | = | Valid entry notes addition, change, deletion   |
| USE  | = | Usage statement change   |
| USEN   | = | Usage notes addition, change, deletion   |
| DC   | = | Data characteristics change (e.g., change from numeric to alpha/numeric)                                     |
| DCL  | = | Data characteristics length change   |
| DCN  | = | Data characteristics note addition, change, deletion   |
| EX   | = | Example addition, change, deletion   |
| EXN  | = | Example notes addition, change, deletion   |
| FORM   | = | Changes made to the ASR forms (i.e., additions, rearrangements, field length changes or deletions of fields) |
| GLOSSARY   | = | Identifies changes within the glossary sections (i.e., additions or deletions of fields)                     |
| TEXT   | = | Identifies changes within the text of a section (i.e., additions or deletions of fields)                     |

## ASOG V50 SYNOPSIS OF CHANGES

| SYNOPSIS OF CHANGES |         |                  |                |  |              |
|---------------------|---------|------------------|----------------|--|--------------|
| PRAC #              | ISSUE # | Field/ Section   | Type Of Change | Description of Change  | Field Length |
| Overview            |         |                  |                |  |              |
| 000a                | 3508    | Definitions: 1.4 | TEXT           | Add 2 definitions: Service Level Agreement and Service Level Specification |              |
| 000b                |         |                  |                |  |              |
| ASR                 |         |                  |                |  |              |
| 001                 |         |                  |                |  |              |
| FG A                |         |                  |                |  |              |
| 002                 | 3503    | MUXLOC: 20       | DEFN           | Add new Definition Note 4  |              |
| 002                 |         |                  |                |  |              |
| WAL                 |         |                  |                |  |              |
| 003                 |         |                  |                |  |              |
| Trunking            |         |                  |                |  |              |
| 004                 | 3503    | MUXLOC: 27       | DEFN           | Add new Definition Note 3  |              |
| 004                 | 3503    | SMUXLOC: 32      | DEFN           | Add new Definition Note 3  |              |
| 004                 | 3510    | CIC: 12          | USEN           | Added new Usage Note and re-numbered existing                              |              |
| 004                 |         |                  |                |  |              |
| Transport           |         |                  |                |  |              |
| 005                 | 3503    | MUXLOC: 27       | DEFN           | Add new Definition Note 3  |              |
| 005                 | 3503    | SMUXLOC: 37      | DEFN           | Add new Definition Note 3  |              |

## ASOG V50 SYNOPSIS OF CHANGES

| SYNOPSIS OF CHANGES |         |                                  |                |   |              |
|---------------------|---------|----------------------------------|----------------|---|--------------|
| PRAC #              | ISSUE # | Field/ Section                   | Type Of Change | Description of Change   | Field Length |
| 005                 | 3508    | L2CPP: 44                        | NEW            | Added Layer Two Control Protocol Peering                      | 25           |
| 005                 | 3508    | L2CP-ADDR:45                     | NEW            | Added Layer Two Control Protocol Peering                      | 5            |
| 005                 | 3508    | UNI-MSFS: 46                     | NEW            | Added UNI Maximum Service Frame Size                          | 5            |
| 005                 | 3508    | L2CPP: 4,5                       | FORM           | Added L2CPP field to the Camera Ready and Numeric Forms       | 25           |
| 005                 | 3508    | L2CP-ADDR: 4,5                   | FORM           | Added L2CP- ADDR field to the Camera Ready and Numeric Forms  | 5            |
| 005                 | 3508    | UNI-MSFS: 4,5                    | FORM           | Added UNI-MSFS field to the Camera Ready and Numeric Forms    | 5            |
| 005                 | 3508    | L2CPP: 3.2                       | GLOSSARY       | Added L2CPP/Layer Two Control Protocol Peering field          |              |
| 005                 | 3508    | L2CP-ADDR:3.2                    | GLOSSARY       | Added L2CP- ADDR/Layer Two Control Protocol Address Set field |              |
| 005                 | 3508    | UNI-MSFS: 3.2                    | GLOSSARY       | Added UNI-MSFS/UNI Maximum Service Frame Size field           |              |
| MSL                 |         |                                  |                |   |              |
| 006                 |         |                                  |                |   |              |
| ACI                 |         |                                  |                |   |              |
| 007                 | 3503    | GENERAL: 1.1                     | TEXT           | Updated text  |              |
| 007                 | 3503    | ACI REQUEST FORM DESCRIPTION:2.2 | TEXT           | Updated text  |              |
| 007                 | 3512    | BI – Bundling Indicator: 50      | DEF            | Changing definition   |              |
| 007                 | 3512    | BI – Bundling Indicator: 50      | DEFN           | Changing definition note 1                                    |              |

## ASOG V50 SYNOPSIS OF CHANGES

| SYNOPSIS OF CHANGES |         |                             |                |  |              |
|---------------------|---------|-----------------------------|----------------|--|--------------|
| PRAC #              | ISSUE # | Field/ Section              | Type Of Change | Description of Change                                      | Field Length |
| 007                 | 3512    | BI – Bundling Indicator: 50 | DEFN           | Removing definition note 2 and 3                           |              |
| 007                 | 3512    | BI – Bundling Indicator: 50 | VE             | Changing Valid Entry Y and adding entry A                  |              |
| 007                 | 3512    | BI – Bundling Indicator: 50 | VEN            | Adding Valid Entry Notes 1 and 2                           |              |
| 007                 | 3512    | BI – Bundling Indicator: 50 | USEN           | Changing usage note 1                                      |              |
| 007                 | 3508    | SM: 54                      | NEW            | Added Synchronous Mode                                     | 1            |
| 007                 | 3508    | UNI-MSFS: 53                | NEW            | Added UNI Maximum Service Frame Size                       | 5            |
| 007                 | 3508    | SM: 4,5                     | FORM           | Added SM field to the Camera Ready and Numeric Forms       | 1            |
| 007                 | 3508    | UNI-MSFS: 4,5               | FORM           | Added UNI-MSFS field to the Camera Ready and Numeric Forms | 5            |
| 007                 | 3508    | SM: 3.3                     | GLOSSARY       | Added SM/Synchronous Mode field                            |              |
| 007                 | 3508    | UNI-MSFS: 3.3               | GLOSSARY       | Added UNI-MSFS/UNI Maximum Service Frame Size field        |              |
| SES                 |         |                             |                |  |              |
| 008                 | 3512    | BI – Bundling Indicator: 11 | DEF            | Changing definition  |              |
| 008                 | 3512    | BI – Bundling Indicator: 11 | DEFN           | Changing definition note 1                                 |              |
| 008                 | 3512    | BI – Bundling Indicator: 11 | DEFN           | Removing definition note 2 and 3                           |              |
| 008                 | 3512    | BI – Bundling Indicator: 11 | VE             | Changing Valid Entry Y and adding entry A                  |              |

## ASOG V50 SYNOPSIS OF CHANGES

| SYNOPSIS OF CHANGES |         |                                    |                |  |              |
|---------------------|---------|------------------------------------|----------------|--|--------------|
| PRAC #              | ISSUE # | Field/ Section                     | Type Of Change | Description of Change  | Field Length |
| 008                 | 3512    | BI – Bundling Indicator: 11        | VEN            | Adding Valid Entry Notes 1 and 2                             |              |
| 008                 | 3512    | BI – Bundling Indicator: 11        | USEN           | Changing usage note 1  |              |
| 008                 | 3513    | HVP – High Voltage Protection: 13  | NEW            | Add new field  | 1            |
| 008                 | 3513    | HVP – High Voltage Protection: 5   | FORM           | Added new field to camera ready                              |              |
| 008                 | 3513    | HVP – High Voltage Protection: 4   | FORM           | Added new field to enumerated                                |              |
| 008                 | 3513    | HVP – High Voltage Protection: 3.4 | GLOSSARY       | Added new field to Glossary                                  |              |
| 008                 | 3508    | BUM: 10                            | DEFN           | Removed NOTE 1   |              |
| 008                 | 3508    | SBDW: 9                            | DEFN           | Add NOTE 1   |              |
| 008                 | 3508    | L2CPP: 18                          | NEW            | Added Layer Two Control Protocol Peering                     | 25           |
| 008                 | 3508    | L2CP-ADDR:19                       | NEW            | Added Layer Two Control Protocol Address Set                 | 5            |
| 008                 | 3508    | SM: 21                             | NEW            | Added Synchronous Mode                                       | 1            |
| 008                 | 3508    | UNI-MSFS: 20                       | NEW            | Added UNI Maximum Service Frame Size                         | 5            |
| 008                 | 3508    | L2CPP: 4,5                         | FORM           | Added L2CPP field to the Camera Ready and Numeric Forms      | 25           |
| 008                 | 3508    | L2CP-ADDR: 4,5                     | FORM           | Added L2CP- ADDR field to the Camera Ready and Numeric Forms | 5            |
| 008                 | 3508    | SM: 4,5                            | FORM           | Added SM field to the Camera Ready and Numeric Forms         | 1            |



## ASOG V50 SYNOPSIS OF CHANGES

| SYNOPSIS OF CHANGES |         |                |                |  |              |
|---------------------|---------|----------------|----------------|--|--------------|
| PRAC #              | ISSUE # | Field/Section  | Type Of Change | Description of Change                                      | Field Length |
| 008                 | 3508    | UNI-MSFS: 4,5  | FORM           | Added UNI-MSFS field to the Camera Ready and Numeric Forms | 5            |
| 008                 | 3508    | L2CPP: 3.4     | GLOSSARY       | Added L2CPP/Layer Two Control Protocol Peering field       |              |
| 008                 | 3508    | L2CP-ADDR: 3.4 | GLOSSARY       | Added L2CP-ADR/Layer Two field                             |              |
| 008                 | 3508    | SM: 3.4        | GLOSSARY       | Added SM/Synchronous Mode field                            |              |
| 008                 | 3508    | UNI-MSFS: 3.4  | GLOSSARY       | Added UNI-MSFS/UNI Maximum Service Frame Size field        |              |
| OB                  |         |                |                |  |              |
| 009                 |         |                |                |  |              |
| CN/R                |         |                |                |  |              |
| 010                 |         |                |                |  |              |
| CN                  |         |                |                |  |              |
| 011                 |         |                |                |  |              |
| PC                  |         |                |                |  |              |
| 012                 |         |                |                |  |              |
| EUSA                |         |                |                |  |              |
| 013                 | 3503    | MUXLOC: 22     | DEFN           | Add new Definition Note 4                                  |              |
| 013                 | 3503    | SMUXLOC: 57    | DEFN           | Add new Definition Note 4                                  |              |
| 013                 | 3509    | SR:12          | VE             | Add new valid entry to the 1st & 3rd position.             |              |
| 013                 | 3508    | L2CPP: 19      | NEW            | Added Layer Two Control Protocol Peering                   | 25           |
| 013                 | 3508    | L2CP-ADDR:20   | NEW            | Added Layer Two Control Protocol Address Set               | 5            |
| 013                 | 3508    | UNI-MSFS: 21   | NEW            | Added UNI Maximum Service Frame Size                       | 5            |

## ASOG V50 SYNOPSIS OF CHANGES

| SYNOPSIS OF CHANGES |         |                |                |   |              |
|---------------------|---------|----------------|----------------|---|--------------|
| PRAC #              | ISSUE # | Field/ Section | Type Of Change | Description of Change   | Field Length |
| 013                 | 3508    | L2CPP: 4,5     | FORM           | Added L2CPP field to the Camera Ready and Numeric Forms       | 25           |
| 013                 | 3508    | L2CP-ADDR:4,5  | FORM           | Added L2CP- ADDR field to the Camera Ready and Numeric Forms  | 5            |
| 013                 | 3508    | UNI-MSFS:4,5   | FORM           | Added UNI-MSFS field to the Camera Ready and Numeric Forms    | 5            |
| 013                 | 3508    | L2CPP:3.5      | GLOSSARY       | Added L2CPP/Layer Two Control Protocol Peering field          |              |
| 013                 | 3508    | L2CP-ADDR:3.5  | GLOSSARY       | Added L2CP- ADDR/Layer Two Control Protocol Address Set field |              |
| 013                 | 3508    | UNI-MSFS: 3.5  | GLOSSARY       | Added UNI-MSFS/UNI Maximum Service Frame Size field           |              |
| EOD                 |         |                |                |   |              |
| 014                 |         |                |                |   |              |
| SALI                |         |                |                |   |              |
| 015                 | 3514    | WKTEL: 48      | DEF            | Modify Definition   |              |
| EVC                 |         |                |                |   |              |
| 016                 | 3508    | L2CP: 17       | REM            | Removed L2CP field  |              |
| 016                 | 3508    | BUM-FD: 21     | NEW            | Added Broadcast, Unicast and Multicast Frame Delivery         | 3            |
| 016                 | 3508    | CEV-P: 11      | NEW            | Added CE-VLAN Identification Preservation                     | 1            |
| 016                 | 3508    | CEV-CP: 12     | NEW            | Added CE-VLAN Class of Service Preservation                   | 1            |
| 016                 | 3508    | MSFS:10        | NEW            | Added Maximum Service Frame Size                              | 5            |
| 016                 | 3508    | CIR-I: 41      | NEW            | Added Committed Information Rate (Ingress)                    | 7            |
| 016                 | 3508    | CBS-I: 42      | NEW            | Added Committed Burst Size (Ingress)                          | 7            |
| 016                 | 3508    | EIR-I: 43      | NEW            | Added Excess Information Rate (Ingress)                       | 7            |

## ASOG V50 SYNOPSIS OF CHANGES

| SYNOPSIS OF CHANGES |         |                |                |  |              |
|---------------------|---------|----------------|----------------|--|--------------|
| PRAC #              | ISSUE # | Field/ Section | Type Of Change | Description of Change  | Field Length |
| 016                 | 3508    | EBS-I: 44      | NEW            | Added Excess Burst Size (Ingress)                                  | 7            |
| 016                 | 3508    | CMI-I: 45      | NEW            | Added Color Mode Identifier (Ingress)                              | 1            |
| 016                 | 3508    | BCF-I: 46      | NEW            | Added Bandwidth Coupling Flag (Ingress)                            | 1            |
| 016                 | 3508    | L2CP: 4,5      | FORM           | Removed L2CP field from the Camera Ready and Numeric Forms         |              |
| 016                 | 3508    | BUM-FD: 4,5    | FORM           | Added BUM-FD field to the Camera Ready and Numeric Forms           | 3            |
| 016                 | 3508    | CEV-P: 4,5     | FORM           | Added CEV-P field to the Camera Ready and Numeric Forms            | 1            |
| 016                 | 3508    | CEV-CP: 4,5    | FORM           | Added CEV-CP field to the Camera Ready and Numeric Forms           | 1            |
| 016                 | 3508    | MSFS: 4,5      | FORM           | Added MSFS field to the Camera Ready and Numeric Forms             | 5            |
| 016                 | 3508    | CIR-I: 4,5     | FORM           | Added CIR-I field to the Camera Ready and Numeric Forms            | 7            |
| 016                 | 3508    | CBS-I: 4,5     | FORM           | Added CBS-I field to the Camera Ready and Numeric Forms            | 7            |
| 016                 | 3508    | EIR-I: 4,5     | FORM           | Added EIR-I field to the Camera Ready and Numeric Forms            | 7            |
| 016                 | 3508    | EBS-I: 4,5     | FORM           | Added EBS-I field to the Camera Ready and Numeric Forms            | 7            |
| 016                 | 3508    | CMI-I: 4,5     | FORM           | Added CMI-I field to the Camera Ready and Numeric Forms            | 1            |
| 016                 | 3508    | BCF-I: 4,5     | FORM           | Added BCF-I field to the Camera Ready and Numeric Forms            | 1            |
| 016                 | 3508    | L2CP: 3.4      | GLOSSARY       | Removed L2CP field   |              |
| 016                 | 3508    | BUM-FD: 3.4    | GLOSSARY       | Added BUM-FD/Broadcast, Unicast and Multicast Frame Delivery field |              |

## ASOG V50 SYNOPSIS OF CHANGES

| SYNOPSIS OF CHANGES |         |               |                |  |              |
|---------------------|---------|---------------|----------------|--|--------------|
| PRAC #              | ISSUE # | Field/Section | Type Of Change | Description of Change                                    | Field Length |
| 016                 | 3508    | CEV-P: 3.4    | GLOSSARY       | Added CEV-P/CE-VLAN Identification Preservation field    |              |
| 016                 | 3508    | CEV-CP: 3.4   | GLOSSARY       | Added CEV-CP/CE-VLAN Class of Service Preservation field |              |
| 016                 | 3508    | MSFS: 3.4     | GLOSSARY       | Added MSFS/Maximum Service Frame Size field              |              |
| 016                 | 3508    | CIR-I: 3.4    | GLOSSARY       | Added CIR-I/Committed Information Rate (Ingress) field   |              |
| 016                 | 3508    | CBS-I: 3.4    | GLOSSARY       | Added CBS-I/Committed Burst Size (Ingress)               |              |
| 016                 | 3508    | EIR-I: 3.4    | GLOSSARY       | Added EIR-I/Excess Information Rate (Ingress)            |              |
| 016                 | 3508    | EBS-I: 3.4    | GLOSSARY       | Added EBS-I/Excess Burst Size (Ingress)                  |              |
| 016                 | 3508    | CMI-I: 3.4    | GLOSSARY       | Added CMI-I/Color Mode Identifier (Ingress)              |              |
| 016                 | 3508    | BCF-I: 3.4    | GLOSSARY       | Added BCF-I/Bandwidth Coupling Flag (Ingress)            |              |
| VCAT                |         |               |                |  |              |
| 017                 |         |               |                |  |              |
| MEC                 |         |               |                |  |              |
| 018                 |         |               |                |  |              |
| TQ                  |         |               |                |  |              |
| 019                 | 3510    | CIC: 40       | USEN           | Modified Usage Note                                      |              |
| 019                 | 3510    | CIC: 40       | USEN           | Added two Usage Notes and re-numbered existing           |              |
| 019                 | 3510    | ACIC: 41      | USEN           | Modified Usage Note 1                                    |              |
| 019                 | 3510    | ACIC: 41      | USEN           | Added two Usage Notes                                    |              |
| 019                 | 3510    | CIC: 54       | USEN           | Modified Usage Note 1                                    |              |
| RING                |         |               |                |  |              |
| 021                 |         |               |                |  |              |

## ASOG V50 SYNOPSIS OF CHANGES

| SYNOPSIS OF CHANGES |         |                     |                |  |              |
|---------------------|---------|---------------------|----------------|--|--------------|
| PRAC #              | ISSUE # | Field/Section       | Type Of Change | Description of Change                                    | Field Length |
| ARI                 |         |                     |                |  |              |
| 022                 |         |                     |                |  |              |
| VC                  |         |                     |                |  |              |
| 023                 |         |                     |                |  |              |
| NAI                 |         |                     |                |  |              |
| 024                 |         |                     |                |  |              |
| ECI                 |         |                     |                |  |              |
| 025                 | 3506    | BAT: 1036-1043      | VE             | Add new valid entry                                      |              |
| 025                 | 3506    | BAT: 1036-1043      | VEN            | Add new valid entry note 3 and modify valid entry note 1 |              |
| 025                 | 3506    | NWKSTATA: 879       | FN             | Change tag/field name                                    |              |
| 025                 | 3506    | NWKSTATA: 879       | DEF            | Modify definition  |              |
| 025                 | 3506    | NWKSTATZ: 1054      | NEW            | Add new field - record F10B                              | 1            |
| 025                 | 3506    | FPG: 1055-1057      | NEW            | Add new field - record F10B                              | 3            |
| 025                 | 3506    | SBDW: 1003-1010     | NEW            | Add new field - record F10B                              | 8            |
| 025                 | 3506    | IPAI: 129           | NEW            | Add new field - record F30A                              | 1            |
| 025                 | 3506    | IP ADDRESS: 130-168 | NEW            | Add new field - record F30A                              | 39           |
| 025                 | 3506    | SUBNET MASK:169-183 | NEW            | Add new field - record F30A                              | 14           |
|                     |         |                     |                |  |              |

ASOG V50 SYNOPSIS OF CHANGES

| SYNOPSIS OF CHANGES |         |                |                |                       |              |
|---------------------|---------|----------------|----------------|-----------------------|--------------|
| PRAC #              | ISSUE # | Field/ Section | Type Of Change | Description of Change | Field Length |
|                     |         |                |                |                       |              |
| NOTES:              |         |                |                |                       |              |



**ATIS-0404000-0050**

**Access Service Request Ordering Overview**  
**Access Service Ordering Guidelines (ASOG)**  
**Industry Support Interface**

**Version 50**



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ATIS – 0404000-0050

Access Service Request Ordering Overview - Access Service Ordering Guidelines (ASOG)

Is an ATIS standard developed by the Ordering Solutions Committee - Access Service Ordering Subcommittee under the ATIS Ordering and Billing Forum (OBF)

*Published by*

**Alliance for Telecommunications Industry Solutions**  
**1200 G Street, NW, Suite 500**  
**Washington, DC 20005**

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<http://www.atis.org/docstore/default.aspx>”

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## ACCESS SERVICE REQUEST ORDERING OVERVIEW

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## GENERAL SECTION

| <u>DESCRIPTION</u>        | <u>SECTION</u> |
|---------------------------|----------------|
| GENERAL_____              | 1.0            |
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## **1. GENERAL**

In an effort to insure that all possible providers, users and customers of access services or local trunking services are addressed in all issues and documentation maintained by or on behalf of the Ordering & Billing Forum, two terms describing these providers, users and customers will be used:

Customer

Provider

Throughout this document, the term customer describes the entity ordering services (e.g., an interexchange carrier or end user. The term provider describes the entity providing the service (e.g., an exchange carrier).

1.1 This overview describes the various ordering forms used for the purpose of requesting service to be provided by the providers. These instructions are equally applicable to manual (paper) and mechanized (electronic) forms of ordering by the customer when placing an order for service under the various provider tariffs/contracts/negotiations.

Many fields within the ASOG are applied on the same basis in both Canada and the United States.

In Canada, the geographical equivalent of a state is known as a province. In cases where there is a geographic reference, "state/province" will be indicated in the field definition where applicable.

The concept of LATA does not exist in Canada. Canadian providers are regulated at the federal level. For fields where a reference is made to state in association with regulatory issues or LATA, there will be no reference to "province" in the definition.

1.2 This guideline is reissued to reflect changes necessary to clarify the ASR ordering process as recommended by provider representatives and customer representatives in the Ordering and Billing Forum committees. Requests for changes, additions, deletions or other such enhancements are to be forwarded in accordance with the procedures in the Ordering and Billing Forum.

1.3 The Access Service Request does not convey licensing right to non-COMMON LANGUAGE® licensees to use the COMMON LANGUAGE code sets identified throughout the Access Service Request in their internal operations. Where COMMON LANGUAGE is provided, its intended use by non-COMMON LANGUAGE licensees is limited. Allowable uses will be specified by the COMMON LANGUAGE licensee per their COMMON LANGUAGE contract.

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## 1.4 **DEFINITIONS**

The following list of definitions provides some of the most frequently used terms in ASR ordering. Refer to the access service tariffs/contracts/negotiations for a more extensive list or the various technical references addressing these services.

### Access Code

Denotes a uniform five or seven digit code assigned by the provider to an individual customer. The five digit code has the form 10XXX and the seven digit code has the form 950-XXXX or 101XXXX. It is important to be cognizant of another access code used within an end user switching vehicle (PBX, CENTREX). This access code is usually a three digit code for tie-trunk, FX, WATS, etc. or is a one digit code such as used in hotels for accessing various telecommunication services.

### Access Minutes - Interexchange Carriers

Denotes the usage of exchange facilities for the purpose of calculating chargeable access usage. On the originating end of an interstate or foreign call, usage is measured from the time the originating end user's call is delivered by the provider and acknowledged as received by the customer's facilities connected with the originating exchange. On the terminating end of an interstate or foreign call, usage is measured from the time the call is received by the end user in the terminating exchange. Timing of usage at both the originating and terminating end of an interstate or foreign call shall terminate when the calling or called party disconnects, whichever event is recognized first in the originating and terminating end exchanges, as applicable. Those two times are measured by the receipt of a signal known as answer/disconnect supervision.

### Access Service

Service and facilities provided for the origination or termination of InterLATA/IntraLATA or foreign telecommunications.

### Access Tandem (AT)

A provider switching entity designated by the provider for the purpose of originating and terminating traffic to end offices identified as subtending that access tandem. It is represented by an 11-character CLLI code.

Acceptance (Cooperative) Tests

Non-chargeable tests which are performed by the provider in cooperation with the customer at the customer's request at the time service is installed.

Answer/Disconnect Supervision

The transmission of the switch trunk equipment supervisory signal (off-hook or on-hook) to the customer Point of Termination (POT) as an indication that the called party has answered or disconnected.

Billing Account Number Correction (BANC)

A BANC is issued by an Other Exchange Company (OEC) to update Billing Account Number (BAN) and/or Access Service Group (ASG) information.

Border Gateway Protocol (BGP)

The routing protocol that is designed to make core routing decisions between autonomous systems (AS) on the Internet.

Busy Hour Minutes of Capacity (BHMC)

Denotes the average of the highest time consistent hour of usage during the highest twenty consecutive day period during a calendar year.

Carrier

Any individual, partnership, association, joint-stock company, trust or corporation engaged for hire in interstate, intrastate or foreign communication by wire or radio.

Central Office

A local provider switching system where Telephone Exchange Service customer station loops are terminated for purposes of connections to each other and to trunks.

Central Office Prefix

The first three digits (NXX) of the seven digit telephone number assigned to an end user's Telephone Exchange Service when dialed on a local basis.

### Channel(s)

An electrical or photonic, in the case of fiber optic-based transmission systems, communications path between two or more points of termination.

### Circuit Administration Center (CAC)

The provider organization which may have responsibility for developing Message Trunk forecasts, issuing Message Trunk orders and Network Routing orders to maintain Network service.

### Circuit Provision Center (CPC)

Denotes the provider organization which may have responsibility for the assignment of interoffice facilities and equipment, circuit design, and the preparation and distribution of work order documents for special services, message trunks and carrier systems.

### Common Channel Signaling (CCS)

A signaling method in which a signal channel conveys by means of labeled messages, signaling information relating to many circuits or calls and other information such as that used for network management.

### Confirming Design Layout Report (CDLR)

Denotes a report sent by the customer engineering office to the provider Engineering Control Office (ECO). It either confirms the customer's acceptance of the design forwarded by the provider via the Design Layout Report (DLR) or requests specific changes in the design.

### Control Office/Center

A provider office that has been designated as the Control Office for installation and maintenance purposes on a given service furnished for a customer.

### Critical Dates

The specific provisioning Control dates in the life of an order (e.g., APP, DLRD, CDLRD) generated for order control and progress monitoring purposes after the due date has been determined.

### Custom Local Area Signaling Services (CLASS<sup>sm1</sup>)

Features, such as calling number delivery, callback to calling number and end user originated call trace, associated with end user lines requiring support of SS7 signaling.

### Customer

Any individual, partnership, association, corporation or governmental agency or any other entity which subscribes to the services offered to provide telecommunications services for its own use or for use of its customers (end users).

### Customer's Agent

An entity which has an agreement between itself and its customer empowering that entity to act as the customer's agent on some or all matters concerning service being provided to the customer. The entity obtains an agency authorization from its customer specifying the degree of responsibility conferred on that entity.

### Customer/Provider Negotiations

Throughout the ASOG and associated industry documents, there are references to terms such as: "Customer/Provider Negotiations", "Customer Provider Agreements" and "Provider/Tariff/Contracts/Negotiations".

Although common industry standard definitions and guidelines may exist, the industry recognizes that there may be variances based on individual provider practices.

Typical customer/provider negotiations may include (but not be limited to) the following:

- Use of a field
- Valid entries within a field
- Application of usage rules within a field

The information above does not override the guidelines found in Section 2 pertaining to conventions within this document.

<sup>1</sup> CLASS is a ServiceMark of Telcordia Technologies, Inc.

Dedicated Network Access Link (DNAL)

A dedicated data channel between the customer termination and a designated central office which contains the specific features required by the customer.

Design Layout Report (DLR)

A report containing technical and administrative information that describes the service provided by the provider. The technical information is needed by the customer to design the overall service and includes such items as cable makeup (gauge, loading, length, etc.), carrier channel bank type and system mileage, facility interfaces etc. The DLR is sent to the designated customer representative by the provider.

Direct-Link Transport (DLT)

A VG, DS-1, or portion thereof, between the SWC and the STP.

Direct-Trunked Transport (DTT)

A VG, DS-1, DS-3 or Optical transmission path, or portion thereof, between the SWC/HUB and the end office/access tandem/HUB.

Effective 2-Wire

A condition which may allow the simultaneous transmission in both directions over a channel, but it is not possible to insure independent information transmission in both directions. Effective 2-wire channels may be terminated with 2-wire or 4-wire interfaces.

Effective 4-Wire

A condition which may allow the simultaneous independent transmission of information in both directions over a channel. The method of implementing effective 4-wire transmission is at the discretion of the provider (physical, time-domain and frequency-domain separation or echo cancellation techniques). Effective 4-wire channels may be terminated with a 2-wire interface at the end user premises or central office, but not at the customer Point of Interface. However, when terminated 2-wire, simultaneous independent transmission cannot be supported.

Egress

This term refers to the transmission of service frames from the provider's network towards the port.

End Office (EO)

A provider central office switching entity serving end user customers. It is represented by an 11-character CLLI code.

End User

Any individual, partnership, association, corporation, governmental agency or any other entity that subscribes to interstate/intrastate service(s) provided by a carrier.

Entrance Facility (EF)

The VG, DS-1, DS-3 or Optical transmission path, or portion thereof, between the POI and its serving wire center.

Ethernet Virtual Connection (EVC)

An association of two or more User Network Interfaces (UNI) that limits the exchange of Service Frames to those UNIs.

Firm Order Confirmation (FOC)

A Firm Order Confirmation is issued in response to a Firm Order ASR. It provides the customer with non-design information such as critical dates and circuit identification. Design information will be provided on the Design Layout Report (DLR) when requested by the customer.

External Network to Network Interface (ENNI)

A reference point representing the boundary between two Operator Metro Ethernet Networks (MENs) that are operated as separate administrative domains.

First Point of Switching

Denotes the first provider location at which switching occurs on the terminating path of a call proceeding from the customer terminal location to the terminating end office and, at the same time, the last provider location at which switching occurs on the originating path of a call proceeding from the originating end office to the customer terminal location.

Frame Relay Service (FRS)

A high performance, packet mode, public data communications service which enables local area network (LAN) type connectivity among multiple distributed customer locations over a wide area. Data are relayed from the source to the desired destination by means of “virtual” connections, that is, through a fixed path established through the network. It may be offered providing Permanent Virtual Circuits (PVCs) Implemented N/A over dedicated digital access circuits.

GET DATA

Query service to provide flexible access to data for validation of the account owner and or regional accounting office indicating where to send billing records.

HUB

A provider location designated for multiplexing, bridging and/or terminating switched access services into switching entities.

Hundred Call Seconds (CCS)

A standard unit of traffic load that is equal to 100 seconds of usage or capacity of a group of service (e.g., trunks).

Individual Case Basis (ICB)

A condition in which the regulations, if applicable, rates and charges for an offering are developed based on the circumstances in each case.

Ingress

This term refers to the transmission of service frames from the port to the provider’s network.

### Interexchange Customer Service Center (ICSC)

A point of contact in the provider area designated to handle negotiating, provisioning and billing inquiries for services.

### Internet Assigned Numbers Authority (IANA)

The IANA is a nonprofit corporation that oversees Internet Protocol related symbols and numbers including Global IP addresses and Autonomous System Number (ASN) Allocation.

### Internet Engineering Task Force (IETF)

An open international community of network designers, operators, vendors, and researchers concerned with making the Internet work better by producing high quality, relevant technical documents that influence the way people design, use, and manage the Internet.

### Interstate and Foreign Communications

Any communications subject to FCC oversight as provided under the Communications Act of 1934, as amended, and the FCC's Rules and Regulations.

### Inter-Switch Voice Messaging (ISVM)

A feature that enables voice mail and call answering capabilities to be extended to end users served by other switches in addition to those end users connected to a host switch with a voice messaging system.

### Intrastate Communications

Any communications within a state subject to oversight by a state regulatory commission as provided by the laws of the state involved.

### Jointly Provided Ring

A ring facility that is provisioned by multiple providers.

### Line-Side Connection

A connection of a transmission path to the line side of a local exchange switching system.



Link

A digital transmission path that transports signaling messages between elements of the common channel signaling network.

Local Access and Transport Area (LATA)

A geographic area established by the provider for the provision and administration of communications service. It encompasses designated exchanges, which are grouped to serve common social, economic and other purposes.

Local Transport (LT)

The transport requirement for lines/trunks from the customer POP location to the end office/access tandem. The transport may be either direct-trunked or tandem-switched.

The Network Channel (NC)

The NC is a coded representation of a channel service offered by a service provider. It defines both high level and detailed channel attributes. The format and structure is defined by ANSI T1.238-2004 and valid entries are defined and maintained by Telcordia Technologies through COMMON LANGUAGE® NC/NCI™ license agreements.

Network Channel Interface (NCI)

The NCI is a coded representation of the technical interface characteristics at either end of a network channel service as offered by a service provider. Its format and structure is defined by ANSI T1.238-2004 and valid entries are defined and maintained by Telcordia Technologies through COMMON LANGUAGE® NC/NCI™ license agreements.

Network Interface (NI)

The point of demarcation at the end user's premises at which the provider's responsibility for the provision of Service ends.

Network Planning

Various types of information that may need to be exchanged between the Local Exchange Carrier and the Certified Local Exchange Carrier to support the flow of Local and intraLATA traffic.

Node

A piece of transmission equipment at the end of a facility.

Operator Virtual Connections (OVC)

An association of “External Interfaces” within the same Operator Metro Ethernet Network (MEN). OVCs are the building blocks for constructing an EVC spanning multiple Operator MENs.

Originating Direction

The origination of calls from an end user to a customer terminal location.

Originating Line Number Screening (OLNS)

A Line Information Database (LIDB) based query service to provide access information for the originating line to facilitate call processing and billing associated with the line from which the call originates.

Physical Collocation

In physical collocation, the customer occupies space within a provider's location and the customer installs and maintains its transmission equipment in that location. The provider then provides points of interconnection between the customer's equipment and the provider network. Once the physical interconnection is established and tested, the customer buys services or UNEs from the provider, which the customer uses to provide services to its end user. The customer typically has 24 by 7 access to its collocation node and is responsible for the provisioning, maintenance and repair of its equipment.

Point of Interface (POI)/Point of Presence (POP)

The customer terminal location at which the provider's responsibility for access service ends.

### Point of Interconnection (POI)

A POI is a physical demarcation (or handoff) between a customer and a provider's network for exchange of interconnection traffic. Typical arrangements include collocation at a provider's central office, collocation at a customer's premises or a mutually agreeable mid-span meet. While this terminology for POI is used for local interconnection, the terms of POI and POT are synonymous.

### Ring Service

A dedicated high capacity network. This network consists of fiber routed through internodal and/or interoffice facilities.

### Service Access Code (SAC)

Refers to a code in a form of NYY that takes the place of an NPA in the dialing sequence in order to access a particular service, where N is a numeric digit of 2 through 9 and YY is a duplicated numeric digit of 0 through 9 (e.g., 500, 533, 800, 877, 888, 900). Within the ASOG, references to SAC in the form of NYY pertain to the valid codes in effect as assigned and administered by the North American Numbering Plan Administrator (NANPA).

### Service Level Agreement

The contract between the Subscriber and Service Provider specifying the agreed to service level commitments and related business agreements.

### Service Level Specification

The technical specification of the service level being offered by the Service Provider to the Subscriber.

### Service Request Confirmation (SRC)

A confirmation issued in response to the customer's request such as provisioning interval, estimated charges or BHMCs converted to a quantity of circuits.

### Serving Wire Center (SWC)

The provider building/location which would normally provide dial tone to a specific address.

### Signaling System 7 (SS7)

An internationally standardized general purpose common channel signaling system.

### Signaling Point of Interface (SPOI)

The customer's signaling location at which the provider's responsibility for common channel signaling ends.

### Signal Transport Point (STP)

A packet switch that provides translation and routing functions for signaling messages received from network signaling entities.

### Special Service Center (SSC)

A provider office that has been designated control office on a given facility and/or termination furnished for a customer. The SSC may be responsible for the installation and repair of interoffice designed services including those terminated in provider CENTREX services.

### Switching Control Center (SCC)

A provider office that has been designated control office on a given facility and/or termination furnished for a customer. The SCC may be responsible for the installation and repair of FGB-C-D access and for local trunking services.

### Tandem-Switched Transport (TST)

The Voice Grade, DS-1, DS-3 or Optical transmission path, or portion thereof, between the SWC/HUB and the access tandem/HUB.

### Terminating Direction

The completion of calls from a customer terminal location to an end user.

### Trunk

A communications path connecting two switching systems in a network, used in the establishment of an end-to-end connection.

### Trunk Group

A set of trunks which are traffic engineered as a unit for the establishment of connections between switching systems in which all of the communications paths are interchangeable.

### Trunk-Side Connection

The connection of a transmission path to the trunk side of a local exchange switching system.

### Unbundled Multiplexer

An unbundled multiplexer provides for the combining of multiple input signals of lower capacity or bandwidth into one facility for transmission over a single higher-speed channel. An unbundled multiplexer provides the customer dedicated use of the multiplexing function, since both the higher-speed channel and the lower-speed channels terminate at the customer's collocation arrangement established in the same central office.

### Unbundled Network Elements (UNE)

Unbundled network elements include but are not limited to: end office switch trunk ports, tandem switch trunk ports, unbundled multiplexing and unbundled interoffice transport. Unbundled network elements may connect two provider switches, a provider switch to a customer POI, or POI to POI.

### Unbundled Transport

Unbundled transport provides transmission between central offices or POIs. There are two types of transport: dedicated and shared. Dedicated transport provides the customer exclusive use of the interoffice facility while shared transport carries transmission from several different carriers, including the provider.

### V and H Coordinates Method

A method of computing airline miles between two points by utilizing an established formula which is based on the vertical (V) and horizontal (H) coordinates of the two points.

### Virtual Collocation

The customer provides the equipment to be collocated to the provider for a nominal sum of \$1 or through some other arrangement. The provider then handles the provisioning, maintenance, and repair of the equipment at the customer's direction on a non-discriminatory basis.

### Virtual Concatenation (VCAT)

An inverse multiplexing technique used to split synchronous optical network (SONET) or synchronous digital hierarchy (SDH) bandwidth into logical groups which may be transported or routed independently.

### Wire Center (WC)

A building in which one or more central offices, used for the provision of Telephone Exchange Services, are located.

### Wireless Type 1 Interconnection

Type 1 interconnection offers a trunk-side connection from an End Office (EO) to a Wireless Services Provider (WSP). This trunk-side connection has a Trunk With Line Treatment (TWLT) feature, or its equivalent, that offers trunk-side signaling and supervision but treats the connection as a line for recording purposes. With a Type 1 interconnection, the WSP can establish connections to valid NXX codes in the LATA.

### Wireless Type 2A Interconnection

Type 2A interconnection is a trunk-side connection to the access or local tandem. The WSP functions like an EO. The tandem homing arrangements are specified in the Telcordia Local Exchange Routing Guide (LERG) <sup>TM</sup>.

#### Wireless Type 2B Interconnection

Type 2B interconnection is a trunk-side connection to an EO and functions exactly like a high usage trunk. It is intended to be used with a Type 2A connection in situations where the WSP has large traffic quantities to and from NXX codes within a specific EO. The first choice route is the Type 2B connection with overflow allowed via the Type 2A connection. With the Type 2B connection, the WSP can establish connections only to valid NXX codes in the EO providing the Type 2B connection.

#### Wireless Type 2C Interconnection

Type 2C interconnection is used for connection to the Local Exchange Company (LEC) tandem arranged for 911 emergency calls. Type 2C calls are routed to the Public Safety Answering Point (PSAP) and may transfer cell site, sector information and/or subscriber ANI provided by the WSP.

#### Wireless Type 2D Interconnection

Type 2D interconnection is used with a LEC Operator Service/Directory Assistance tandem to complete LEC operator assisted, and/or directory assistance calls.

#### Wireless Type S Interconnection

Type S interconnection is used with LEC Signaling Transfer Point (STP) for access to the Common Channel Signaling (CCS) network.

## 1.5 GRAPHIC CONVENTIONS

The following depict the graphic conventions contained in subsequent sections of this practice.

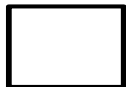
### THE CONVENTIONS USED ARE:



**PBX or END USER**



**Customer Terminal (ACTL)  
Customer Point of Presence (POP)  
Signaling Point of Interface (SPOI)**



**Provider Central Office (CO)  
Access Tandem (AT)**



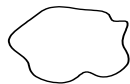
**Provider CO Switched Termination  
End Office (EO)  
Dial Tone Office (DTO)  
Signal Transfer Point (STP)**



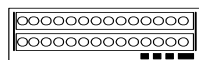
**Serving Wire Center (SWC)  
CO - Must be at least one**



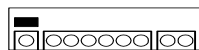
**HUB**



**Representation of a network**



**Cross Connect Equipment**



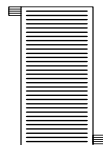
**Multiplexer (unbundled)**



**Existing services**



**New services being requested**



**Frame**



## 1.6 **FORMS AND PRACTICES**

There are many types of ordering forms used to order access services. Each form is supported by a practice containing the guidelines for use of the form and definitions for field entries. Definitions of same name fields should be consistent within a practice but may vary from practices to practices. These forms and the associated special report numbers are:

|  |              |
|--|--------------|
| Access Service Request Form Preparation Guide                  | ATIS-0404001 |
| Feature Group A Form Preparation Guide                         | ATIS-0404002 |
| WATS Access Line Form Preparation Guide                        | ATIS-0404003 |
| Trunking Form Preparation Guide                                | ATIS-0404004 |
| Transport Form Preparation Guide                               | ATIS-0404005 |
| Multipoint Service Legs Form Preparation Guide                 | ATIS-0404006 |
| Additional Circuit Information Form<br>Preparation Guide       | ATIS-0404007 |
| Switched Ethernet Services Form Preparation Guide              | ATIS-0404008 |
| Open Billing Form Preparation Guide                            | ATIS-0404009 |
| Clarification/Notification Request Form<br>Preparation Guide   | ATIS-0404010 |
| Confirmation Notice Form Preparation Guide                     | ATIS-0404011 |
| Ports Configuration Form Preparation Guide                     | ATIS-0404012 |
| End User Special Access Request Form<br>Preparation Guide      | ATIS-0404013 |
| End Office Detail Form Preparation Guide                       | ATIS-0404014 |
| Service Address Location Information Form<br>Preparation Guide | ATIS-0404015 |
| Ethernet Virtual Connection Form Preparation Guide             | ATIS-0404016 |

## 1.6 **FORMS AND PRACTICES (CONTINUED)**

|   |              |
|---|--------------|
| Virtual Concatenation Form Preparation Guide          | ATIS-0404017 |
| Multi-EC Form Preparation Guide                       | ATIS-0404018 |
| Translation Questionnaire Form Preparation Guide      | ATIS-0404019 |
| Ring Form Preparation Guide                           | ATIS-0404021 |
| Additional Ring Information Form<br>Preparation Guide | ATIS-0404022 |
| Virtual Connection Form Preparation Guide             | ATIS-0404023 |
| Network Assignment Information<br>Preparation Guide   | ATIS-0404024 |
| Enhanced Customer Interface Preparation Guide         | ATIS-0404025 |

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## GENERAL ORDERING RULES/INFORMATION

| <u>DESCRIPTION</u>                       | <u>SECTION</u> |
|--|----------------|
| GENERAL ORDERING RULES/INFORMATION _____ | 2.0            |
| GENERAL _____                            | 2.1            |
| SERVICE QUANTITIES _____                 | 2.2            |
| RIGHT/LEFT JUSTIFICATIONS _____          | 2.3            |
| CONVENTIONS _____                        | 2.4            |
| ERRORS _____                             | 2.5            |
| CUSTOMER/PROVIDER ENTRIES _____          | 2.6            |
| ORDERING/BILLING CONFIGURATIONS _____    | 2.7            |
| AGENCY LETTERS _____                     | 2.8            |
| ATTACHMENTS/REMARKS _____                | 2.9            |
| MULTIPLE FORM REQUIREMENTS _____         | 2.10           |
| SERVICE SPECIFIC FORMS _____             | 2.11           |
| ADDITIONAL FORMS _____                   | 2.12           |
| PROVIDER INITIATED FORMS _____           | 2.13           |
| COMMON LANGUAGE FORMATS _____            | 2.14           |
| ETHERNET SERVICE ATTRIBUTES _____        | 2.15           |

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## **2. GENERAL ORDERING RULES/INFORMATION**

**2.1 GENERAL** Access and local trunking services are ordered using uniform order request forms. When a paper form is utilized to order any services supported by the various ASOG practices, the current version of that form should be submitted to the provider. Each request form contains entries required for ordering of the particular service and for the establishment of billing of the appropriate customer account.

**2.2 SERVICE QUANTITIES** Each request may be submitted for any quantity of access circuits provided that the entries pertaining to such access (with the exception of circuit identification) are identical.

**2.3 RIGHT/LEFT JUSTIFICATIONS** All Access Order forms utilize the following general instructions.

- Quantity fields are right justified.
- Fields with text are left justified.
- Fields not following these justification rules are so noted within the context of the definition and usage statement.

**2.4 CONVENTIONS** The access order guidelines incorporate the following conventions for the population of form entries. These instructions/conventions are equally applicable to manual (paper) and mechanized (electronic) forms of ordering by the customer when placing an order for service under the various provider tariffs/contracts and customer/provider negotiations. Any change to the usage of optional or conditional fields that affect the usage of any other required or prohibited ASOG field requires the submission of a formal issue per OBF guidelines.

- |            |  |
|------------|--|
| - Required | - is defined as the field must be populated. Any change to the condition of this field will require submission of a formal issue per OBF guidelines.   |
| - Optional | - is defined as the field may or may not be populated. Optional fields may be required by individual providers. Consideration (including a reasonable implementation timeframe) should be given when changing the usage of optional fields in an effort to minimize customer impact. |

- Prohibited - is defined as the field must not be populated. Any change to the condition of this field will require submission of a formal issue per OBF guidelines.
- Conditional - is defined as the field is dependent upon the relationship to another entry as specified in the usage statement and is dependent upon the presence, absence or combination of other data entries. Conditional fields may be required by individual providers. Consideration (including a reasonable implementation timeframe) should be given when changing the usage of conditional fields, in an effort to minimize customer impact.
- Alpha/Numeric, Etc. field composition statements are designed to describe the type of valid entries. If a numeric field is designated as prohibited, it should be left blank and not zero filled.
- Punctuation and other symbols (e.g., hyphens, ampersands, etc.) are to be considered alpha characters.

2.5 **ERRORS** Errors in the preparation of the request forms are to be corrected in a manner which will allow for the service to be provided in the most expedient method for all concerned. Errors (e.g., billing or provisioning impacting) may require a supplemental ASR.

All errors, should be acknowledged, tracked and controlled by all parties for the purpose of eliminating all such errors in the future.

2.6 **CUSTOMER/PROVIDER ENTRIES** Certain entries may be provider assigned and given to the customer prior to the issuance of the order. These stipulations are contained in the instruction for each of the forms.

2.7 **ORDERING/BILLING CONFIGURATIONS** The customer ordering the access service may be the entity to be billed, or the billed entity may be another customer or an end user of the customer. The ordering forms allow for these variations. Provider practices/procedures will determine the ordering/billing configurations that are available.

2.8 **AGENCY LETTERS** A letter of agency stipulates a billing/provisioning agreement between two or more customers. The letter of agency may be specific between the involved parties and limited to those parties or the agency may be general, stipulating an open ended arrangement as specified within the letter of agency.

2.9 **ATTACHMENTS/REMARKS** These request forms were designed with the intent to require a minimum of input information. Remarks fields provide space for clarification required for items not specifically covered by the request forms.

2.10 **MULTIPLE FORM REQUIREMENTS** The Access Service Request (ASR) Form contains administrative data which is common to the request and is associated with one or more order forms, as illustrated in the ordering matrices (3.0).



**2.11 SERVICE SPECIFIC FORMS** Service specific forms have been designed to accommodate ordering conditions specific to a service type and must be associated with an ASR Form. These service specific forms and service types are:

- Feature Group A
- WATS Access Lines or WATS like access offerings
- Trunking, CCS Links, and Unbundled STP Ports
- Transport and DNALs
- Switched Ethernet Services
- End User Special Access
- Ring

**2.12 ADDITIONAL FORMS** Certain services may require additional order forms which will accompany the Administrative (ASR) Form and may accompany the Service Specific form. These forms are as follows:

- Additional Circuit Information
- Additional Ring Information
- End Office Detail
- Ethernet Virtual Connection
- Multi-EC
- Multipoint Service Legs
- Network Assignment Information
- Ports Configuration
- Service Address Location Information
- Translation Questionnaire
- Virtual Concatenation
- Virtual Connection

**2.13 PROVIDER INITIATED FORMS** Certain forms are prepared by the provider and are forwarded to the customer as a means of passing information to the customer:

- Open Billing Form
- Confirmation Notice
- Clarification/Notification Request Form

**2.14 COMMON LANGUAGE FORMATS** Several practices require/suggest the usage of standard conventions for designating network LOCATIONS (ATIS-0300253), CONNECTIONS (ATIS-0300097), AND NETWORK CHANNEL/ NETWORK CHANNEL INTERFACES (ATIS-0300223). While the appropriate reference document is always preferred, the formats are summarized briefly here for user convenience.

2.14.1 LOCATIONS (CLLI CODES) generally consist 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).

2.14.2 CONNECTIONS – (CLCI MSG) Message Trunk ID codes consist of:

1. **Trunk Number** - A serial number type code that identifies a specific trunk in a trunk group (1-4 numeric characters).
2. **Traffic Class** - A standardized code that designates an engineering categorization, e.g., grade of service, alternate route. Valid entries are outlined in Telcordia Technologies practice BR 795-400-100 (2 alpha characters).
3. **Office Class** - A standardized code that designates the highest level of switching performed by the traffic units or offices terminating the trunk or trunk group. Valid entries are outlined in Telcordia Technologies practice BR 795-400-100 (2 alpha/numeric characters).
4. **Traffic Use Code** - A standardized code that designates the type of traffic offered to the trunk group, e.g., inter-end office, tandem access, directory assistance. Valid entries are outlined in Telcordia Technologies practice BR 795-400-100 (2 alpha characters).
5. **Trunk Type Modifier** - A standardized code that indicates specialized use of the trunk or trunk group. Valid entries are outlined in Telcordia Technologies practice BR 795-400100 (1-7 alpha/numeric characters).

6. **Location A** - A standardized code that uniquely identifies the location of facility terminal A. Valid entries are outlined in Telcordia Technologies practice BR 795-100-100 (11 alpha/numeric characters).
7. **Address Signaling** - A standardized code that uniquely identifies the type of signals used to direct a call to its destination. Valid entries are outlined in Telcordia Technologies practice BR 795-400-100 (2 alpha/numeric characters).
8. **Location Z** - A standardized code that uniquely identifies the location of facility terminal Z. Valid entries are outlined in Telcordia Technologies practice BR 795-100-100 (11 alpha/numeric characters).

2.14.3 CONNECTIONS – (CLCI SS) Special Service Circuit ID telephone number formatted codes consist of:

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).
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. **NPA Code** - A standardized code that identifies the NPA associated with the telephone number of a special services circuit (3 numeric characters).

5. **CO Unit Code** - A standardized code that identifies the CO number associated with the telephone number of a special services circuit (3 numeric characters).
6. **Line Number Code** - A standardized code that identifies the line number associated with the telephone number of a special services circuit (4 numeric characters).
7. **Extension Number/Trunk Code** - A non-standard code used to record extension numbers/trunk codes associated with the telephone number of a special services circuit (5 alpha/numeric characters).
8. **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).

2.14.4 CONNECTIONS – (CLCI SS) Special Service Circuit ID SERIAL number formatted codes consist of:

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).
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).

#### 2.14.5 CONNECTIONS – (CLFI) Facility ID codes consist of:

1. **Facility Designation** - A code that, for a specific type of facility, uniquely identifies a path between two network nodes (1 - 5 alpha/numeric characters).
2. **Facility Type** - A code that describes a type of facility when it is other than a single baseband channel on cable. Valid entries are outlined in Telcordia Technologies practice BR 795-450-100 (1-6 alpha/numeric characters).
3. **Channel/Pair/Time Slot** - A code that identifies a specific assignable portion of a facility (1-5 alpha/numeric characters).

4. **Location A** - A standardized code that uniquely identifies the location of facility terminal A, which has the lower in alpha/numeric sequence of the two facility location codes. Valid entries are maintained by Telcordia Technologies. (8 or 11 alpha/numeric characters).
5. **Location Z** - A standardized code that uniquely identifies the location of facility terminal Z, which has the higher in alpha/numeric sequence of the two facility location codes. Valid entries are maintained by Telcordia Technologies. (8 or 11 alpha/numeric characters).

2.14.6 NETWORK CHANNEL (NC/NCI™) NC Code consists of the following:

1. **Channel Service Code** – Positions 1 and 2 describe the channel service code in an encoded form. The channel service code will typically be specified as the service code of the special service circuit or the transmission grade of the message trunk circuit. (2 alpha or 2 alpha/numeric characters).
2. **Optional Feature Code** – Positions 3 and 4 represent the option codes available for each channel service code. Standard combinations of this code will allow the requested channel, or to further identify the type of service. It is also used to specify options such as conditioning, effective 4-wire, multiplexing, etc. (2 alpha or 2 alpha/numeric characters).

2.14.7 NETWORK CHANNEL INTERFACES (NC/NCI™) NCI Code  
consists of the following:

1. **Total Conductors** – Positions 1 and 2 identify the total number of physical conductors (e.g., wires) required at the interface (2 numeric characters).
2. **Protocol** – Positions 3 and 4 identify the requirements for the interface regarding signaling and transmission (2 alpha characters).
3. **Impedance** – Position 5 identifies the nominal reference impedance that will terminate the channel for the purpose of evaluating transmission performance (1 alpha/numeric character).
4. **Delimiter #1** – Position 6 identifies the start of the protocol option field if a protocol option code is assigned.
5. **Protocol Options** – Positions 7, 8 and 9 identify additional features (e.g., bit rate, bandwidth, etc...) on the protocol to be used. (3 alpha/numeric characters).
6. **Delimiter #2** – Position 10 identifies the start of the Transmission Level Points (TLP) field if a TLP is assigned.
7. **Transmission Level** – Positions 11 and 12 identify the TLPs from either the exchange carrier/service provider or customer end.

**NOTE 1:** Position 11 identifies the TLP transmit signal level at the EC/service provider when transmitting to the customer.

**NOTE 2:** Position 12 identifies the TLP receive signal level at the EC/service provider when receiving from the customer.



**NOTE 3:** If TLP is entered in one character position only (transmit or receive), a hyphen or the letter “O” is required as field filler in the associated TLP character position.

**NOTE 4:** If TLPs are not to be coded, default levels found in Telcordia Technologies Technical Publications will apply and the TLP character positions will be left blank.

**2.15 ETHERNET SERVICE ATTRIBUTES** Several practices reference the usage of Metro Ethernet Forum (MEF) Technical Specifications. For more information visit: <http://metroethernetforum.org/carrier-ethernet/technical-specifications>.

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## ORDERING FORMS MATRIX

| <u>DESCRIPTION</u>  | <u>SECTION</u> |
|---|----------------|
| TRANSPORT:  |                |
| NON-BROADBAND _____   | 3.1            |
| BROADBAND _____   | 3.2            |
| ETHERNET _____  | 3.3            |
| SWITCHED ACCESS:  |                |
| FEATURE GROUP A _____   | 3.4            |
| FEATURE GROUP B-C-D/LOCAL TRUNKING AND<br>WIRELESS TRUNKING _____                               | 3.5            |
| WATS ACCESS LINES _____   | 3.6            |
| RING SERVICE _____  | 3.7            |
| SWITCHED ETHERNET SERVICES (UNI/ENNI ONLY) _____  | 3.8            |
| ETHERNET VIRTUAL CONNECTION (STAND ALONE EVC) _____   | 3.9            |
| SWITCHED ETHERNET SERVICES (UNI/ENNI AND ETHERNET<br>VIRTUAL CONNECTION (EVC COMBINATION) _____ | 3.10           |

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### 3. ORDERING FORMS MATRIX

#### 3.1 ORDERING MATRIX – TRANSPORT (NON BROADBAND)

| SERVICE CONFIGURATION |             |             |           |             |             |             |            |
|-----------------------|-------------|-------------|-----------|-------------|-------------|-------------|------------|
| PRIMARY LOCATION:     | <u>ACTL</u> |             | <u>CO</u> |             | <u>PREM</u> |             | <u>PSL</u> |
| FORMS                 | 2 POINT     | MULTI POINT | 2 POINT   | MULTI POINT | 2 POINT     | MULTI POINT | 2 POINT    |
| <u>BASIC:</u>         |             |             |           |             |             |             |            |
| ASR (1)               | R           | R           | R         | R           | R           | R           | R          |
| TRANSPORT             | R           | R           |           |             |             |             | R          |
| EUSA                  |             |             | R         | R           | R           | R           |            |
| <u>ADDITIONAL:</u>    |             |             |           |             |             |             |            |
| ACI (2) (5)           | O           |             | O         |             | O           |             | O          |
| MSL (2) (4)           |             | R           |           | R           |             | R           |            |
| MULTI-EC (3)          | C           | C           | C         | C           | C           | C           | C          |
| SALI                  | C           | C           | C         | C           | C           | C           | C          |
| NAI (4) (5)           | O           |             | O         |             | O           |             | O          |
| PC                    | O           |             | O         |             | O           |             |            |
| VCAT (6)              | O           |             | O         |             | O           |             | O          |
| <u>CONFIRMATION:</u>  |             |             |           |             |             |             |            |
| CN                    | R           | R           | R         | R           | R           | R           | R          |

Legend: R - Required C - Conditional O - Optional

1. The EVCI field on the ASR Form must be blank.
2. ACI and MSL Forms are mutually exclusive for the life of the ASR.
3. The MULTI-EC Form is required when more than one provider is involved in provisioning the access service.

4. NAI and MSL Forms are mutually exclusive for the life of the ASR.
5. When only one circuit is ordered, the NAI Form may be used and the REF NUM (0001) will be assumed by virtue of the service specific form. The NAI and ACI Forms must be used together when the quantity of circuits being ordered is greater than one (1).
6. VCAT and MSL Forms are mutually exclusive for the life of the ASR.

### 3.2 ORDERING MATRIX - TRANSPORT (BROADBAND)

| FORMS                | BROADBAND SERVICES |
|----------------------|--------------------|
| <u>BASIC:</u>        |                    |
| ASR                  | R                  |
| TRANSPORT (1)        | C                  |
| EUSA (1)             | C                  |
| <u>ADDITIONAL:</u>   |                    |
| MULTI-EC (2)         | C                  |
| SALI                 | C                  |
| NAI (3)              | O                  |
| VC                   | C                  |
| <u>CONFIRMATION:</u> |                    |
| CN                   | R                  |

Legend:                    R - Required            C – Conditional            O - Optional

1. TRANSPORT and EUSA are mutually exclusive for the life of the access request.
2. The MULTI-EC Form is required when more than one provider is involved in provisioning the access service.
3. The NAI Form is only applicable for the physical connection.

NOTE: EVCI is not applicable

### 3.3 ORDERING MATRIX – TRANSPORT (ETHERNET) WITH ETHERNET VIRTUAL CONNECTION (COMBINATION)

| SERVICE CONFIGURATION |             |           |             |            |
|-----------------------|-------------|-----------|-------------|------------|
| PRIMARY LOCATION:     | <u>ACTL</u> | <u>CO</u> | <u>PREM</u> | <u>PSL</u> |
| FORMS                 | 2 POINT     | 2 POINT   | 2 POINT     | 2 POINT    |
| <u>BASIC:</u>         |             |           |             |            |
| ASR (1)               | R           | R         | R           | R          |
| TRANSPORT (2)         | R           |           |             | R          |
| EUSA (2)              |             | R         | R           |            |
| <u>ADDITIONAL:</u>    |             |           |             |            |
| EVC/OVC               | R           | R         | R           | R          |
| NAI                   | O           | O         | O           | O          |
| SALI                  | C           | C         | C           | C          |
| <u>CONFIRMATION:</u>  |             |           |             |            |
| CN                    | R           | R         | R           | R          |

Legend:                R - Required    C – Conditional                O - Optional

1. The EVCI field on the ASR Form is “B”.
2. TRANSPORT and EUSA Forms are only applicable with ordering Specialized Ethernet aggregation services (SEI field on the ASR Form is blank).

NOTE: If ordering Metro Ethernet Service (Switched Ethernet) see Section 3.10



### 3.4 ORDERING MATRIX - SWITCHED ACCESS; FEATURE GROUP A

| SERVICE CONFIGURATION |            |                            |                         |      |
|-----------------------|------------|----------------------------|-------------------------|------|
| FORMS                 | FX<br>OPEN | FX EXT OPEN<br>INTRA/INTER | 2 <sup>ND</sup><br>D.T. | ONAL |
| <u>BASIC:</u>         |            |                            |                         |      |
| ASR                   | R          | R                          | R                       | R    |
| FGA                   | R          | R                          | R                       | R    |
| <u>ADDITIONAL:</u>    |            |                            |                         |      |
| ACI (1) (4)           | O          |                            | O                       | O    |
| MSL (1) (3)           |            | R                          | O                       |      |
| MULTI-EC (2)          | C          | C                          | C                       | C    |
| SALI                  |            | C                          |                         |      |
| NAI (3) (4)           | O          |                            | O                       | O    |
| <u>CONFIRMATION:</u>  |            |                            |                         |      |
| CN                    | R          | R                          | R                       | R    |

Legend: R - Required C - Conditional O - Optional

1. ACI and MSL Forms are mutually exclusive for the life of the Access Service Request.
2. The MULTI-EC Form is required when more than one provider is involved in provisioning the access service.
3. NAI and MSL Forms are mutually exclusive for the life of the ASR.
4. When only one circuit is ordered, the NAI Form may be used and the REF NUM (0001) will be assumed by virtue of the service specific form. The NAI and ACI Forms must be used together when the quantity of circuits being ordered is greater than one (1).

NOTE: Closed end of a FGA circuit is ordered as Transport. Refer to the TRANSPORT Matrix.

### 3.5 ORDERING MATRIX - SWITCHED ACCESS; FEATURE GROUP B-C-D/LOCAL TRUNKING AND WIRELESS TRUNKING

| SERVICE CONFIGURATION |                |   |   |       |           |            |         |              |
|-----------------------|----------------|---|---|-------|-----------|------------|---------|--------------|
| FORMS                 | FEATURE GROUP: |   |   |       | CCS LINKS | TRANS ONLY | SAC NXX | FORE-CASTING |
|                       | B              | C | D | LOCAL |           |            |         |              |
| <u>BASIC:</u>         |                |   |   |       |           |            |         |              |
| ASR                   | R              | R | R | R     | R         | R          | R       | R            |
| TRUNKING              | R              | R | R | R     | R         | O          | O       | O            |
| <u>ADDITIONAL:</u>    |                |   |   |       |           |            |         |              |
| ACI (2)               | O              | O | O | O     | O         |            |         |              |
| MULTI-EC (1)          | C              | C | C | O     | C         | C          | C       | C            |
| TQ (3)                | O              |   | O | O     | C         | R          | R       |              |
| EOD                   |                |   | O |       |           | O          | O       | R            |
| NAI (2)               | O              | O | O | O     | O         |            |         |              |
| PC (4)                | C              |   | C | C     |           |            |         |              |
| <u>CONFIRMATION:</u>  |                |   |   |       |           |            |         |              |
| CN                    | R              | R | R | R     | R         | R          | R       | O            |

Legend: R - Required C - Conditional O - Optional

1. The MULTI-EC Form is required when more than one provider is involved in provisioning the ASR.
2. When only one circuit is ordered, the NAI Form may be used and the REF NUM (0001) will be assumed by virtue of the service specific form. The NAI and ACI Forms must be used together when the quantity of circuits being ordered is greater than one (1) and/or QACI is populated.
3. Use of the TQ in conjunction with CCS Links is limited to STP translation changes.
4. Use of the PC Form is conditional on a request for the combination of transport and trunking when the customer requests specific equipment configurations, e.g., SONET/DWDM.

### 3.6 ORDERING MATRIX - WATS ACCESS LINES

| SERVICE CONFIGURATION |     |             |
|-----------------------|-----|-------------|
| FORMS                 | WAL | WAL EXT (3) |
| <u>BASIC:</u>         |     |             |
| ASR                   | R   | R           |
| WAL                   | R   | R           |
| <u>ADDITIONAL:</u>    |     |             |
| ACI (1)               | O   |             |
| MSL (1)               |     | R           |
| MULTI-EC (2)          | C   | C           |
| SALI (3)              | C   | C           |
| <u>CONFIRMATION:</u>  |     |             |
| CN                    | R   | R           |
| OB                    | O   | O           |

Legend:                      R - Required              C - Conditional              O - Optional

1. ACI and MSL Forms are mutually exclusive for the life of the Access Request.
2. The MULTI-EC Form is required when more than one provider is involved in provisioning the Access Service.
3. When the WAL extension terminates in another LATA, a second Transport request (ASR and TRANSPORT Forms) is required for the portion within the other LATA. A SALI Form is also required if the extension termination is identified by a street address.

### 3.7 ORDERING MATRIX - RING SERVICE

| FORMS                | RING SERVICE |
|----------------------|--------------|
| <u>BASIC:</u>        |              |
| ASR                  | R            |
| RING                 | R            |
| <u>ADDITIONAL:</u>   |              |
| ARI                  | R            |
| SALI                 | C            |
| MULTI-EC (1)         | C            |
| NAI                  | O            |
| PC (2)               | C            |
| VCAT                 | O            |
| <u>CONFIRMATION:</u> |              |
| CN                   | R            |

Legend:                    R - Required        C – Conditional        O - Optional

1. The MULTI-EC Form is required when more than one provider is involved in provisioning the access service.
2. The PC Form is required when the customer requests specific equipment configurations, e.g., SONET/DWDM, in lieu of using the PORTS field.

### 3.8 ORDERING MATRIX - SWITCHED ETHERNET SERVICES (UNI/ENNI ONLY)

| SERVICE CONFIGURATION |             |            |             |            |
|-----------------------|-------------|------------|-------------|------------|
| PRIMARY LOCATION:     | <u>ACTL</u> | <u>CO</u>  | <u>PREM</u> | <u>PSL</u> |
| FORMS                 | 2<br>POINT  | 2<br>POINT | 2<br>POINT  | 2<br>POINT |
| <u>BASIC:</u>         |             |            |             |            |
| ASR (1)               | R           | R          | R           | R          |
| SES (2)               | R           | R          | R           | R          |
| <u>ADDITIONAL:</u>    |             |            |             |            |
| ACI                   | C           | C          | C           | C          |
| MULTI-EC (3)          | C           | C          | C           | C          |
| SALI                  | -           | C          | C           | -          |
| NAI                   | O           | O          | O           | O          |
| <u>CONFIRMATION:</u>  |             |            |             |            |
| CN                    | R           | R          | R           | R          |

Legend: R - Required C - Conditional O - Optional

1. The EVCI field on the ASR Form is blank.
2. The SEI field on the ASR Form is populated (ordering Switched Ethernet Services).
3. The MULTI-EC Form is required when more than one provider is involved in provisioning the access service.

### 3.9 ORDERING MATRIX – ETHERNET VIRTUAL CONNECTION (STAND ALONE EVC)

| FORMS                | ETHERNET VIRTUAL<br>CONNECTION SERVICE |
|----------------------|--|
| <u>BASIC:</u>        |  |
| ASR (1)              | R                                      |
| <u>ADDITIONAL:</u>   |  |
| EVC/OVC              | R                                      |
| <u>MULTI-EC (2)</u>  | C                                      |
| <u>CONFIRMATION:</u> |  |
| CN                   | R                                      |

Legend:                    R - Required            C – Conditional            O - Optional

1. The EVCI field on the ASR form is “A”.
2. The MULTI-EC Form is required when more than one provider is involved in provisioning the access service.

### 3.10 ORDERING MATRIX - SWITCHED ETHERNET SERVICES (UNI/ENNI AND ETHERNET VIRTUAL CONNECTION (EVC) COMBINATION)

| SERVICE CONFIGURATION |             |           |             |            |
|-----------------------|-------------|-----------|-------------|------------|
| PRIMARY LOCATION:     | <u>ACTL</u> | <u>CO</u> | <u>PREM</u> | <u>PSL</u> |
| FORMS                 | 2 POINT     | 2 POINT   | 2 POINT     | 2 POINT    |
| <u>BASIC:</u>         |             |           |             |            |
| ASR (1)               | R           | R         | R           | R          |
| SES (2)               | R           | R         | R           | R          |
| <u>ADDITIONAL:</u>    |             |           |             |            |
| EVC/OVC (3)           | R           | R         | R           | R          |
| NAI                   | O           | O         | O           | O          |
| SALI                  | -           | C         | C           | -          |
| <u>CONFIRMATION:</u>  |             |           |             |            |
| CN                    | R           | R         | R           | R          |

Legend: R - Required C - Conditional O - Optional

1. The EVCI field on the ASR Form is "B".
2. The SEI field on the ASR form is "Y" (ordering Metro Ethernet services).
3. EVC Form required when ordering the UNI (User Network Interface) or ENNI (Network to Network Interface) and the Ethernet Virtual Connection or Operator Virtual Connection on the same ASR.

## FORM DESCRIPTIONS

| <u>DESCRIPTION</u>                                   | <u>SECTION</u> |
|--|----------------|
| GENERAL _____  | 4.1            |
| ACCESS SERVICE REQUEST (ASR) _____                   | 4.2            |
| FEATURE GROUP A (FGA) SERVICE REQUEST _____          | 4.3            |
| WATS ACCESS LINE (WAL) SERVICE REQUEST _____         | 4.4            |
| TRUNKING SERVICE REQUEST _____                       | 4.5            |
| TRANSPORT SERVICE REQUEST _____                      | 4.6            |
| MULTIPOINT SERVICE LEGS (MSL) REQUEST _____          | 4.7            |
| ADDITIONAL CIRCUIT INFORMATION (ACI) REQUEST _____   | 4.8            |
| SWITCHED ETHERNET SERVICES (SES) _____               | 4.9            |
| OPEN BILLING (OB) _____                              | 4.10           |
| CONFIRMATION NOTICE (CN) _____                       | 4.11           |
| END USER SPECIAL ACCESS (EUSA) REQUEST _____         | 4.12           |
| END OFFICE DETAIL (EOD) _____                        | 4.13           |
| MULTI-EC _____                                       | 4.14           |
| TRANSLATION QUESTIONNAIRE (TQ) _____                 | 4.15           |
| RING _____   | 4.16           |
| ADDITIONAL RING INFORMATION _____                    | 4.17           |
| VIRTUAL CONNECTION _____                             | 4.18           |
| CLARIFICATION/NOTIFICATION REQUEST FORM (C/NR) _____ | 4.19           |
| NETWORK ASSIGNMENT INFORMATION (NAI) _____           | 4.20           |



|   |      |
|---|------|
| SERVICE ADDRESS LOCATION INFORMATION (SALI) | 4.21 |
| PORTS CONFIGURATION (PC)                    | 4.22 |
| ETHERNET VIRTUAL CONNECTION (EVC)           | 4.23 |
| VIRTUAL CONCATENATION (VCAT)                | 4.24 |

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## **4. FORM DESCRIPTIONS**

**4.1 GENERAL** Service is ordered using uniform order request forms. The Access Service Request (ASR) Form contains administrative data which is common to all orders and is associated with one or more order forms which specifically define the requested configurations. The following briefly describes the various ordering forms.

**4.2 ACCESS SERVICE REQUEST (ASR)** This form is used by the customers to request various services as specified in the contracts and tariffs. The form entries and their usage rules are described in ATIS-0404001, Access Service Request Form Preparation Guide.

**4.3 FEATURE GROUP A (FGA) SERVICE REQUEST** This form is used by the customers to order:

- FGA
- Line-side BSA

The form entries and their usage rules are described in ATIS-0404002, Feature Group A (FGA) Form Preparation Guide.

**4.4 WATS ACCESS LINE (WAL) SERVICE REQUEST** This form is used by the customer to order WATS access lines. The form entries and their usage are described in ATIS-0404003, WATS Access Line (WAL) Form Preparation Guide.

**4.5 TRUNKING SERVICE REQUEST** This form is used by the customer to order:

- Trunk-side BSA
- Trunking
  - FGB, C, D
  - Local Interconnection
  - Wireless Trunking
- CCS Links and Unbundled STP Ports

The form entries and their usage rules are described in ATIS-0404004, Trunking Form Preparation Guide.

**4.6 TRANSPORT SERVICE REQUEST** This form is used by the customer to order:

- Narrow-band
- Voice Grade
- Unbundled Transport
- Unbundled Multiplexing
- Program Audio
- Television
- Wideband Analog
- Wideband Digital
- Digital Access
- High Capacity
- DNAL
- 
- Specialized Ethernet Aggregation

The form entries and their usage rules are described in ATIS-0404005, Transport Form Preparation Guide.

**4.7 MULTIPOINT SERVICE LEGS (MSL) REQUEST** This form is used by the customer to relate circuit legs to specific bridge points; and bridge points to bridge points. The form entries and their usage rules are described in ATIS-0404006, Multipoint Service Legs (MSL) Form Preparation Guide.

**4.8 ADDITIONAL CIRCUIT INFORMATION (ACI) REQUEST** This form is used by both the customer and the provider for stipulating circuit specific information which cannot readily be provided on a service specific request form. The form entries and their usage rules are described in ATIS-0404007, Additional Circuit Information (ACI) Form Preparation Guide.

**4.9 SWITCHED ETHERNET SERVICES (SES) REQUEST** This form is used by the customer to order User Network Interfaces (UNI) or External Network to Network Interfaces (ENNI) for Metro Ethernet services. The form entries and their usage rules are described in ATIS-0404008, Switched Ethernet Services Form Preparation Guide.

**4.10 OPEN BILLING (OB)** This form is prepared by the provider and is used by the customer for ordering open billing services in conjunction with access service. The form entries and their usage rules are described in ATIS-0404009, Open Billing (OB) Form Preparation Guide.

**4.11 CONFIRMATION NOTICE (CN)** This form is prepared by the provider and is forwarded to the customer to confirm the services. The form entries and their usage rules are described in ATIS-0404011, Confirmation Notice (CN) Form Preparation Guide.

**4.12 END USER SPECIAL ACCESS (EUSA) REQUEST** This Form is used by the customer for ordering special access:

- Premises to Premises
- Premises to Central Office
- Central Office to Central Office

The form entries and their usage rules are described in ATIS-0404013, End User Special Access (EUSA) Form Preparation Guide.

**4.13 END OFFICE DETAIL (EOD)** This form is used by the customer to:

- Forecast traffic routed from end offices subtending a tandem
- Identify end offices for SAC Code activity
- Identify subtending end offices for originating traffic
- Estimate Traffic Distribution Requirements

The form entries and their usage rules are described in ATIS-0404014, End Office Detail (EOD) Form Preparation Guide.

**4.14 MULTI-EC** This form is used by the customer to order access services that are to be provisioned by more than one provider. The form entries and their usage rules are described in ATIS-0404018, MULTI-EC Form Preparation Guide.

**4.15 TRANSLATION QUESTIONNAIRE (TQ)** This form is used by the customer to order:

- Translation
- Routing
- SAC NXX Activity

For associated FGB, FGD and local trunks, the form entries and their usage rules are described in ATIS-0404019, Translation Questionnaire (TQ) Form Preparation Guide.

**4.16 RING** This form is used by the customer to order ring service. The form entries and their usage rules are described in ATIS-0404021, Ring Form Preparation Guide.

**4.17 ADDITIONAL RING INFORMATION** This form is used by the customer to order additional ring segments. The form entries and their usage rules are described in ATIS-0404022, Additional Ring Information Form Preparation Guide.

**4.18 VIRTUAL CONNECTION** This form is used by the customer to order virtual connection service. The form entries and their usage rules are described in ATIS-0404023, Virtual Connection Form Preparation Guide.

**4.19 CLARIFICATION/NOTIFICATION REQUEST FORM (C/NR)** This form is prepared by the provider and is forwarded to the customer to request clarification for the services ordered. This form also supports a process for the notification of service request errors, jeopardies, completion and cancellation. The form entries and their usage rules are described in ATIS-0404010, Clarification/Notification Request Form Preparation Guide.

**4.20 NETWORK ASSIGNMENT INFORMATION (NAI)** This form is used by the customer to provide information such as:

- Intermediate Connecting Facility Assignment(s)
- Alternate facility/alternate ACTL
- Drop Port Equipment Assignment(s) Information

The form entries and their usage rules are described in ATIS-0404024, Network Assignment Information Form Preparation Guide.

**4.21 SERVICE ADDRESS LOCATION INFORMATION (SALI)** This form is used by the customer to provide service address information. The form entries and their usage rules are described in ATIS-0404015, Service Address Location Information Form Preparation Guide.

**4.22 PORTS CONFIGURATION (PC)** This form is used by the customer when requesting specific equipment configurations, e.g., SONET/DWDM. The form entries and their usage rules are described in ATIS-0404012, Ports Configuration Form Preparation Guide.

**4.23 ETHERNET VIRTUAL CONNECTION (EVC)** This form is used by the customer to order the overall Ethernet Virtual Connection/Operator Virtual Connections (OVC) service and provide the mapping details for the User Network Interface (UNI) and External Network to Network Interface (ENNI) terminations. The form entries and their usage rules are described in ATIS-0404016, Ethernet Virtual Connection Form Preparation Guide.

**4.24 VIRTUAL CONCATENATION (VCAT)** This form is used by the customer to designate the channels/timeslots to be utilized on the special access facilities when a virtually concatenated configuration is requested. The form entries and their usage rules are described in ATIS-0404017, Virtual Concatenation Form Preparation Guide.

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## FOUR STEP ORDERING PROCESS

| <u>DESCRIPTION</u>                                | <u>SECTION</u> |
|---|----------------|
| GENERAL _____                                     | 5.1            |
| STEP 1 - SERVICE REQUEST (SR) _____               | 5.2            |
| STEP 2 - SERVICE REQUEST CONFIRMATION (SRC) _____ | 5.3            |
| STEP 3 - FIRM ORDER (FO) _____                    | 5.4            |
| STEP 4 - FIRM ORDER CONFIRMATION (FOC) _____      | 5.5            |
| SERVICE REQUEST STEPS _____                       | 5.6            |
| FIRM ORDER STEPS _____                            | 5.7            |
| REQTYP ENTRIES _____                              | 5.8            |

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## **5. FOUR STEP ORDERING PROCESS**

5.1 **GENERAL** Access and Trunking Services are ordered using a Four Step ordering process which is described below. This Four Step process can be achieved in a manual or mechanized mode. Additional interaction may occur and may be verbal and/or via a Clarification Request Form. The Clarification Request Form is typically used in lieu of verbal correspondence and is not a major part of the Four Step ordering process.

The Four Steps are:

- 1) Service Request (SR)
- 2) Service Request Confirmation (SRC)
- 3) Firm Order (FO)
- 4) Firm Order Confirmation (FOC)

Not all four steps are required for the ordering of Access or Trunking Service. Once the request has reached Firm Order status, it cannot revert to Service Request status.

5.2 **STEP 1 - SERVICE REQUEST (SR):** This step applies when the customer wishes to query the provider as to its ability to provide a particular type of service or quantity of like service at some future date but does not want to place a firm order at this time. It also applies for the exchange of data prior to the placement of a firm order. The Service Request can be used for all service orderable prior to the placement of a firm order.

5.3 **STEP 2 - SERVICE REQUEST CONFIRMATION (SRC):** This step is initiated by the provider in response to a Service Request from Step 1. The response will let the customer know if the provider is able to provide the service, the appropriate interval to provide the requested service and any data required for the submission of a firm order. A response to a SR for capacity will include the number of circuits required and a routing proposal.

5.3 **STEP 2 - SERVICE REQUEST CONFIRMATION (SRC)**  
**(continued):**

**NOTE 1:** Planning information may consist of:

- Provisioning interval in work days
- Number of circuits (converted from BHMCs)
- Routing
- Engineering charge estimate when applicable
- Charges - special construction or deposit requirement
- Serving central office identification
- Search 800 Data Base Number(s)

**NOTE 2:** The SRC usually does not reserve facilities or 800 Data Base Numbers nor does it guarantee a due date for service.

**NOTE 3:** The provisioning interval (in work days) is based on a current view and contingent upon facility availability and work force schedules when the actual order is placed. However, the provisioning interval should be a good indicator for predicting an actual due date when placing the firm order.

5.4 **STEP 3 - FIRM ORDER (FO):** This step has two possible actions:

**Step 3A** - This step in the process is used when the SR or SRC information process has taken place and the customer now wishes to place a firm order for the service using the same PON.

**Step 3B** - This step is to be used when the customer has not previously placed an SR but instead wants to initially place a Firm Order.

5.5 **STEP 4 - FIRM ORDER CONFIRMATION (FOC):** This step is initiated by the provider in response to a Firm Order (FO).

The following responses are mutually exclusive:

FOC

FOC/DLR

5.6 **SERVICE REQUEST STEPS:** These are the steps to be followed when the process begins with a Service Request:

| Step: | Description                        |
|-------|------------------------------------|
| 1     | Service Request (SR)               |
| 2     | Service Request Confirmation (SRC) |
| 3A    | Firm Order (FO)                    |
| 4     | Firm Order Confirmation (FOC)      |

It is the option of the customer to submit a Firm Order (Step 3A) prior to Step 2.

Individual provider practices determine the length of time during which a confirmed Service Request may be upgraded to a Firm Order.

**5.7 FIRM ORDER STEPS:** These are the steps to be followed when the process begins with a Firm Order:

| Step: | Description             |
|-------|-------------------------|
| 1     | Not Required            |
| 2     | Not Required            |
| 3B    | Firm Order              |
| 4     | Firm Order Confirmation |

**5.8 REQ TYP ENTRIES:** The current step within the Four Step process is reflected in the second character of the REQ TYP field on the ASR Form (a description of this field can be found in ATIS-0404001).

The second position of the REQ TYP field may contain the following additional values within the providers systems which do not appear on the confirmation notice:

|                              |                              |
|------------------------------|------------------------------|
| 2nd character of REQ TYP is: | Description of Activity:     |
| B                            | Service Request Confirmation |
| E                            | Firm Order Confirmation      |

## SERVICES

| <u>DESCRIPTION</u>                              | <u>SECTION</u> |
|---|----------------|
| ACCESS SERVICES _____                           | 6.1            |
| GENERAL _____                                   | 6.1.1          |
| SWITCHED ACCESS _____                           | 6.1.2          |
| NON-SWITCHED ACCESS _____                       | 6.1.3          |
| LOCAL SERVICES AND INTERCONNECTION TRUNKS _____ | 6.2            |
| GENERAL _____                                   | 6.2.1          |
| WIRELESS SERVICES _____                         | 6.3            |
| GENERAL _____                                   | 6.3.1          |

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## **6. SERVICES**

### **6.1 ACCESS SERVICES**

**6.1.1 GENERAL** Access Service is ordered out of the various Access Service Tariffs filed with Interstate and Intrastate commissions. Additionally, non-access tariff offerings are also available in conjunction with access ordering using specific access order form entries. However, not all offerings are universally available or filed within all the states of a particular Region.

When a customer requests a provider to provide access service to be used in conjunction with its authorized telecommunications services, it should prepare and forward to the provider the appropriate access service request order form(s). The applicable field entries should be populated in the prescribed manner as covered in the appropriate Preparation Guide.

Access Services are broadly categorized as:

- Switched Access
- Non-Switched Access

**6.1.2 SWITCHED ACCESS** Switched access is comprised of a line-side or trunk-side switching termination connected by a facility configuration to a location of a customer. Switched access is ordered and billed on a bundled or unbundled basis depending on the providers tariffs:

- Feature Groups (FGs) - Bundled Services
- Basic Serving Arrangements (BSAs) - Unbundled Services

Feature Groups and Basic Serving Arrangements will be ordered using the FGA Form for line-side connections and the Trunking Form for trunk-side connections. Throughout the ASR ATIS-0404000-0050 series of practices, the term FGA will denote both Feature Group A and line-side Basic Serving Arrangement; the term FGB-C-D will denote Feature Groups B, C and D and their equivalent trunk-side basic serving arrangement.

There are unique requirements governing the Local Transport (LT) of Switched Access. Section 7 provides an in-depth review of these requirements, as well as an overview to the subject of Local Transport. These unique Local Transport requirements are based on FCC Order DA 93-1579 and are not meant to cover all providers or all Intrastate Local Transport services.

**6.1.3 NON-SWITCHED ACCESS** Non-Switched Access is comprised of a facility configuration provided between two or more locations. These locations may be the customer terminal or that of another customer terminal, an end user premises or a provider location. CENTREX locations are defined as provider end office terminations, for the purpose of access ordering and provisioning.

## 6.2 **LOCAL SERVICES AND INTERCONNECTION TRUNKS**

6.2.1 **GENERAL** Local service and Interconnection Trunks are ordered out of tariff/contracts/ negotiations.

When a customer requests local service to be used in conjunction with its authorized telecommunications services, it should prepare and forward to the provider via appropriate service request order forms with the applicable entries populated in the prescribed manner as covered in the appropriate Preparation Guide.

Local Services are broadly categorized as:

- Local Trunking/Interconnection Trunks: These two terms can be used synonymously
- Unbundled Network Elements

Local Trunking/Interconnection Trunks are composed of a trunk-side switching termination connecting a facility configuration to the location of a customer.

Local Trunking/Interconnection Trunks are to be ordered using a Trunking Form.

UNEs will be ordered using a Transport or Trunking Form depending on the element being ordered.

## 6.3 **WIRELESS SERVICES**

6.3.1 **GENERAL** Wireless exchange services are ordered out of tariffs/contracts.

When a customer request wireless exchange service to be used in conjunction with its authorized telecommunications services, it should prepare and forward to the provider via appropriate service request forms with applicable entries populated in the prescribed manner as covered in the appropriate Preparation Guide.

Wireless exchange services are broadly categorized as trunk-side services and will be ordered using a Trunking Form.

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## LOCAL TRANSPORT RESTRUCTURE (LTR)

| <u>DESCRIPTION</u>   | <u>SECTION</u> |
|--|----------------|
| GENERAL _____  | 7.1            |
| LTR ORDERING ASSUMPTIONS _____   | 7.2            |
| LTP FIELD ASSUMPTIONS _____  | 7.3            |
| LTR ORDERING CONFIGURATIONS _____  | 7.4            |
| EXAMPLES OF VALID COMBINATIONS OF LTP _____  | 7.5            |
| ENTRANCE FACILITY ONLY, NO SPECIAL ACCESS _____  | 7.6            |
| ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT<br>TO HUB, NO SPECIAL ACCESS _____  | 7.7            |
| ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT<br>TO END OFFICE, NO SPECIAL ACCESS _____   | 7.8            |
| ENTRANCE FACILITY, DIRECT-TRUNKED TRANSPORT<br>TO END OFFICE AND FGA LINES, NO SPECIAL ACCESS _____                              | 7.9            |
| ENTRANCE FACILITY, DIRECT-TRUNKED TRANSPORT<br>TO END OFFICE AND TRUNKS, NO SPECIAL ACCESS _____                                 | 7.10           |
| ENTRANCE FACILITY, AND DIRECT-TRUNKED TRANSPORT<br>TO THE ACCESS TANDEM, NO SPECIAL ACCESS _____                                 | 7.11           |
| ENTRANCE FACILITY, DIRECT-TRUNKED TRANSPORT TO<br>THE ACCESS TANDEM AND TRUNKS, NO SPECIAL ACCESS _____                          | 7.12           |
| ENTRANCE FACILITY AND TANDEM-SWITCHED TRANSPORT<br>TO THE ACCESS TANDEM, NO SPECIAL ACCESS _____                                 | 7.13           |
| ENTRANCE FACILITY, TANDEM-SWITCHED TRANSPORT<br>TO ACCESS TANDEM AND TRUNKS, NO SPECIAL ACCESS _____                             | 7.14           |
| DIRECT-TRUNKED TRANSPORT TO HUB, ENTRANCE<br>FACILITY AND DIRECT-TRUNKED TRANSPORT TO HUB,<br>#1 EXISTS, NO SPECIAL ACCESS _____ | 7.15           |

LOCAL TRANSPORT RESTRUCTURE (LTR) (CONTINUED)

| <u>DESCRIPTION</u>   | <u>SECTION</u> |
|--|----------------|
| DIRECT-TRUNKED TRANSPORT TO HUB, ENTRANCE FACILITY USES SPECIAL ACCESS _____   | 7.16           |
| DIRECT-TRUNKED TRANSPORT TO HUB, ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT TO HUB #1 USE SPECIAL ACCESS _____                               | 7.17           |
| DIRECT-TRUNKED TRANSPORT TO END OFFICE, ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT TO HUB EXISTS, NO SPECIAL ACCESS _____                    | 7.18           |
| DIRECT-TRUNKED TRANSPORT TO END OFFICE, ENTRANCE FACILITY USES SPECIAL ACCESS _____  | 7.19           |
| DIRECT-TRUNKED TRANSPORT TO END OFFICE, ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT TO HUB USE SPECIAL ACCESS _____                           | 7.20           |
| DIRECT-TRUNKED TRANSPORT TO THE END OFFICE AND FGA LINES, ENTRANCE FACILITY EXISTS, NO SPECIAL ACCESS _____                                      | 7.21           |
| DIRECT-TRUNKED TRANSPORT TO THE END OFFICE AND FGA LINES, ENTRANCE FACILITY USES SPECIAL ACCESS _  | 7.22           |
| DIRECT-TRUNKED TRANSPORT TO THE END OFFICE AND FGA LINES, ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT _____                                   | 7.23           |
| DIRECT-TRUNKED TRANSPORT TO THE END OFFICE AND TRUNKS, ENTRANCE FACILITY EXISTS, NO SPECIAL ACCESS _____   | 7.24A          |
| DIRECT-TRUNKED TRANSPORT TO THE END OFFICE AND TRUNKS, ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT TO THE HUB EXISTS, NO SPECIAL ACCESS _____ | 7.24B          |
| DIRECT-TRUNKED TRANSPORT TO THE END OFFICE AND TRUNKS, ENTRANCE FACILITY USES SPECIAL ACCESS ____  | 7.25           |

LOCAL TRANSPORT RESTRUCTURE (LTR) (CONTINUED)

| <u>DESCRIPTION</u>  | <u>SECTION</u> |
|---|----------------|
| DIRECT-TRUNKED TRANSPORT TO THE END OFFICE<br>AND TRUNKS, ENTRANCE FACILITY AND DIRECT-TRUNKED<br>TRANSPORT TO THE HUB USE SPECIAL ACCESS _____     | 7.26           |
| DIRECT-TRUNKED TRANSPORT TO THE ACCESS TANDEM<br>ENTRANCE FACILITY EXISTS, NO SPECIAL ACCESS _____  | 7.27           |
| DIRECT-TRUNKED TRANSPORT TO THE ACCESS TANDEM,<br>ENTRANCE FACILITY USES SPECIAL ACCESS _____   | 7.28           |
| DIRECT-TRUNKED TRANSPORT TO THE ACCESS TANDEM,<br>ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT<br>TO THE HUB USE SPECIAL ACCESS _____             | 7.29           |
| DIRECT-TRUNKED TRANSPORT TO THE ACCESS TANDEM<br>AND TRUNKS, ENTRANCE FACILITY EXISTS, NO SPECIAL<br>ACCESS _____                                   | 7.30           |
| DIRECT-TRUNKED TRANSPORT TO THE ACCESS TANDEM<br>AND TRUNKS, ENTRANCE FACILITY USES SPECIAL ACCESS ____   | 7.31           |
| DIRECT-TRUNKED TRANSPORT TO THE ACCESS TANDEM<br>AND TRUNKS, ENTRANCE FACILITY AND DIRECT-TRUNKED<br>TRANSPORT TO THE HUB USE SPECIAL ACCESS _____  | 7.32           |
| TANDEM-SWITCHED TRANSPORT TO THE ACCESS TANDEM<br>AND TRUNKS, ENTRANCE FACILITY EXISTS,<br>NO SPECIAL ACCESS _____                                  | 7.33           |
| TANDEM-SWITCHED TRANSPORT TO THE ACCESS TANDEM<br>AND TRUNKS, ENTRANCE FACILITY USES SPECIAL ACCESS ____  | 7.34           |
| TANDEM-SWITCHED TRANSPORT TO THE ACCESS TANDEM<br>AND TRUNKS, ENTRANCE FACILITY AND DIRECT-TRUNKED<br>TRANSPORT TO THE HUB USE SPECIAL ACCESS _____ | 7.35           |

LOCAL TRANSPORT RESTRUCTURE (LTR) (CONTINUED)

| <u>DESCRIPTION</u>   | <u>SECTION</u> |
|--|----------------|
| TANDEM-SWITCHED TRANSPORT TO THE ACCESS<br>TANDEM AND TRUNKS, ENTRANCE FACILITY AND TANDEM-<br>SWITCHED TRANSPORT TO THE HUB USE SPECIAL ACCESS ____                   | 7.36           |
| FGA LINES ONLY, ENTRANCE FACILITY AND DIRECT-<br>TRUNKED TRANSPORT TO THE END OFFICE EXISTS, NO<br>SPECIAL ACCESS _____  | 7.37           |
| FGA LINES ONLY, ENTRANCE FACILITY AND DIRECT-<br>TRUNKED TRANSPORT TO THE HUB USE SPECIAL ACCESS ____  | 7.38           |
| TRUNKS ONLY, ENTRANCE FACILITY AND TRANSPORT TO<br>THE ACCESS TANDEM EXIST. (MAY BE EITHER DIRECT-<br>TRUNKED OR TANDEM-SWITCHED TRANSPORT) NO SPECIAL<br>ACCESS _____ | 7.39A          |
| TRUNKS ONLY, ENTRANCE FACILITY AND DIRECT-TRUNKED<br>TRANSPORT TO THE END OFFICE EXIST,<br>NO SPECIAL ACCESS _____   | 7.39B          |
| TRUNKS ONLY, ENTRANCE FACILITY AND DIRECT-<br>TRUNKED TRANSPORT TO THE HUB USE SPECIAL ACCESS __   | 7.40A          |
| TRUNKS ONLY, ENTRANCE FACILITY AND DIRECT-<br>TRUNKED TRANSPORT TO THE HUB USE SPECIAL ACCESS __   | 7.40B          |
| DIRECT-LINK TRANSPORT TO THE STP AND LINKS,<br>ENTRANCE FACILITY USES SPECIAL ACCESS _____   | 7.41A          |
| DIRECT-LINK TRANSPORT TO THE STP AND LINKS,<br>ENTRANCE FACILITY USES SPECIAL ACCESS _____   | 7.41B          |
| LINKS, EXISTING DIRECT-LINK TRANSPORT TO<br>THE STP AND ENTRANCE FACILITY USES SPECIAL ACCESS ____   | 7.42           |



LOCAL TRANSPORT RESTRUCTURE (LTR) (CONTINUED)

| <u>DESCRIPTION</u>   | <u>SECTION</u> |
|--|----------------|
| ENTRANCE FACILITY AND DIRECT-LINK TRANSPORT<br>TO THE STP AND LINKS, NO SPECIAL ACCESS _____         | 7.43A          |
| ENTRANCE FACILITY AND DIRECT-LINK TRANSPORT<br>TO THE STP AND LINKS, NO SPECIAL ACCESS _____         | 7.43B          |
| DIRECT-LINK TRANSPORT TO THE STP AND LINKS,<br>ENTRANCE FACILITY EXISTS, NO SPECIAL ACCESS _____     | 7.44A          |
| DIRECT-LINK TRANSPORT TO THE STP AND LINKS,<br>ENTRANCE FACILITY EXISTS, NO SPECIAL ACCESS _____     | 7.44B          |
| LINKS ONLY, ENTRANCE FACILITY AND DIRECT-LINK<br>TRANSPORT TO THE STP EXIST, NO SPECIAL ACCESS _____ | 7.45A          |
| LINKS ONLY, ENTRANCE FACILITY AND DIRECT-LINK<br>TRANSPORT TO THE STP EXIST, NO SPECIAL ACCESS _____ | 7.45B          |

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## **7. LOCAL TRANSPORT RESTRUCTURE (LTR)**

7.1 **GENERAL** Unique LTR requirements addressed in this section are based on FCC Order DA 93-1579 and are not meant to cover all providers or all Intrastate LTR services.

LTR denotes the transport requirements for lines/trunks from the customer POP location to the end office/access tandem.

### **7.2 LTR ORDERING ASSUMPTIONS**

1. Ordering and provisioning of LTR consists of 3 elements:
  - a. Entrance facilities
  - b. Transport (either direct-trunked or tandem-switched)
  - c. Lines/trunks
2. Every line/trunk must have an entrance facility and transport all the way to the end office/access tandem. The transport may be either direct-trunked or tandem-switched for lines/trunks. Only direct link transport is available for links.
3. The serving wire center, HUB, end office(s), access tandem(s), and STP's may be in the same or different provider's buildings. LTP entry rules will be the same in either situation.
4. Where offered, DS-3 tandem-switched transport may only be ordered together with a DS-3 entrance facility, through the serving wire center, between the POP and a multiplexer in the same telephone company building as the access tandem. When this arrangement has been provisioned, subsequent orders for Feature Group B, C or D trunks must also request DS-1 tandem-switched transport between the multiplexer and the access tandem.
5. The first position of the LTP field defines what the customer is requesting the provider to provision. The second position, other than "F", denotes the need for adjustments to the special access facility identified in the CFA field.

6. When a mixture of LTR elements are desired (e.g., new trunks to an existing CFA and trunks to a new CFA) two ASRs will be required.
7. Entrance Facility
  - A. When ordered separately as DS-1 or DS-3 level, multiplexing at the SWC must be ordered at the same time.
  - B. When ordered at the VG level, the line/trunk/link and transport must be ordered at the same time.
8. Direct-Trunked Transport
  - A. When ordered at the DS-3 level, multiplexing must be ordered at the same time.
  - B. When ordered at the DS-1 level, multiplexing or switched termination must be specified.
  - C. When ordered at the VG level, trunk/lines must be ordered at the same time.
9. Tandem-Switched Transport
  - A. When ordered at the DS-3 level, multiplexing must be ordered at the same time. The multiplexing must be in the same building as the access tandem.
  - B. When ordered at the DS-1 level, multiplexing or switched termination must be specified.
  - C. When ordered at the VG level, trunks must be ordered at the same time.
10. Direct-Link Transport
  - A. When ordered at the DS-1 level, multiplexing or switched termination must be specified.
  - B. When ordered at a VG level, links must be ordered at the same time.

### 7.3 LTP FIELD ASSUMPTIONS

ACT = "N"

- 1<sup>st</sup> POSITION = Elements ordered, not existing.
- 2<sup>nd</sup> POSITION = Identifies whether the facility indicated in the CFA field is a special access facility. Where no CFA is shown, the second position is "F".

ACT = "C"

- 1<sup>st</sup> POSITION = Elements changed
- 2<sup>nd</sup> POSITION = Identifies whether the facility indicated in the CFA field is a special access facility. Where no CFA is shown, the second position is "F".

ACT = "D"

- 1<sup>st</sup> POSITION = Elements disconnected
- 2<sup>nd</sup> POSITION = Identifies whether the facility indicated in the CFA field is a special access facility. Where no CFA is shown, the second position is "F".

**7.4 LTR ORDERING CONFIGURATIONS** The LTP field addresses the ordering requirements for LTR. The following matrices and configurations are examples only. There may be other descriptions of valid entries.

| 7.5 EXAMPLES OF VALID COMBINATIONS OF LTP |    |                  |                                 |                 |     |     |             |     |                              |    |                  |               |             |            |
|---|----|------------------|---------------------------------|-----------------|-----|-----|-------------|-----|------------------------------|----|------------------|---------------|-------------|------------|
| ELEMENTS BEING ORDERED                    |    |                  |                                 |                 |     |     |             |     | USES EXISTING SPECIAL ACCESS |    |                  |               | FIELD ENTRY |            |
|   | EF | DTT<br>TO<br>HUB | DTT/<br>DLT<br>TO<br>EO/<br>STP | DTT<br>TO<br>AT | TST | FGA | FG<br>B,C,D | LNK | NO<br>SPL<br>ACC             | EF | DTT<br>TO<br>HUB | TST TO<br>HUB | LTP         | REQ<br>TYP |
| 7.6                                       | X  |                  |                                 |                 |     |     |             |     | X                            |    |                  |               | AF          | S          |
| 7.7                                       | X  | X                |                                 |                 |     |     |             |     | X                            |    |                  |               | GF          | S          |
| 7.8                                       | X  |                  | X                               |                 |     |     |             |     | X                            |    |                  |               | GF          | S          |
| 7.9                                       | X  |                  | X                               |                 |     | X   |             |     | X                            |    |                  |               | DF          | A          |
| 7.10                                      | X  |                  | X                               |                 |     |     | X           |     | X                            |    |                  |               | DF          | M          |
| 7.11                                      | X  |                  |                                 | X               |     |     |             |     | X                            |    |                  |               | KF          | S          |
| 7.12                                      | X  |                  |                                 | X               |     |     | X           |     | X                            |    |                  |               | MF          | M          |
| 7.13                                      | X  |                  |                                 |                 | X   |     |             |     | X                            |    |                  |               | IF          | S          |
| 7.14                                      | X  |                  |                                 |                 | X   |     | X           |     | X                            |    |                  |               | BF          | M          |
| 7.15                                      |    | X                |                                 |                 |     |     |             |     | X                            |    |                  |               | HF          | S          |
| 7.16                                      |    | X                |                                 |                 |     |     |             |     |                              | X  |                  |               | HA          | S          |
| 7.17                                      |    | X                |                                 |                 |     |     |             |     |                              | X  | X                |               | HC          | S          |
| 7.18                                      |    |                  | X                               |                 |     |     |             |     | X                            |    |                  |               | HF          | S          |
| 7.19                                      |    |                  | X                               |                 |     |     |             |     |                              | X  |                  |               | HA          | S          |
| 7.20                                      |    |                  | X                               |                 |     |     |             |     |                              | X  | X                |               | HC          | S          |
| 7.21                                      |    |                  | X                               |                 |     | X   |             |     | X                            |    |                  |               | EF          | A          |
| 7.22                                      |    |                  | X                               |                 |     | X   |             |     |                              | X  |                  |               | EA          | A          |
| 7.23                                      |    |                  | X                               |                 |     | X   |             |     |                              | X  | X                |               | EC          | A          |
| 7.24A                                     |    |                  | X                               |                 |     |     | X           |     | X                            |    |                  |               | EF          | M          |
| 7.24B                                     |    |                  | X                               |                 |     |     | X           |     | X                            |    |                  |               | EF          | M          |
| 7.25                                      |    |                  | X                               |                 |     |     | X           |     |                              | X  |                  |               | EA          | M          |
| 7.26                                      |    |                  | X                               |                 |     |     | X           |     |                              | X  | X                |               | EC          | M          |
| 7.27                                      |    |                  |                                 | X               |     |     |             |     | X                            |    |                  |               | JF          | S          |
| 7.28                                      |    |                  |                                 | X               |     |     |             |     |                              | X  |                  |               | JA          | S          |
| 7.29                                      |    |                  |                                 | X               |     |     |             |     |                              | X  | X                |               | JC          | S          |
| 7.30                                      |    |                  |                                 | X               |     |     | X           |     | X                            |    |                  |               | LF          | M          |
| 7.31                                      |    |                  |                                 | X               |     |     | X           |     |                              | X  |                  |               | LA          | M          |
| 7.32                                      |    |                  |                                 | X               |     |     | X           |     |                              | X  | X                |               | LC          | M          |
| 7.33                                      |    |                  |                                 |                 | X   |     | X           |     | X                            |    |                  |               | CF          | M          |
| 7.34                                      |    |                  |                                 |                 | X   |     | X           |     |                              | X  |                  |               | CA          | M          |
| 7.35                                      |    |                  |                                 |                 | X   |     | X           |     |                              | X  | X                |               | CC          | M          |
| 7.36                                      |    |                  |                                 |                 | X   |     | X           |     |                              | X  |                  | X             | CE          | M          |
| 7.37                                      |    |                  |                                 |                 |     | X   |             |     | X                            |    |                  |               | FF          | A          |
| 7.38                                      |    |                  |                                 |                 |     | X   |             |     |                              | X  | X                |               | FC          | A          |

| 7.5 <b>EXAMPLES OF VALID COMBINATIONS OF LTP (CONTINUED)</b> |    |            |                     |           |     |     |          |     |                              |    |            |            |             |           |
|--|----|------------|---------------------|-----------|-----|-----|----------|-----|------------------------------|----|------------|------------|-------------|-----------|
| ELEMENTS BEING ORDERED                                       |    |            |                     |           |     |     |          |     | USES EXISTING SPECIAL ACCESS |    |            |            | FIELD ENTRY |           |
|  | EF | DTT TO HUB | DTT/ DLT TO EO/ STP | DTT TO AT | TST | FGA | FG B,C,D | LNK | NO SPL ACC                   | EF | DTT TO HUB | TST TO HUB | LTP         | REQ TYP   |
| 7.39A  |    |            |                     |           |     |     | X        |     | X                            |    |            |            | FF          | M         |
| 7.39B  |    |            |                     |           |     |     | X        |     | X                            |    |            |            | FF          | M         |
| 7.40A  |    |            |                     |           |     |     | X        |     |                              | X  | X          |            | FC          | M         |
| 7.40B  |    |            |                     |           |     |     | X        |     |                              | X  | X          |            | FC          | M         |
| 7.41A  |    |            | X                   |           |     |     |          | X   |                              | X  |            |            | QA          | L         |
| 7.41B  |    |            | X                   |           |     |     |          | X   |                              | X  |            |            | QA          | L         |
| 7.42   |    |            |                     |           |     |     |          | X   |                              | X  |            |            | RA          | L         |
| 7.43A  | X  |            | X                   |           |     |     |          | X   | X                            |    |            |            | PF          | L         |
| 7.43B  | X  |            | X                   |           |     |     |          | X   | X                            |    |            |            | PF          | L         |
| 7.44A  |    |            | X                   |           |     |     |          | X   | X                            |    |            |            | QF          | L         |
| 7.44B  |    |            | X                   |           |     |     |          | X   | X                            |    |            |            | QF          | L         |
| 7.45A  |    |            |                     |           |     |     |          | X   | X                            |    |            |            | RF          | L         |
| 7.45B  |    |            |                     |           |     |     |          | X   | X                            |    |            |            | RF          | L         |
| LTP NOT APPLICABLE   |    |            |                     |           |     |     |          |     |                              |    |            |            | N           | A, M or L |

**LEGEND**

|         |   |                                       |
|---------|---|---------------------------------------|
| AT      | = | Access Tandem                         |
| DLT     | = | Direct Link Transport                 |
| DTT     | = | Direct-Trunked Transport              |
| EF      | = | Switched Access Entrance Facility     |
| EO      | = | End Office (Dial Tone Office for FGA) |
| HUB     | = | Multiplexing Location                 |
| LNK     | = | Link                                  |
| SPL ACC | = | Special Access Hi-Cap Facility        |
| STP     | = | Signal Transport Point                |
| TST     | = | Tandem-Switched Transport             |

| 7.5.1 EXAMPLES OF VALID COMBINATIONS OF LTP |         |       |                        |            |                     |           |     |     |          |     |                              |    |            |            |
|---|---------|-------|------------------------|------------|---------------------|-----------|-----|-----|----------|-----|------------------------------|----|------------|------------|
| FIELD ENTRY                                 |         |       | ELEMENTS BEING ORDERED |            |                     |           |     |     |          |     | USES EXISTING SPECIAL ACCESS |    |            |            |
| LTP   | REQ TYP |       | EF                     | DTT TO HUB | DTT/ DLT TO EO/ STP | DTT TO AT | TST | FGA | FG B,C,D | LNK |                              | EF | DTT TO HUB | TST TO HUB |
| AF  | S       | 7.6   | X                      |            |                     |           |     |     |          |     | X                            |    |            |            |
| BF  | M       | 7.14  | X                      |            |                     |           | X   |     | X        |     | X                            |    |            |            |
| CA  | M       | 7.34  |                        |            |                     |           | X   |     | X        |     |                              | X  |            |            |
| CC  | M       | 7.35  |                        |            |                     |           | X   |     | X        |     |                              | X  | X          |            |
| CE  | M       | 7.36  |                        |            |                     |           | X   |     | X        |     |                              | X  |            | X          |
| CF  | M       | 7.33  |                        |            |                     |           | X   |     | X        |     | X                            |    |            |            |
| DF  | A       | 7.9   | X                      |            | X                   |           |     | X   |          |     | X                            |    |            |            |
| DF  | M       | 7.10  | X                      |            | X                   |           |     |     | X        |     | X                            |    |            |            |
| EA  | A       | 7.22  |                        |            | X                   |           |     | X   |          |     |                              | X  |            |            |
| EA  | M       | 7.25  |                        |            | X                   |           |     |     | X        |     |                              | X  |            |            |
| EC  | A       | 7.23  |                        |            | X                   |           |     | X   |          |     |                              | X  | X          |            |
| EC  | M       | 7.26  |                        |            | X                   |           |     |     | X        |     |                              | X  | X          |            |
| EF  | A       | 7.21  |                        |            | X                   |           |     | X   |          |     | X                            |    |            |            |
| EF  | M       | 7.24A |                        |            | X                   |           |     |     | X        |     | X                            |    |            |            |
| EF  | M       | 7.24B |                        |            | X                   |           |     |     | X        |     | X                            |    |            |            |
| FC  | A       | 7.38  |                        |            |                     |           |     | X   |          |     |                              | X  | X          |            |
| FC  | M       | 7.40A |                        |            |                     |           |     |     | X        |     |                              | X  | X          |            |
| FC  | M       | 7.40B |                        |            |                     |           |     |     | X        |     |                              | X  | X          |            |
| FF  | A       | 7.37  |                        |            |                     |           |     | X   |          |     | X                            |    |            |            |
| FF  | M       | 7.39A |                        |            |                     |           |     |     | X        |     | X                            |    |            |            |
| FF  | M       | 7.39B |                        |            |                     |           |     |     | X        |     | X                            |    |            |            |
| GF  | S       | 7.7   | X                      | X          |                     |           |     |     |          |     | X                            |    |            |            |
| GF  | S       | 7.8   | X                      |            | X                   |           |     |     |          |     | X                            |    |            |            |
| HA  | S       | 7.16  |                        | X          |                     |           |     |     |          |     |                              | X  |            |            |
| HA  | S       | 7.19  |                        |            | X                   |           |     |     |          |     |                              | X  |            |            |
| HC  | S       | 7.17  |                        | X          |                     |           |     |     |          |     |                              | X  | X          |            |
| HC  | S       | 7.20  |                        |            | X                   |           |     |     |          |     |                              | X  | X          |            |
| HF  | S       | 7.15  |                        | X          |                     |           |     |     |          |     | X                            |    |            |            |



| 7.5.1 EXAMPLES OF VALID COMBINATIONS OF LTP (CONTINUED) |         |       |                        |            |                  |           |     |     |          |     |                              |    |            |            |
|---|---------|-------|------------------------|------------|------------------|-----------|-----|-----|----------|-----|------------------------------|----|------------|------------|
| FIELD ENTRY   |         |       | ELEMENTS BEING ORDERED |            |                  |           |     |     |          |     | USES EXISTING SPECIAL ACCESS |    |            |            |
| LTP   | REQ TYP |       | EF                     | DTT TO HUB | DTT/ DLT EO/ STP | DTT TO AT | TST | FGA | FG B,C,D | LNK | NO SPL ACC                   | EF | DTT TO HUB | TST TO HUB |
| HF  | S       | 7.18  |                        |            | X                |           |     |     |          |     | X                            |    |            |            |
| IF  | S       | 7.13  | X                      |            |                  |           | X   |     |          |     | X                            |    |            |            |
| JA  | S       | 7.28  |                        |            |                  | X         |     |     |          |     |                              | X  |            |            |
| JC  | S       | 7.29  |                        |            |                  | X         |     |     |          |     |                              | X  | X          |            |
| JF  | S       | 7.27  |                        |            |                  | X         |     |     |          |     | X                            |    |            |            |
| KF  | S       | 7.11  | X                      |            |                  | X         |     |     |          |     | X                            |    |            |            |
| LA  | M       | 7.31  |                        |            |                  | X         |     |     | X        |     |                              | X  |            |            |
| LC  | M       | 7.32  |                        |            |                  | X         |     |     | X        |     |                              | X  | X          |            |
| LF  | M       | 7.30  |                        |            |                  | X         |     |     | X        |     | X                            |    |            |            |
| MF  | M       | 7.12  | X                      |            |                  | X         |     |     | X        |     | X                            |    |            |            |
| PF  | L       | 7.43A | X                      |            | X                |           |     |     |          | X   | X                            |    |            |            |
| PF  | L       | 7.43B | X                      |            | X                |           |     |     |          | X   | X                            |    |            |            |
| QA  | L       | 7.41A |                        |            | X                |           |     |     |          | X   |                              | X  |            |            |
| QA  | L       | 7.41B |                        |            | X                |           |     |     |          | X   |                              | X  |            |            |
| QF  | L       | 7.44A |                        |            | X                |           |     |     |          | X   | X                            |    |            |            |
| QF  | L       | 7.44B |                        |            | X                |           |     |     |          | X   | X                            |    |            |            |

| <b>7.5.1 EXAMPLES OF VALID COMBINATIONS OF LTP (CONTINUED)</b> |                 |                    |                               |                  |                                 |                 |     |     |             |     |                                     |    |                  |                  |
|--|-----------------|--------------------|-------------------------------|------------------|---------------------------------|-----------------|-----|-----|-------------|-----|-------------------------------------|----|------------------|------------------|
| <i>FIELD ENTRY</i>   |                 |                    | <i>ELEMENTS BEING ORDERED</i> |                  |                                 |                 |     |     |             |     | <i>USES EXISTING SPECIAL ACCESS</i> |    |                  |                  |
| LTP<br>RA<br>RF<br>RF<br>N                                     | REQ<br>TYP      |                    | EF                            | DTT<br>TO<br>HUB | DTT/<br>DLT<br>TO<br>EO/<br>STP | DTT<br>TO<br>AT | TST | FGA | FG<br>B,C,D | LNK | NO<br>SPL<br>ACC                    | EF | DTT<br>TO<br>HUB | TST<br>TO<br>HUB |
|  | L               | 7.42               |                               |                  |                                 |                 |     |     |             | X   |                                     | X  |                  |                  |
|  | L               | 7.45A              |                               |                  |                                 |                 |     |     |             | X   | X                                   |    |                  |                  |
|  | L               | 7.45B              |                               |                  |                                 |                 |     |     |             | X   | X                                   |    |                  |                  |
| N  | A, M<br>or<br>L | LTP NOT APPLICABLE |                               |                  |                                 |                 |     |     |             |     |                                     |    |                  |                  |

**LEGEND**

|         |   |                                       |
|---------|---|---------------------------------------|
| AT      | = | Access Tandem                         |
| DLT     | = | Direct Link Transport                 |
| DTT     | = | Direct-Trunked Transport              |
| EF      | = | Switched Access Entrance Facility     |
| EO      | = | End Office (Dial Tone Office for FGA) |
| HUB     | = | Multiplexing Location                 |
| LNK     | = | Link                                  |
| SPL ACC | = | Special Access Hi-Cap Facility        |
| STP     | = | Signal Transport Point                |
| TST     | = | Tandem-Switched Transport             |

## 7.6 AF ENTRANCE FACILITY ONLY, NO SPECIAL ACCESS

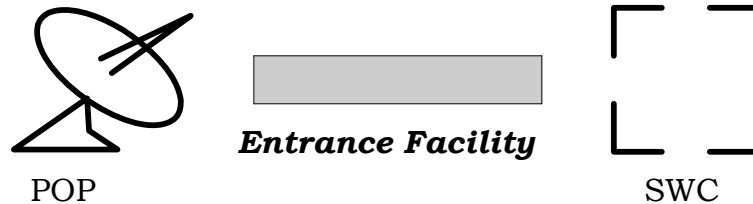
### LATA ORDERING REQUIREMENTS

May be ordered at DS-3 or DS-1 level

ASR FORM  
TRANSPORT FORM

### PROVISIONING

Facility from POP to SWC  
and a MUX



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## 7.7 GF ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT TO HUB, NO SPECIAL ACCESS

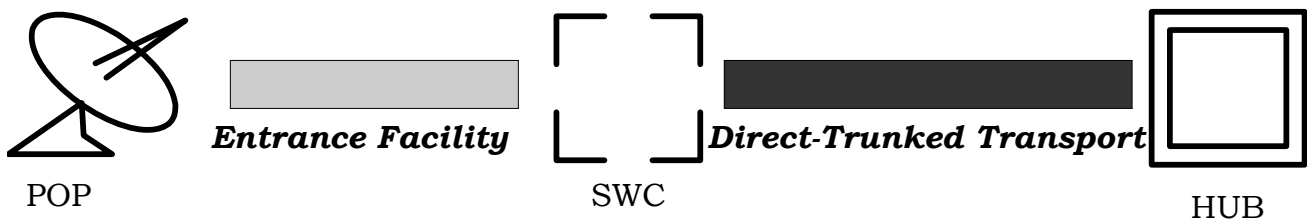
### LATA ORDERING REQUIREMENTS

May be ordered at DS-3 or DS-1 level

ASR FORM  
TRANSPORT FORM

### PROVISIONING

Facility from POP thru  
SWC to HUB and a MUX



**7.8 GF ENTRANCE FACILITY AND DIRECT-TRUNKED  
TRANSPORT TO END OFFICE, NO SPECIAL ACCESS**

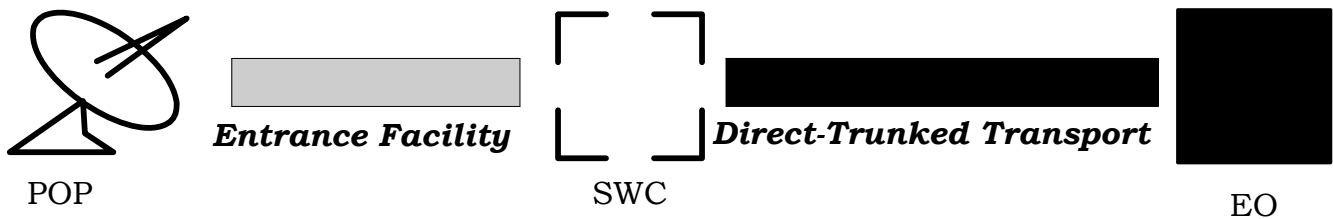
**LATA ORDERING REQUIREMENTS**

May be ordered at DS-1 level only

**PROVISIONING**

Facility from POP thru  
SWC to EO

ASR FORM  
TRANSPORT FORM



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**7.9 DF ENTRANCE FACILITY, DIRECT-TRUNKED TRANSPORT  
TO END OFFICE AND FGA LINES, NO SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

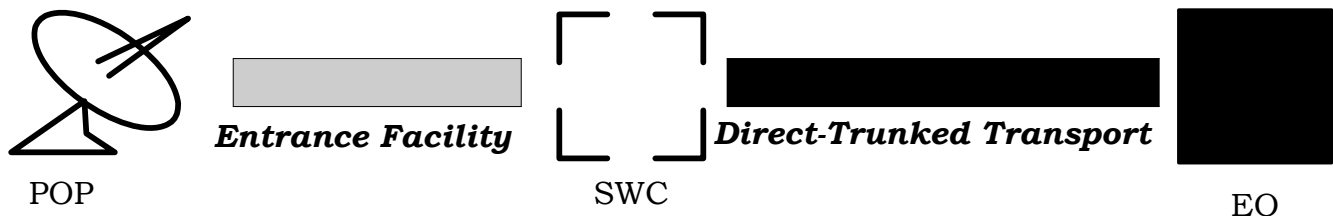
May be ordered at DS-1 or VG-1 level

**PROVISIONING**

DS-1: Facility from POP  
thru SWC to EO and FGA  
Lines

ASR FORM  
FGA FORM

VG: VG Level FGA Lines



### 7.10 DF ENTRANCE FACILITY, DIRECT-TRUNKED TRANSPORT TO END OFFICE AND TRUNKS, NO SPECIAL ACCESS

#### LATA ORDERING REQUIREMENTS

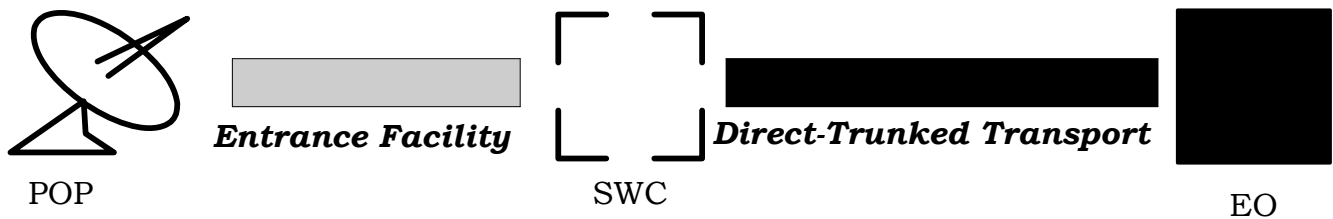
May be ordered at DS-1 or VG-1 level

ASR FORM  
TRUNKING FORM

#### PROVISIONING

DS-1: Facility from POP  
thru SWC to EO and  
Trunks

VG: VG Level Trunks



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### 7.11 KF ENTRANCE FACILITY, AND DIRECT-TRUNKED TRANSPORT TO THE ACCESS TANDEM, NO SPECIAL ACCESS

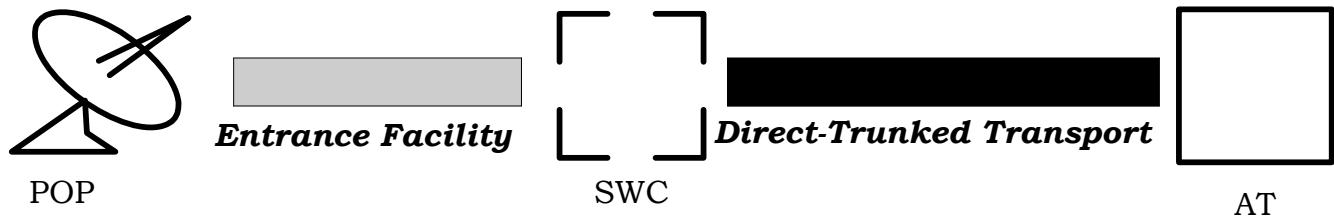
#### LATA ORDERING REQUIREMENTS

May be ordered at DS-3 or DS-1 Level

ASR FORM  
TRANSPORT FORM

#### PROVISIONING

DS-1 or DS3 Facility from  
POP thru SWC AT



**7.12 MF ENTRANCE FACILITY, DIRECT-TRUNKED TRANSPORT TO THE ACCESS TANDEM AND TRUNKS, NO SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

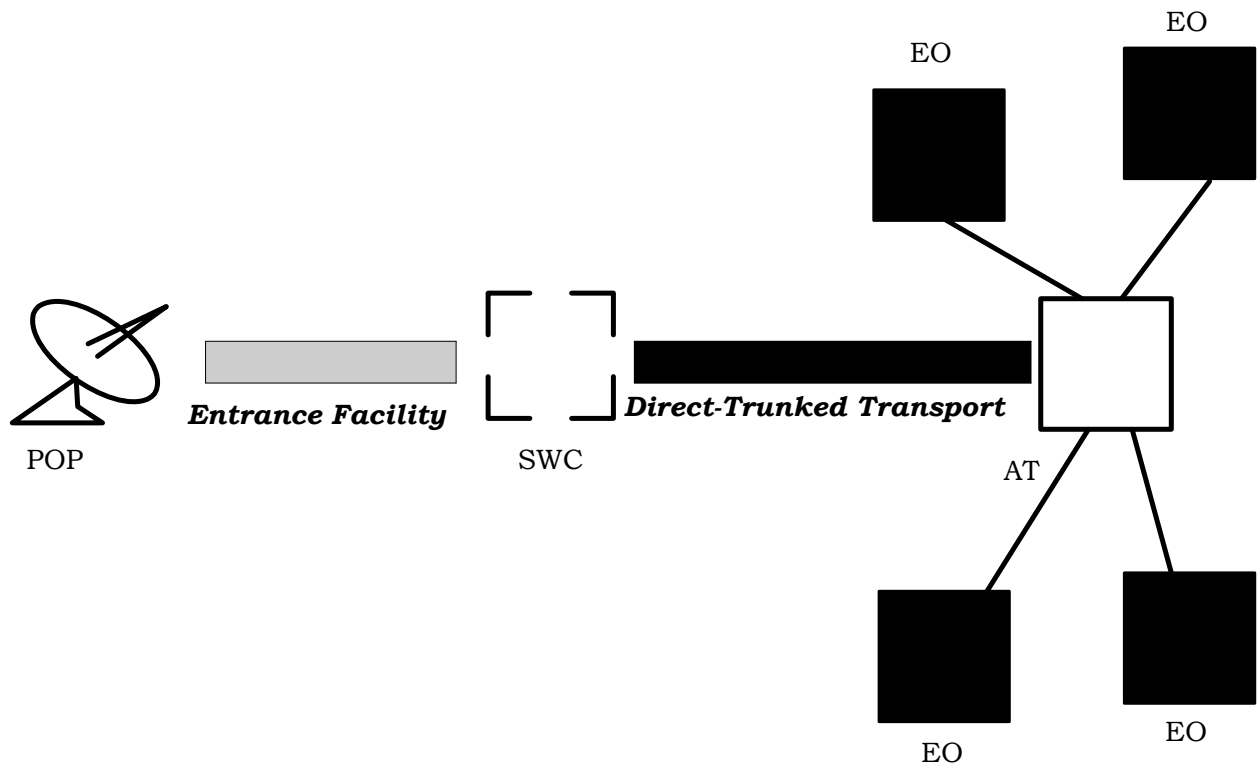
May be ordered at DS-1 or VG- level

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: Facility from POP  
thru SWC to AT and  
Trunks

VG: VG Level Trunks



**7.13 IF ENTRANCE FACILITY AND TANDEM-SWITCHED  
TRANSPORT TO THE ACCESS TANDEM, NO SPECIAL  
ACCESS**

**LATA ORDERING REQUIREMENTS**

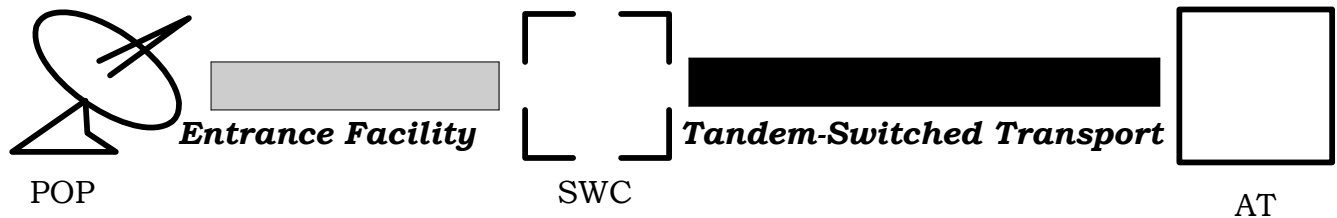
May be ordered at DS-3 or DS-1 levels.

ASR FORM  
TRANSPORT FORM

**PROVISIONING**

DS-3: Facility from POP  
thru SWC to MUX in same  
bldg as AT

DS-1: Facility from POP  
thru SWC to AT



**7.14 BF ENTRANCE FACILITY, TANDEM-SWITCHED TRANSPORT TO ACCESS TANDEM AND TRUNKS, NO SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

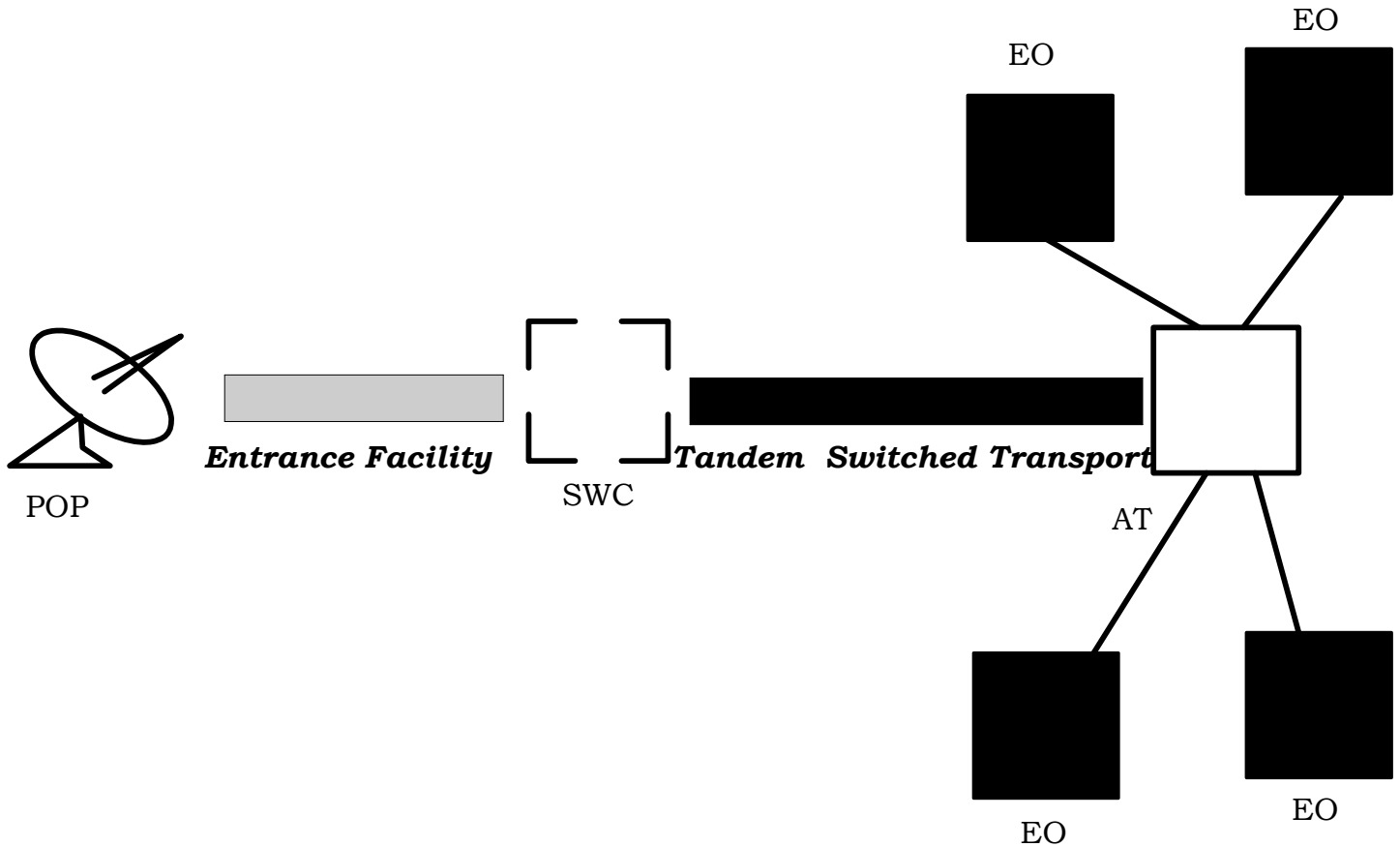
May be ordered at DS-1 or VG level.

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: Facility from POP  
thru SWC to AT (\*) and  
Trunks

VG: VG Level Trunks



(\*) Portion Between SWC and AT may not be DS-1 for some providers



**7.15 HF DIRECT-TRUNKED TRANSPORT TO HUB, ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT TO HUB, #1 EXISTS, NO SPECIAL ACCESS**

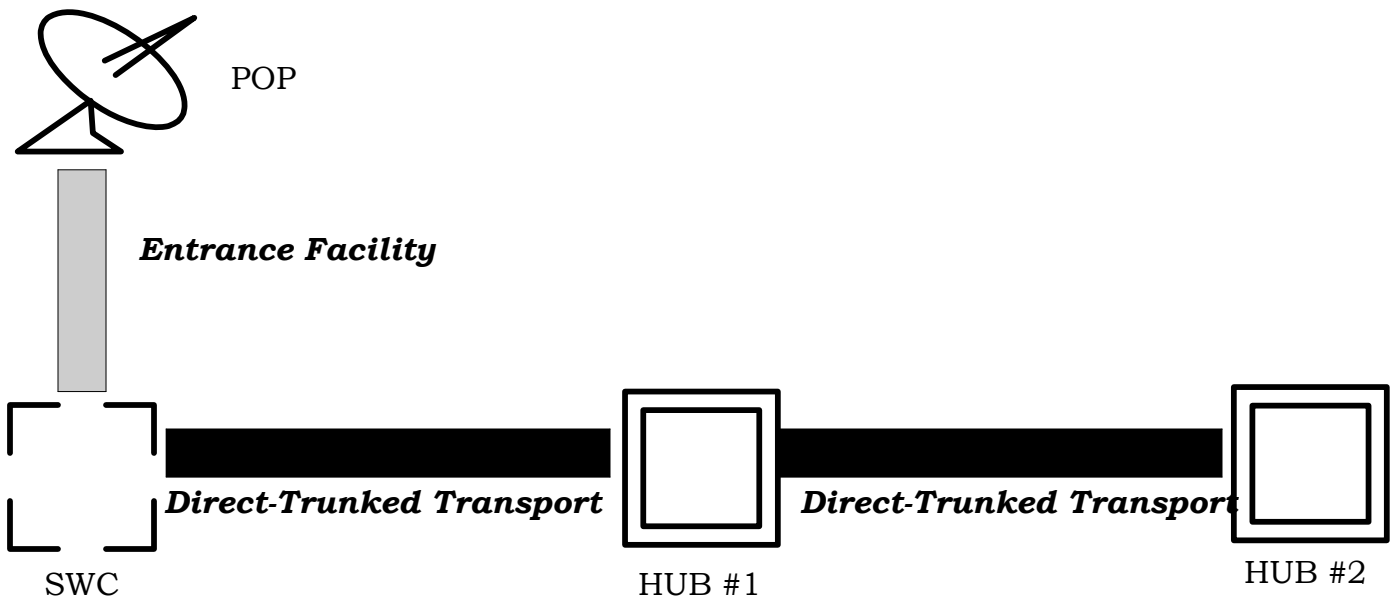
**LATA ORDERING REQUIREMENTS**

May be ordered at DS-1 level only.

ASR FORM  
TRUNKING FORM

**PROVISIONING**

There is an existing DS-3 POP to HUB #1. Provider will provide channel off of DS-3 POP to HUB #2 and a MUX



## 7.16 HA DIRECT-TRUNKED TRANSPORT TO HUB, ENTRANCE FACILITY USES SPECIAL ACCESS

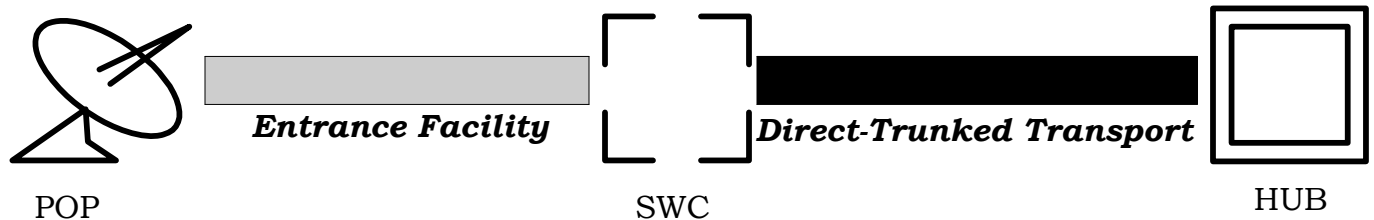
### LATA ORDERING REQUIREMENTS

May be ordered at DS-1 level only.

ASR FORM  
TRANSPORT FORM

### PROVISIONING

There is an existing DS-3 POP to SWC. Provider will provide a channel off of DS-3 POP to HUB and a MUX.



**7.17 HC DIRECT-TRUNKED TRANSPORT TO HUB, ENTRANCE  
FACILITY AND DIRECT-TRUNKED TRANSPORT TO HUB  
#1 USE SPECIAL ACCESS**

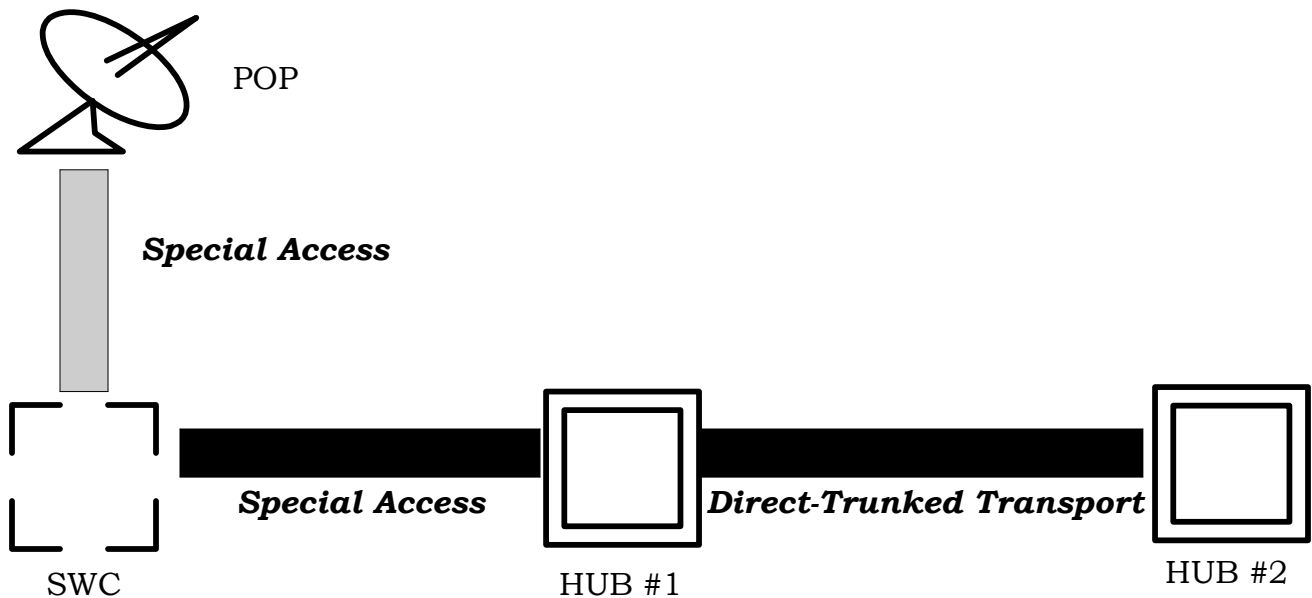
**LATA ORDERING REQUIREMENTS**

May be ordered at DS-1 level only.

ASR FORM  
TRANSPORT FORM

**PROVISIONING**

There is an existing DS-3  
POP to HUB #1. Provider  
will provide a channel off of  
DS-3 POP to HUB #2 and  
a MUX.



**7.18 HF DIRECT-TRUNKED TRANSPORT TO END OFFICE,  
ENTRANCE FACILITY AND DIRECT-TRUNKED  
TRANSPORT TO HUB EXISTS, NO SPECIAL ACCESS**

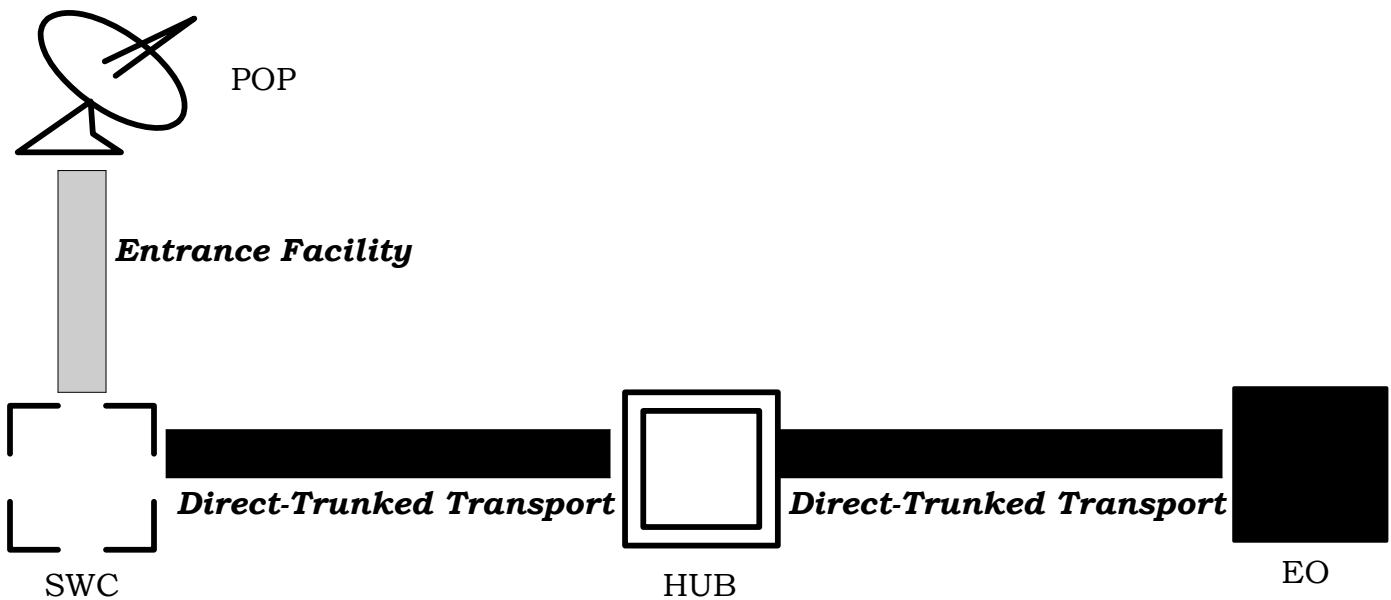
**LATA ORDERING REQUIREMENTS**

May be ordered at DS-1 level only.

ASR FORM  
TRANSPORT FORM

**PROVISIONING**

There is an existing DS-3  
POP to HUB. Provider will  
provide a channel off of  
DS-3 POP to EO.



**7.19 HA DIRECT-TRUNKED TRANSPORT TO END OFFICE,  
ENTRANCE FACILITY USES SPECIAL ACCESS**

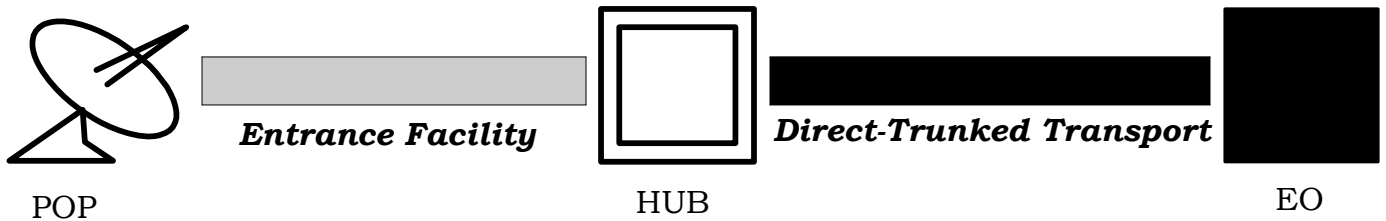
**LATA ORDERING REQUIREMENTS**

May be ordered at DS-1 level only.

ASR FORM  
TRANSPORT FORM

**PROVISIONING**

There is an existing DS-3  
POP to SWC. Provider will  
provide a channel off of  
DS-3 POP to EO.



**7.20 HC DIRECT-TRUNKED TRANSPORT TO END OFFICE,  
ENTRANCE FACILITY AND DIRECT-TRUNKED  
TRANSPORT TO HUB USE SPECIAL ACCESS**

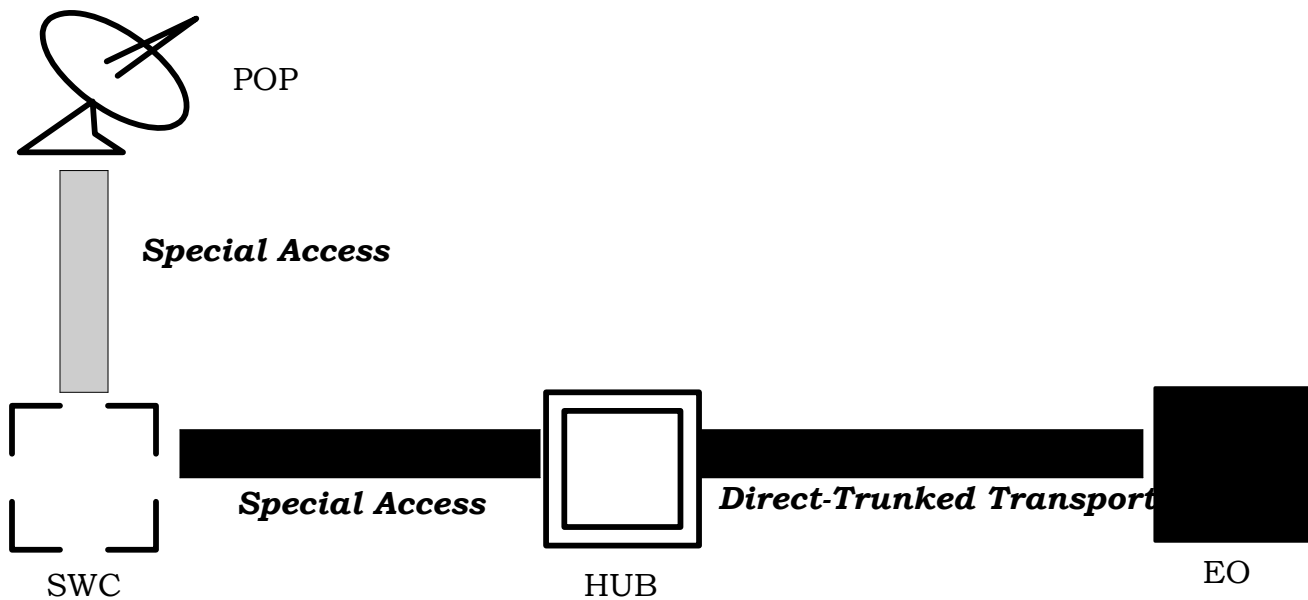
**LATA ORDERING REQUIREMENTS**

May be ordered at DS-1 level only.

ASR FORM  
TRANSPORT FORM

**PROVISIONING**

There is an existing DS-3  
POP to HUB. Provider will  
provide a channel off of  
DS-3 POP to EO.



**7.21 EF DIRECT-TRUNKED TRANSPORT TO THE END OFFICE  
AND FGA LINES, ENTRANCE FACILITY EXISTS, NO  
SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

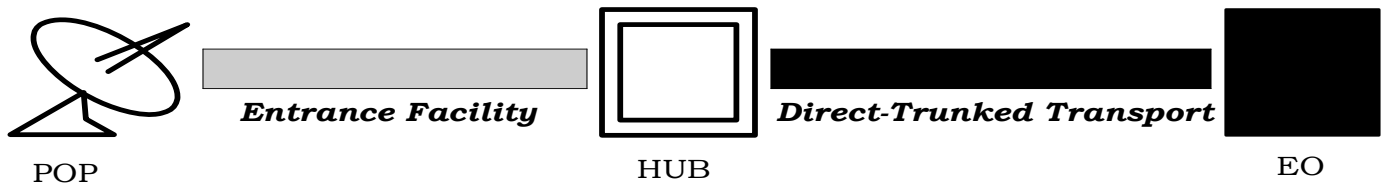
May be ordered at DS-1 or VG level.

ASR FORM  
FGA FORM

**PROVISIONING**

There is an existing DS-3 POP to SWC. Provider will provide a channel off of DS-3 POP to EO and FGA lines.

VG: There is an existing DS-1 POP to SWC. Provider will provide FGA line off of the DS-1.



**7.22 EA DIRECT-TRUNKED TRANSPORT TO THE END OFFICE  
AND FGA LINES, ENTRANCE FACILITY USES SPECIAL  
ACCESS**

**LATA ORDERING REQUIREMENTS**

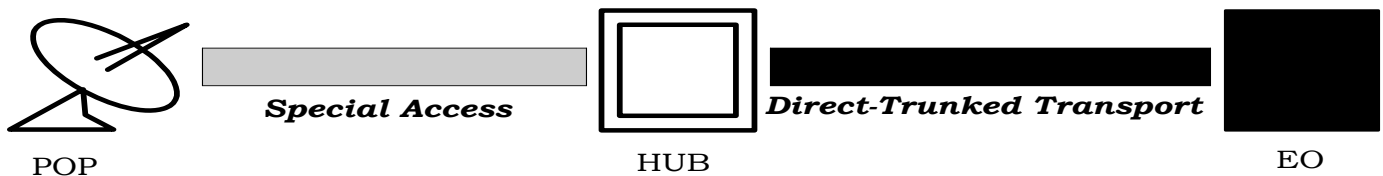
May be ordered at DS-1 or VG level.

ASR FORM  
FGA FORM

**PROVISIONING**

DS-1: There is an existing DS-3 POP to SWC. Provider will provide channel off of DS-3 POP to EO and FGA lines.

VG: There is an existing DS-1 POP to SWC. Provider will provide FGA lines off of the DS-1.



### 7.23 EC DIRECT-TRUNKED TRANSPORT TO THE END OFFICE AND FGA LINES, ENTRANCE FACILITY AND DIRECT- TRUNKED TRANSPORT

#### LATA ORDERING REQUIREMENTS

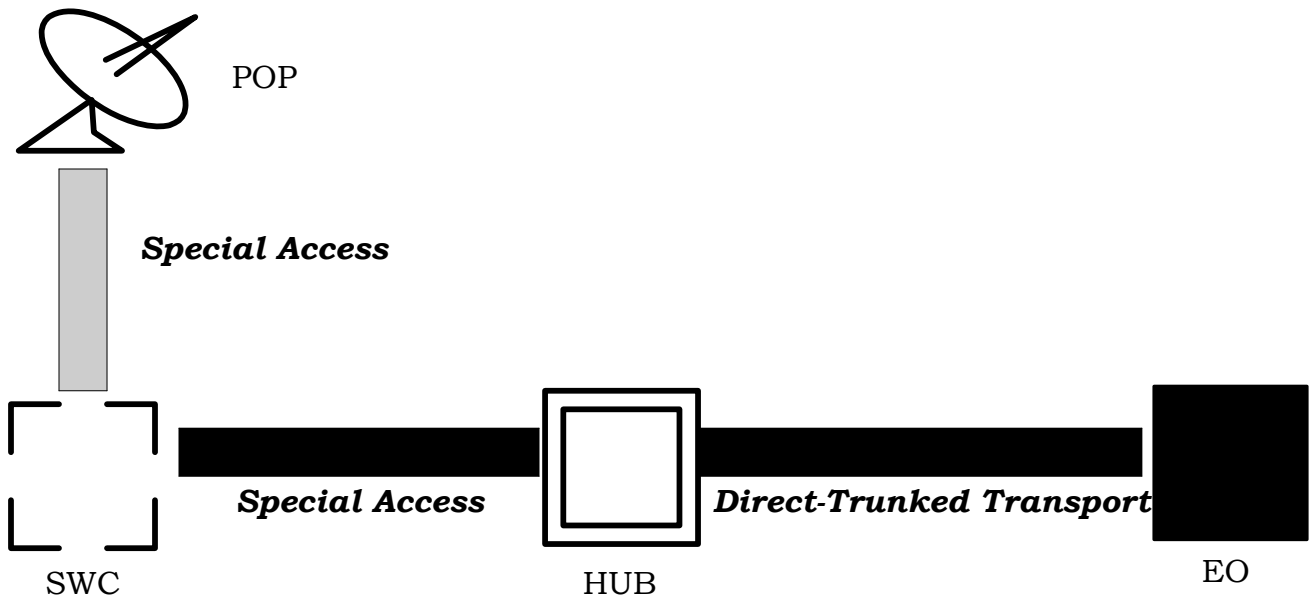
May be ordered at DS-1 or VG level.

ASR FORM  
FGA FORM

#### PROVISIONING

DS-1: There is an existing DS-3 POP to HUB. Provider will provide channel off of DS-3 POP to EO and FGA lines.

VG: There is an existing DS-1 POP to HUB. Provider will provide FGA lines off of DS-1.





**7.24A EF DIRECT-TRUNKED TRANSPORT TO THE END OFFICE  
AND TRUNKS, ENTRANCE FACILITY EXISTS, NO SPECIAL  
ACCESS**

**LATA ORDERING REQUIREMENTS**

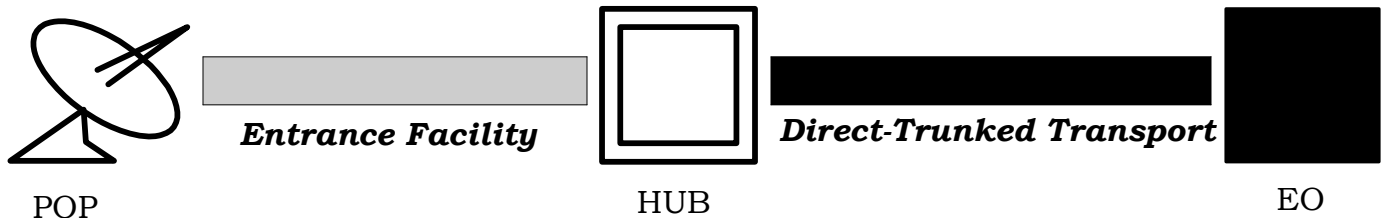
May be ordered at DS-1 or VG level.

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: There is an existing DS-3 POP to SWC. Provider will provide a channel off of DS-3 POP to EO and trunks.

VG: There is an existing DS-1 POP to SWC. Provider will provide trunks off of DS-1.



**7.24B EF DIRECT-TRUNKED TRANSPORT TO THE END OFFICE  
AND TRUNKS, ENTRANCE FACILITY AND DIRECT-  
TRUNKED TRANSPORT TO THE HUB EXISTS, NO  
SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

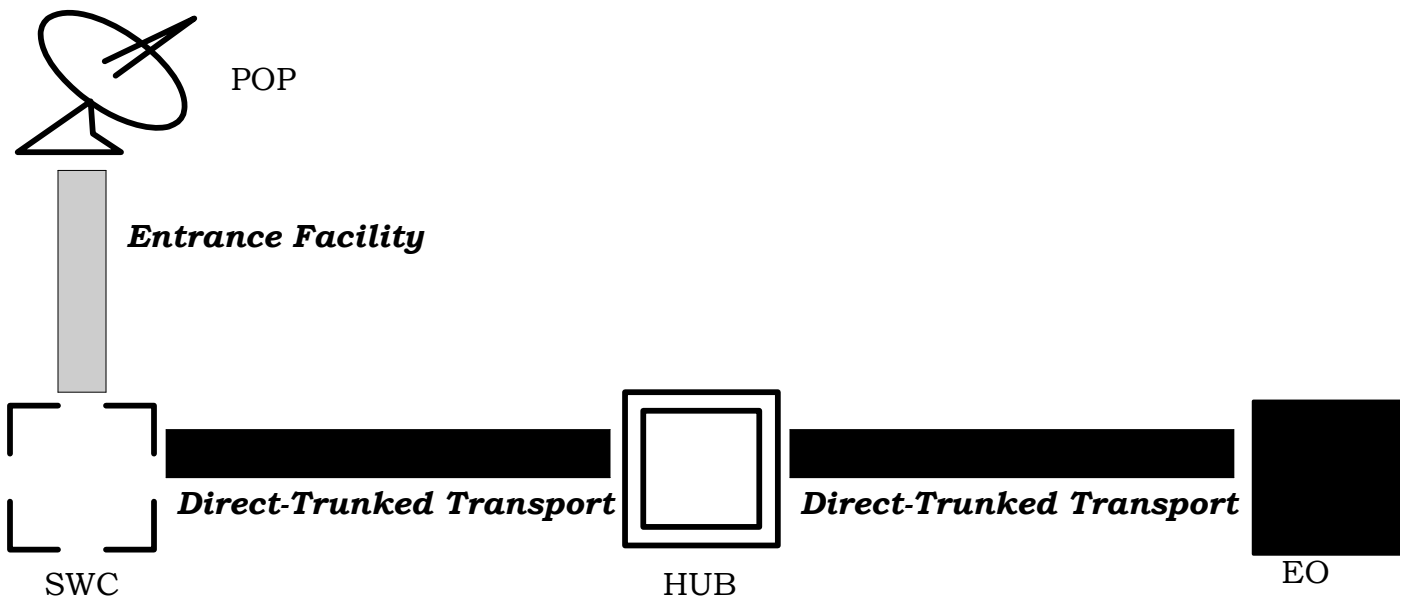
May be ordered at DS-1 or VG level.

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: There is an existing DS-3 POP to HUB. Provider will provide a channel off of DS-3 POP to EO and trunks.

VG: There is an existing DS-1 POP to HUB. Provider will provide trunks off of DS-1.



**7.25 EA DIRECT-TRUNKED TRANSPORT TO THE END OFFICE  
AND TRUNKS, ENTRANCE FACILITY USES SPECIAL  
ACCESS**

**LATA ORDERING REQUIREMENTS**

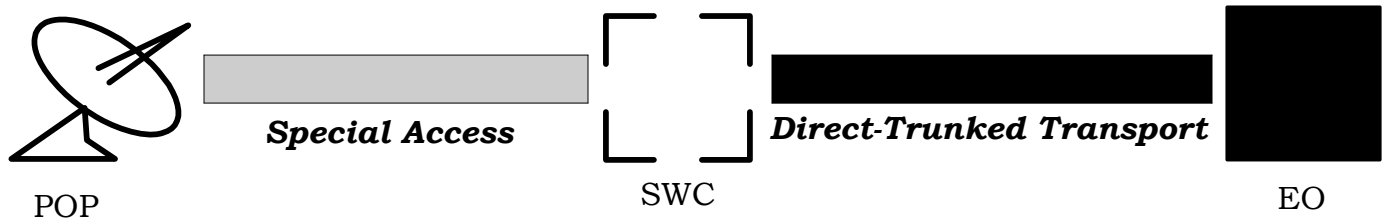
May be ordered at DS-1 or VG level.

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: There is an existing DS-3 POP to SWC. Provider will provide a channel off of DS-3 POP to EO and trunks.

VG: There is an existing DS-1 POP to SWC. Provider will provide trunks off of DS-1.



**7.26 EC DIRECT-TRUNKED TRANSPORT TO THE END OFFICE  
AND TRUNKS, ENTRANCE FACILITY AND DIRECT-  
TRUNKED TRANSPORT TO THE HUB USE SPECIAL  
ACCESS**

**LATA ORDERING REQUIREMENTS**

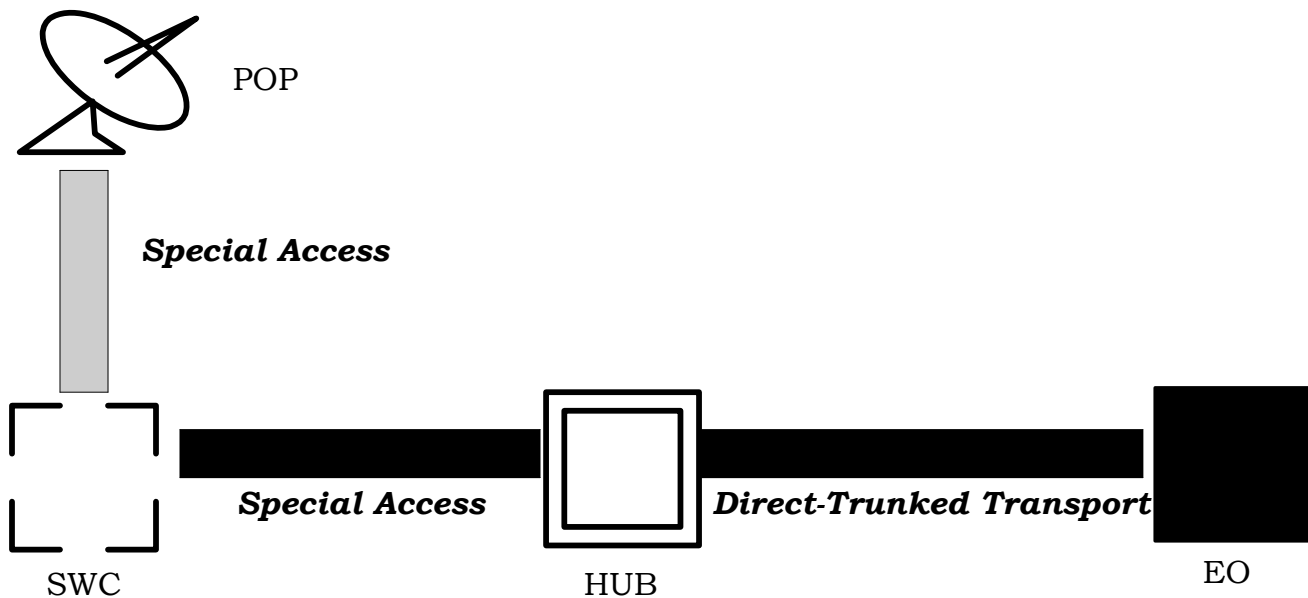
May be ordered at DS-1 or VG level.

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: There is an existing DS-3 POP to HUB. Provider will provide channel off of DS-3 POP to EO and trunks.

VG: There is an existing DS-1 POP to HUB. Provider will provide trunks off of DS-1.



**7.27 JF DIRECT-TRUNKED TRANSPORT TO THE ACCESS TANDEM, ENTRANCE FACILITY EXISTS, NO SPECIAL ACCESS**

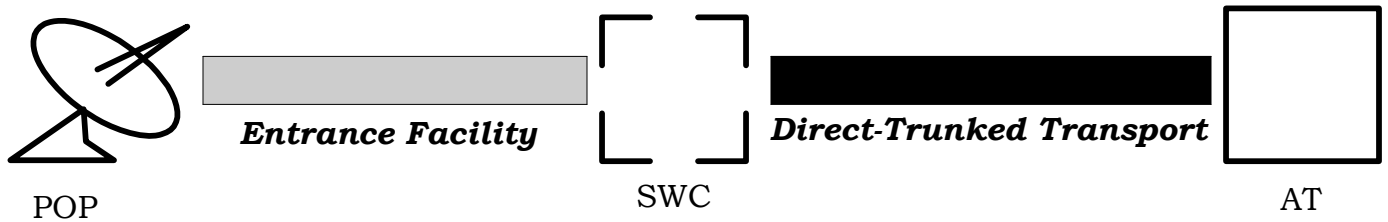
**LATA ORDERING REQUIREMENTS**

May be ordered at DS-1 level only.

ASR FORM  
TRANSPORT FORM

**PROVISIONING**

There is an existing DS-3 POP to SWC. Provider will provide channel off of the DS-3 POP to AT



**7.28 JA DIRECT-TRUNKED TRANSPORT TO THE ACCESS TANDEM, ENTRANCE FACILITY USES SPECIAL ACCESS**

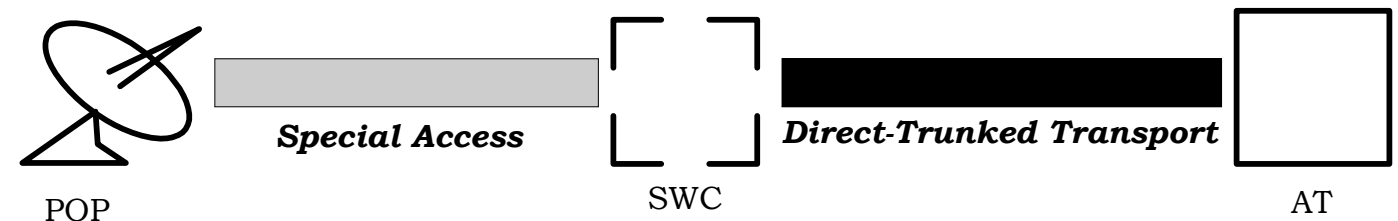
**LATA ORDERING REQUIREMENTS**

May be ordered at DS-1 level only.

ASR FORM  
TRANSPORT FORM

**PROVISIONING**

There is an existing DS-3 POP to SWC. Provider will provide channel off of the DS-3 POP to AT.



**7.29 JC DIRECT-TRUNKED TRANSPORT TO THE ACCESS  
TANDEM, ENTRANCE FACILITY AND DIRECT-TRUNKED  
TRANSPORT TO THE HUB USE SPECIAL ACCESS**

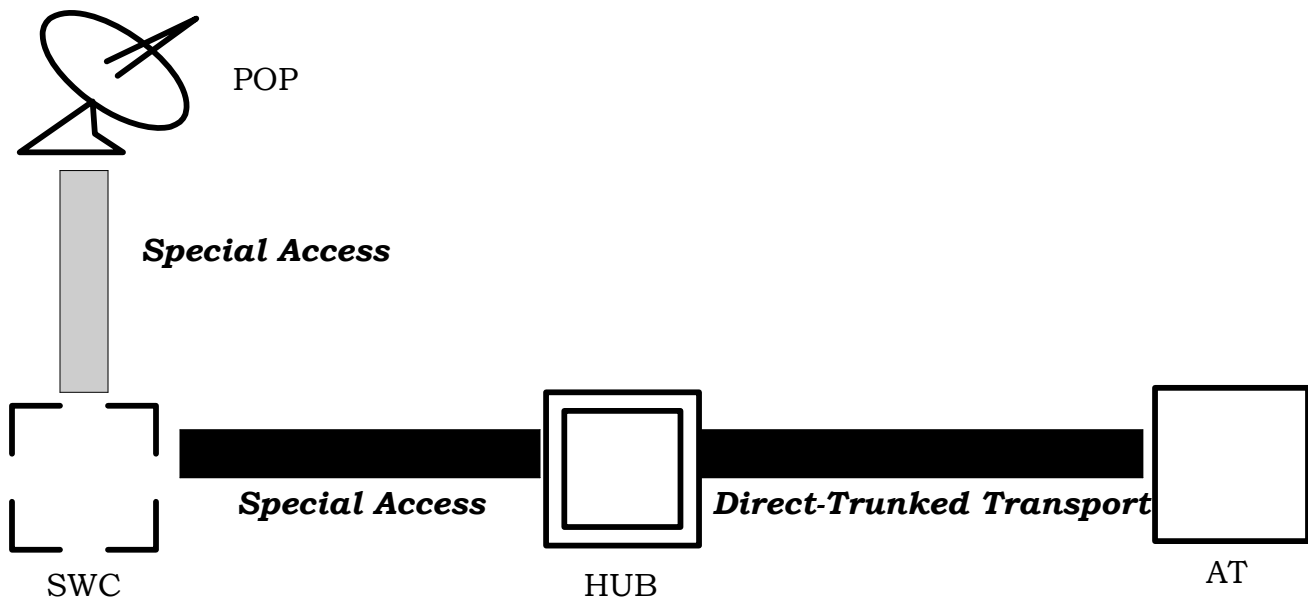
**LATA ORDERING REQUIREMENTS**

May be ordered at DS-1 level only.

ASR FORM  
TRANSPORT FORM

**PROVISIONING**

There is an existing DS-3  
POP to HUB. Provider will  
provide channel off of the  
DS-3 POP to AT.



### 7.30 LF DIRECT-TRUNKED TRANSPORT TO THE ACCESS TANDEM AND TRUNKS, ENTRANCE FACILITY EXISTS, NO SPECIAL ACCESS

#### LATA ORDERING REQUIREMENTS

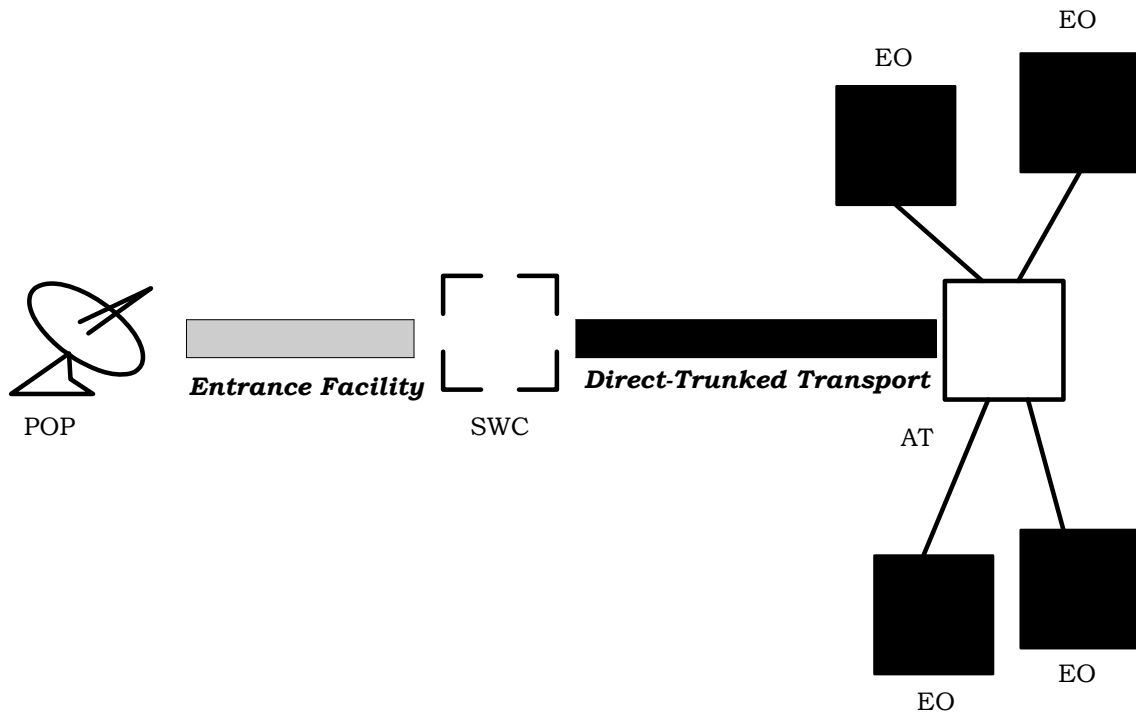
May be ordered at DS1 or VG level.

ASR FORM  
TRUNKING FORM

#### PROVISIONING

DS-1: There is an existing DS-3 POP to SWC. Provider will provide channel off of DS-3 POP to AT and trunks.

VG: There is an existing DS-1 POP to SWC. Provider will provide trunks off of DS-1.



**7.31 LA DIRECT-TRUNKED TRANSPORT TO THE ACCESS  
TANDEM AND TRUNKS, ENTRANCE FACILITY USES  
SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

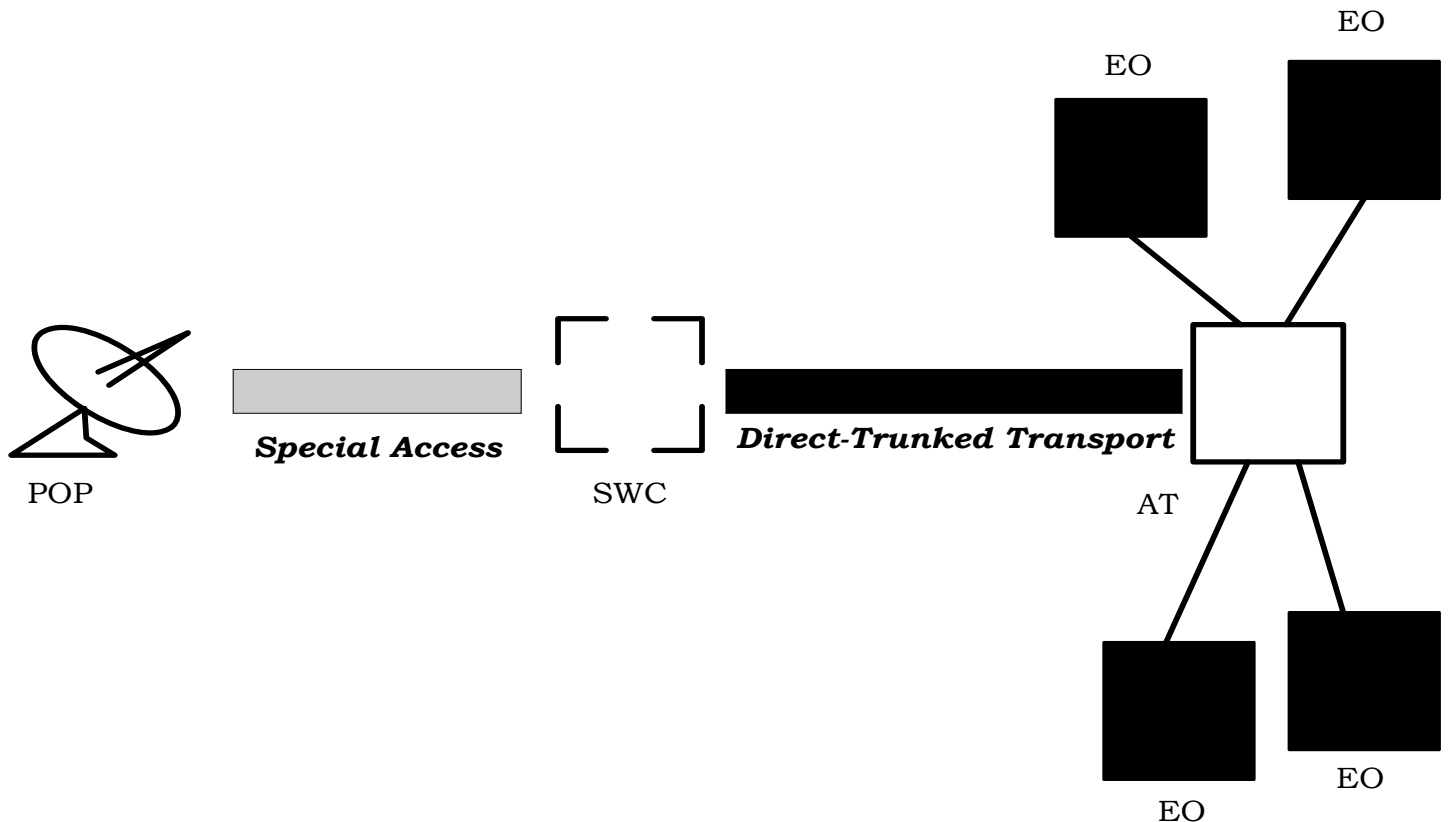
May be ordered at DS-1 or VG level.

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: There is an existing DS-3 POP to SWC. Provider will provide channel off of DS-3 POP to AT and trunks.

VG: There is an existing DS-1 POP to SWC. Provider will provide trunks off of DS-1.





**7.32 LC DIRECT-TRUNKED TRANSPORT TO THE ACCESS  
TANDEM AND TRUNKS, ENTRANCE FACILITY AND  
DIRECT-TRUNKED TRANSPORT TO THE HUB USE  
SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

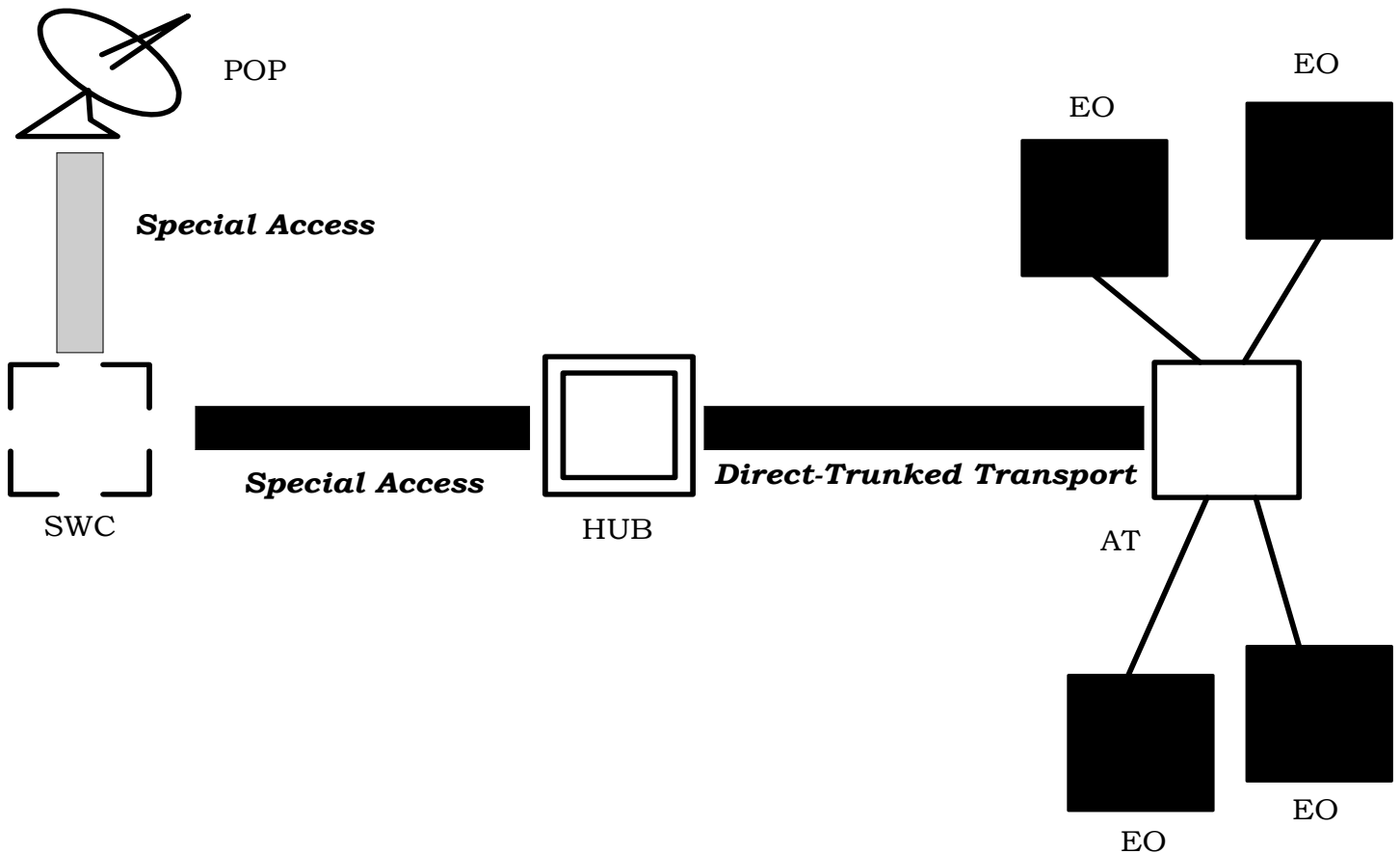
May be ordered at DS-1 or VG level.

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: There is an existing DS-3 POP to HUB. Provider will provide channel off of DS-3 POP to AT and trunks.

VG: There is an existing DS-1 POP to HUB. Provider will provide trunks off of DS-1.



**7.33 CF TANDEM-SWITCHED TRANSPORT TO THE ACCESS  
TANDEM AND TRUNKS, ENTRANCE FACILITY EXISTS, NO  
SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

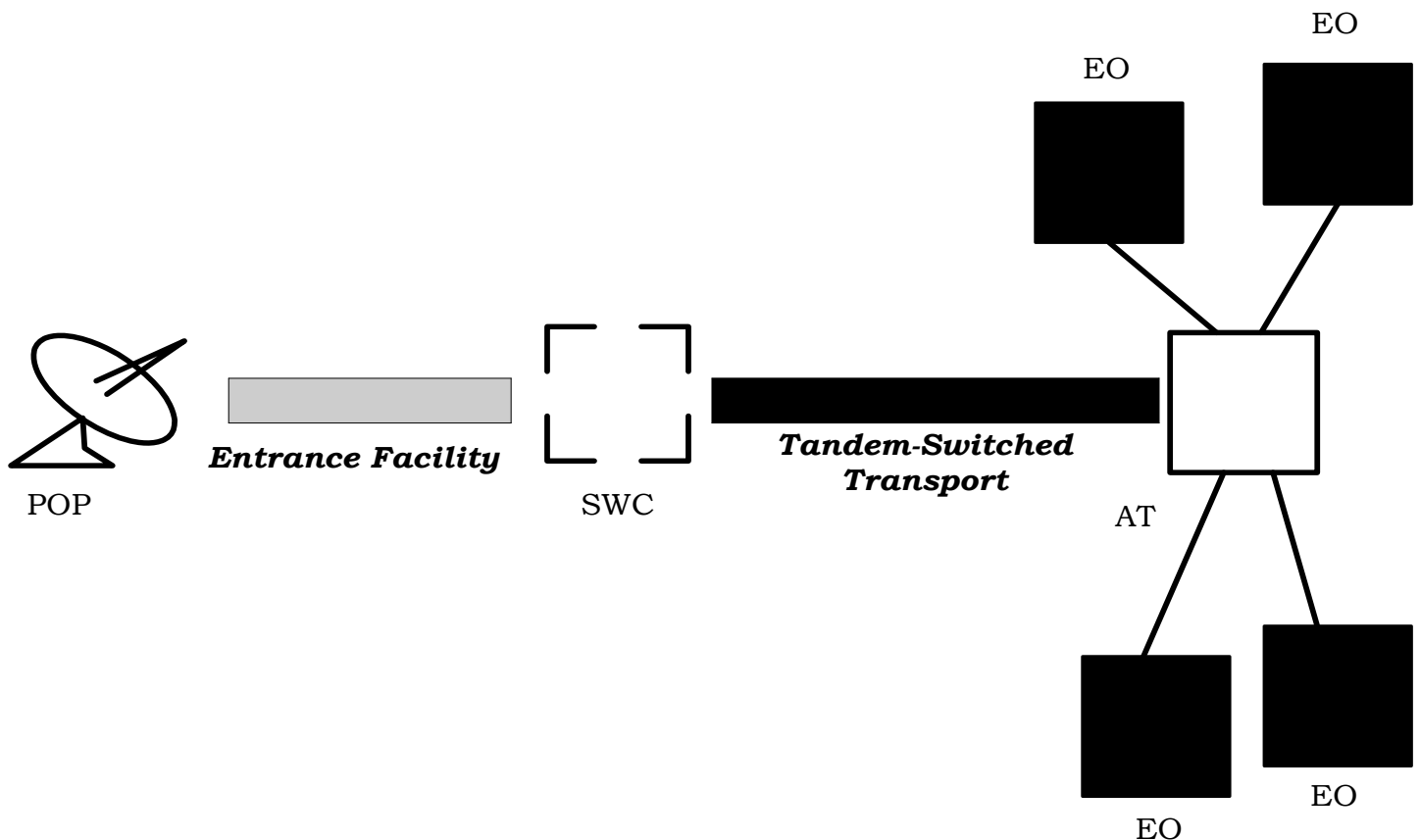
May be ordered at DS-1 or VG level.

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: There is an existing DS-3 POP to SWC. Provider will provide channel off of DS-3 and trunks.

VG: There is an existing DS-1 POP to SWC. Provider will provide trunks off of DS-1.



### 7.34 CA TANDEM-SWITCHED TRANSPORT TO THE ACCESS TANDEM AND TRUNKS, ENTRANCE FACILITY USES SPECIAL ACCESS

#### LATA ORDERING REQUIREMENTS

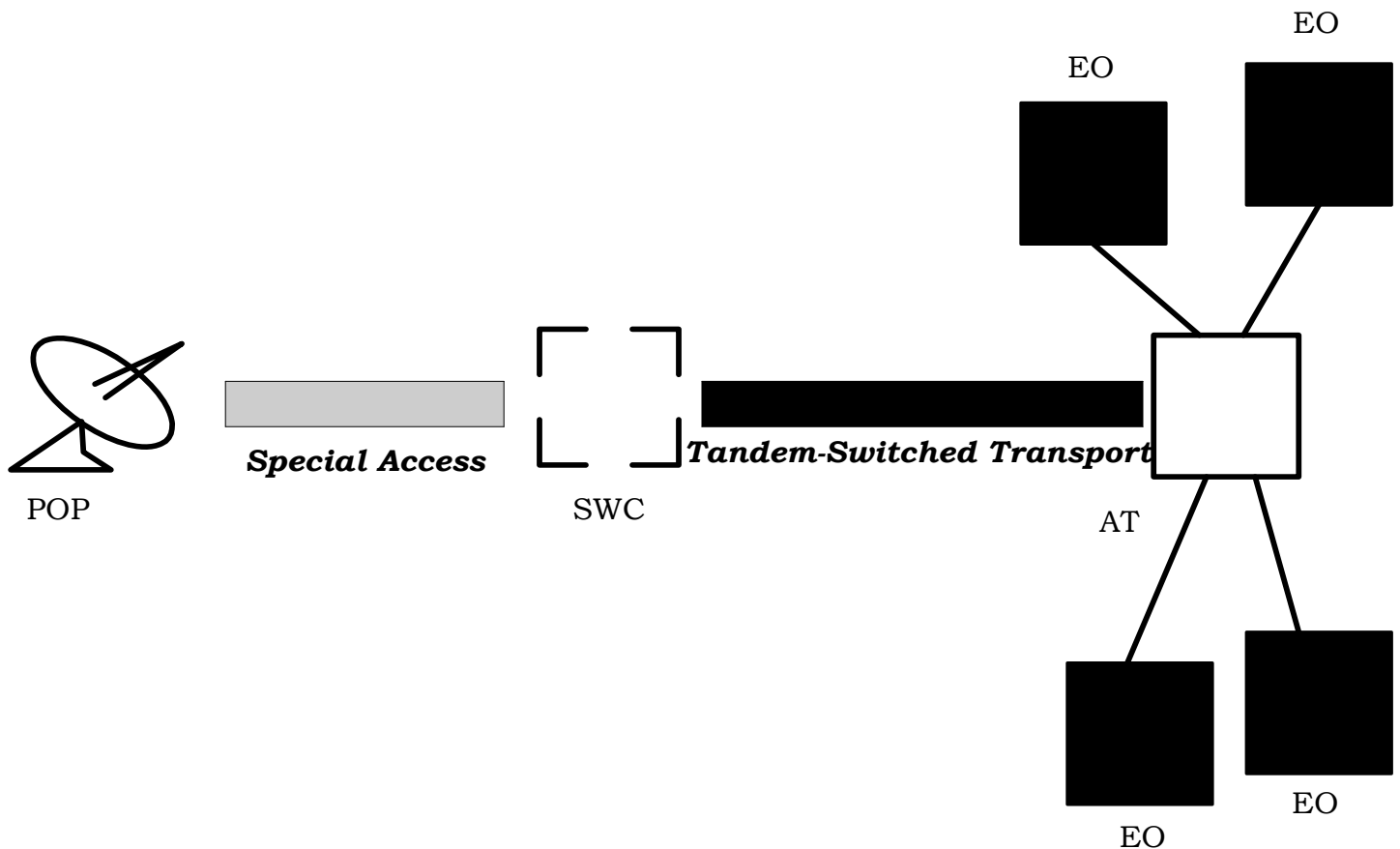
May be ordered at DS-1 or VG level.

ASR FORM  
TRUNKING FORM

#### PROVISIONING

DS-1: There is an existing DS-3 POP to SWC. Provider will provide channel off of DS-3 and trunks.

VG: There is an existing DS-1 POP to SWC. Provider will provide trunks off of DS-1.



**7.35 CC TANDEM-SWITCHED TRANSPORT TO THE ACCESS  
TANDEM AND TRUNKS, ENTRANCE FACILITY AND  
DIRECT-TRUNKED TRANSPORT TO THE HUB USE  
SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

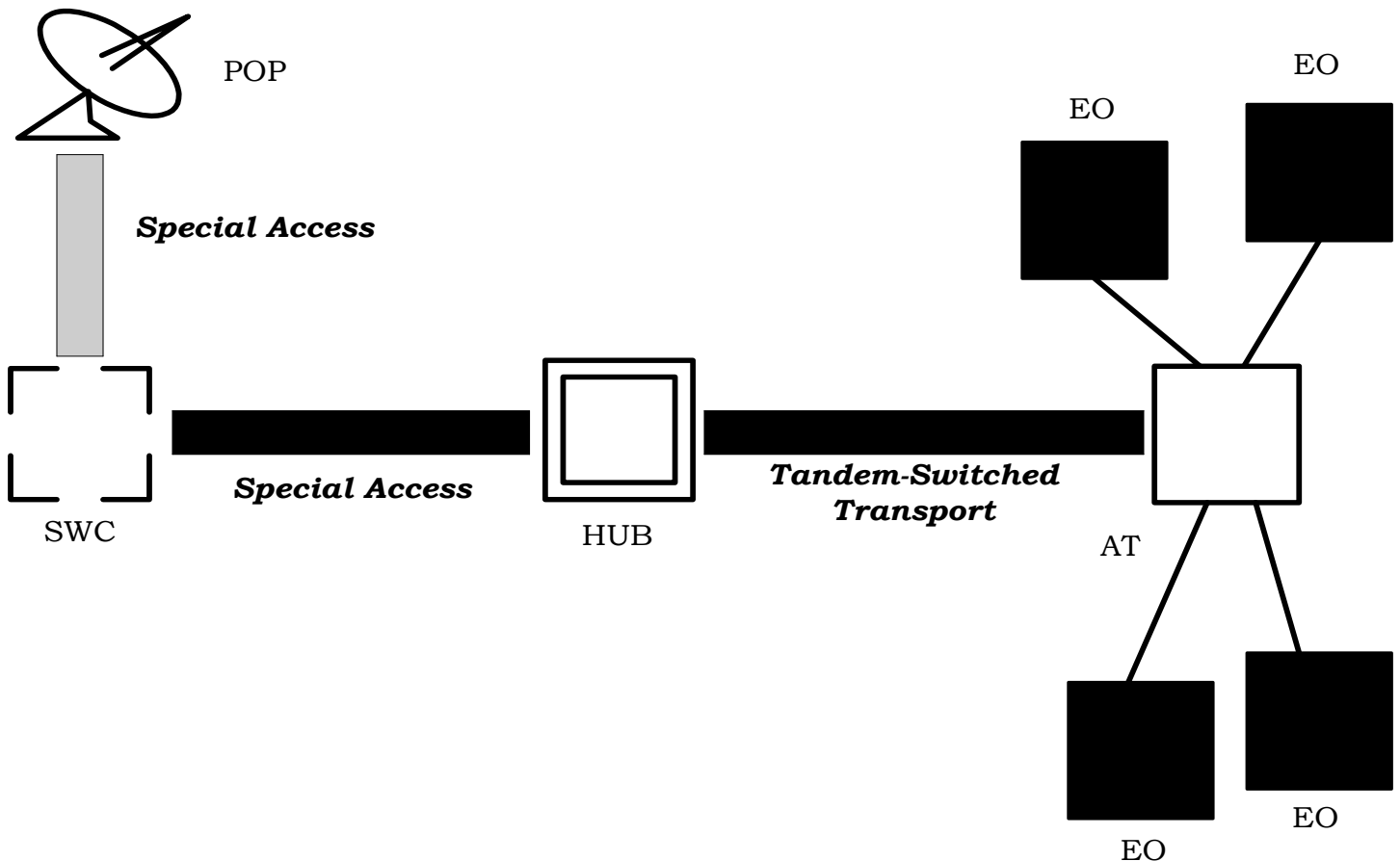
May be ordered at DS-1 or VG level.

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: There is an existing DS-3 POP to HUB. Provider will provide channel off of DS-3 POP to AT and trunks.

VG: There is an existing DS-1 POP to HUB. Provider will provide trunks off of DS-1.



**7.36 CE TANDEM-SWITCHED TRANSPORT TO THE ACCESS  
TANDEM AND TRUNKS, ENTRANCE FACILITY AND  
TANDEM-SWITCHED TRANSPORT TO THE HUB USE  
SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

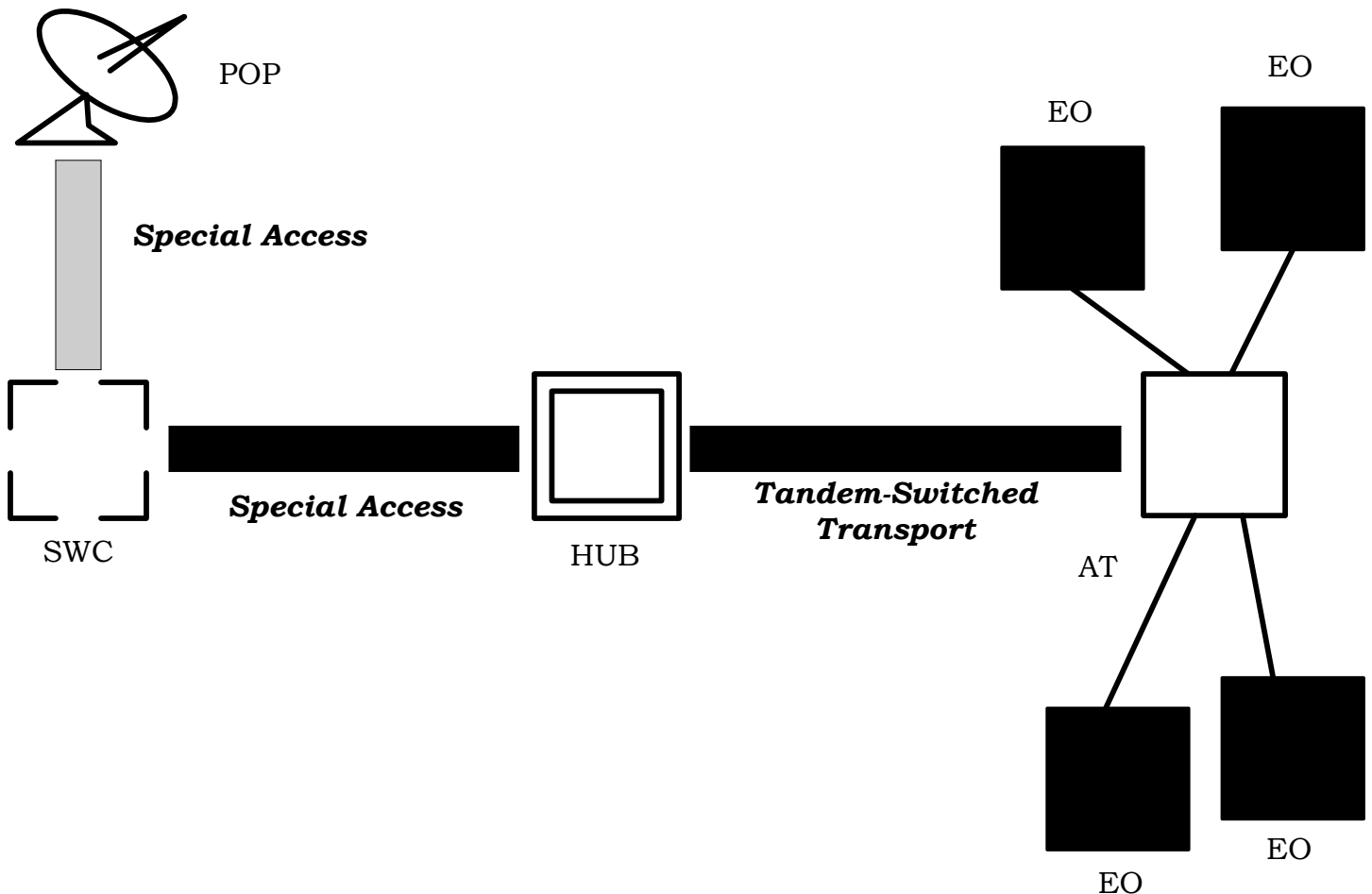
May be ordered at DS-1 or VG level.

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: There is an existing DS-3 POP to HUB. Provider will provide channel off of DS-3 POP to AT and trunks.

VG: There is an existing DS-1 POP to HUB. Provider will provide trunks off of DS-1.



**7.37 FF FGA LINES ONLY, ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT TO THE END OFFICE EXISTS, NO SPECIAL ACCESS**

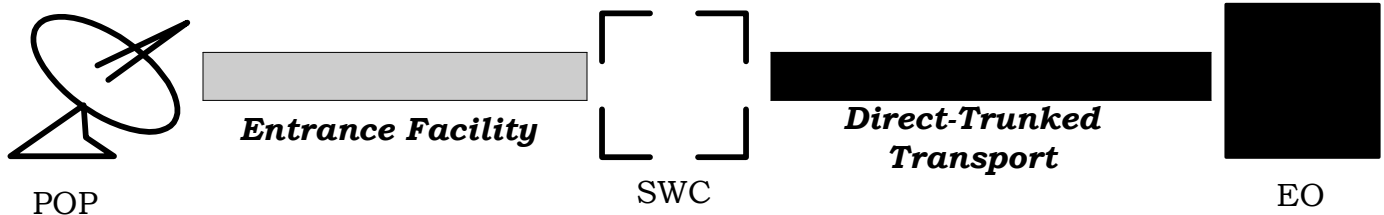
**LATA ORDERING REQUIREMENTS**

May be ordered at VG level only.

ASR FORM  
FGA FORM

**PROVISIONING**

There is an existing DS-1 POP to EO. Provider will provide FGA lines off of DS-1.



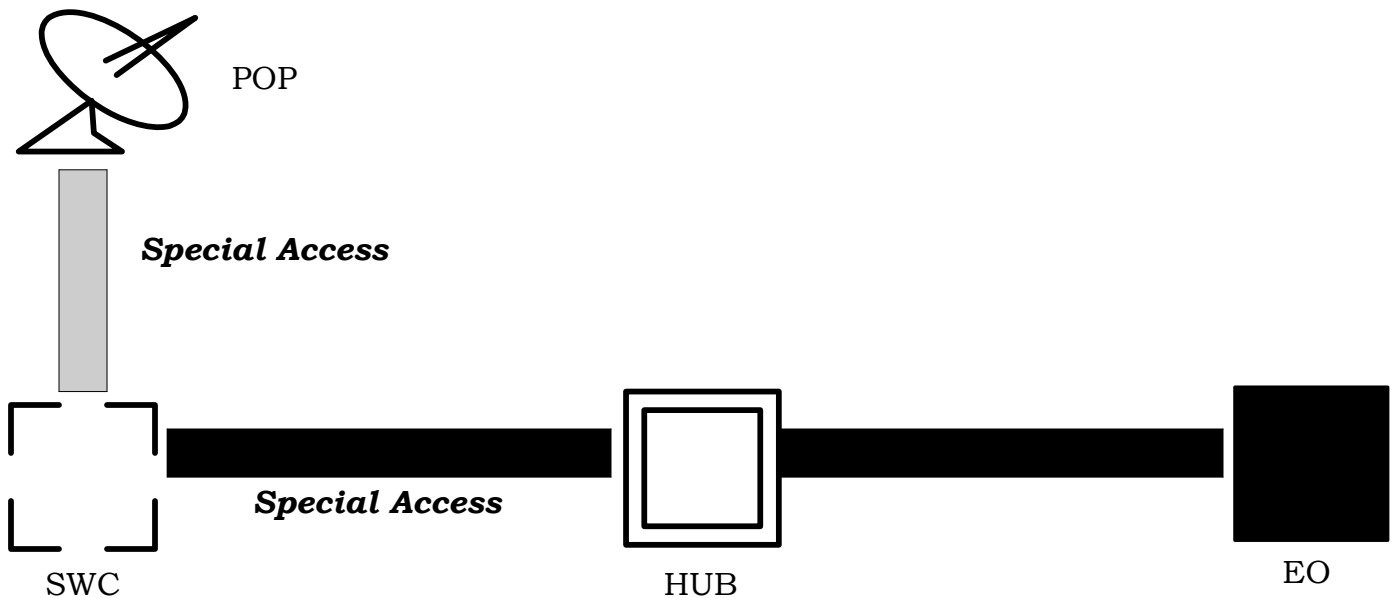
**7.38 FC FGA LINES ONLY, ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT TO THE HUB USE SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

**PROVISIONING**

ASR FORM  
FGA FORM

There is an existing Hi-cap facility POP to HUB. The HUB and EO are in the same building. Provider will provide FGA lines to EO.\*



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\* This is the exception to assumption #2 that every line/trunk must have an entrance facility and transport all the way to the end office or access tandem.

**7.39A FF TRUNKS ONLY, ENTRANCE FACILITY AND TRANSPORT TO THE ACCESS TANDEM EXIST. (MAY BE EITHER DIRECT-TRUNKED OR TANDEM-SWITCHED TRANSPORT) NO SPECIAL ACCESS**

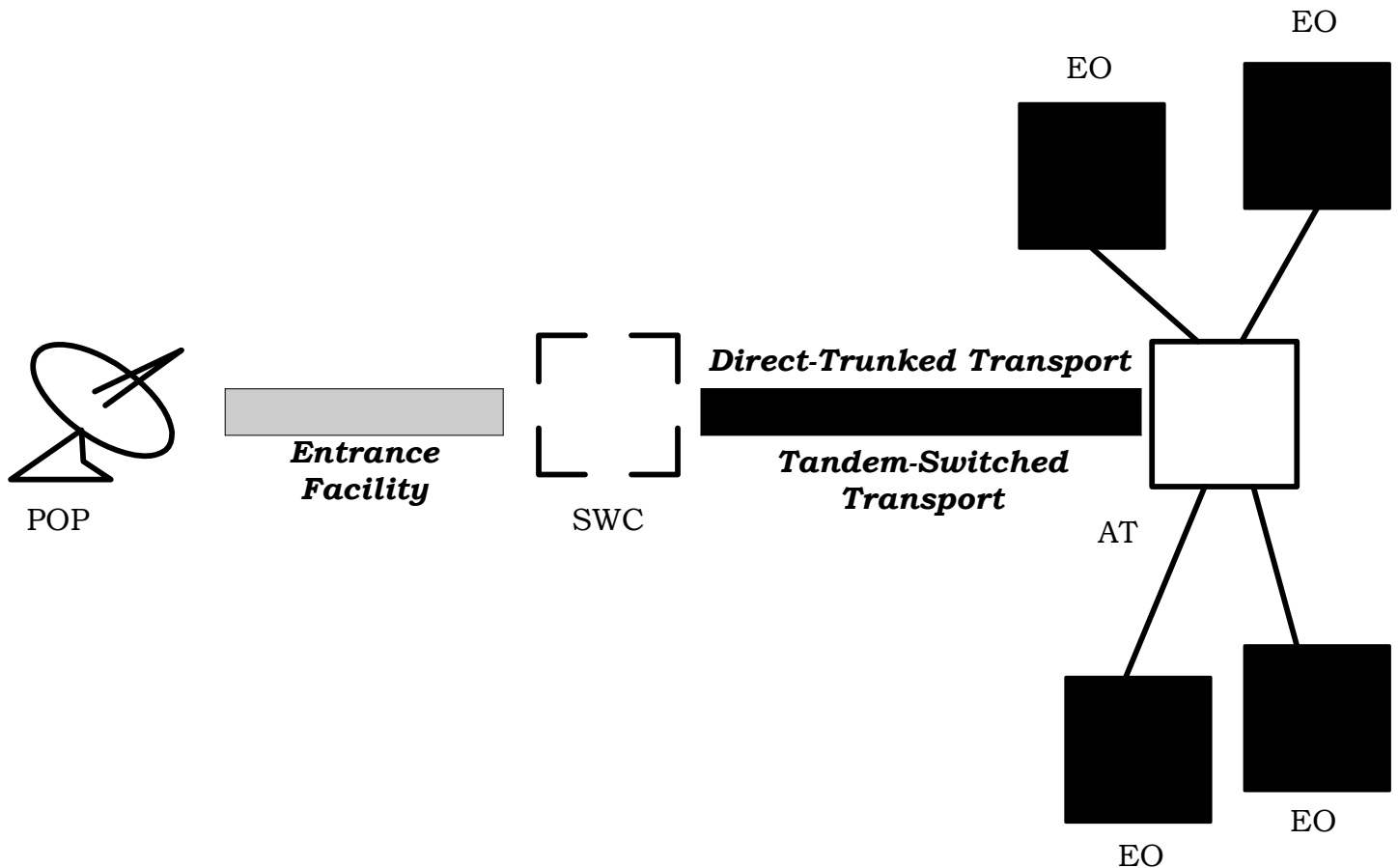
**LATA ORDERING REQUIREMENTS**

May be ordered at VG level only.

ASR FORM  
TRUNKING FORM

**PROVISIONING**

There is an existing DS-1 POP to AT. Provider will provide trunks off of DS-1.





**7.39B FF TRUNKS ONLY, ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT TO THE END OFFICE EXIST, NO SPECIAL ACCESS**

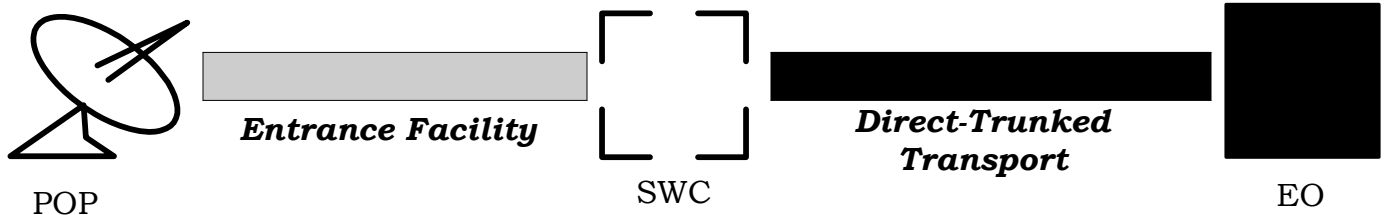
**LATA ORDERING REQUIREMENTS**

May be ordered at VG level only.

ASR FORM  
TRUNKING FORM

**PROVISIONING**

There is an existing DS-1 POP to EO. Provider will provide trunks off of DS-1.



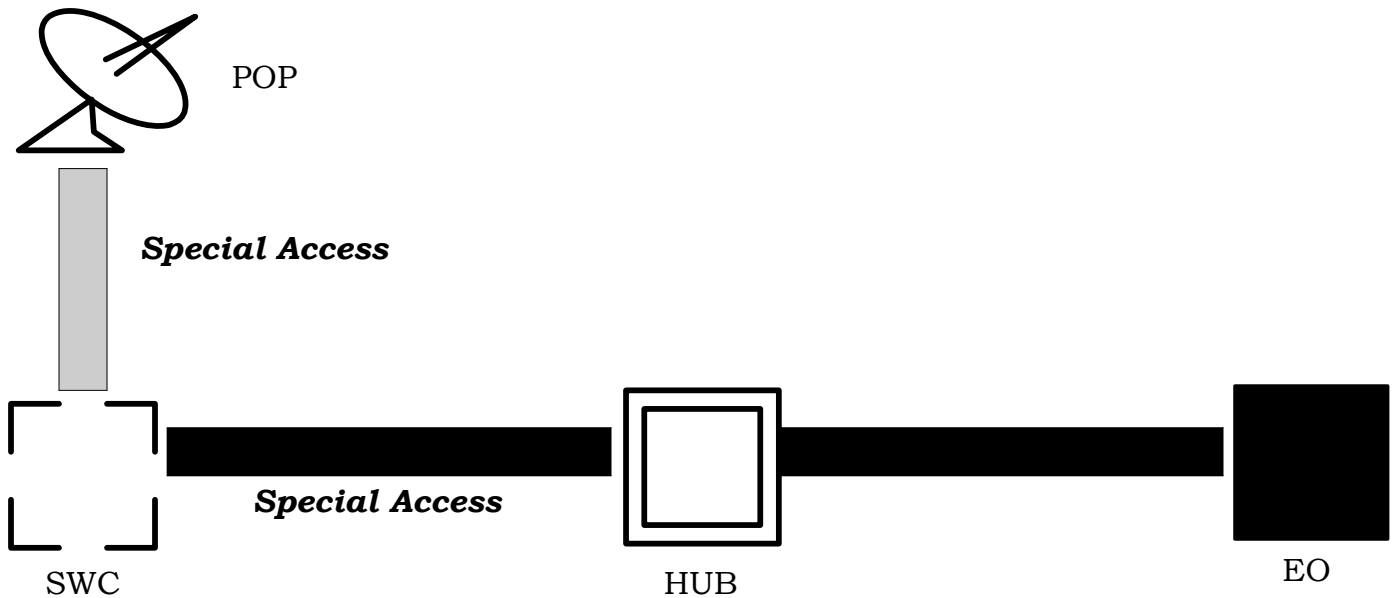
**7.40A FC TRUNKS ONLY, ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT TO HUB USE SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

ASR FORM  
TRUNKING FORM

**PROVISIONING**

There is an existing Hi-cap facility POP to HUB. The HUB and EO are in the same building. Provider will provide trunks to the EO.\*



---

\* This is the exception to assumption #2 that every line/trunk must have an entrance facility and transport all the way to the end office or access tandem.

**7.40B FC TRUNKS ONLY, ENTRANCE FACILITY AND DIRECT-TRUNKED TRANSPORT TO THE HUB USE SPECIAL ACCESS**

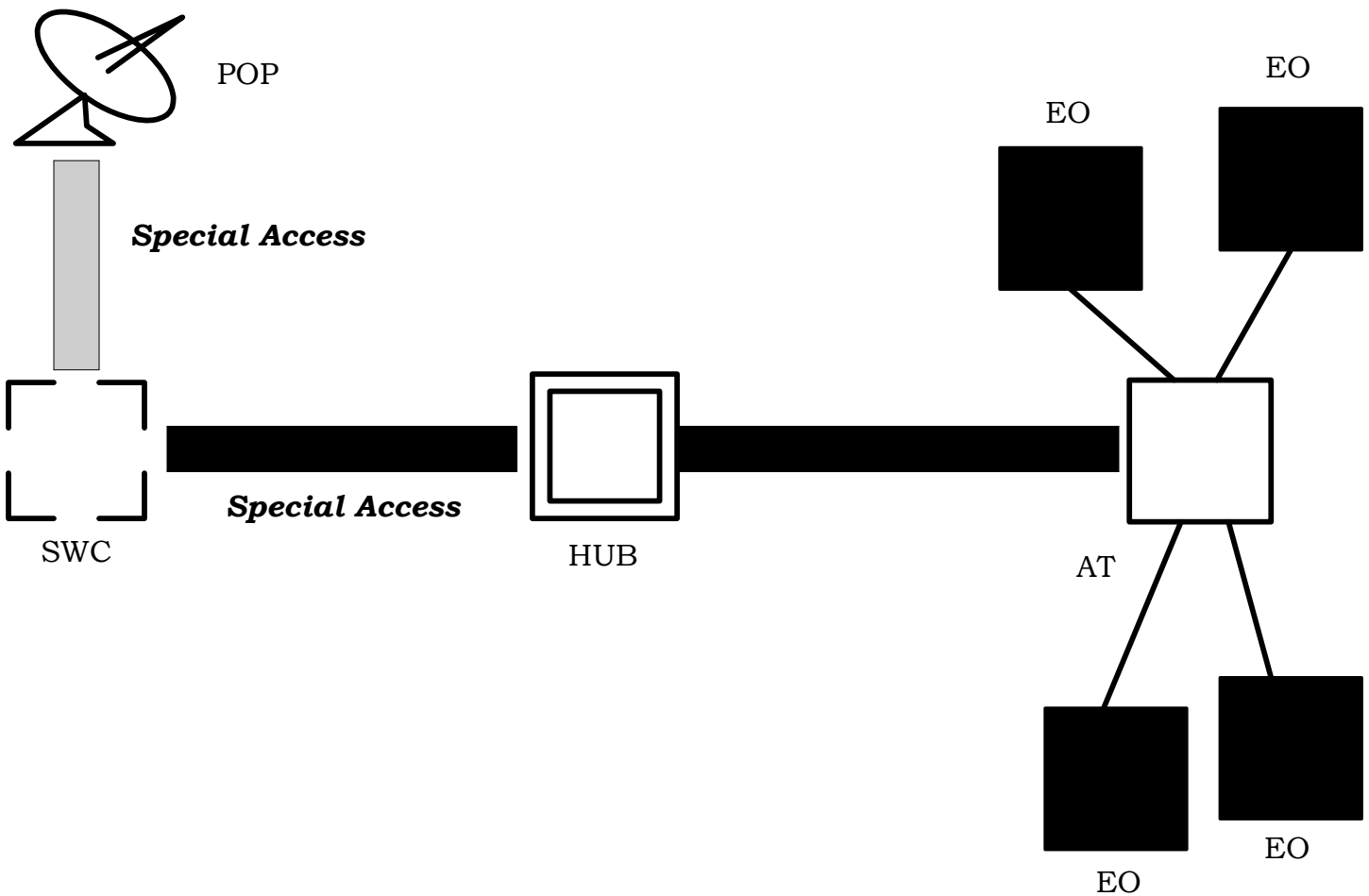
**LATA ORDERING REQUIREMENTS**

May be ordered at VG level only.

ASR FORM  
TRUNKING FORM

**PROVISIONING**

There is an existing Hi-cap facility POP to HUB. The HUB and AT are in the same building. Provider will provide trunks to the AT.\*



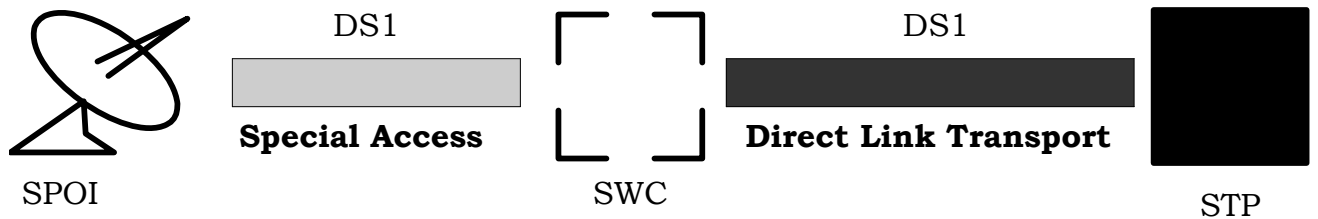
**7.41A QA DIRECT-LINK TRANSPORT TO THE STP AND LINKS,  
ENTRANCE FACILITY USES SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: There is an existing DS-3 entrance facility from the SPOI to SWC. Provider will provide a channel off of DS-3 SPOI to STP and links.



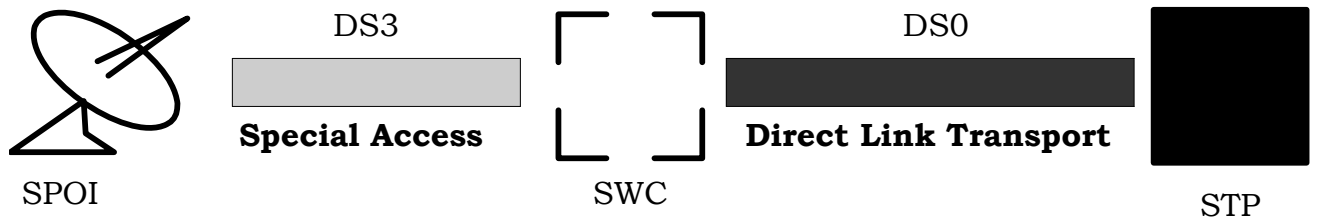
**7.41B QA DIRECT-LINK TRANSPORT TO THE STP AND LINKS,  
ENTRANCE FACILITY USES SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

ASR FORM  
TRUNKING FORM

**PROVISIONING**

VG: There is an existing DS-1 entrance facility from the SPOI to SWC. Provider will provide links off of DS-1.



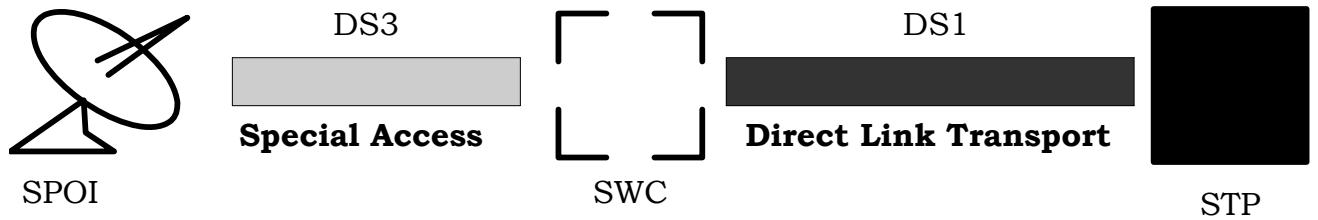
**7.42 RA LINKS, EXISTING DIRECT-LINK TRANSPORT TO THE STP AND ENTRANCE FACILITY USES SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

ASR FORM  
TRUNKING FORM

**PROVISIONING**

There is an existing DS-3 entrance facility from the SPOI to SWC, and an existing DS-1 DLT facility SPOI to STP. Provider will provide links off of DS-1.



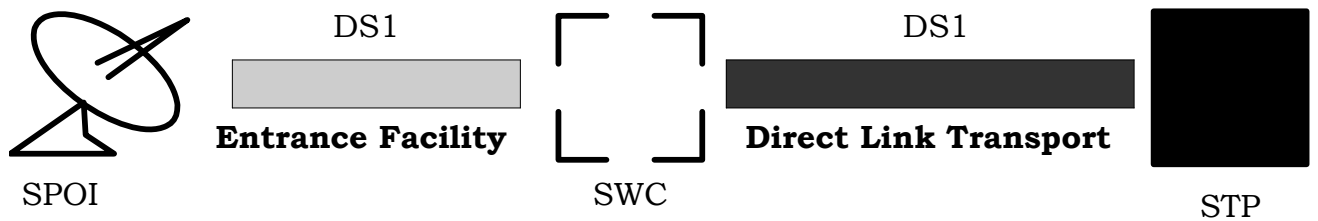
**7.43A PF ENTRANCE FACILITY AND DIRECT-LINK TRANSPORT TO  
THE STP AND LINKS, NO SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: Facility from SPOI  
through SWC to STP and  
links.



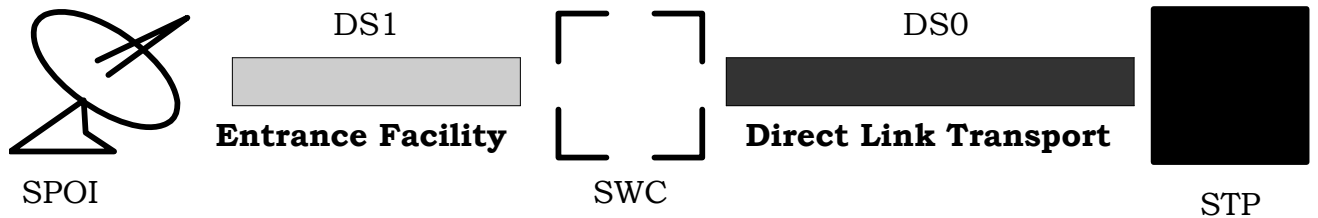
**7.43B PF ENTRANCE FACILITY AND DIRECT-LINK TRANSPORT TO  
THE STP AND LINKS, NO SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: Facility from SPOI to  
SWC. Provider will provide  
a channel off of DS-1 to  
STP and links.





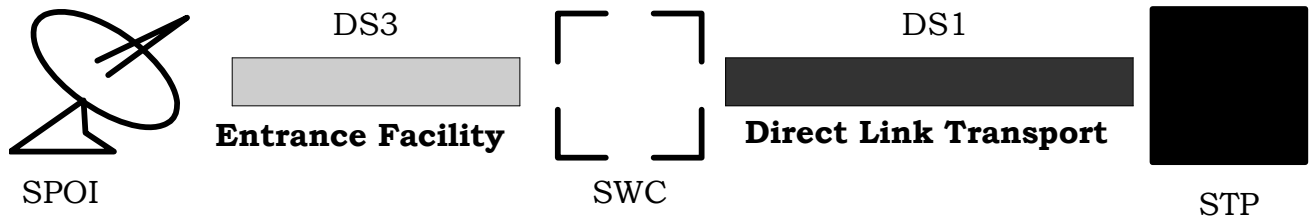
**7.44A QF DIRECT-LINK TRANSPORT TO THE STP AND LINKS,  
ENTRANCE FACILITY EXISTS, NO SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: There is an existing DS-3 entrance facility from the SPOI to SWC. Provider will provide a channel off of DS-3 SPOI to STP and links.



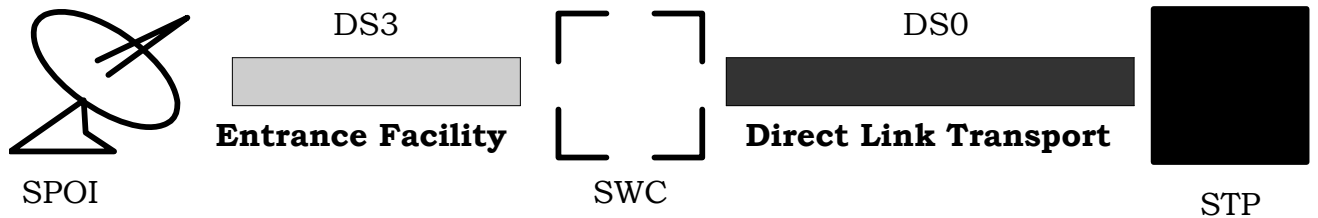
**7.44B QF DIRECT-LINK TRANSPORT TO THE STP AND LINKS,  
ENTRANCE FACILITY EXISTS, NO SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

ASR FORM  
TRUNKING FORM

**PROVISIONING**

DS-1: There is an existing DS-3 entrance facility from the SPOI to SWC. Provider will provide a channel off of DS-3 SPOI to STP and links.



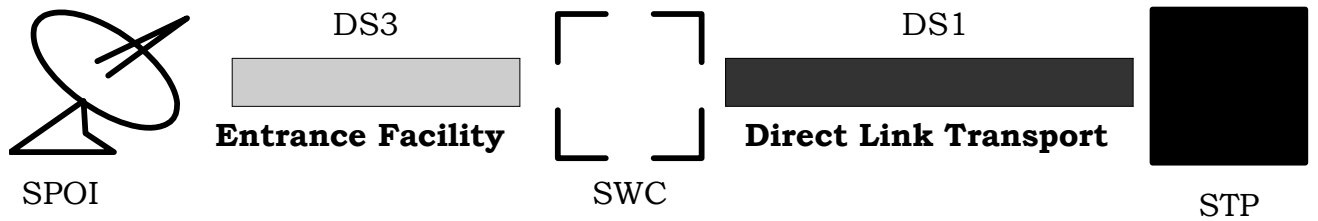
**7.45A RF LINKS ONLY, ENTRANCE FACILITY AND DIRECT-LINK  
TRANSPORT TO THE STP EXIST, NO SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

ASR FORM  
TRUNKING FORM

**PROVISIONING**

There is an existing DS-3  
entrance facility from the  
SPOI to SWC. Provider will  
provide links off of DS-1.



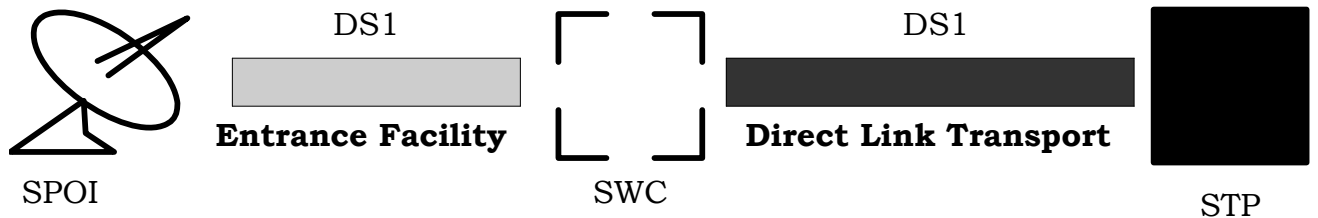
**7.45B RF LINKS ONLY, ENTRANCE FACILITY AND DIRECT-LINK  
TRANSPORT TO THE STP EXIST, NO SPECIAL ACCESS**

**LATA ORDERING REQUIREMENTS**

ASR FORM  
TRUNKING FORM

**PROVISIONING**

There is an existing DS-1  
entrance facility from the  
SPOI to STP. Provider will  
provide links off of DS-1.



## FEATURE GROUP A

| <u>DESCRIPTION</u>  | <u>SECTION</u> |
|---|----------------|
| GENERAL _____   | 8.1            |
| FEATURE GROUP A (FGA) ORDERING CONFIGURATIONS _____   | 8.2            |
| FOREIGN EXCHANGE _____  | 8.2.1          |
| FOREIGN EXCHANGE WITH CUSTOMER EXTENSION<br>DIFFERENT LATA _____                              | 8.2.2          |
| FOREIGN EXCHANGE WITH CUSTOMER EXTENSION<br>SAME LATA _____                                   | 8.2.3          |
| FOREIGN EXCHANGE WITH CUSTOMER EXTENSION<br>WITHIN FGA LATA _____                             | 8.2.4          |
| FGA WITH PROVIDER EXTENSION WITHIN FGA LATA ____  | 8.2.5          |
| FGA WITH CUSTOMER EXTENSION AND TRANSITING<br>FACILITY IN THE FGA LATA _____                  | 8.2.6          |
| FGA WITH CUSTOMER EXTENSION AND PROVIDER<br>PROVIDED TRANSITING FACILITY IN THE FGA LATA ____ | 8.2.7          |
| FGA WITH PROVIDER TRANSITING FACILITY AS AN<br>EXTENSION IN THE FGA LATA _____                | 8.2.8          |

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## **8. FEATURE GROUP A**

**8.1 GENERAL** FGA Access provides line side access to provider end office switches with an associated seven digit local telephone number for the customer's use in originating and terminating communications to a customer service or a customer provided communications capability. The line side termination will be provided with either ground start supervisory signaling or loop start supervisory signaling. The type of signaling is at the option of the customer.

A seven digit telephone number assigned by the provider is provided for access to FGA switching in the originating direction. The seven digit local telephone number will be associated with the selected end office switch and is of the form NXX-XXXX.

If the customer requests a specific seven digit telephone number that is not currently assigned, and the provider can, with reasonable effort, comply with that request, the requested number will be assigned to the customer.

FGA switching, when used in the terminating direction, is arranged with dial tone start-dial signaling. When used in the terminating direction FGA switching may, at the option of the customer, be arranged for dial pulse or dual tone multi-frequency address signaling, subject to availability of equipment at the first point of switching. When FGA switching is provided in a hunt group or uniform call distribution arrangement, all FGA switching will be arranged for the same type of address signaling.

No address signaling is provided by the provider when FGA Switching is used in the originating direction. Address signaling in such cases, if required by the customer, must be provided by the customer's end user using in-band tone signaling techniques. Such in-band tone address signals will not be regenerated by the provider and will be subject to the ordinary transmission capabilities of the Local Transport provided.

When a FGA switching arrangement for an individual customer (a single line or entire hunt group) is discontinued at an end office, an intercept announcement is provided. This arrangement provides, for a limited period of time, an announcement that the service associated with the number dialed has been disconnected.

Feature Group A may be ordered by the customer with various arrangements comprised of the following where available.

- Common Switching Optional Features
- Transport Termination Optional Features
- Local Transport Optional Features

Certain other features may be available in connection with Feature Group A and are provided under the provider's general exchange service tariffs.

FGA is provided, in the terminating direction where equipment is available, with seven digit access to balanced (100 type) test line and milliwatt (102 type) test line.

**8.2 FEATURE GROUP A (FGA) ORDERING CONFIGURATIONS** is ordered between a customer terminal location and a FGA Ordering Configurations Central Office (commonly called the Dial Tone Office) providing the FGA service. FGA is provided with a telephone number which is used to access the service by the dialing of seven or ten digits. When this number is dialed, ringing is provided to the customer who answers and processes the call over its facilities.

This section provides graphic representations of ordering requirements for basic FGA service configurations. They are "high level" in presentation, and do not include the specifications of local transport. See Section 7 for local transport requirements. Pictorials of customer requirements for end- to-end service often involve a combination of access and other services. These configurations represent the majority of such orders and are not meant to limit ordering through other variations.



**8.2.1 FOREIGN EXCHANGE:** A combination of services (a FGA service in LATA-A and a Special Access service in LATA-B) can be used to create an Inter-LATA Foreign Exchange service.

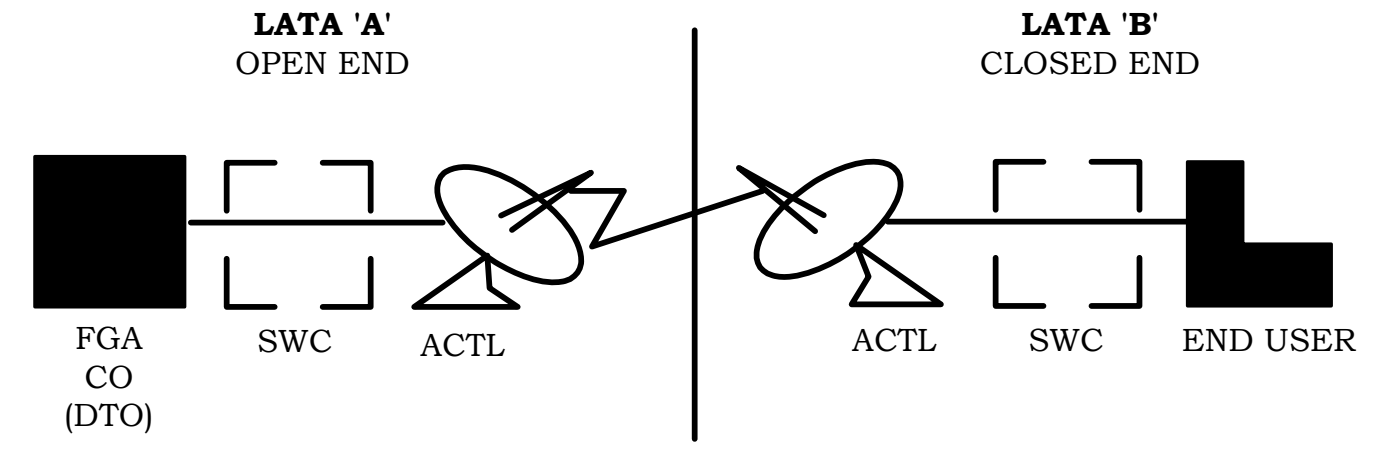
The configuration in LATA-A depicts a line-side switched Access Service between an ACTL and a provider Central Office (Dial Tone Office).

The configuration shown in LATA-B depicts a Special Access service terminating the Foreign Exchange service. The terminating end is ordered separately from the FGA service.

### ORDERING REQUIREMENTS

LATA-A  
ASR FORM  
FGA FORM

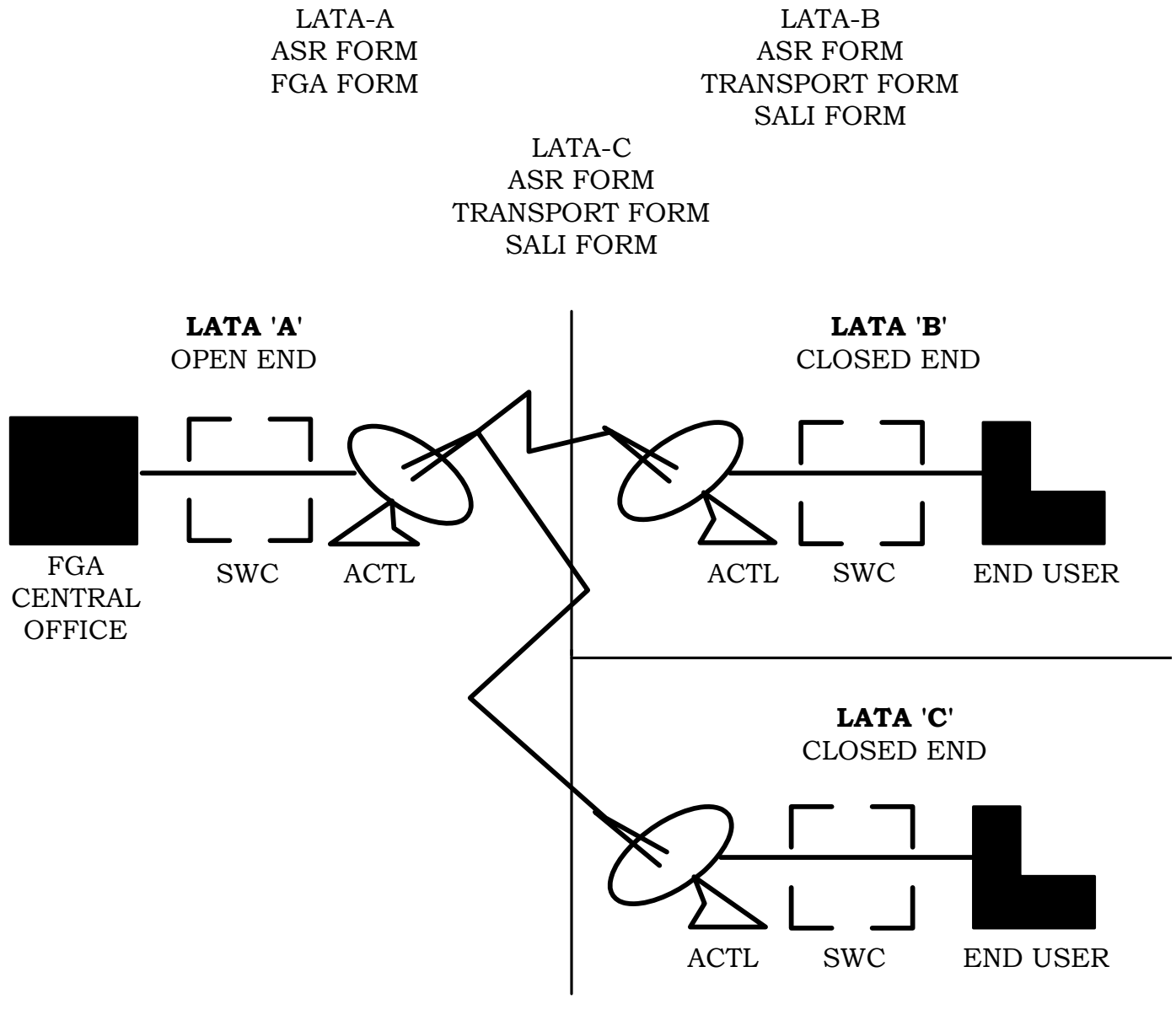
LATA-B  
ASR FORM  
TRANSPORT FORM  
SALI FORM



Foreign Exchange from a customer perspective

**8.2.2 FOREIGN EXCHANGE WITH CUSTOMER EXTENSION DIFFERENT LATA.** This configuration is the same basic layout as in Section 8.3 with the addition of a separately ordered Special Access Service in LATA C acting as the closed end of a Foreign Exchange Configuration.

#### ORDERING REQUIREMENTS



**8.2.3 FOREIGN EXCHANGE WITH CUSTOMER EXTENSION SAME LATA** The configuration is the same basic layout as in Section 8.3 with the customer providing a bridged extension using provider access to a second end user location within LATA-B. This service arrangement requires four (4) sets of requests:

- 1) One for the FGA
- 2) One for the first end user location
- 3) One for the second end user location
- 4) One for the ACTL to ACTL transiting facility

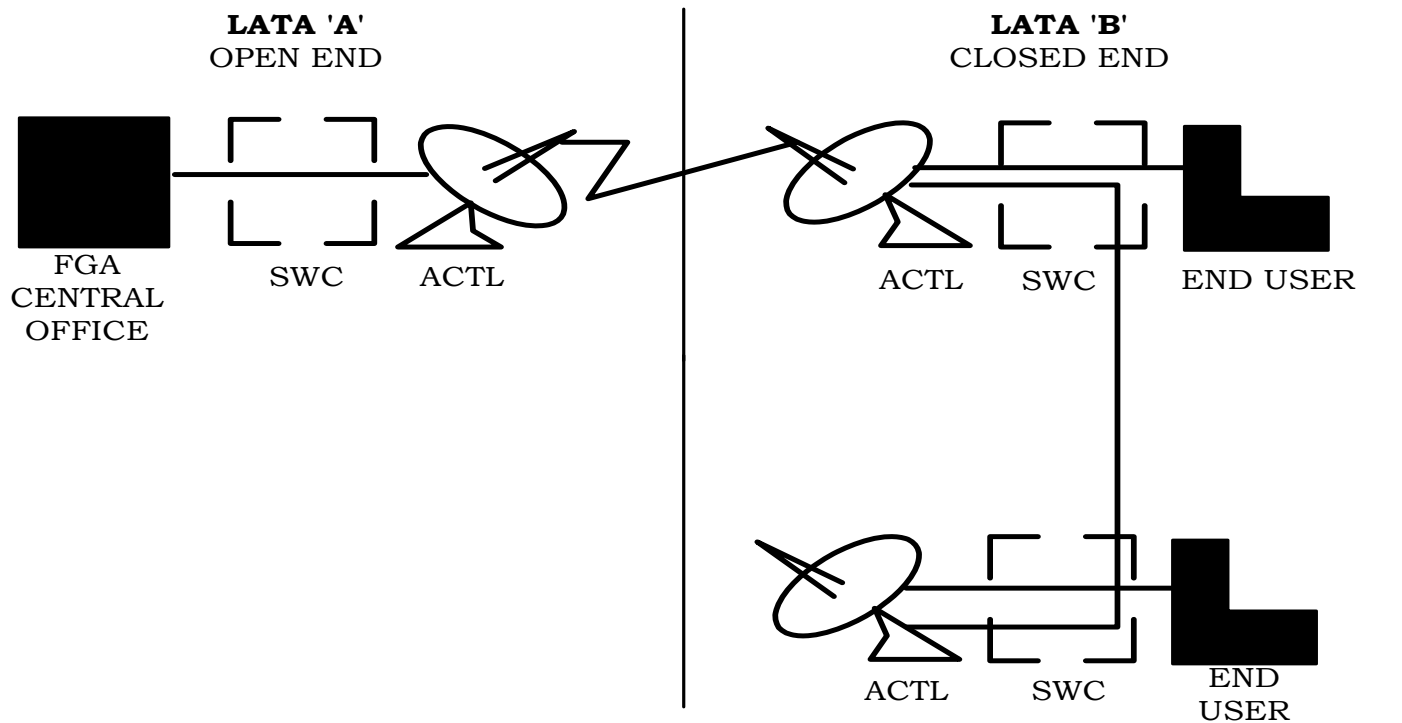
#### ORDERING REQUIREMENTS

LATA-A (1)  
ASR FORM  
FGA FORM

LATA-B (2)  
ASR FORM  
TRANSPORT FORM  
SALI FORM

LATA-A (3)  
ASR FORM  
FGA FORM

LATA-B (3)  
ASR FORM  
TRANSPORT FORM  
SALI FORM



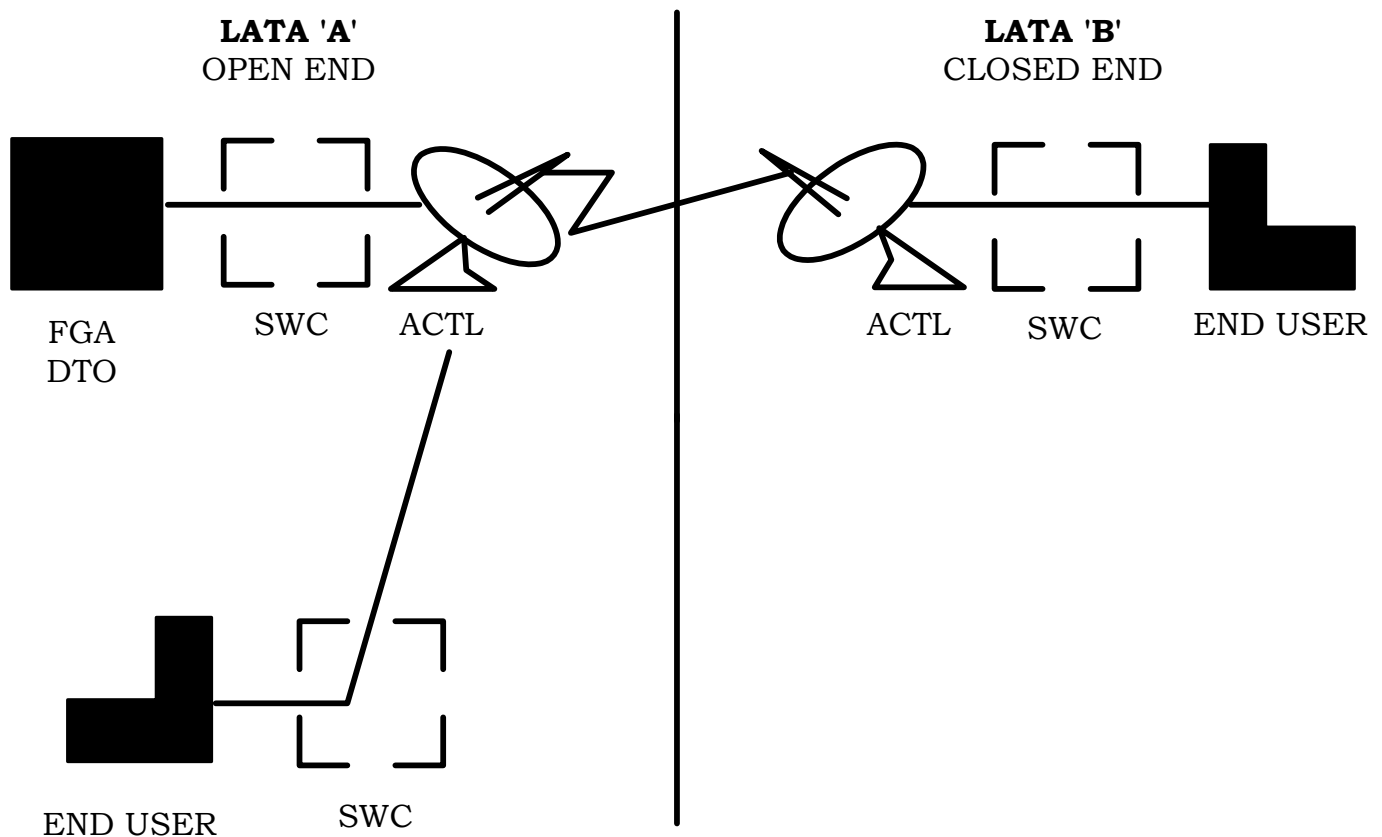
**8.2.4 FOREIGN EXCHANGE WITH CUSTOMER EXTENSION WITHIN FGA LATA** The configuration is the same basic layout as in Section 8.3 with the customer providing a bridged extension within the FGA (dial tone) LATA. This arrangement requires three (3) sets of requests: 1) one for the FGA service 2) one for the end user location in LATA-A 3) one for the end user location LATA-B

#### ORDERING REQUIREMENTS

LATA-A  
ASR FORM  
FGA FORM

LATA-A  
ASR FORM  
TRANSPORT FORM  
SALI FORM

LATA-B  
ASR FORM  
TRANSPORT FORM  
SALI FORM



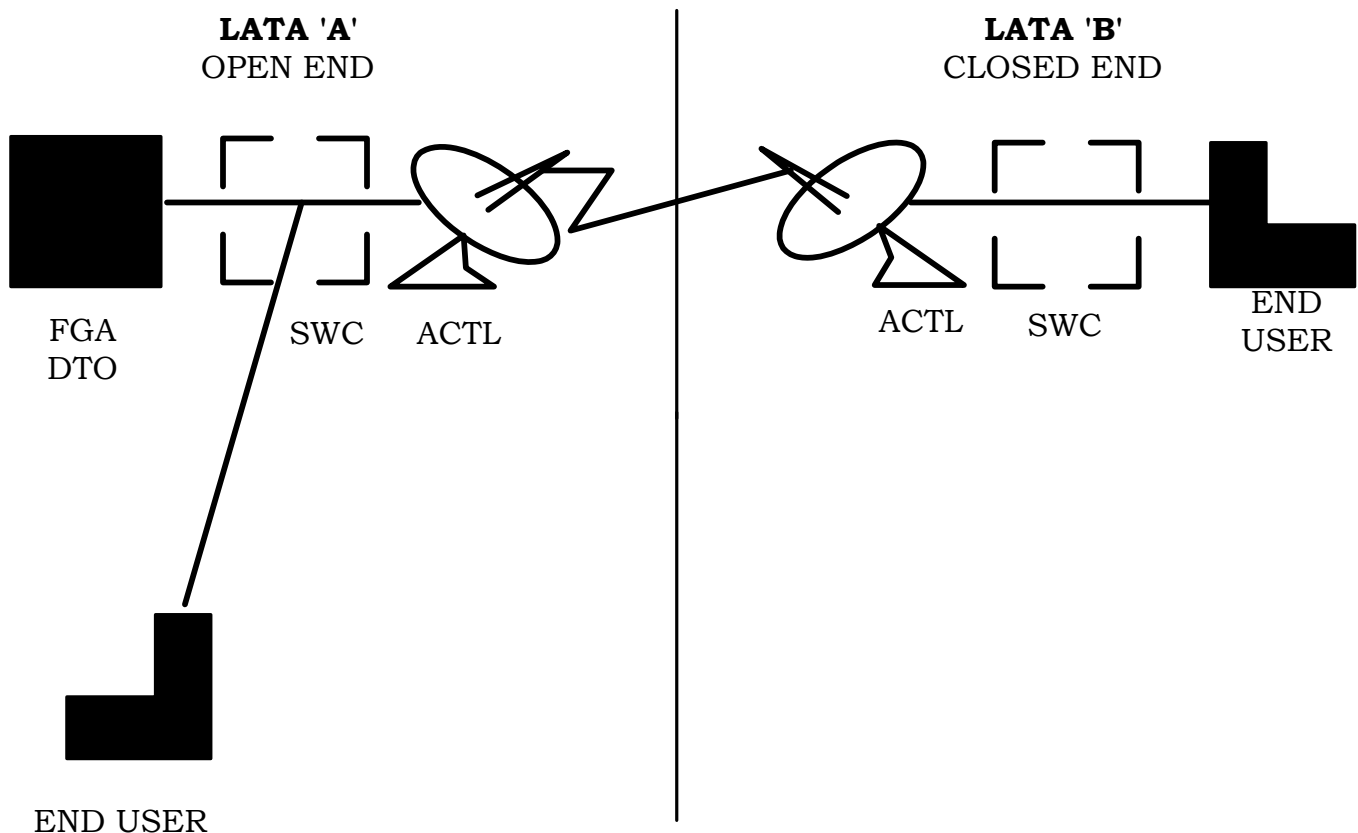
**8.2.5 FGA WITH PROVIDER EXTENSION WITHIN FGA LATA** This configuration is again the same basic layout as in Section 8.3 with the provider providing a bridged extension within the FGA (dial tone) LATA. This arrangement requires two (2) sets of requests.

- 1) One for the FGA and Service Leg extension in LATA-A
- 2) One for the end user location in LATA-B

#### ORDERING REQUIREMENTS

LATA-A  
ASR FORM  
FGA FORM  
MSL FORM  
SALI FORM

LATA-B  
ASR FORM  
TRANSPORT FORM  
SALI FORM



**8.2.6 FGA WITH CUSTOMER EXTENSION AND TRANSITING FACILITY IN THE FGA LATA** This configuration is basically the same as in Section 8.4 with the customer providing the transiting facility within LATA-A. This arrangement requires three (3) sets of requests:

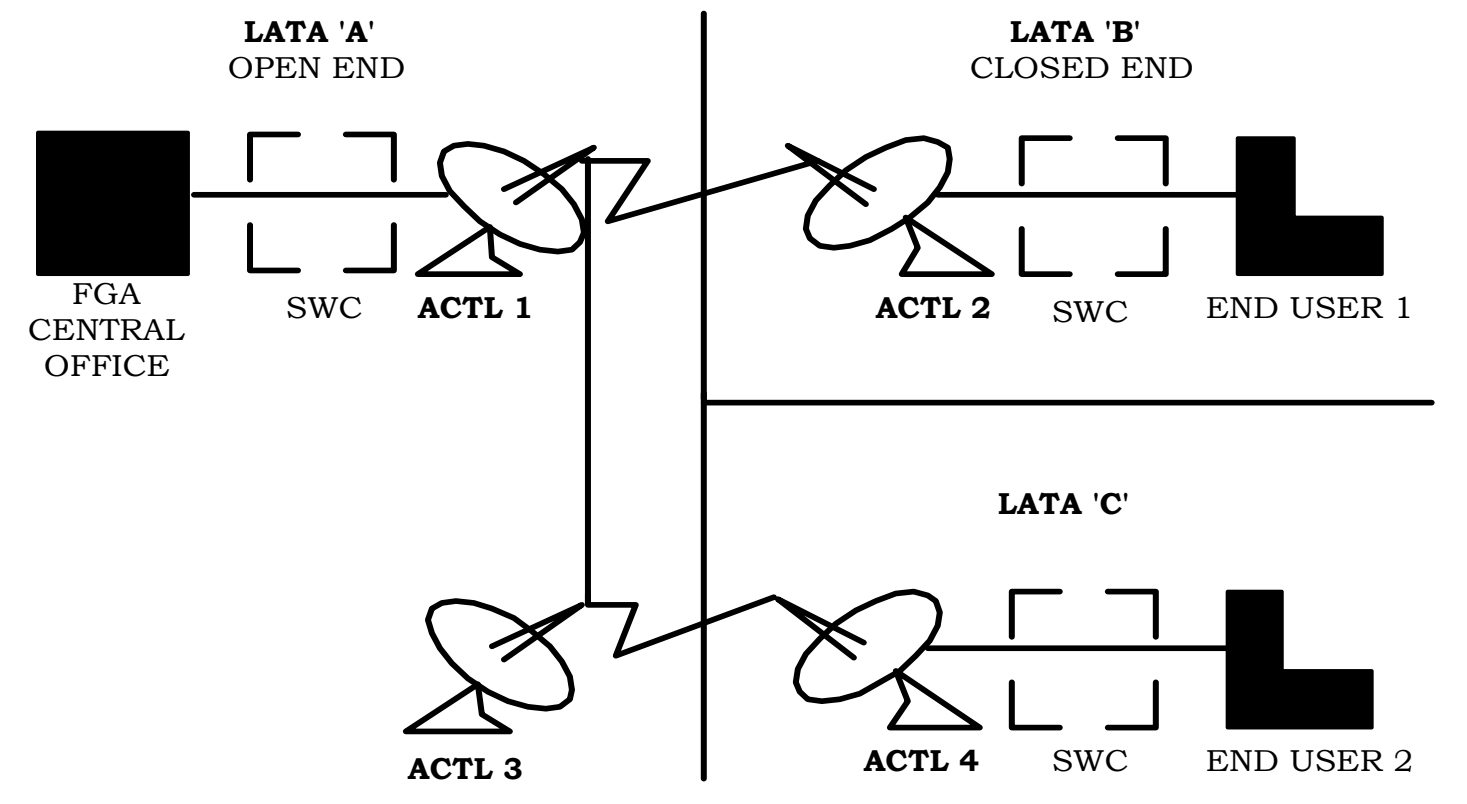
- 1) One for the FGA in LATA-A
- 2) One for the end user location in LATA-B
- 3) One for the end user location in LATA-C

**ORDERING REQUIREMENTS**

LATA-A  
ASR FORM  
FGA FORM

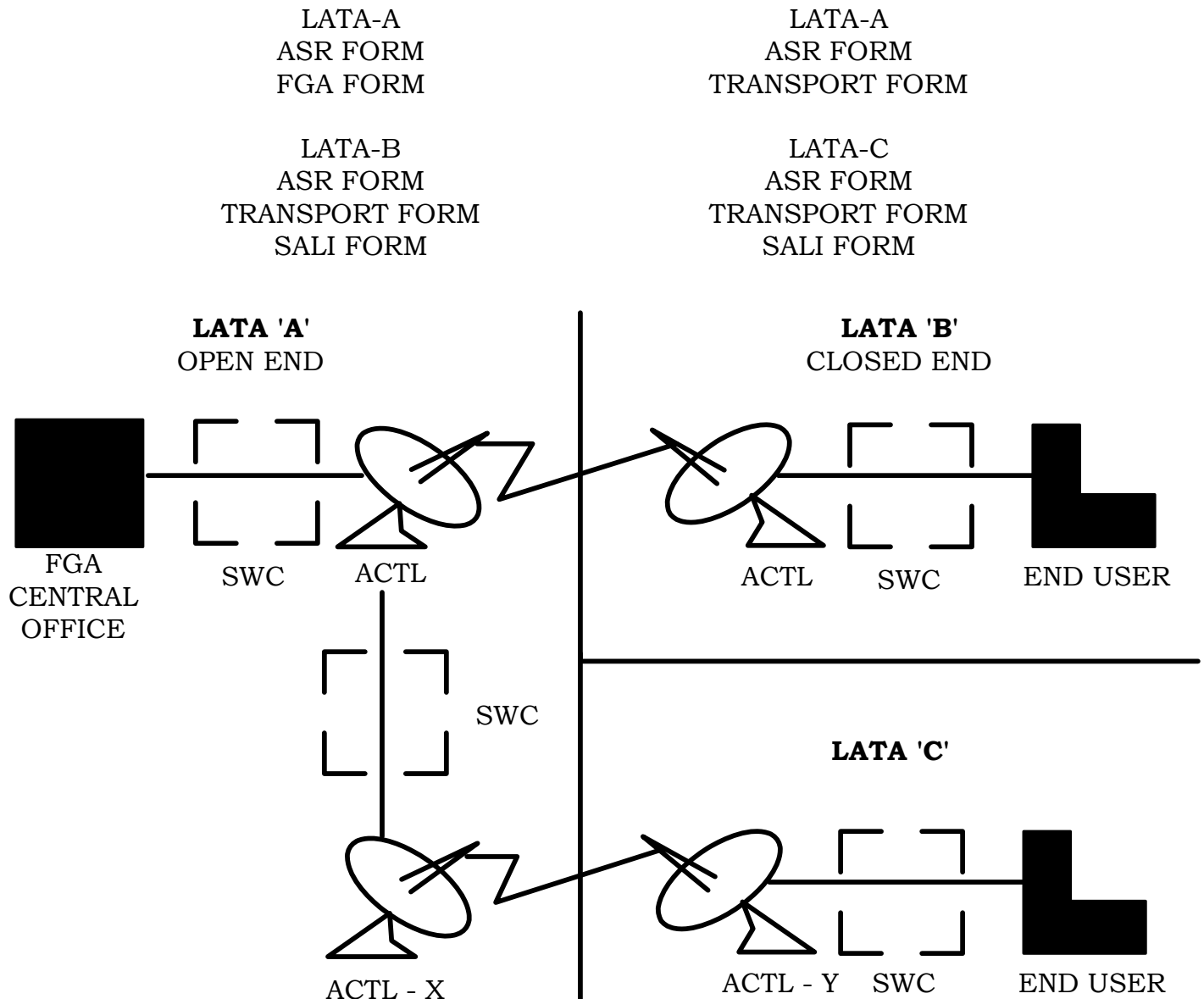
LATA-B  
ASR FORM  
TRANSPORT FORM  
SALI FORM

LATA-C  
ASR FORM  
TRANSPORT FORM  
SALI FORM



**8.2.7 FGA WITH CUSTOMER EXTENSION AND PROVIDER PROVIDED TRANSITING FACILITY IN THE FGA LATA** This configuration is the same as in Section 8.8 with an additional requirement for an ACTL to ACTL transmitting facility within LATA-A provided as Special Access Service.

#### ORDERING REQUIREMENTS



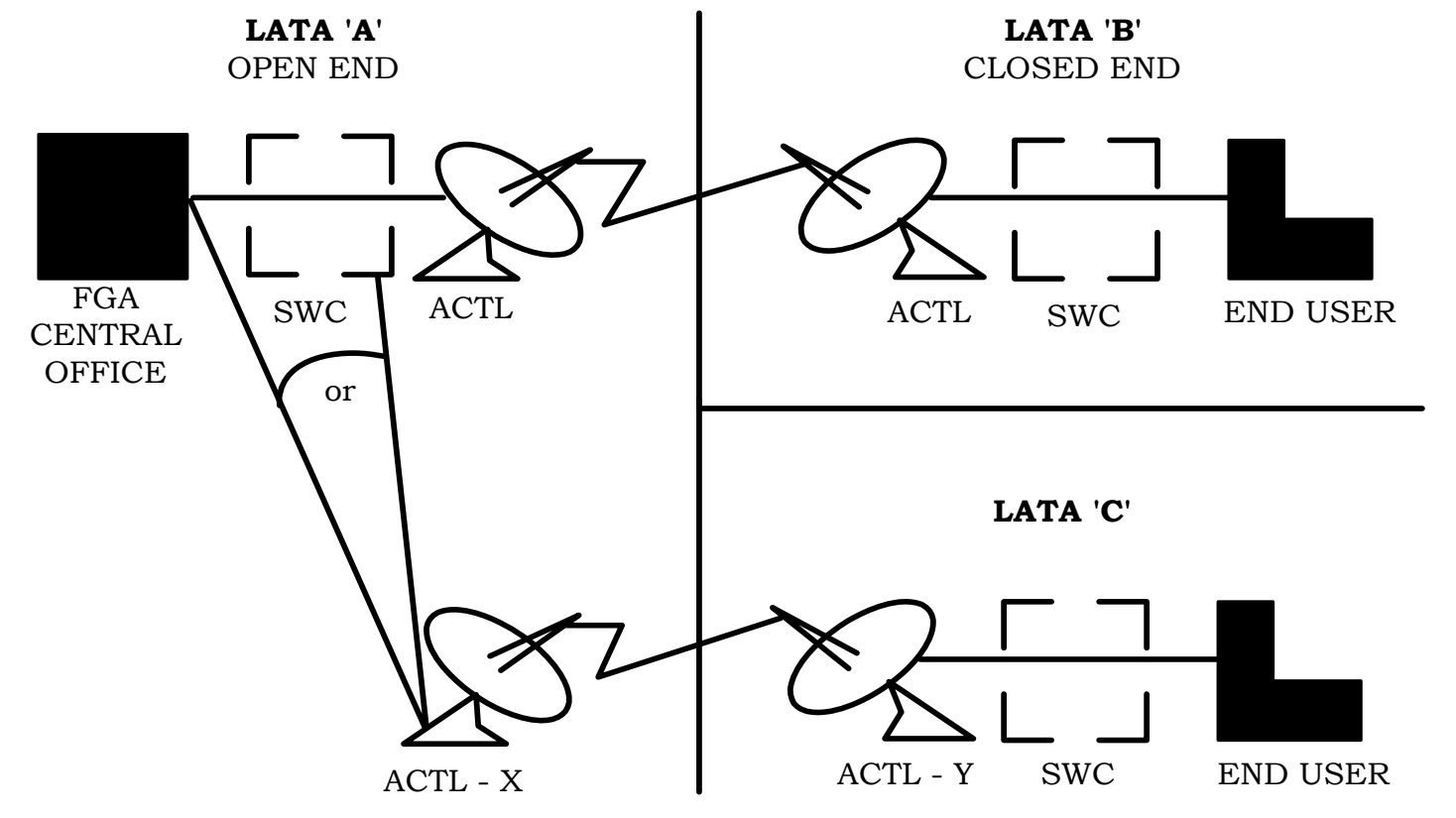
**8.2.8 FGA WITH PROVIDER TRANSITING FACILITY AS AN EXTENSION IN THE FGA LATA** This configuration is the same layout as in Section 8.9 with the provider providing the bridged extension off the FGA service. The customer orders to the second ACTL and the bridge location is determined by the provider. The MSL Form may be used with the Secondary Location (SECLOC) specifying the secondary customer. The SALI Form designates the Secondary Point of Termination (SPOT) specifying the secondary ACTL.

#### ORDERING REQUIREMENTS

LATA-A  
ASR FORM  
FGA FORM  
MSL FORM

LATA-A  
ASR FORM  
TRANSPORT FORM  
SALI FORM

LATA-C  
ASR FORM  
TRANSPORT FORM  
SALI FORM





## WATS ACCESS LINES

| <u>DESCRIPTION</u>                                     | <u>SECTION</u> |
|--|----------------|
| GENERAL _____  | 9.1            |
| WATS ACCESS LINES (WALS) ORDERING CONFIGURATIONS _____ | 9.2            |
| WATS ACCESS LINE _____                                 | 9.2.1          |
| WATS ACCESS LINE WITH EXTENSION _____                  | 9.2.2          |
| WATS ACCESS LINE WITH INTERLATA EXTENSION _____        | 9.2.3          |

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## **9. WATS ACCESS LINES**

**9.1 GENERAL** WATS access lines are optional features of FGC or FGD switched access service; however, WALs may be ordered separately by a customer other than the customer who orders the FGC or FGD switched access service. For the WATS Access Line, the customer specifies the premises at which the WAL terminates, the type of line (i.e., two-wire or four-wire), the type of calling (i.e., originating, terminating or two way) and the type of supervisory signaling.

When the necessary screening functions are not provided at the wire center which serves the customer's originating or terminating premises, the provider will use the nearest wire center premises where the screening capacity exists.

The customer must specify that the WAL is to be provided with an extension in the same or a different LATA, if applicable. When such an extension is specified on the order, the customer must also specify either (1) the end user premises in the LATA (for an intraLATA extension) or (2) the customer's premises (for an extension in a different LATA) to which such extension is to be provided.

WAL terminations are differentiated by line side vs. trunk side terminations. In addition, there are various types of terminations depending on the type of signaling associated with the WAL. Line side terminations are available with either dial pulse or dual tone multifrequency address signaling. Trunk side terminations are available for the forwarding of dialed number identification to the end user. These terminations use loop reverse battery or E&M type supervisory signaling. When Dialed Number Identification Service (DNIS) is ordered, all WALs in a group must be supplied with the DNIS feature.

**NOTE:** These features may not be available by all providers.

WALs may be provided as two-way service with or without screening. The NC (Network Channel) code set provides for the ordering of directionality. The BAND field entry provides for the ordering of screening capability for Interstate WALs and Intrastate WALs.

## **9.2 WATS ACCESS LINES (WALS) ORDERING CONFIGURATIONS**

WALS may be ordered between a provider central office and an end user location. The central office may be stipulated by the customer using the DTO (Dial Tone Office) field entry. The secondary location is used to identify the end user from which the service originates and terminates.

There is no Access Customer Terminal Location (ACTL) physically present on the WAL configuration being ordered. However, the ACTL is associated with the Feature Group B, C, D trunk groups which carry the WAL traffic.

The WAL request form provides for ordering the various options offered with this feature of the Access Tariff. Non-access tariff features may also be ordered in association with the WAL by the customer through data entries using the GETO entry.

**9.2.1 WATS ACCESS LINE** This configuration depicts an access line terminated at a provider switch which provides access to Message Telephone Service (MTS).

LATA ORDERING REQUIREMENTS:

ASR FORM  
WAL FORM  
SALI FORM

**WATS ACCESS LINE**

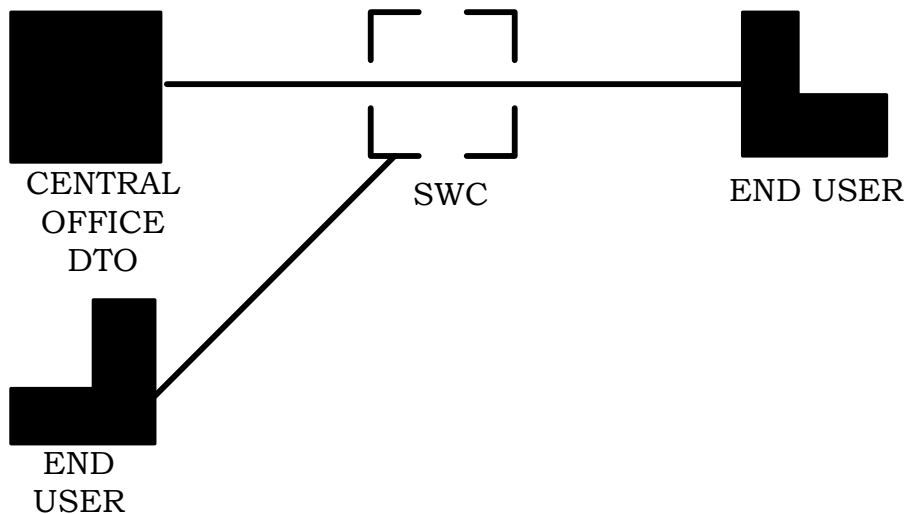


**9.2.2 WATS ACCESS LINE WITH EXTENSION** This configuration depicts a WAL service with an extension off the main service. The MSL Form in conjunction with a SALI Form is used to order the second end user location in a manner similar to Multipoint ordering.

LATA ORDERING REQUIREMENTS:

ASR FORM  
WAL FORM  
MSL FORM  
SALI FORM

**WATS ACCESS LINE  
W/EXTENSION**



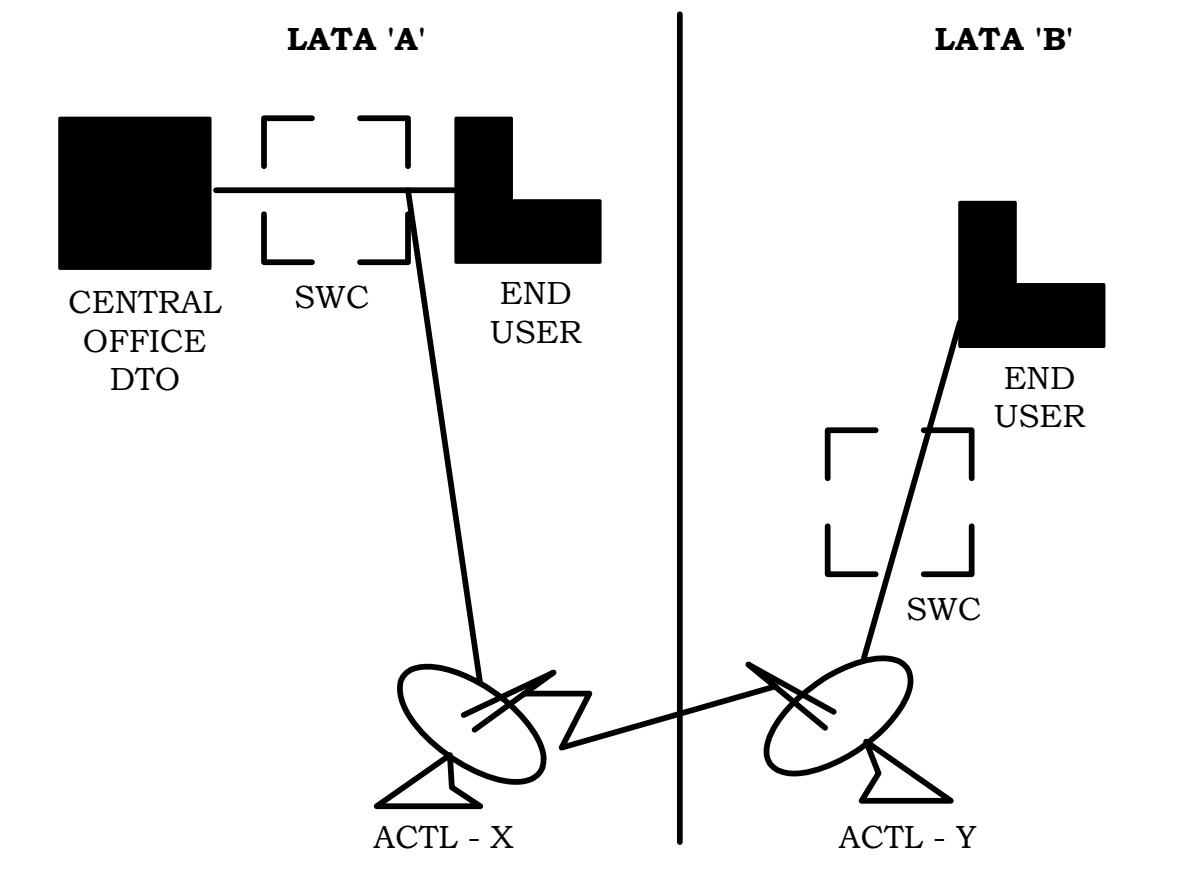
**9.2.3 WATS ACCESS LINE WITH INTERLATA EXTENSION** This configuration depicts a WAL service with an InterLATA extension. The bridging is performed by the provider selecting the most appropriate point on the circuit.

**LATA ORDERING REQUIREMENTS:**

LATA-A  
ASR FORM  
WAL FORM  
MSL FORM  
SALI FORM

LATA-B  
ASR FORM  
TRANSPORT FORM  
SALI FORM

**WATS ACCESS LINE W/EXT INTERLATA**



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## TRUNKING

| <u>DESCRIPTION</u>   | <u>SECTION</u> |
|--|----------------|
| GENERAL _____  | 10.1           |
| TRUNK ORDERING CONFIGURATIONS _____                                      | 10.2           |
| FGB-C-D DIRECT ROUTED _____  | 10.2.1         |
| FGB-C-D TANDEM ROUTED _____  | 10.2.2         |
| FGB-C-D ALTERNATE ROUTING (ARTG) _____                                   | 10.2.3         |
| FGB-C-D END OFFICE ALTERNATE ROUTING (EARTG) _                           | 10.2.4         |
| FGD WITH SERVICE CLASS ROUTING (SCRT) _____                              | 10.2.5         |
| FGD WITH MULTIPLE CARRIER IDENTIFICATION<br>CODES (CICs) _____           | 10.2.6         |
| COMMON CHANNEL SIGNALING LINKS _____                                     | 10.3           |
| LOCAL TRUNKING _____   | 10.4           |
| INTRA-LATA TOLL TRUNKING _____   | 10.5           |
| IXC TRUNKING _____   | 10.6           |
| DIRECTORY ASSISTANCE TRUNKING _____                                      | 10.7           |
| OPERATOR SERVICES TRUNKING _____   | 10.8           |
| BUSY LINE VERIFICATION (BLV)/BUSY LINE INTERRUPT (BLI)<br>TRUNKING _____ | 10.9           |
| INFORMATION SERVICES TRUNKING _____                                      | 10.10          |
| CHOKE GROUP TRUNKING _____   | 10.11          |
| E-911 TRUNKING _____   | 10.12          |
| UNBUNDLED DEDICATED TRUNKING _____                                       | 10.13          |
| CUSTOM ROUTING TRUNKING _____  | 10.14          |

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## **10. TRUNKING**

### **10.1 GENERAL**

**FEATURE GROUP B** Access, which is available to all customers, provides trunk-side access to a provider's switch with an associated uniform 950-XXXX access code, for the customer's use in originating and/or terminating a call to an access customer for InterLATA communications.

FGB is provided directly to an end office or may be provided to an access tandem. The customer must specify at the time of ordering the desired routing configuration.

FGB provides a specific dialing plan, in the originating direction, for the end user to dial 950-XXXX (X = 0 - 9) to reach the customer's network. The "XXXX" represents the Carrier Identification Code (CIC) that is maintained and assigned by ATIS' Industry Numbering Committee (INC) on behalf of the providers for the customer. The CIC is used nationally by the customer.

FGB when used in the terminating direction may be used to access valid NXXs in the LATA. When directly routed to an end office, only those valid NXX codes served by that end office may be accessed. When routed through an access tandem, only those valid NXX codes served by end offices subtending that tandem may be accessed.

**FEATURE GROUP C** Access, which is available only to providers of Message Telephone Service (MTS) and Wide Area Telephone Service (WATS), provides trunk-side access to provider end office or tandem switches for the customer's use in originating and terminating InterLATA communications.

FGC is provided to the customer unless FGD end office switching is provided in the same office. When FGD service is available, FGC will not be provided and existing FGC service will be converted to FGD Access.

FGC requires no access code and will transmit the telephone number dialed by the customer's end user that is a seven or ten digit number for calls in the North American Numbering Plan (NANP).

FGC when used in the terminating direction may be used to access valid NXXs in the LATA. When directly routed to an end office, only those valid NXX codes served by that end office may be accessed. When routed through an access tandem, only those valid NXX codes served by end offices subtending that tandem may be accessed.

**FEATURE GROUP D** Access, which is available to all customers, is provided at provider designated end office switches on a direct basis or via provider designated access tandem switches. FGD provides trunk-side access to provider end office switches with an associated uniform 10XXX/101XXX access code for the customer's use in originating and terminating communications.

FGD provides an equal access dialing plan to all customers. Customers can reach their customer by dialing 1+ or 10XXX/101XXX. The XXX/XXXX represents the access customer's CIC and may be the same CIC as FGB.

FGD trunks are differentiated by the type and directionality of traffic carried over them. There are three major traffic types:

- ORIGINATING TRAFFIC type represents access capacity within a LATA for carrying traffic from the end user to the customer. This may further be defined as Domestic, NYY Service Access Codes (e.g. 5YY, 8YY, and 9YY), Operator and International. The customer must specify the type of access capacity when ordering the FGD service:

- DD traffic type represents access capacity for carrying only domestic traffic other than 5YY, 8YY, 9YY and operator traffic.
- ID traffic type represents access capacity for carrying only international traffic.
- 50, 80, 90 and OP traffic type represent access capacity for carrying respectively only 5YY, 8YY, 9YY or Operator Traffic.
- OT traffic type represents a combination of originating traffic types.

- TERMINATING TRAFFIC type represents access capacity within a LATA for carrying traffic from the customer to the end user.
- DIRECTORY ASSISTANCE TRAFFIC type represents access capacity within a LATA for carrying Directory Assistance traffic from the customer to a Directory Assistance location.

FGD, when used in the terminating direction, may be used to access valid NXXs in the LATA. When directly routed to an end office, only those valid NXX codes served by that end office may be accessed. When routed through an access tandem, only those valid NXX codes served by end offices subtending that tandem may be accessed.

**LOCAL TRUNKING** Local trunking is available to all CLECs and ILECs between ICEC switches and a CLEC point of interconnection. Local trunks are differentiated by the type and directionality of traffic carried over them. The following represent the major types of local trunking:

- Local Trunking
- Intra-LATA Toll Trunking
- IXC Trunking
- Directory Assistance Trunking
- Operator Services Trunking
- Busy Line Verification/Interrupt Trunking
- Information Services Trunking
- Choke Group Trunking
- Unbundled Dedicated Trunking
- Custom Routing Trunking

**COMMON CHANNEL SIGNALING (CCS) LINKS** A signaling link consists of signaling terminal equipment and a signaling data link (transmission facility). It is used for transport of signaling information between signaling points.

**10.2 TRUNK ORDERING CONFIGURATIONS** Feature Group B, C, D or Local is ordered between a customer's terminal location and a provider's central office providing the trunk-side termination. The provider's central office may be a Class 5 end office or a local tandem central office with common trunking (shared) arrangements to subtending end offices.

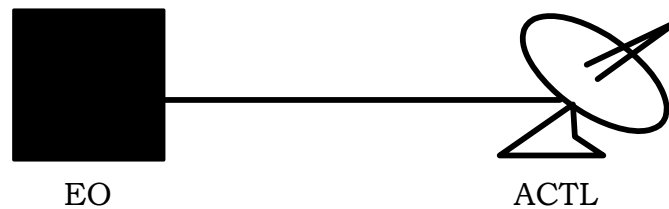
Feature Group B, C, D and Local requests are differentiated by the specification of a NC (Network Channel) code on the Trunking Request Form. The NC code is comprised of four characters with the last character designating the feature group and some allowable options.

The following configurations are "high level" in presentation and not meant to depict all companies' requirements. Refer to Section 7 for Local Transport Restructure (LTR) requirements.

10.2.1 **FGB-C-D DIRECT ROUTED** This configuration depicts trunk-side switched access service ordered between an ACTL and a provider end office. The fourth position of the NC code differentiates between Feature Groups B, C and D.

LATA ORDERING REQUIREMENTS:

ASR FORM  
TRUNKING FORM

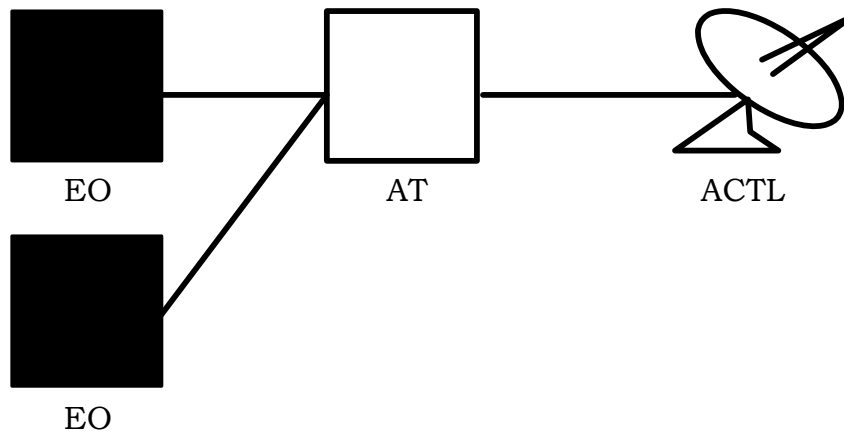


**10.2.2 FGB-C-D TANDEM ROUTED** This configuration depicts trunk-side switched access service ordered between an ACTL and a provider access tandem switch. Trunking between the end offices and the access tandem is provisioned based upon the aggregate requirements of all the customers providing InterLATA service through the access Tandem.

The fourth position of the NC code differentiates between Feature Groups B, C and D.

LATA ORDERING REQUIREMENTS:

ASR FORM  
TRUNKING FORM



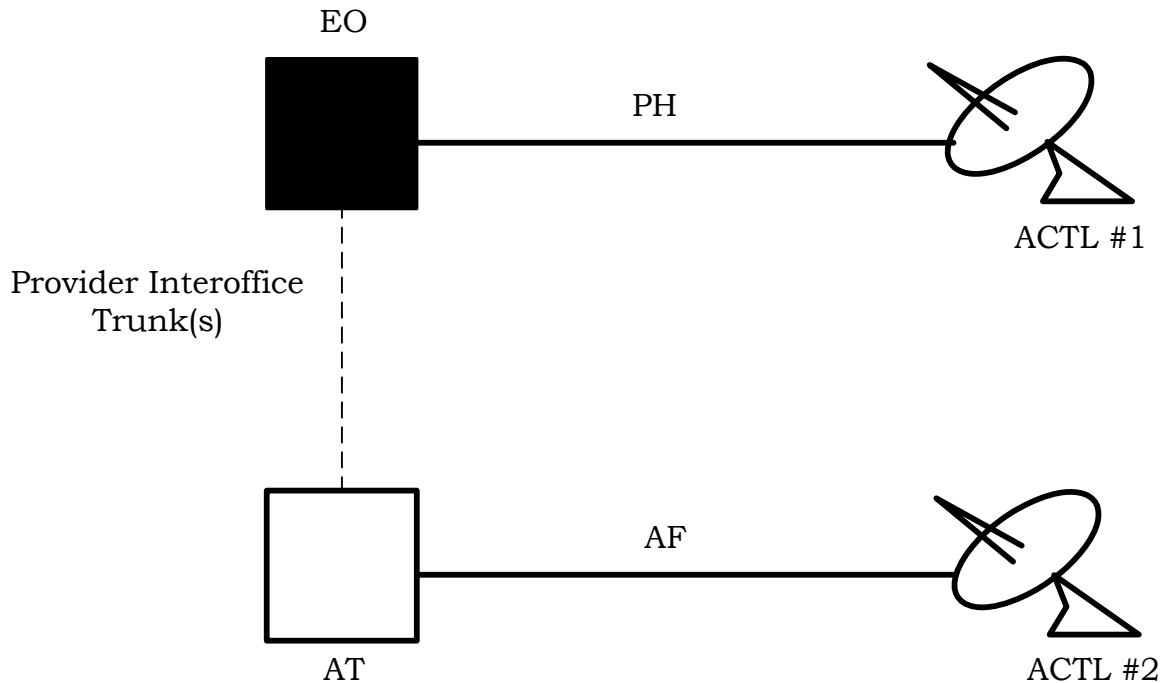


**10.2.3 FGB-C-D ALTERNATE ROUTING (ARTG)** This configuration depicts two ACTL locations; one with a direct end office trunk group Primary High (PH) and one with a tandem trunk group Alternate Final (AF). This option will allow originating overflow traffic to be directed from the PH trunk group to the AF trunk group. Two ASRs are required to provision this configuration, one for the PH and one for AF route, with each being related to the other.

LATA ORDERING REQUIREMENTS:

END OFFICE ROUTED (PH)  
ASR FORM  
TRUNKING FORM

TANDEM ROUTED  
ASR FORM  
TRUNKING FORM

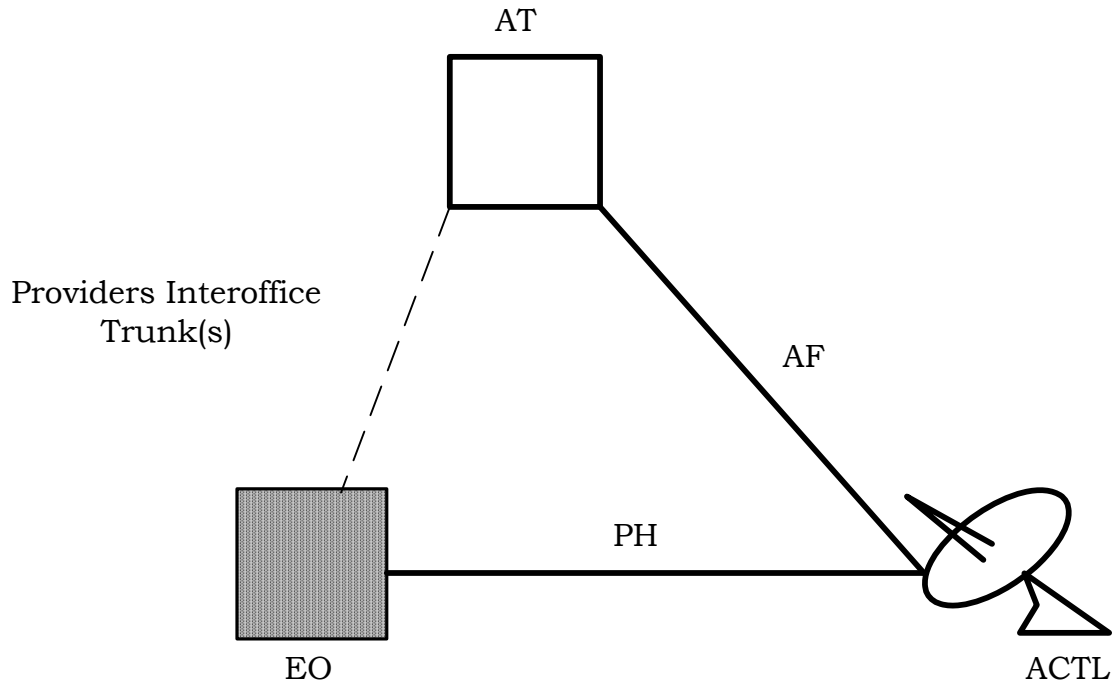


**10.2.4 FGB-C-D END OFFICE ALTERNATE ROUTING (EARTG)** This configuration depicts one ACTL with trunk groups to the same end office. One trunk group, Primary High (PH) is routed direct to the end office and the other trunk group; Alternate Final (AF) is routed via the Tandem. The EARTG routes originating overflow traffic, from the direct group (PH) to the tandem group (AF), via the common transport provider interoffice trunks. Two ASRs are required to provision this configuration, one for the PH and one for the AF route, with each being related to the other.

LATA ORDERING REQUIREMENTS:

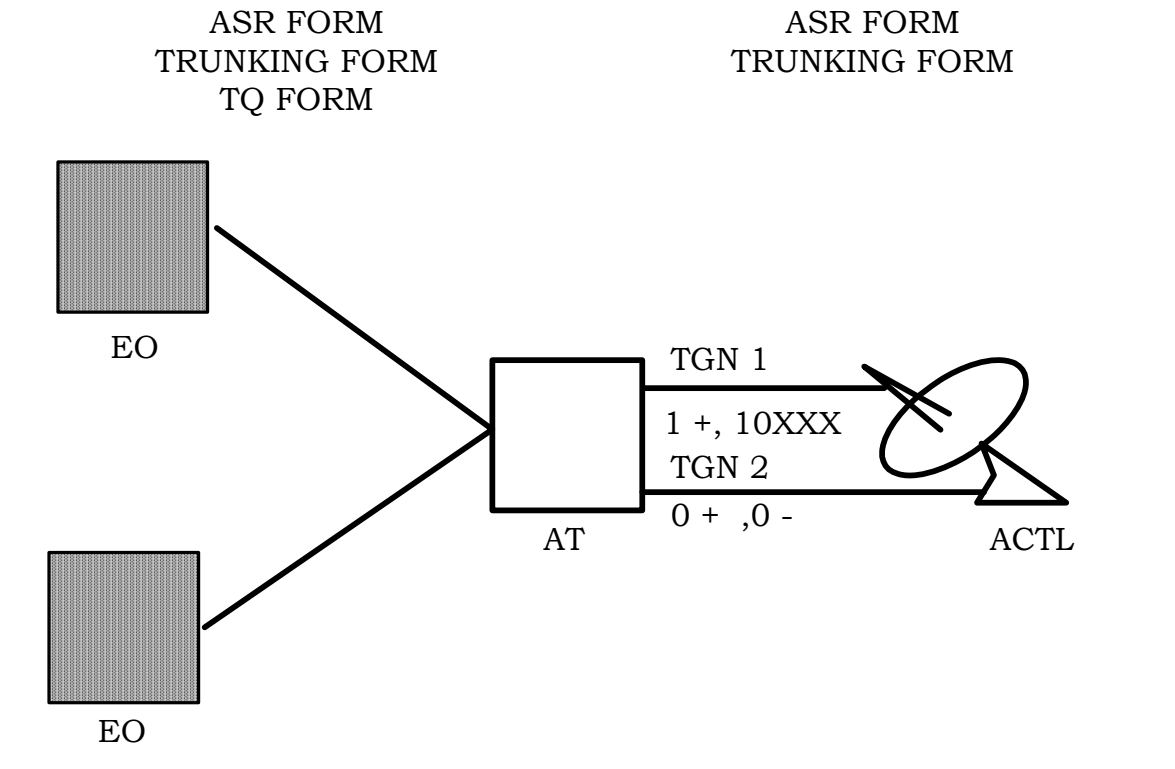
END OFFICE ROUTED (PH)  
ASR FORM  
TRUNKING FORM

TANDEM ROUTED  
ASR FORM  
TRUNKING FORM



**10.2.5 FGD WITH SERVICE CLASS ROUTING (SCRT)** This configuration depicts one ACTL location with two tandem trunk groups. Each Trunk Group has specified types of traffic routed to it. This option will allow the customer to direct or block originating traffic based on traffic type. This option is ordered using the SCRT field on the Trunking Form and the routing matrices on the TQ Form.

LATA ORDERING REQUIREMENTS:

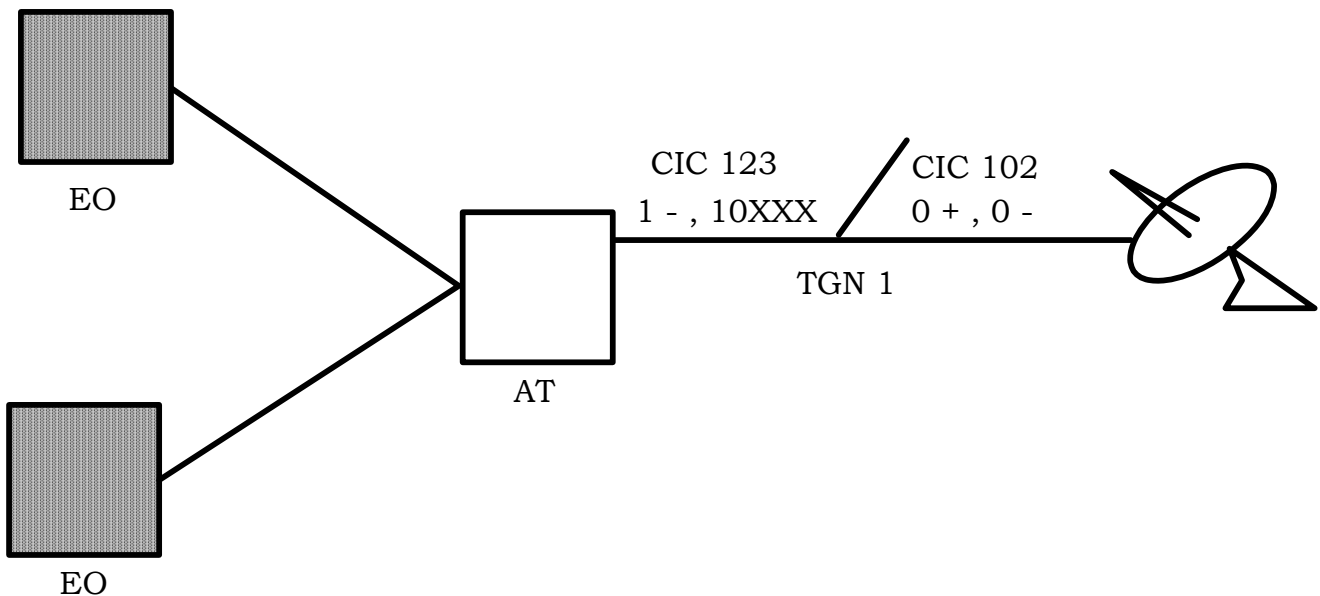


**10.2.6 FGD WITH MULTIPLE CARRIER IDENTIFICATION CODES (CICs)** This configuration depicts an ACTL location with one tandem trunk group with more than one CIC code assigned. Different traffic types are assigned to different CIC codes. This option will allow the customer to direct or block originating traffic based on the CIC code. This option is ordered using the CIC field and the SCRT field on the Trunking Form and the routing matrices on the TQ Form.

LATA ORDERING REQUIREMENTS:

ASR FORM  
TRUNKING FORM  
TQ FORM

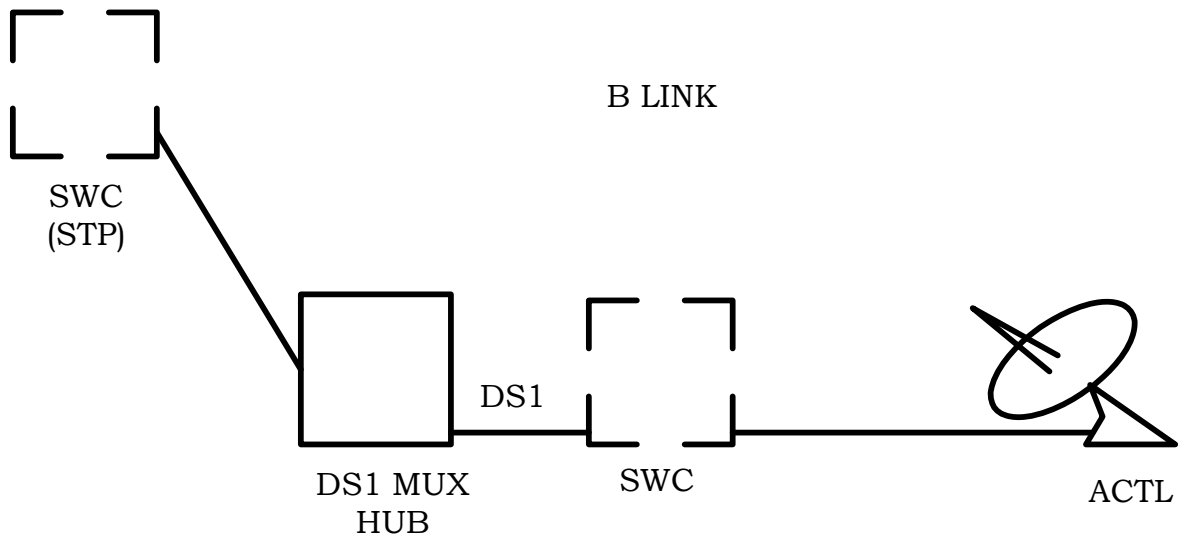
ASR FORM  
TRUNKING FORM  
TQ FORM



**10.3 COMMON CHANNEL SIGNALING LINKS** This configuration depicts an CCS “B” Link provided between a Signaling Point of Interface (SPOI) at an ACTL and the provider Signaling Transfer Point (STP) at a central office. The CCS “B” Link is provisioned as a subrated circuit of a DS1 multiplexed system.

LATA ORDERING REQUIREMENTS:

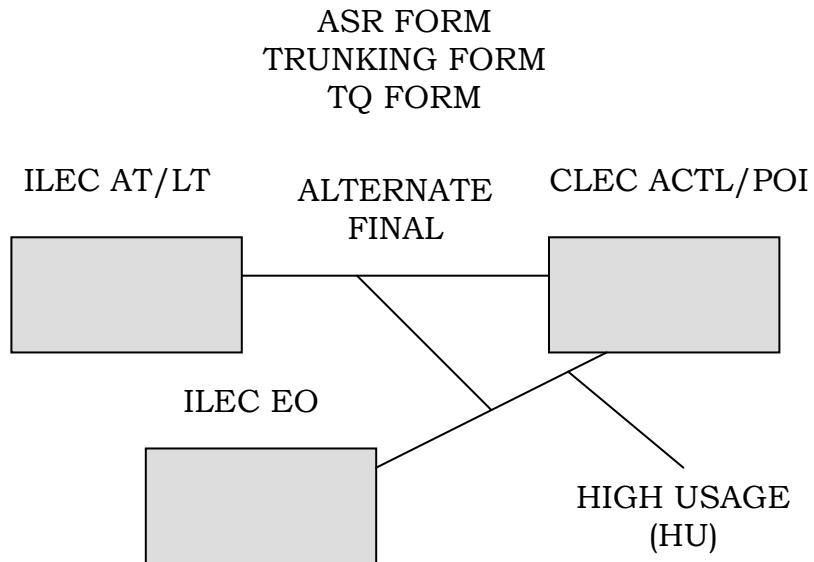
ASR FORM  
TRUNKING FORM



NOTE 1: Signaling Point of Interface is defined by the CUSTOMER SWITCH LOCATION (CSL) and CUSTOMER SWITCH TYPE (CST) fields on the Trunking Form, ATIS-0404004

**10.4 LOCAL TRUNKING** This configuration depicts a trunk group carrying local traffic from a CLECs ACTL/POI to an ILEC end office and/or on ILECs ACCESS, or local tandem. Local traffic is based on the CLEC NPA/NXX and the rate center based on existing ILEC arrangements. The EO trunks group may be either HU or DF. Tandem trunks groups will be either an AF or DF group. These trunk groups can be 2W, one way from customer to provider.

**ORDERING REQUIREMENTS:**

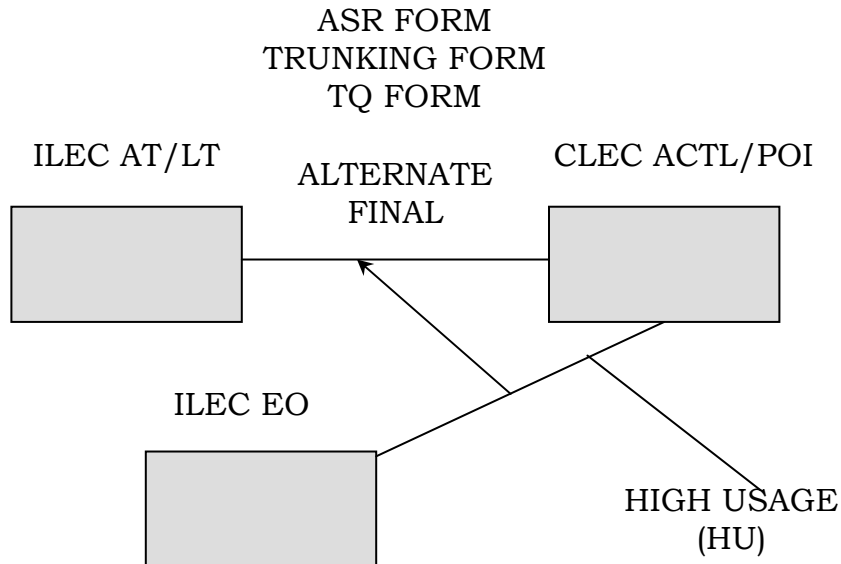


**DATA ELEMENTS:**

| ASR Form: | Trunking Form:   | TQ Form:       |
|-----------|------------------|----------------|
| REQTYP=MD | TTT              | TG ACT         |
|           | TRFTYP=LL, or LT | TGTYP          |
|           | CIC              | DIR            |
|           | TRN              | TK SEQ         |
|           | TCIC             | TK SIG         |
|           |                  | CIC            |
|           |                  | COIN EA        |
|           |                  | GLARE          |
|           |                  | ROUTING MATRIX |

**10.5 INTRA - LATA TOLL TRUNKING** This is identical to 10.10 with the exception of billing. These calls are toll calls leased on the CLECs NPA/NXX via the ILEC rate center.

**ORDERING REQUIREMENTS:**



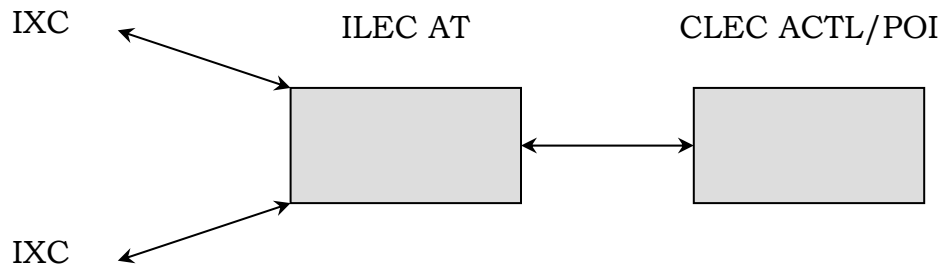
**DATA ELEMENTS:**

| ASR Form: | Trunking Form:      | TQ Form:       |
|-----------|---------------------|----------------|
| REQTYP=MD | TTT                 | TG ACT         |
|           | TRFTYP=AT, LI or LT | TGTYP          |
|           | CIC                 | DIR            |
|           | TRN                 | TK SEQ         |
|           | TCIC                | TK SIG         |
|           |                     | CIC            |
|           |                     | COIN EA        |
|           |                     | GLARE          |
|           |                     | ROUTING MATRIX |

**10.6 IXC TRUNKING** This is a two way trunk group ordered by the CLEC. The purpose of the group is to reach and be reached by IXCs. The CLECs NPA/NXX must subtend the ILECs Access Tandem. A CLEC needs a trunk group to every Access Tandem that they have an NPA/NXX rate centered on.

**ORDERING REQUIREMENTS:**

ASR FORM  
 TRUNKING FORM  
 TQ FORM



**DATA ELEMENTS:**

| ASR Form: | Trunking Form: | TQ Form:       |
|-----------|----------------|----------------|
| REQTYP=MD | TTT            | TG ACT         |
|           | TRFTYP         | TGTYP          |
|           | CIC            | DIR            |
|           | TRN            | TK SEQ         |
|           | TCIC           | TK SIG         |
|           |                | CIC            |
|           |                | COIN EA        |
|           |                | GLARE          |
|           |                | ROUTING MATRIX |



**10.7 DIRECTORY ASSISTANCE TRUNKING** This is a one way trunk group from a CLECs POI/ACTL to an ILEC Directory Assistance Tandem. Terms and conditions are based on either tariff or contract. These DA Tandems are listed in the Local Exchange Routing Guide (LERG). The calls from a CLEC's end user are typically 411 or 555-1212.

**ORDERING REQUIREMENTS:**

ASR FORM  
TRUNKING FORM  
TQ FORM



**DATA ELEMENTS:**

| ASR Form: | Trunking Form:  | TQ Form:       |
|-----------|-----------------|----------------|
| REQTYP=MD | TRFTYP=DA or DC | TG ACT         |
|           | CIC             | TGTYP          |
|           | TRN             | DIR            |
|           | TCIC            | TK SEQ         |
|           |                 | TK SIG         |
|           |                 | CIC            |
|           |                 | ROUTING MATRIX |

**10.8 OPERATOR SERVICES TRUNKING** This is a one way trunk group from a CLEC's POI/ACTL to an ILEC operator services tandem. Terms and conditions are based on either tariffs or contracts. These operator services tandems are listed in the national Local Exchange Routing Guide (LERG). These calls from a CLEC's end user are typically 0.

ORDERING REQUIREMENTS:

ASR FORM  
TRUNKING FORM  
TQ FORM



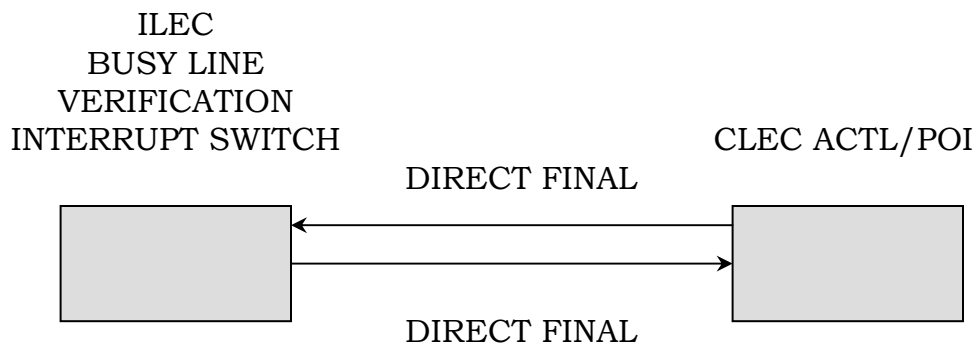
DATA ELEMENTS:

| ASR Form: | Trunking Form: | TQ Form:       |
|-----------|----------------|----------------|
| REQTYP=MD | TTT            | TG ACT         |
|           | TRFTYP=OP      | TGTYP          |
|           | CIC            | DIR            |
|           | TRN            | TK SEQ         |
|           | TCIC           | TK SIG         |
|           |                | CIC            |
|           |                | COIN EA        |
|           |                | ROUTING MATRIX |

**10.9 BUSY LINE VERIFICATION (BLV)/BUSY LINE INTERRUPT (BLI) TRUNKING** This is a trunk group to connect the operator of one party to the operator of another party. These are one way trunk groups between a CLEC's POI/ACTL and an ILEC's BLV/BLI switch location.

ORDERING REQUIREMENTS:

ASR FORM  
TRUNKING FORM  
TQ FORM



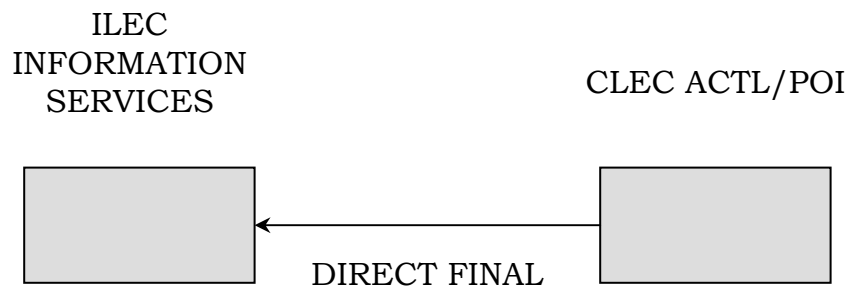
DATA ELEMENTS:

| ASR Form: | Trunking Form: | TQ Form:       |
|-----------|----------------|----------------|
| REQTYP=MD | TTT            | TG ACT         |
|           | TRFTYP=VR      | TGTYP          |
|           | CIC            | DIR            |
|           | TRN            | TK SEQ         |
|           |                | TK SIG         |
|           |                | CIC            |
|           |                | COIN EA        |
|           |                | ROUTING MATRIX |

**10.10 INFORMATION SERVICES TRUNKING** This is a one way trunk group which connects the end user of a CLEC to the information service provider (example: 976 calls) of an ILEC. The Information Service Office location is typically an ILEC's end office switch.

**ORDERING REQUIREMENTS:**

ASR FORM  
TRUNKING FORM  
TQ FORM



**DATA ELEMENTS:**

| ASR Form: | Trunking Form: | TQ Form:       |
|-----------|----------------|----------------|
| REQTYP=MD | TTT            | TG ACT         |
|           | TRFTYP         | TGTYP          |
|           | CIC            | DIR            |
|           | TRN            | TK SEQ         |
|           | TCIC           | TK SIG         |
|           |                | CIC            |
|           |                | COIN EA        |
|           |                | GLARE          |
|           |                | ROUTING MATRIX |

**10.11 CHOKE GROUP TRUNKING** This is a one way trunk group from a CLEC to an ILEC which carries calls that the CLEC has decided to choke. Most switches today can perform this function in software which means this group may not be required.

ORDERING REQUIREMENTS:

ASR FORM  
TRUNKING FORM  
TQ FORM



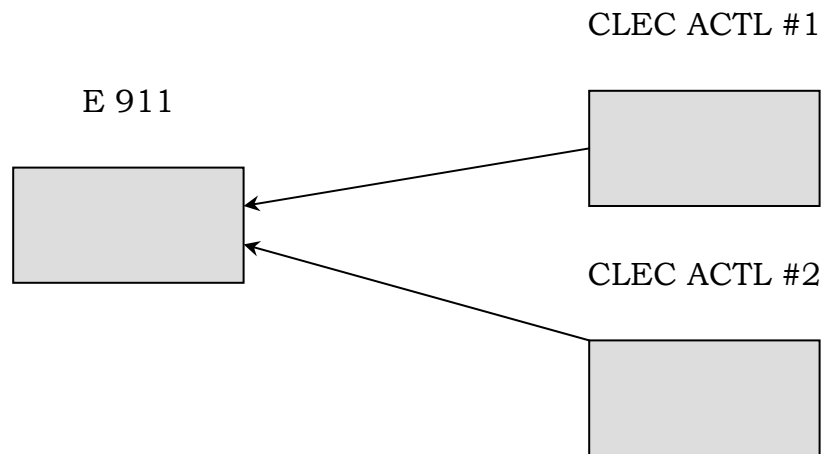
DATA ELEMENTS:

| ASR Form: | Trunking Form: | TQ Form:       |
|-----------|----------------|----------------|
| REQTYP=MD | TTT            | TG ACT         |
|           | TRFTYP=CH      | TGTYP          |
|           | CIC            | DIR            |
|           | TRN            | TK SEQ         |
|           | TCIC           | TK SIG         |
|           |                | CIC            |
|           |                | COIN EA        |
|           |                | ROUTING MATRIX |

10.12 **E-911 TRUNKING** This is a one way trunk group from a CLEC end user to an E911 tandem. Their trunk groups are typically small. Most companies, local, and/or state governments require that the CLEC provide a diverse trunk group from a 2<sup>nd</sup> location.

ORDERING REQUIREMENTS:

ASR FORM  
TRUNKING FORM  
TQ FORM

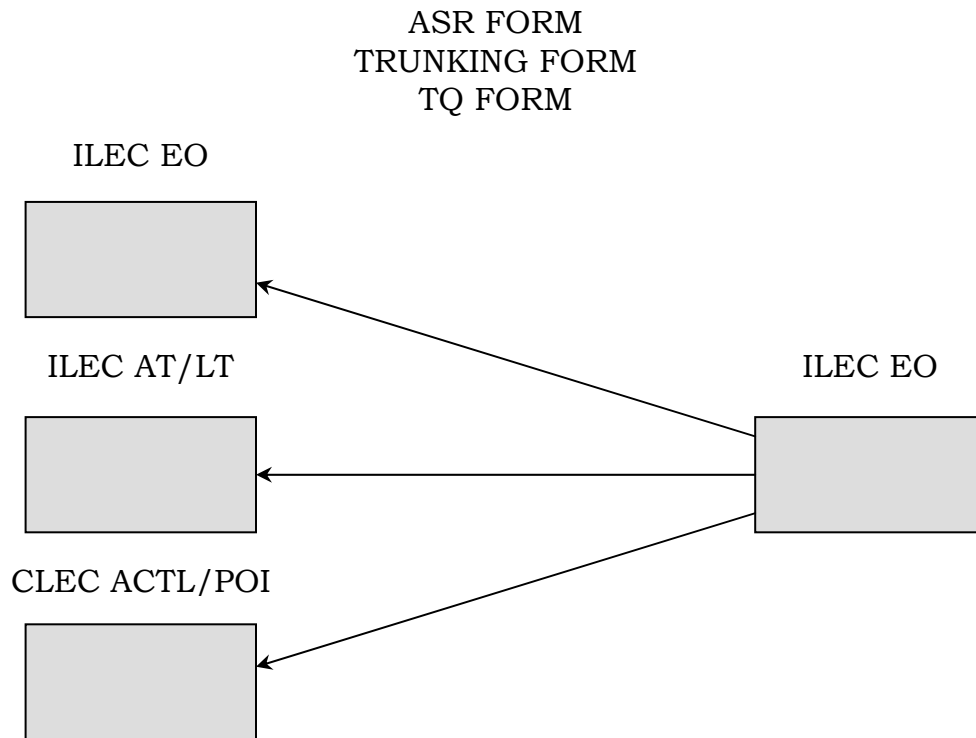


DATA ELEMENTS:

| ASR Form: | Trunking Form: | TQ Form:       |
|-----------|----------------|----------------|
| REQTYP=MD | TTT            | TG ACT         |
|           | TRFTYP=E9      | TGTYP          |
|           | CIC            | DIR            |
|           |                | TK SEQ         |
|           |                | TK SIG         |
|           |                | CIC            |
|           |                | COIN EA        |
|           |                | GLARE          |
|           |                | ROUTING MATRIX |

**10.13 UNBUNDLED DEDICATED TRUNKING** This is a one way trunk group from an ILEC's end office to either the CLEC's POI or to the ILEC's AT/LT or EO switch. These groups are ordered and under the control of the CLEC. These groups connect to unbundled switch ports ordered by the CLEC. Calls sent to an ILEC's AT/LT are completed on the ILEC's message trunking network.

**ORDERING REQUIREMENTS:**



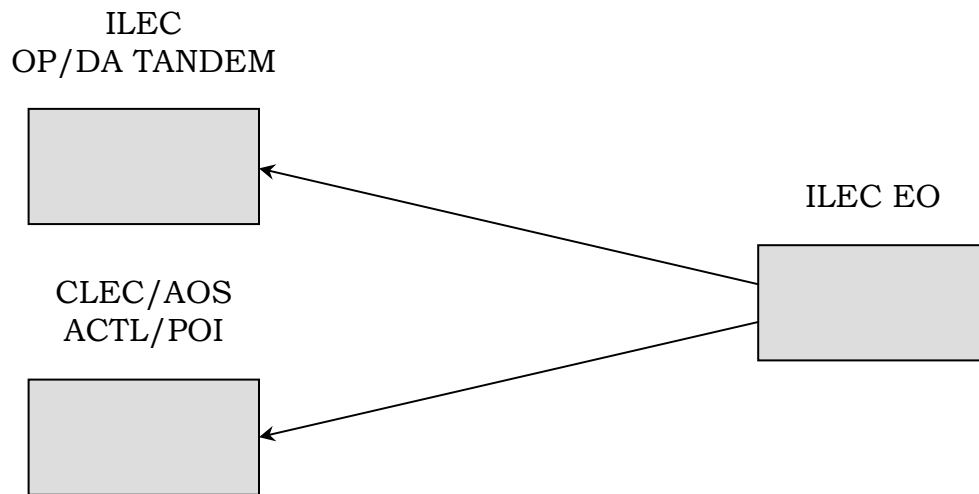
**DATA ELEMENTS:**

| ASR Form: | Trunking Form: | TQ Form:       |
|-----------|----------------|----------------|
| REQTYP=MD | TTT            | TG ACT         |
| PLSI      | TRFTYP         | TGTYP          |
| PSL       | CIC            | DIR            |
| UNE =Y    |                | TK SEQ         |
|           |                | TK SIG         |
|           |                | CIC            |
|           |                | COIN EA        |
|           |                | GLARE          |
|           |                | ROUTING MATRIX |

**10.14 CUSTOM ROUTING TRUNKING** This is a one way trunk group from an ILEC end office to an ILEC OP/DA Tandem or a CLEC ACTL/POI. This trunk group may connect either unbundled switch ports or re-sold lines of an ILEC to a CLEC. These calls are 0 -, 0 + local, 411 and 555-1212.

ORDERING REQUIREMENTS:

ASR FORM  
TRUNKING FORM  
TQ FORM



DATA ELEMENTS:

| ASR Form: | Trunking Form: | TQ Form:       |
|-----------|----------------|----------------|
| REQTYP=MD | TTT            | TG ACT         |
|           | TRFTYP         | TGTYP          |
|           | CIC            | DIR            |
|           | TRN            | TK SEQ         |
|           | TCIC           | TK SIG         |
|           |                | CIC            |
|           |                | COIN EA        |
|           |                | GLARE          |
|           |                | ROUTING MATRIX |



## TRANSPORT SERVICE

| <u>DESCRIPTION</u>  | <u>SECTION</u> |
|---|----------------|
| GENERAL _____   | 11.1           |
| SPECIAL ACCESS ORDERING CONFIGURATIONS _____                | 11.2           |
| TWO POINT SPECIAL ACCESS _____                              | 11.3           |
| SPECIAL ACCESS TERMINATING ON A CENTREX _____               | 11.4           |
| MULTIPOINT SERVICE _____                                    | 11.5           |
| THRU-CONNECTS - GENERAL _____                               | 11.6           |
| TWO POINT THRU-CONNECT _____                                | 11.7           |
| MULTIPOINT THRU-CONNECT _____                               | 11.8           |
| CASCADING MULTIPLEXING _____                                | 11.9           |
| DEDICATED NETWORK ACCESS LINE (DNAL) - GENERAL _____        | 11.10          |
| DNAL DEDICATED NETWORK ACCESS LINK _____                    | 11.11          |
| UNBUNDLED ORDERING CONFIGURATIONS _____                     | 11.12          |
| UNBUNDLED MULTIPLEXER 1/0 _____                             | 11.13          |
| UNBUNDLED MULTIPLEXER 3/1 _____                             | 11.14          |
| COLLOCATION TO COLLOCATION (SAME CENTRAL OFFICE) _____      | 11.15          |
| COLLOCATION TO COLLOCATION (DIFFERENT CENTRAL OFFICE) _____ | 11.16          |
| PHYSICAL COLLOCATION TO CLEC POI _____                      | 11.17          |
| VIRTUAL COLLOCATION TO CLEC POI _____                       | 11.18          |
| CLEC POI TO CLEC POI _____                                  | 11.19          |

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## **11. TRANSPORT SERVICE**

### **11.1 GENERAL**

Special Access (SA) service is generally ordered between an Access Customer Terminal Location (ACTL) and an end user location. However, SA service may be ordered between two ACTLs (same or different customer) or to a Central Office (e.g., Hi-Cap or Wideband channels) or to a provider edge device.

Special Access service provides a transmission path to connect customer designated premises\*, either directly or through a provider Hub where bridging or multiplexing functions are performed. Special Access service includes all exchange access not utilizing provider end office switches.

The connections provided by Special Access service can be either analog or digital. Analog connections are differentiated by spectrum and bandwidth. Digital connections are differentiated by bit rate.

Unbundled Network Elements (UNE) service is generally ordered between two ACTLs (same or different customers). However, UNE service may be ordered between an ACTL and an end user location. From an ordering perspective, the fields required for ordering UNE Transport will be the same as those used for the same type of service ordered as Access Service with the exception of the addition of the UNE field on the ASR being populated for all unbundled orders.

For Unbundled Ordering and definition see Section 11.12.

## **11. TRANSPORT SERVICE continued**

### **11.1 GENERAL continued**

**Channel Types** There are numerous types of channels used to provide Special Access services. Each type has its own characteristics. All are subdivided by one or more of the following:

- Transmission specifications
- Bandwidth
- Speed (i.e., bit rate)
- Spectrum

Customers can order a basic channel and select, from a list of available transmission parameters and channel interfaces, those that they desire to meet specific communications requirements.

---

\* AP C.O. CENTREX-like switches, Packet Switches included in Public Packet Switching Network (PPSN) service and AP Answering Service Concentrators are considered to be customer premises for purposes of administering regulations and rates.

**11.2 SPECIAL ACCESS ORDERING CONFIGURATIONS** Special Access within the LATA is ordered between an ACTL (primary location) and:

- an end user location (SECLOC)
- a provider edge device
- another ACTL
- a provider Central Office for bridging, multiplexing or for termination in CENTREX switch

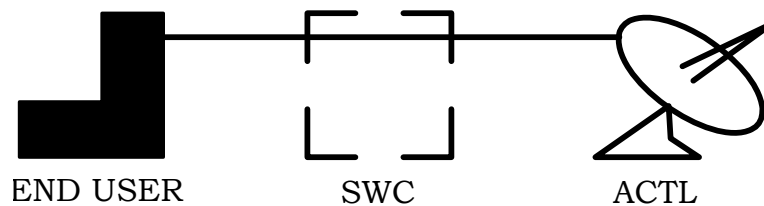
For ordering purposes, a CENTREX switch is treated as a provider end office termination.

**11.3 TWO POINT SPECIAL ACCESS** An example of a typical configuration is with ACTL to end user connections.

LATA ORDERING REQUIREMENTS:

ASR FORM  
TRANSPORT FORM  
SALI FORM

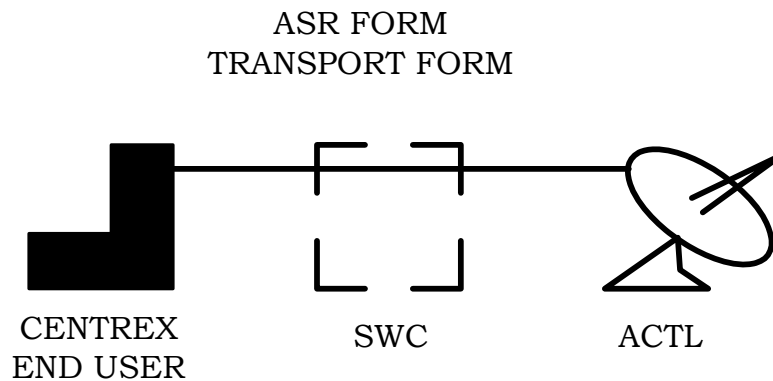
EXAMPLE 1:



**11.4 SPECIAL ACCESS TERMINATING ON A CENTREX** This special access configuration is a typical tie trunk operation off a CENTREX.

Provider receives the ASR and TRANSPORT Forms. The CENTREX order may be negotiated with the provider representative who handles the CENTREX account or the rep who handles ASR negotiations. The customer negotiating with the provider would obtain a CENTREX service order number and enter that service order number on the ASR in the RORD field indicating that the CENTREX termination has been negotiated.

LATA ORDERING REQUIREMENTS  
FOR CENTREX TERMINATION

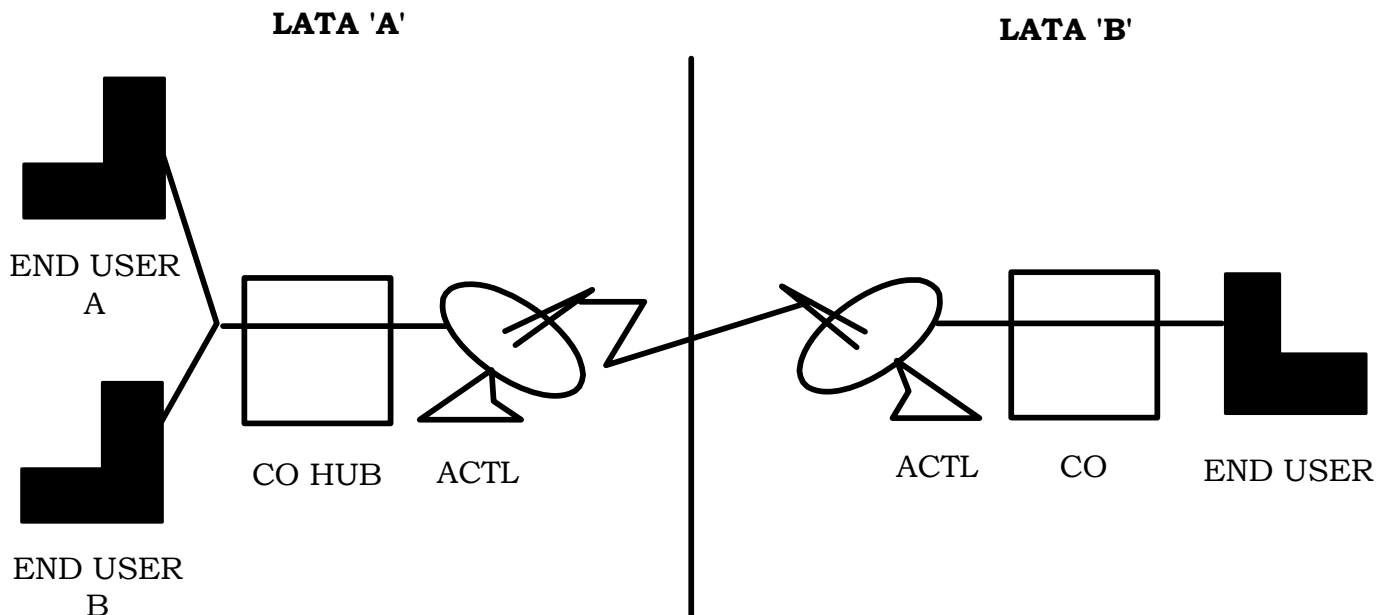


**11.5 MULTIPOINT SERVICE** This configuration describes a multipoint access service. The request is comprised of an ASR, TRANSPORT, two (2) Multipoint Service Leg (MSL) Forms and two (2) SALI Forms. An MSL Form is used to order from the bridge to each end user location.

**LATA ORDERING REQUIREMENTS:**

LATA-A  
ASR FORM  
TRANSPORT FORM\*  
(2) MSL FORMs  
(2) SALI FORMs

LATA-B  
ASR FORM  
TRANSPORT FORM  
(2) SALI FORMs



\* CKLT on the TRANSPORT Form is used to specify the HUB for bridging of the end user locations shown here. Additional bridging locations can be ordered using separate MSL Forms.



**11.6 THRU-CONNECTS - GENERAL** A Thru-Connect configuration is one which utilizes the channels of two or more Hi-Cap facilities. These channels are cross connected within one or more provider central offices for the purpose of connecting the Hi-Cap facilities at a circuit level (see Example X). A Thru-Connect is ordered as a two-point Special Access (see Example X) or as a leg on a multi-point Special Access service (see Example Y).

**11.7 TWO POINT THRU-CONNECT** The ordering requirements for a two-point Thru-Connect are as follows (see Example X for illustration):

ORDERING FORM:      FIELDS USED SPECIFICALLY FOR A THRU-CONNECT CONFIGURATION ARE:

|           |         |  |
|-----------|---------|--|
| TRANSPORT | CFA     | - Identifies the channel(s) of the multiplexed Hi-Cap facility being utilized for the “a” connection in the provider central office (or HUB). This CFA is associated with the ACTL specified on the ASR Form.                    |
| TRANSPORT | SCFA    | - Identifies the channel(s) of the multiplexed Hi-Cap facility being utilized for the “b” connection in the provider central office (or HUB). This SCFA is associated with the location specified in the SECLOC and SPOT fields. |
| TRANSPORT | MUXLOC  | - Identifies the multiplexing location in which the Hi-Cap facility associated with the CFA terminates and in which the Thru-Connect may be cross connected. The MUXLOC CLI code is the HUB location identified in the CFA.      |
| TRANSPORT | SMUXLOC | - Identifies the multiplexing location in which the Hi-Cap facility associated with the SCFA terminates, and in which the Thru-Connect may be cross-connected.   |

### 11.7 TWO POINT THRU-CONNECT (CONTINUED)

|           |        |   |
|-----------|--------|---|
| TRANSPORT | SECLOC | - Identifies the secondary location associated with the SCFA. This is usually a secondary ACTL and as such the CLLI code for this location should be shown in the SPOT field. |
| TRANSPORT | SPOT   | - Identifies the SECLOC CLLI code when the SECLOC is a secondary ACTL.  |

## 11.7 TWO POINT THRU-CONNECT (CONTINUED)

EXAMPLE X:

| TWO POINT THRU-CONNECT   |                              |       |        |                           |
|--------------------------|------------------------------|-------|--------|---------------------------|
| (a)                      | MULTIPLEXING HUB<br>(MUXLOC) |       | (b)    |                           |
| ////////////////////     | M                            | ***** | M      | ////////////////////      |
| Hi-Cap FACILITY<br>(CFA) | U<br>X                       |       | U<br>X | Hi-Cap FACILITY<br>(SCFA) |
| ***** = THRU-CONNECT     |                              |       |        |                           |

**11.8 MULTIPOINT THRU-CONNECT** The ordering requirements for a multipoint Thru-Connect are as follows (see Example Y for illustration):

ORDERING FORM:      FIELDS USED SPECIFICALLY FOR A THRU-CONNECT CONFIGURATION ARE:

|           |         |   |
|-----------|---------|---|
| TRANSPORT | CFA     | - Identifies the channel(s) of the multiplexed Hi-Cap facility being utilized for the “a” connection in the provider central office (or HUB). This CFA is associated with the ACTL specified on the ASR Form.                                       |
| TRANSPORT | MUXLOC  | - Identifies the multiplexing location in which the multiplexed Hi-Cap facility associated with the CFA terminates and in which the Thru-Connect may be cross connected. The MUXLOC CLI code is the HUB location identified in the CFA field.       |
| TRANSPORT | SMUXLOC | - Identifies the multiplexing location in which the multiplexed Hi-Cap facility associated with the SCFA terminates, and in which the Thru-Connect may be cross connected.  |
| TRANSPORT | CKLT    | - Identifies the first point of bridging for the multipoint service. The CLI code for the bridge location may be the same as the CLI code for the multiplexing location specified in the MUXLOC or SMUXLOC field or the CLI codes may be different. |

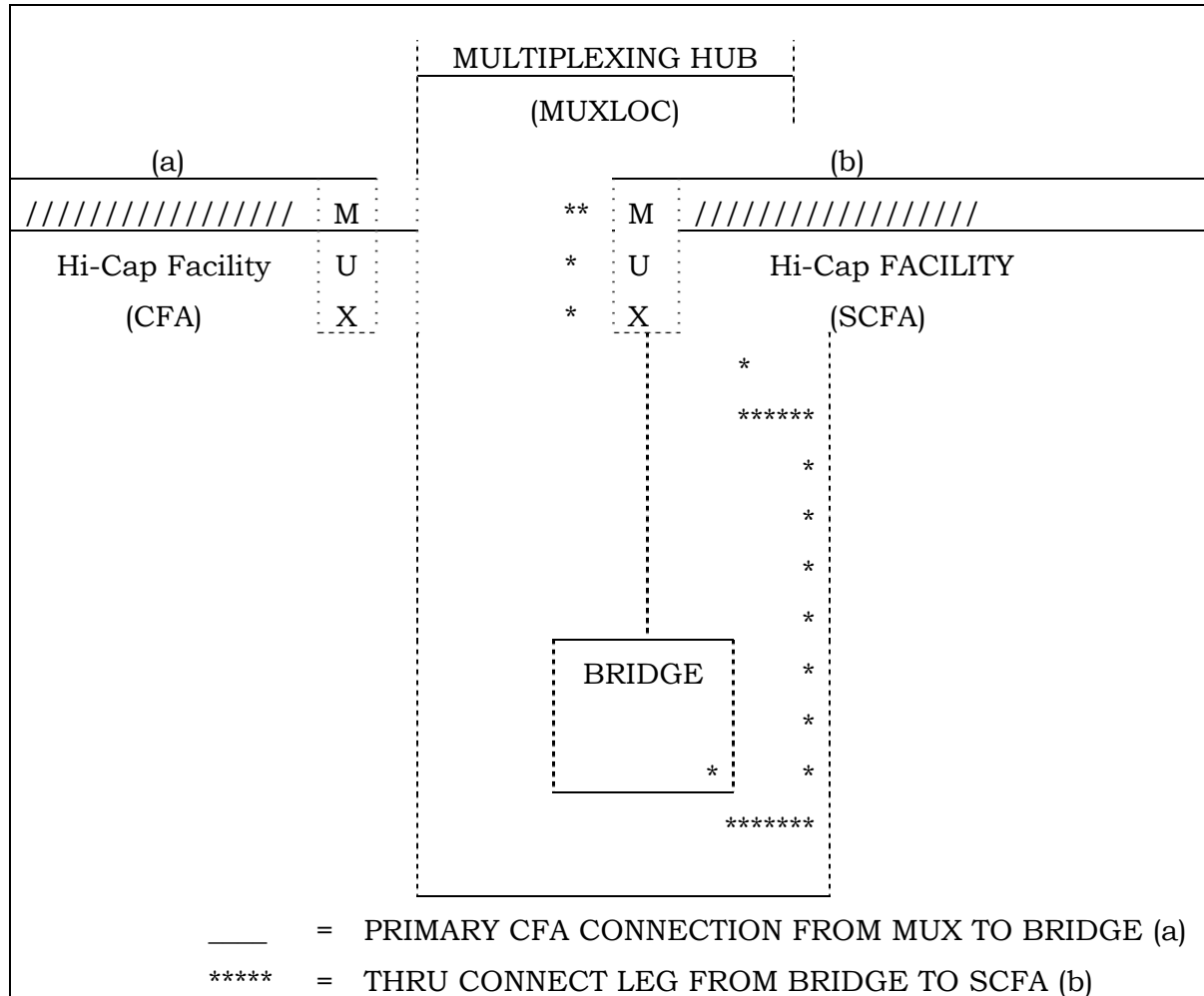
## 11.8 MULTIPOINT THRU-CONNECT (CONTINUED)

|                                 |        |  |
|---------------------------------|--------|--|
| MULTIPOINT<br>SERVICE LEG (MSL) | SCFA   | - Identifies the channel(s) of LEG (MSL) the multiplexed Hi-Cap facility being utilized for the “b” connection in the provider central office (or HUB). This SCFA is associated with the location specified in the SECLOC and SPOT fields specified on the MSL Form. |
| MULTIPOINT<br>SERVICE LEG (MSL) | SECLOC | - Identifies the secondary location. LEG (MSL) associated with the SCFA. This is usually a secondary ACTL and as such the CLLI code for this location should be shown in the SPOT field.   |
| MULTIPOINT<br>SERVICE LEG (MSL) | SPOT   | - Identifies the SECLOC CLLI code when LEG (MSL) the SECLOC is a secondary ACTL.   |

## 11.8 MULTIPOINT THRU-CONNECT (CONTINUED)

### EXAMPLE Y: MULTIPOINT THRU-CONNECT

#### MULTIPOINT THRU-CONNECT



**11.9 CASCADING MULTIPLEXING** The ordering requirements for a Cascading Multiplexing arrangement are as follows (see Example Z for illustration):

ORDERING FORM:      UNIQUE FIELD REQUIREMENTS FOR A  
CASCADING MULTIPLEXING CONFIGURATION  
ARE:

- |           |     |  |
|-----------|-----|--|
| TRANSPORT | NC  | - Identifies the type of service being ordered. Example: If ordering the DS3, a DS3 NC is required; if ordering the DS1, a DS1 NC is required, etc.  |
| TRANSPORT | NCI | - Identifies the interface at the ACTL. The NC and NCI may represent different types of service. Example: If ordering a DS1 cascading or “riding” a DS3; a DS3 NCI is required to represent the DS3 interface at the ACTL but the NC will be for the DS1 being ordered.  |
| TRANSPORT | CFA | - Identifies the channel(s) of the multiplexed Hi-Cap facility on which the service being ordered will “ride”. Example: If ordering a DS1 cascading from a DS3; the CFA identifies the channel of the DS3 on which the DS1 will ride. When the voice grade channel is ordered, the CFA on that request will reflect the channel of the DS1 on which the voice service will ride. |



## 11.9 CASCADING MULTIPLEXING (CONTINUED)

|           |         |   |
|-----------|---------|---|
| TRANSPORT | MUXLOC  | - Identifies the multiplexing location in which the multiplexed Hi-Cap facility associated with the CFA terminates. The MUXLOC CLI code is the HUB location identified in the CFA field.                      |
| TRANSPORT | SMUXLOC | - Identifies the multiplexing location in which the multiplexed Hi-Cap facility associated with the SCFA terminates.  |
| TRANSPORT | SECLOC  | - Identifies the multiplexing location for the service being ordered. Example: If ordering a DS1 cascading from a DS3, the SECLOC is the multiplexing location for the DS1 (if the DS1 is being multiplexed). |

**11.9 CASCADING MULTIPLEXING (CONTINUED)** Cascading Multiplexing involves the use of a channel from a multiplexed service that is multiplexed into smaller channels.

EXAMPLE Z:

|                            |                                     |       |             |                            |
|----------------------------|-------------------------------------|-------|-------------|----------------------------|
|                            | MULTIPLEXING HUB<br>(MUXLOC)<br>DS1 |       |             |                            |
| ////////////////////       | DS3                                 | ***** | DS1         | ////////////////////       |
| DS3 Hi-Cap<br>FACILITY (a) | to<br>DS1                           | (b)   | to<br>VOICE | VOICE GRADE<br>CHANNEL (c) |

The DS3 Hi-Cap facility (a) is ordered to a provider central office and is multiplexed down into 28 DS1's (b). Each DS1 can then be multiplexed into 24 voice grade channels (c) or 23 digital data channels. This configuration is called "Cascading Multiplexing".

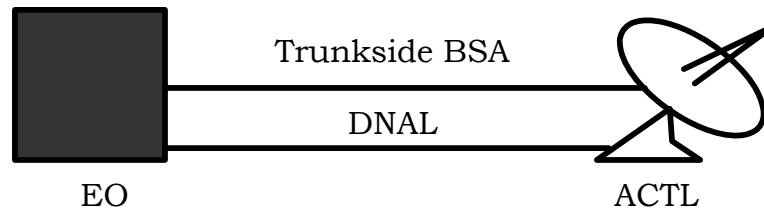
**11.10 DEDICATED NETWORK ACCESS LINE (DNAL) - GENERAL** The Dedicated Network Access Link (DNAL) provides a dedicated data channel between the customer termination and a designated central office which contains the specific features required by the customer.

The DNAL is used to transmit network information or network control information from the customer to the network (e.g. activate a message waiting indicator) or from the network to the customer (e.g. calling number identification over a message desk interface).

**11.11 DNAL DEDICATED NETWORK ACCESS LINK** This configuration depicts a Trunk-side Basic Serving Arrangement (BSA) with an associated DNAL used to provide a Trunk Make Busy Arrangement. The Trunk-side BSA is ordered concurrently or prior to the DNAL. The DNAL is ordered on the Transport Form using the SSS and ATN Fields.

LATA ORDERING REQUIREMENTS:

ASR FORM  
TRANSPORT FORM  
SSS = N  
ATN = TSC/TGID



## 11.12 **UNBUNDLED ORDERING CONFIGURATIONS**

### UNBUNDLED MULTIPLEXER

1. 1/0 MUX
2. 3/1 MUX

### UNBUNDLED TRANSPORT

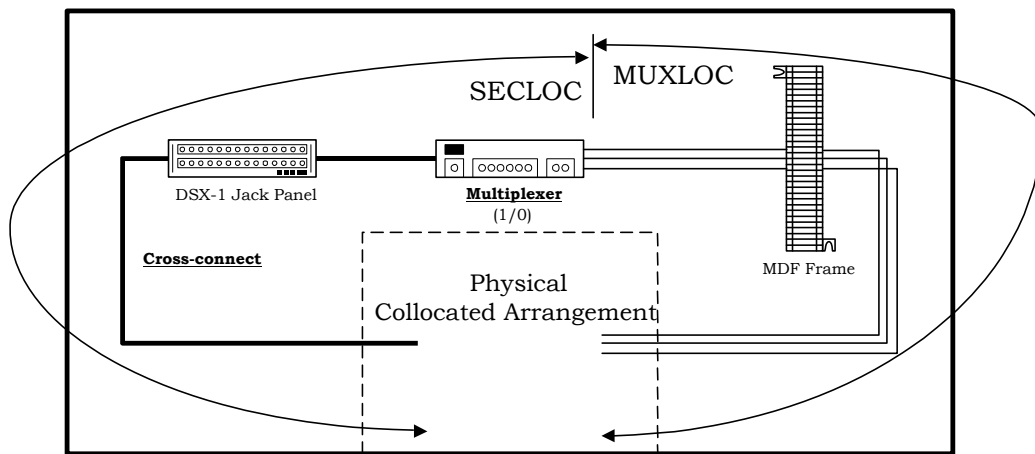
1. Physical COLLOCATION to physical COLLOCATION
  - A. Same CENTRAL OFFICE
  - B. Different CENTRAL OFFICE
2. Physical COLLOCATION to CLEC POI
3. Virtual COLLOCATION to CLEC POI
4. CLEC POI to CLEC POI

11.13 **UNBUNDLED MULTIPLEXER 1/0** This configuration depicts an Unbundled Network Element which multiplexes between DS0 and T1 levels.

ORDERING REQUIREMENTS:

ASR FORM  
TRANSPORT FORM

**Unbundled Multiplexer**  
**1/0**



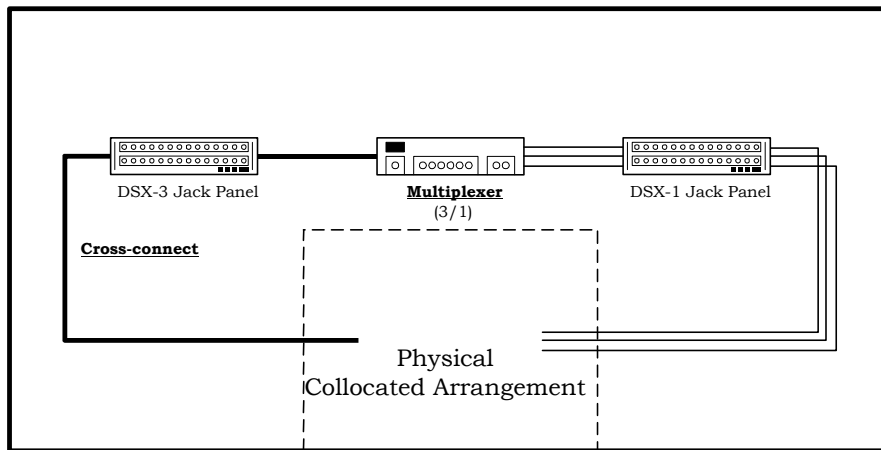
Note: The UNE field on the ASR Form must be populated when placing an order for this service. The above configuration requires two separate ASR's. The first ASR will be for the high speed side and the Multiplexer. The second ASR will be for the low speed connections from the Multiplexer to the collocation arrangement.

11.14 **UNBUNDLED MULTIPLEXER 3/1** This configuration depicts an Unbundled Network Element which multiplexes between DS3 and DS1 levels.

ORDERING REQUIREMENTS:

ASR FORM  
TRANSPORT FORM

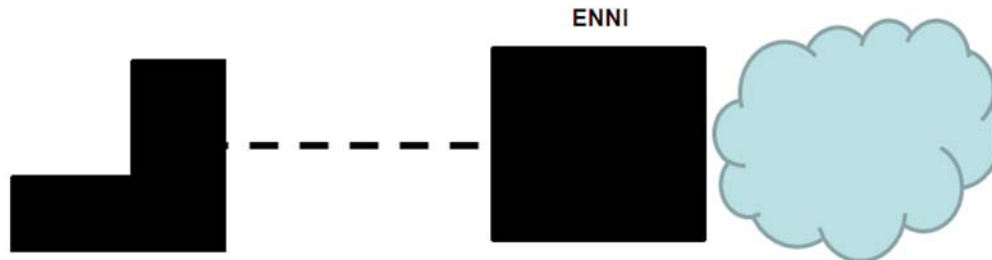
**Unbundled Multiplexer**  
**3/1**



Note: The UNE field on the ASR Form must be populated when placing an order for this service. The above configuration requires two separate ASR's. The first ASR will be for the high speed side and the Multiplexer. The second ASR will be for the low speed connections from the Multiplexer to the collocation arrangement.

### 11.15 SPECIALIZED ETHERNET AGGREGATION COMBO SERVICES

This configuration depicts an example of a Specialized Ethernet Aggregation order.



|                           |   |  |  |                            |   |                 |  |
|---------------------------|---|--|--|----------------------------|---|-----------------|--|
| <b>ASR Form</b>           |   |  |  |                            |   |                 |  |
| REQTYP                    | = | S  |  | SEI                        | = | Blank           |  |
| ACT                       | = | N  |  |                            |   |                 |  |
| ACTL                      | = | Required                                   |  |                            |   |                 |  |
| QTY                       | = | 1  |  |                            |   |                 |  |
| EVCI                      | = | B  |  |                            |   |                 |  |
| <b>Transport Form</b>     |   |  |  |                            |   |                 |  |
| NC                        | = | Specialized Ethernet Aggregation Service   |  | SECLOC                     | = | Required        |  |
| NCI                       | = | Specialized Ethernet Aggregation Interface |  |                            |   |                 |  |
| SECNCI                    | = | Specialized Ethernet Aggregation Interface |  |                            |   |                 |  |
| <b>EVC Form</b>           |   |  |  |                            |   |                 |  |
| <b>EVC Detail Section</b> |   |  |  | <b>UNI Mapping Section</b> |   |                 |  |
| EVC NUM                   | = | 0001                                       |  | UREF                       | = | 01              |  |
| NC                        | = | Required                                   |  | AUNT                       | = | A               |  |
| -                         |   |  |  | UACT                       | = | N               |  |
| NUT                       | = | Required                                   |  | NCI                        | = | Port based/VLAN |  |
| EVCID                     | = | N/A  |  | L2CP                       | = | As needed       |  |
| EVCKR                     | = | Optional                                   |  | RUID or                    | = | Prohibited      |  |
|                           |   |  |  | RPON                       | = | Prohibited      |  |
|                           |   |  |  | EVCSP                      | = | Optional        |  |
|                           |   |  |  | VACT                       | = | Optional        |  |
|                           |   |  |  | CE-VLAN                    | = | Optional        |  |
|                           |   |  |  | S-VACT                     | = | As needed       |  |
|                           |   |  |  | S-VLAN                     | = | As needed       |  |
|                           |   |  |  | SVP                        | = | As needed       |  |

|                            |         |             |        |      |           |             |  |
|----------------------------|---------|-------------|--------|------|-----------|-------------|--|
| <b>UREF #1 LOS Mapping</b> |         |             |        |      |           |             |  |
| LREF                       | LOS ACT | LOS or SPEC |        | PBIT | BDW       | DSCP or TOS |  |
| 1                          | N       |             | EVCGLD |      | Bandwidth |             |  |



## 11.15 SPECIALIZED ETHERNET AGGREGATION COMBO SERVICES (continued)

| UNI Mapping Section – UNI #2       |         |             |        |      |           |             |  |
|------------------------------------|---------|-------------|--------|------|-----------|-------------|--|
| UREF = 2                           |         |             |        |      |           |             |  |
| UACT = N                           |         |             |        |      |           |             |  |
| NCI = Port based/VLAN              |         |             |        |      |           |             |  |
| L2CP = As needed                   |         |             |        |      |           |             |  |
| RUID = ECCKT of Specialized        |         |             |        |      |           |             |  |
| or Ethernet Aggregation #2         |         |             |        |      |           |             |  |
| RPON = PON of Specialized Ethernet |         |             |        |      |           |             |  |
| Aggregation #2 ASR                 |         |             |        |      |           |             |  |
| EVCSP = Optional                   |         |             |        |      |           |             |  |
| VACT = Optional                    |         |             |        |      |           |             |  |
| CE-VLAN = Optional                 |         |             |        |      |           |             |  |
| S-VACT = As needed                 |         |             |        |      |           |             |  |
| S-VLAN = As needed                 |         |             |        |      |           |             |  |
| SVP = As needed                    |         |             |        |      |           |             |  |
| UREF #2 LOS Mapping                |         |             |        |      |           |             |  |
| LREF                               | LOS ACT | LOS or SPEC |        | PBIT | BDW       | DSCP or TOS |  |
| 1                                  | N       |             | EVCGLD |      | Bandwidth |             |  |
|                                    |         |             |        |      |           |             |  |
|                                    |         |             |        |      |           |             |  |

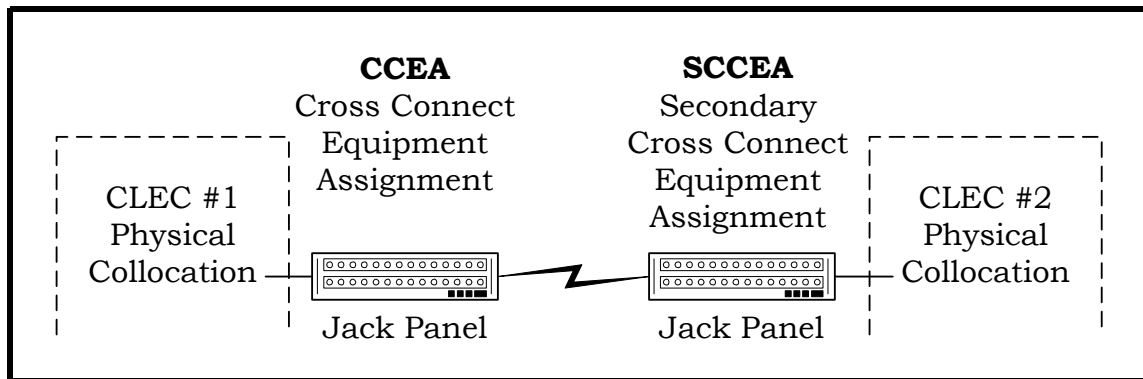
### 11.16 **COLLOCATION TO COLLOCATION (SAME CENTRAL OFFICE)**

This configuration depicts an Unbundled Network Element (Transport) between two physical COLLOCATIONS arrangement within the same Central Office.

ORDERING REQUIREMENTS:

ASR FORM  
TRANSPORT FORM

#### **Multiple Collocation Arrangement** **(Intraoffice Cage-to-Cage)**



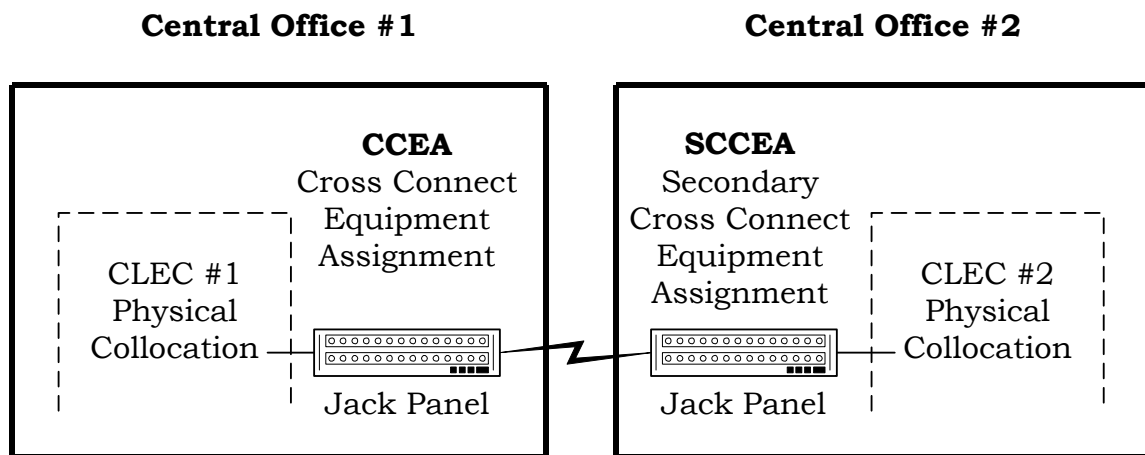
Note: The UNE field on the ASR Form must be populated when placing an order for this service.

**11.17 COLLOCATION TO COLLOCATION (DIFFERENT CENTRAL OFFICE)** This configuration depicts an Unbundled Network Element (Transport) between two COLLOCATIONS in two different Central Offices.

ORDERING REQUIREMENTS:

ASR FORM  
TRANSPORT FORM

**Multiple Collocation Arrangement**  
**(Interoffice Cage-to-Cage)**

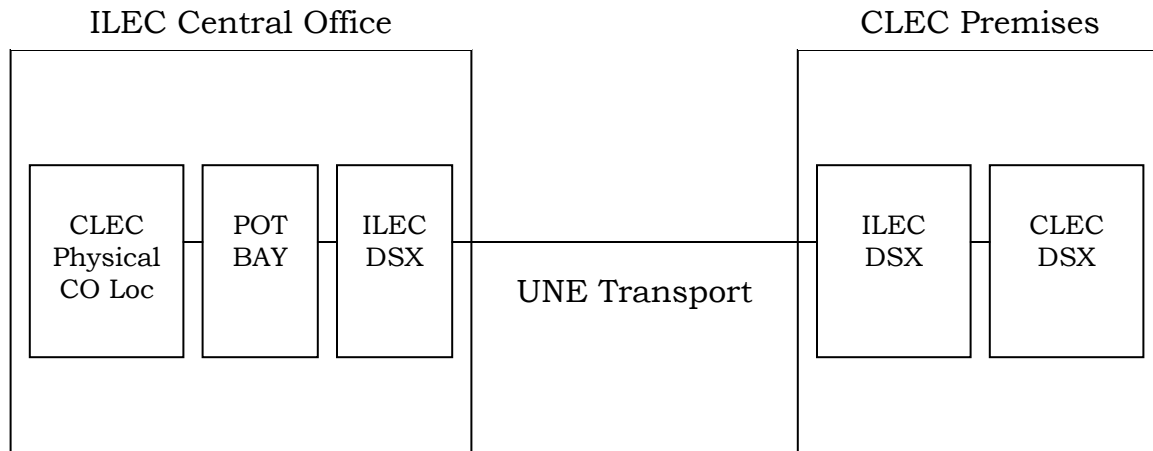


Note: The UNE field on the ASR Form must be populated when placing an order for this service.

**11.18 PHYSICAL COLLOCATION TO CLEC POI** This configuration depicts an Unbundled Network Element (Transport) between a physical collocation and a CLEC POI.

ORDERING REQUIREMENTS:

ASR FORM  
TRANSPORT FORM

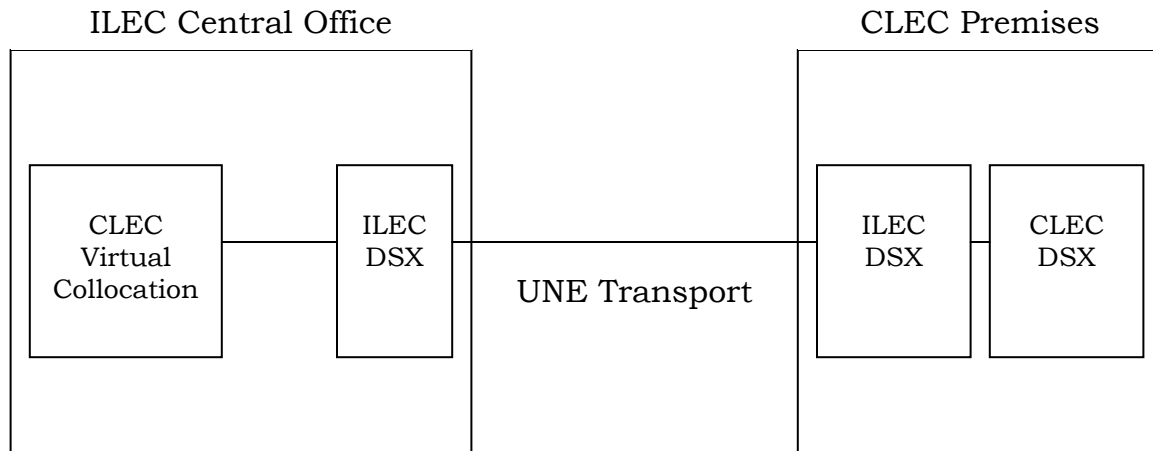


Note: The UNE field on the ASR Form must be populated when placing an order for this service.

**11.19 VIRTUAL COLLOCATION TO CLEC POI** This configuration depicts an Unbundled Network Element (Transport) between a virtual collocation and a CLEC POI.

ORDERING REQUIREMENTS:

ASR FORM  
TRANSPORT FORM

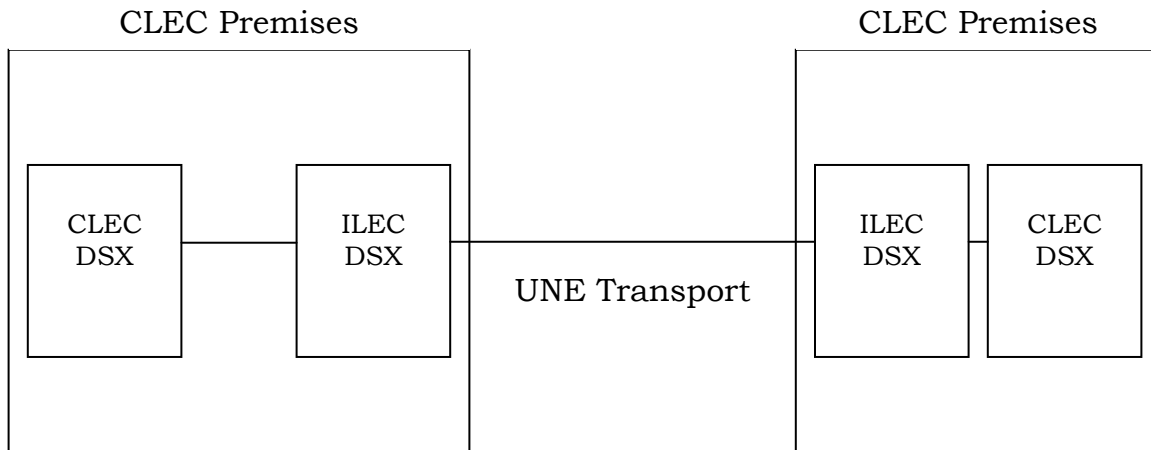


Note: The UNE field on the ASR Form must be populated when placing an order for this service.

11.20 **CLEC POI TO CLEC POI** This configuration depicts an Unbundled Network Element (Transport) between two CLEC POIs.

ORDERING REQUIREMENTS:

ASR FORM  
TRANSPORT FORM



Note: The UNE field on the ASR Form must be populated when placing an order for this service.

## END USER SPECIAL ACCESS

| <u>DESCRIPTION</u>                                   | <u>SECTION</u> |
|--|----------------|
| GENERAL _____  | 12.1           |
| END USER SPECIAL ACCESS ORDERING CONFIGURATIONS ____ | 12.2           |
| TWO POINT END USER SPECIAL ACCESS _____              | 12.2.1         |
| CROSS-CONNECTS _____                                 | 12.2.2         |

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## **12. END USER SPECIAL ACCESS**

12.1 **GENERAL** End User Special Access is generally ordered between two end user locations within a LATA.

- One of the end user locations must be terminated in a circuit which has the capability of switching to a jurisdictionally interstate connection.
- Service between two locations where at least one of the locations has digital cross-connect (DCS) capabilities.

The following location naming conventions are used:

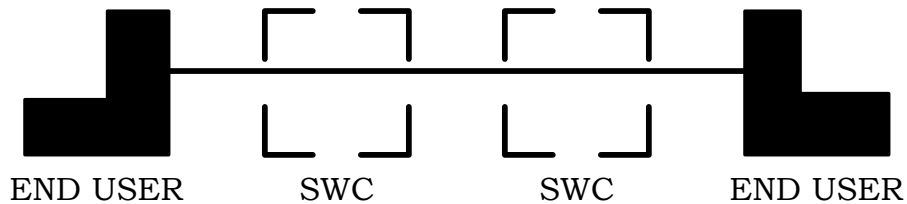
- The end user location with the capability to switch the circuit InterLATA is identified as the primary location (PRILOC) and all other end user locations are identified as secondary locations (SECLOCs).
- When more than end user locations have the capability of switching, the assignment of the PRILOC is arbitrary.

## 12.2 END USER SPECIAL ACCESS ORDERING CONFIGURATIONS

**12.2.1 TWO POINT END USER SPECIAL ACCESS** This configuration depicts a private line between two end user locations within the LATA which are jurisdictionally Interstate because one or both locations have the ability to switch to exchange services. The location having this switching capability is designated as PRILOC and is handled in a manner similar to an ACTL location for the provisioning process.

### LATA ORDERING REQUIREMENTS:

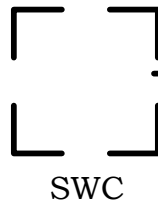
ASR FORM  
NO-ACTL  
EUSA FORM  
PRILOC  
(2) SALI FORMS  
SECLOC



12.2.2 **CROSS-CONNECTS** This example illustrates one location as a provider office with DCS or multiplexing (MUX) capabilities and the other is an end user premises.

LATA ORDERING REQUIREMENTS:

ASR FORM  
NO-ACTL  
EUSA FORM  
PRILOC  
SECLOC  
SALI FORM



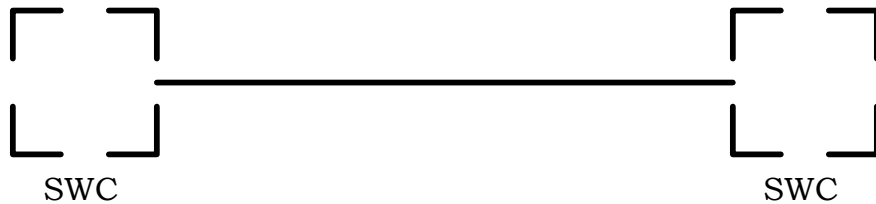
END USER

**12.2.2 CROSS-CONNECTS (CONTINUED)** Another application for the use of the EUSA is to order between two locations when both locations are provider offices with DCS or MUX capabilities. Identification of these locations is as follows:

- When both locations are provider offices with DCS capabilities the assignment of primary versus secondary identification is arbitrary and the choice of the customer.
- When one location is a provider office with DCS capabilities and the other is a provider office with MUX capabilities, the DCS location is identified as the primary location and the MUX location is identified as the secondary location.

LATA ORDERING REQUIREMENTS:

ASR FORM  
EUSA FORM  
PRILOC  
SECLOC  
NO-ACTL



MULTIPLE-EXCHANGE COMPANY (MULTI-EC)

| <u>DESCRIPTION</u>                     | <u>SECTION</u> |
|--|----------------|
| GENERAL _____                          | 13.1           |
| MULTI-EC ORDERING CONFIGURATIONS _____ | 13.2           |
| SPECIAL ACCESS MULTI-EC _____          | 13.2.1         |
| FEATURE GROUP A MULTI-EC _____         | 13.2.2         |

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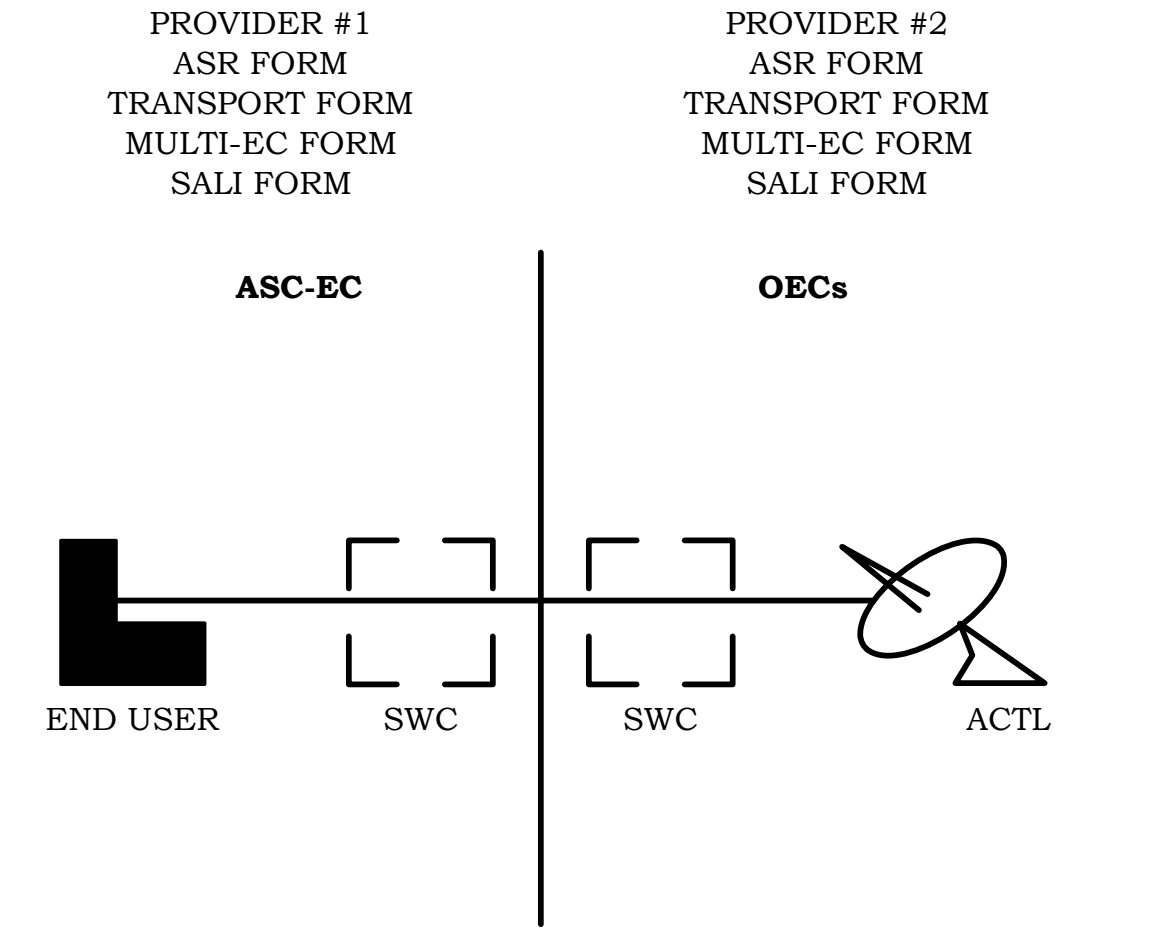
### **13. MULTIPLE-EXCHANGE COMPANY (MULTI-EC)**

13.1 **GENERAL** A Multi-EC configuration is one in which multiple providers are involved in the provision of the access service. The Multi-EC Form provides for the additional administrative and billing detail information for each provider involved where an access service passes through more than one provider's territory. The first line of information will always contain the Access Service Coordination Exchange Company (ASC-EC) details, and the ASC-EC ICSC code on this form must match the ASC-EC field information on the ASR Form. The Multi-EC Form will accompany the ASR and service specific form.

## 13.2 MULTI-EC ORDERING CONFIGURATIONS

**13.2.1 SPECIAL ACCESS MULTI-EC** This configuration depicts a two point private line between an end user location and an ACTL. The Special Access Service is provided to the customer by two providers within the same LATA, requiring the Multi-EC Form in addition to the ASR, Transport and SALI Forms normally provided.

### LATA ORDERING REQUIREMENTS:



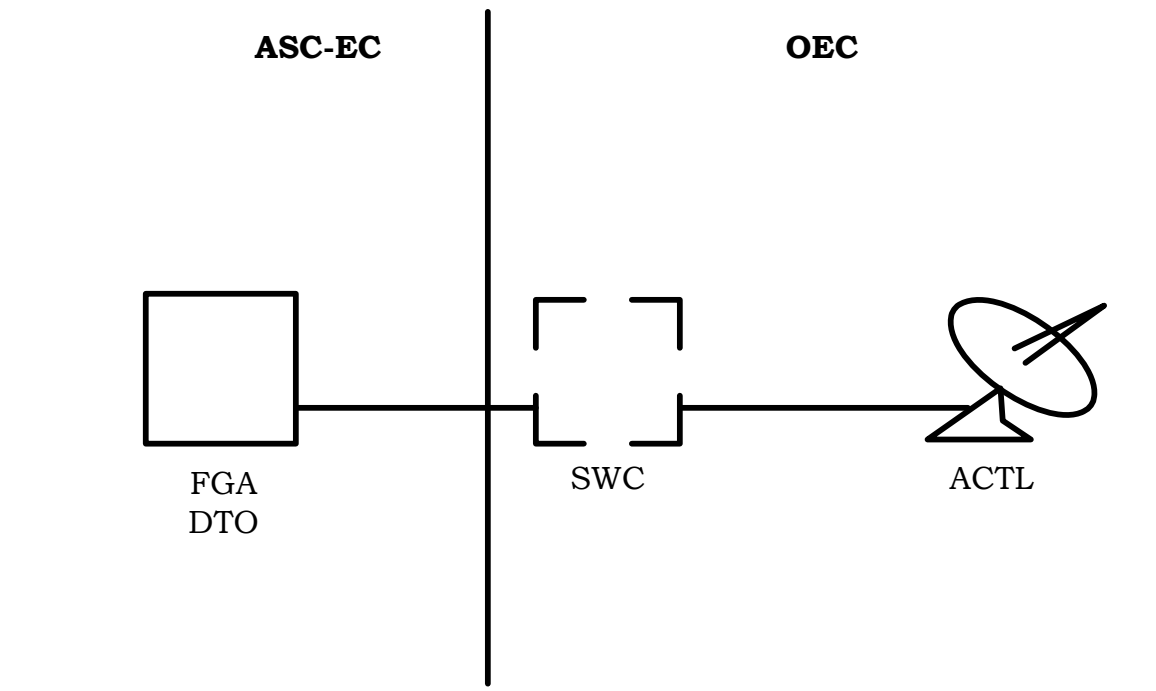


**13.2.2 FEATURE GROUP A MULTI-EC** This configuration depicts a FGA Foreign Exchange service from a FGA end office to an ACTL. The FGA service is provided by two providers within the same LATA, requiring the Multi-EC Form in addition to the ASR and Service Specific Form.

**LATA ORDERING REQUIREMENTS:**

PROVIDER #1  
ASR FORM  
FGA FORM  
MULTI-EC FORM

PROVIDER #2  
ASR FORM  
TRANSPORT FORM  
MULTI-EC FORM



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## RING SERVICE

| <u>DESCRIPTION</u>                          | <u>SECTION</u> |
|---|----------------|
| GENERAL _____                               | 14.1           |
| RING ORDERING CONFIGURATIONS _____          | 14.2           |
| ESTABLISH A RING                            |                |
| 4 NODE RING-POP ON RING AT LOCATION A _____ | 14.3           |
| 4 NODE RING-POP ON RING AT LOCATION C _____ | 14.4           |
| SERVICE REARRANGEMENTS                      |                |
| ADD A NODE _____                            | 14.5           |
| DISCONNECT A NODE _____                     | 14.6           |
| REDISTRIBUTE PORT CAPACITY _____            | 14.7           |
| SERVICE ACTIVATION - OFF NET TO OFF NET -   |                |
| SPECIAL ACCESS _____                        | 14.8           |

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## **14. RING SERVICE**

**14.1 GENERAL** A ring can be one of two transport types: optical carrier (OC) transport or dense wave division multiplexing (DWDM) transport.

The configuration of an OC transport ring consists of a collection of nodes forming a closed end loop, whereby each node is connected via a fiber facility, and the OC transport ring is self-healing.

The configuration of a DWDM transport ring consists of a collection of nodes forming a closed end loop, whereby each node is connected via a fiber facility, and the DWDM transport ring is not self-healing. Individual wavelengths on the DWDM transport ring may or may not be self-healing depending on the customer's circuit level requirements.

**14.2 RING ORDERING CONFIGURATIONS** The Ring Form Preparation Guide (ATIS-0404021) addresses the ordering requirements for the first segment of the ring for this request.

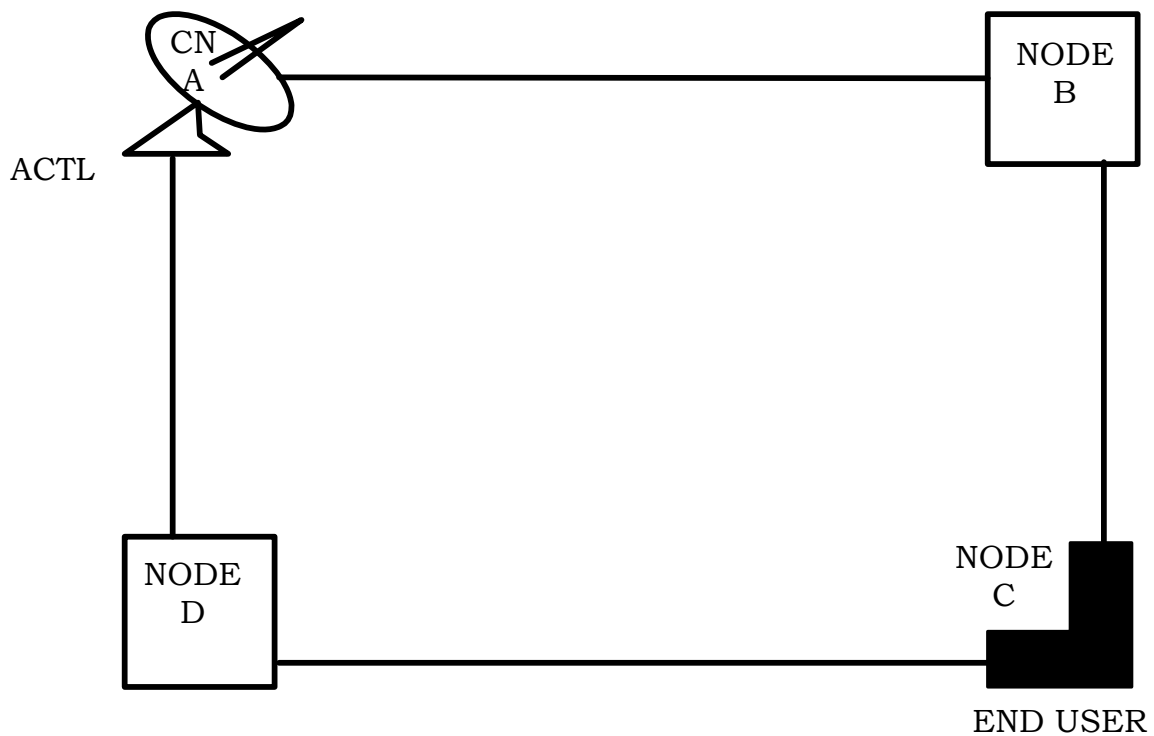
The Additional Ring Information Form Preparation Guide (ATIS-0404022) addresses the ordering requirements for the second and all subsequent segments of a ring for this request.

### 14.3 ESTABLISH A 4 NODE RING-POP ON RING AT LOCATION A

This configuration depicts the establishment of a 4 node ring with 2 central office nodes and 2 customer nodes.

#### ORDERING REQUIREMENTS:

ASR FORM  
RING FORM  
(3) ARI FORMs  
SALI FORM



**14.3 ESTABLISH A 4 NODE RING-POP ON RING AT LOCATION A (CONT'D)** In this example, node A is located at a POP; therefore, the ACTL CLLI code will be entered in the ACTL field on the ASR Form. When node A is not a POP, the PRILOC field on the RING Form will be populated and the ACTL field on the ASR Form will be blank.

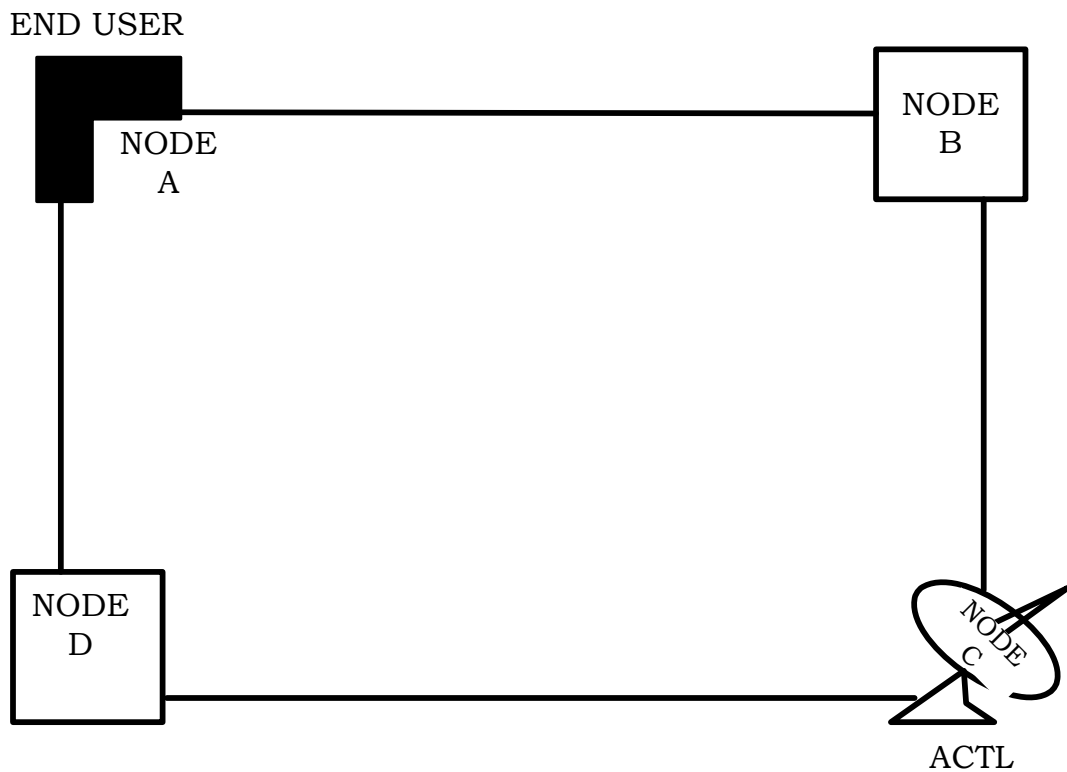
|  |  |
|--|--|
| <b>ASR FORM</b><br>REQ TYP = R<br>ACT = N<br>FNI = N or preassigned FNI<br>QTY = 4 (number of segments)<br>ACTL = CLLI Code of POP ("A" location)<br>QSA = 1 | <b>RING FORM</b><br>Segment A to B<br>NC<br>NCI<br>SECNCI<br>NID<br>SECLOC ("B" location)<br>Assumed REF NUM 0001  |
| <b>ARI FORM #1</b><br>Segment B to C<br>NC<br>NCI<br>SECNCI<br>REF NUM = 0002<br>PRILOC = ("B" location)<br>SPOT (PRI)<br>NID<br>SECLOC ("C" location)       | <b>ARI FORM #2</b><br>Segment C to D<br>NC<br>NCI<br>SECNCI<br>REF NUM = 0003<br>PRILOC = "E" ("C" location)<br>SPOT (PRI)<br>NID<br>SECLOC = ("D" location) |
| <b>ARI FORM #3</b><br>Segment D to A:<br>NC<br>NCI<br>SECNCI<br>REF NUM = 0004<br>PRILOC = ("D" location)<br>SPOT (PRI)<br>NID<br>SECLOC = ("A" location)    | <b>SALI FORM</b><br>REF NUM = 0003<br>PI = "Y"<br>AFT<br>EUNAME = End User Name<br>PRILOC = ("C" location)   |

#### 14.4 **ESTABLISH A 4 NODE RING - POP ON RING AT LOCATION C**

This configuration depicts the establishment of a 4 node ring with 2 central office nodes and 2 customer nodes.

##### ORDERING REQUIREMENTS:

ASR FORM  
RING FORM  
(3) ARI FORMs  
SALI FORM





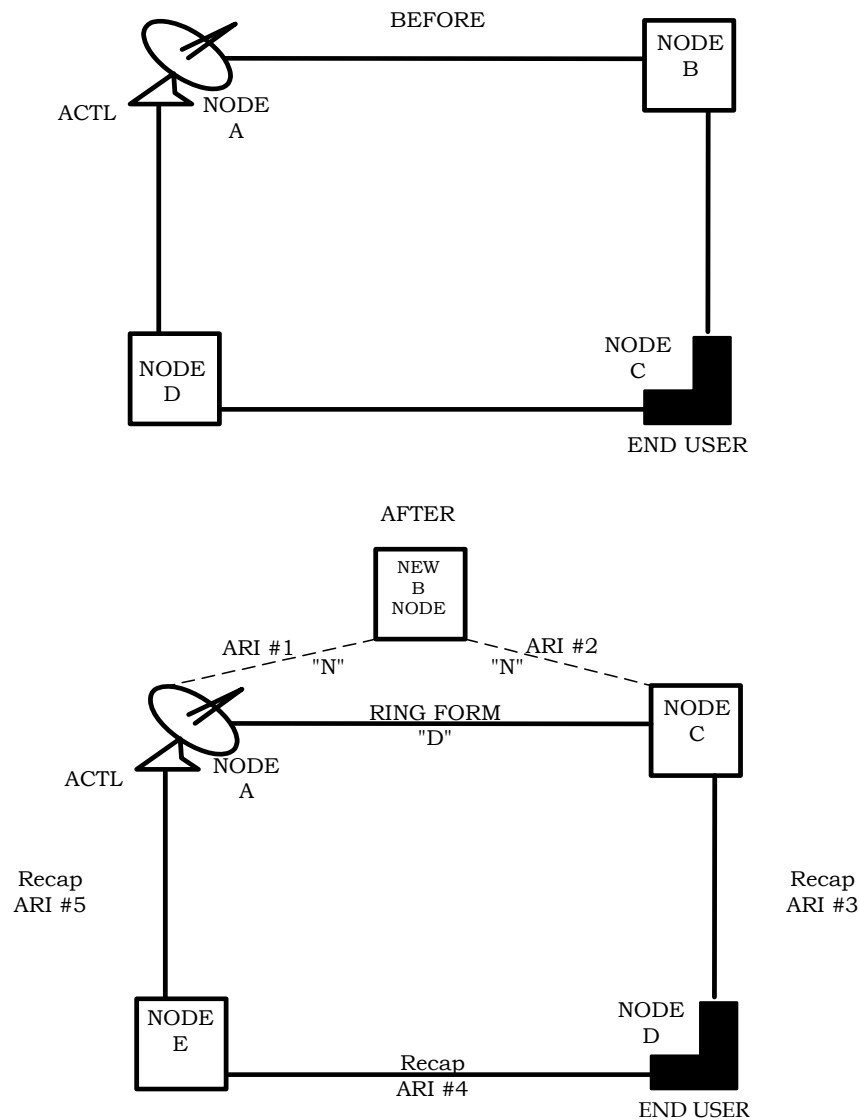
**14.4 ESTABLISH A 4 NODE RING-POP ON RING AT LOCATION C (CONT'D)** In this example, node C is located at a POP; therefore, the ACTL CLLI code will be entered in the SPOT (SEC) field on the ARI Form #1 and the SPOT (PRI) field on the ARI Form #2. Since node A is not a POP, the PRILOC field on the RING Form will be populated and the ACTL field on the ASR Form will be blank.

|   |  |
|---|--|
| <b>ASR FORM</b><br>REQ TYP = R<br>ACT = N<br>FNI = N or pre-assigned FNI<br>QTY = 4 (number of segments)<br>ACTL = blank<br>QSA = 1   | <b>RING FORM</b><br>Segment A to B<br><br>NC<br>NCI<br>PRILOC = "E"<br>SPOT (PRI) = CLLI Code (if available)<br>NID<br>SECLOC = "C" + CLLI Code ("B" location)<br><br>Assumed REF NUM 0001 |
| <b>ARI FORM #1</b><br>Segment B to C<br><br>NC<br>NCI<br>SECNCI<br>REF NUM = 0002<br>PRILOC = "C" + CLLI Code<br>NID<br>SECLOC = "E" + End User Name<br>SPOT (SEC) = ACTL CLLI Code                         | <b>ARI FORM #2</b><br>Segment C to D<br><br>NC<br>NCI<br>SECNCI<br>REF NUM = 0003<br>PRILOC = "E"<br>SPOT (PRI) = ACTL CLLI Code<br>NID<br>SECLOC = "C" + CLLI Code ("D" location)         |
| <b>ARI FORM #3</b><br>Segment D to A:<br><br>NC<br>NCI<br>SECNCI<br>REF NUM = 0004<br>PRILOC = "C" + CLLI Code<br>NID<br>SECLOC = "E" + End User Name ("A" location)<br>SPOT (SEC) CLLI Code (if available) | <b>SALI FORM</b><br><br>REF NUM = blank (assumed 0001)<br>PI = "Y"<br>AFT<br>EUNAME = End User Name  |

**14.5 SERVICE REARRANGEMENTS - ADD A NODE** This configuration depicts a central office node being added to an existing 4 node ring.

ORDERING REQUIREMENTS:

ASR FORM  
RING FORM  
(2) ARI FORMs



---

\_\_\_\_\_ = EXISTING  
----- = NEW

**14.5 SERVICE REARRANGEMENTS-ADD A NODE (CONT'D)** A particular sequence of valid entries for the SEGACT field when more than one type activity is required:

D = disconnect node(s)  
 N = new node(s)  
 C = change node(s)  
 R = recap node(s), if applicable

In this arrangement, the sequence to be used is:

D = segment A to B  
 N = segment A to new B  
 N = segment new B to C

**ORDERING REQUIREMENTS:**

|   |  |
|---|--|
| <b>ASR FORM</b><br>REQ TYP = R<br>ACT = C<br>FNI<br>CKR<br>ECCKT = CLF A-B (old)<br>QTY = 3 (number of segments touched)<br>ACTL      | <b>RING FORM</b><br>Segment A to B<br><br>NC<br>NCI<br>SEGACT = D<br>NID<br><br>Assumed REF NUM = 0001                         |
| <b>ARI FORM #1</b><br>Segment A to new B<br><br>NC<br>NCI<br>SECNCI<br>SEGACT = N<br>REF NUM = 0002<br>PRILOC = ACTL<br>NID<br>SECLOC | <b>ARI FORM #2</b><br>Segment new B to C<br><br>NC<br>NCI<br>SECNCI<br>SEGACT = N<br>REF NUM = 0003<br>PRILOC<br>NID<br>SECLOC |

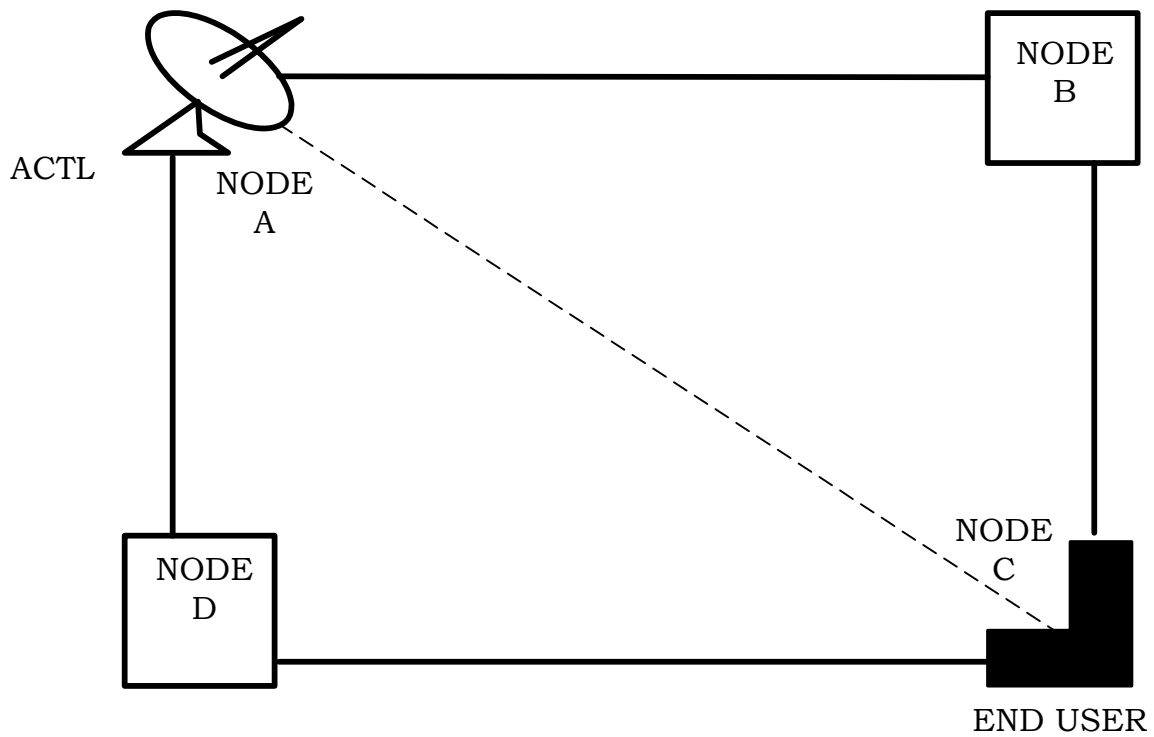
For those who recap, 3 additional ARIs are required:

R = segment new C to D  
 R = segment new D to E  
 R = segment new E to A

**14.6 SERVICE REARRANGEMENTS - DISCONNECT A NODE** This configuration depicts a node being disconnected from an existing 4 node ring. This arrangement requires that existing segments A-B and B-C be disconnected and the segment from A to C be established. All SEGACTs = "D" must precede the SEGACT = "N".

ORDERING REQUIREMENTS:

ASR FORM  
RING FORM  
2 ARI FORMs



———— = EXISTING  
----- = NEW

**14.6 SERVICE REARRANGEMENTS-DISCONNECT A NODE (CONT'D)** A particular sequence of valid entries for the SEGACT field when more than one type activity is required:

- D = disconnect node(s)
- N = new node(s)
- C = change node(s)
- R = recap node(s), if applicable

In this arrangement, the sequence to be used is:

- D = segment A to B
- D = segment B to C
- N = segment A to new C

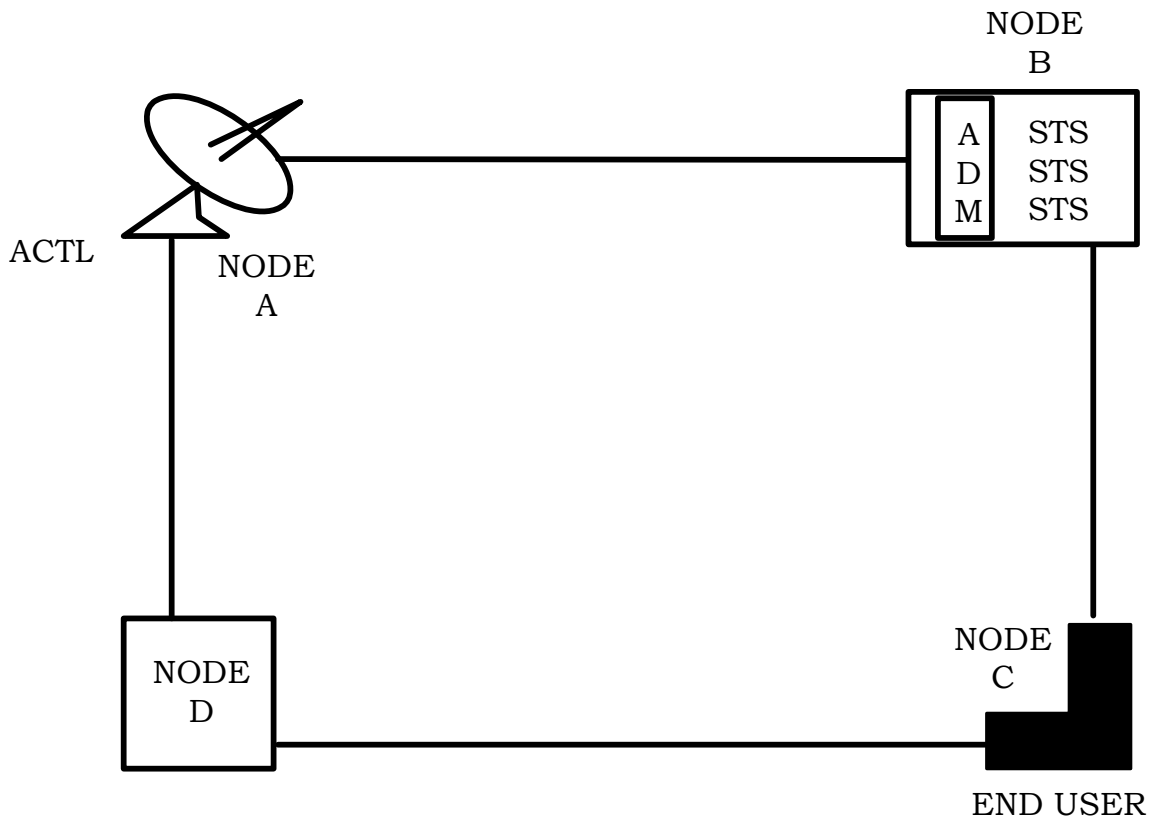
**ORDERING REQUIREMENTS:**

|  |   |
|--|---|
| <b>ASR FORM</b><br>REQ TYP = R<br>ACT = C<br>FNI<br>CKR<br>ECCKT = CLF A-B (old)<br>QTY = 3 (number of segments touched)<br>ACTL | <b>RING FORM</b><br>Segment A to B<br><br>SEGACT = D<br>NID<br><br>Assumed REF NUM 0001   |
| <b>ARI FORM #1</b><br>Segment B to C<br><br>SEGACT = D<br>REF NUM = 0002<br>ECCKT = B - C<br>NID                                 | <b>ARI FORM #2</b><br>New Segment A to C<br>NC<br>NCI<br>SECNCI<br>SEGACT = N<br>REF NUM = 0003<br>PRILOC = "E"<br>SPOT (PRI) = ACTL CLLI Code<br>NID<br>SECLOC = "E" + End User Name<br>SPOT (SEC) |

**14.7 SERVICE REARRANGEMENTS - REDISTRIBUTE PORT CAPACITY** This configuration depicts the reallocation of port capacity at node B. The existing service illustrated here reflects an ECCKT of 101/OC03/CLLI code NODE B/CLLI code NODE C, a FNI of N12345 and a NCI reflecting 3 STS-1 cards.

ORDERING REQUIREMENTS:

ASR FORM  
RING FORM



**14.7 SERVICE REARRANGEMENTS-REDISTRIBUTE PORT CAPACITY (CONT'D)** This example illustrates a proposal for reallocating port capacity at NODE B.

ORDERING REQUIREMENTS:

**ASR Form**

REQTYP = R  
ACT = C  
FNI  
CKR  
ECCKT = 101/OC3/CLLI Code NODE B/CLLI Code  
NODE C  
QTY

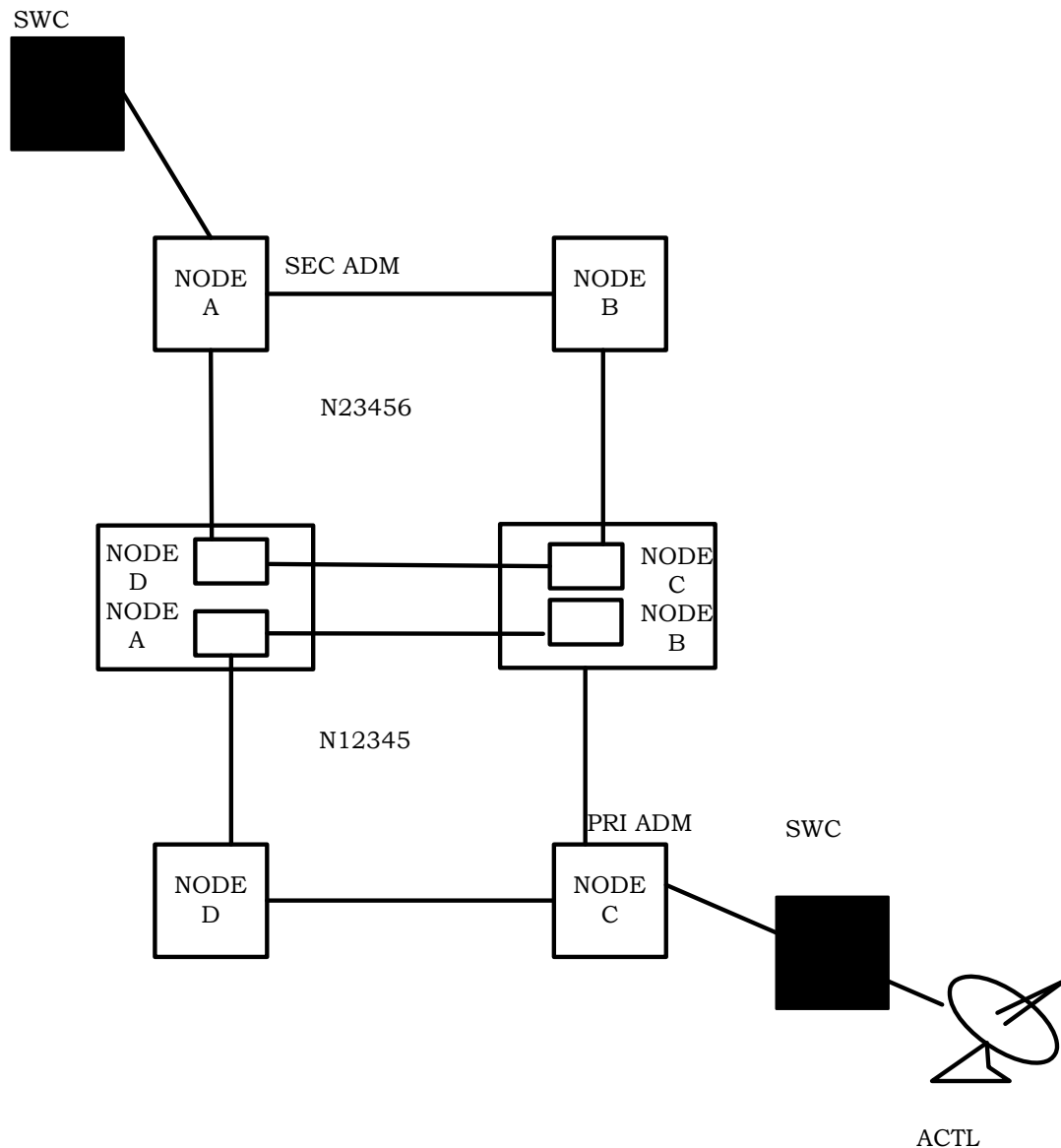
**RING Form**

NC  
NCI = Reflects (2) STS-1 and (1) VT1.5  
D/CDLRD  
SECNCI  
SEGACT = C  
PRILOC = NODE B CLLI Code  
NID  
SECLOC = NODE C

**14.8 SERVICE ACTIVATION - OFF NET TO OFF NET - SPECIAL ACCESS** This configuration depicts adding a special access hi-capacity service to route through 2 interconnected nodes.

ORDERING REQUIREMENTS:

ASR FORM  
TRANSPORT FORM





**14.8 SERVICE ACTIVATION - OFF NET TO OFF NET - SPECIAL ACCESS (CONTINUED)**

ORDERING REQUIREMENTS:

| ASR FORM |                 | TRANSPORT FORM |        |
|----------|-----------------|----------------|--------|
| REQTYP   | = S             | CFA            |        |
| ACT      | = N             | CPT            |        |
| FNI      | = N12345-N23456 | SCFA           |        |
| QTY      | = 1             | PRI ADM        | = CN C |
|          |                 | SEC ADM        | = CN A |

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## VIRTUAL CONNECTION SERVICE

| <u>DESCRIPTION</u>   | <u>SECTION</u> |
|--|----------------|
| GENERAL _____  | 15.1           |
| VIRTUAL CONNECTION CATEGORIES _____  | 15.2           |
| VIRTUAL CONNECTION CONFIGURATIONS _____  | 15.3           |
| ESTABLISH NEW NNI WITH VCs _____   | 15.3.1         |
| ESTABLISH NEW UNI WITH VCs _____   | 15.3.2         |
| ESTABLISH VCs OVER EXISTING NNI _____  | 15.3.3         |
| ESTABLISH VCs OVER EXISTING UNI _____  | 15.3.4         |
| ESTABLISH NNI ONLY _____   | 15.3.5         |
| CHANGE VC VALUES _____   | 15.3.6         |
| DISCONNECT VC _____  | 15.3.7         |
| ESTABLISH NEW UNI WITH VC (CELL RELAY TO FRAME RELAY) _____  | 15.3.8         |
| ESTABLISH NEW UNI WITH VCs (VC #1 FRAME RELAY TO FRAME RELAY, VC #2 FRAME RELAY TO CELL RELAY) _____ | 15.3.9         |

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## **15. VIRTUAL CONNECTION SERVICE**

**15.1 GENERAL** Ordering Broadband Services involves both physical ports and logical circuits. Since physical port activity resembles special access, ordering conventions for special access may basically be used for the physical connectivity of a network-to-network (NNI) or end user-to-network (UNI) interface. In addition to the standard special access type information requirements, specific broadband related information is needed to place an order for ports. Therefore, an ASR Form, Transport or EUSA Form and VC Form will be used when ordering Broadband Services. The SALI Form will also be required when an NNI or UNI terminates at a location that is identified by a service address. (The VC Form is not required if a Virtual Connection [VC] is not being ordered/changed.) Broadband Services supported by this ASOG are identified in the Broadband Services Category (BSC) field.

### **15.2 VIRTUAL CONNECTION CATEGORIES**

Virtual Connections may be ordered as:

- Cell Relay (ATM) packets
- Frame Relay packets
- Cell Relay (ATM) to Frame Relay conversion
- Frame Relay to Cell Relay (ATM) conversion
- Frame Relay to Cell Relay (ATM) to Frame Relay conversions

Combinations of virtual connections may be ordered on a single ASR. Categories of Virtual Connections are identified by entries in the BSC field on the Transport or End User Special Access Form and/or the VST field on the Virtual Connection Form.

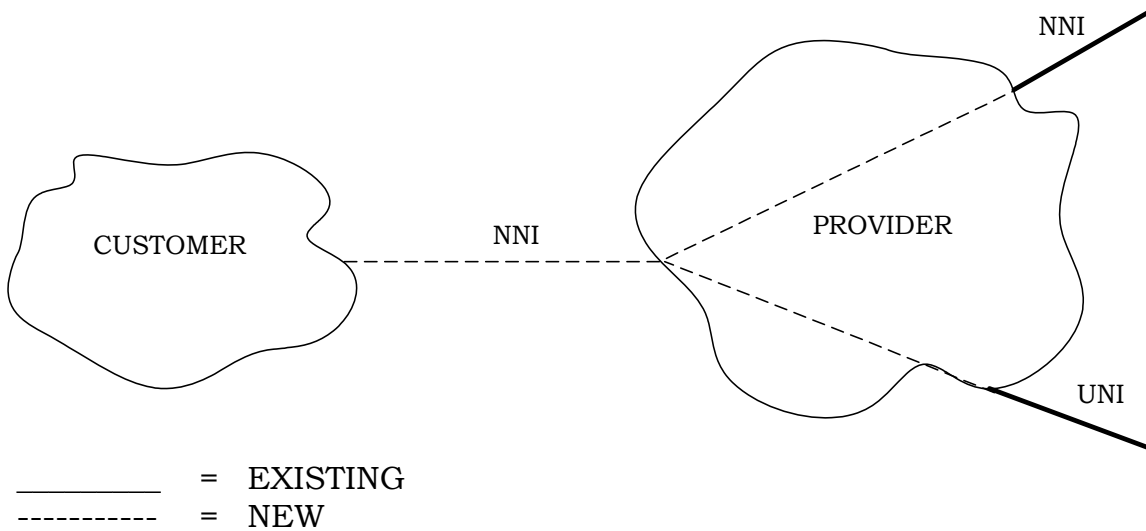
### **15.3 VIRTUAL CONNECTION CONFIGURATIONS**

The following configurations are examples only. The fields listed are common to broadband services. For specific application, additional data elements may apply.

### 15.3.1 ESTABLISH NEW NNI WITH VCs

#### ORDERING REQUIREMENTS:

ASR FORM  
 TRANSPORT FORM  
 SALI FORM  
 VC FORM



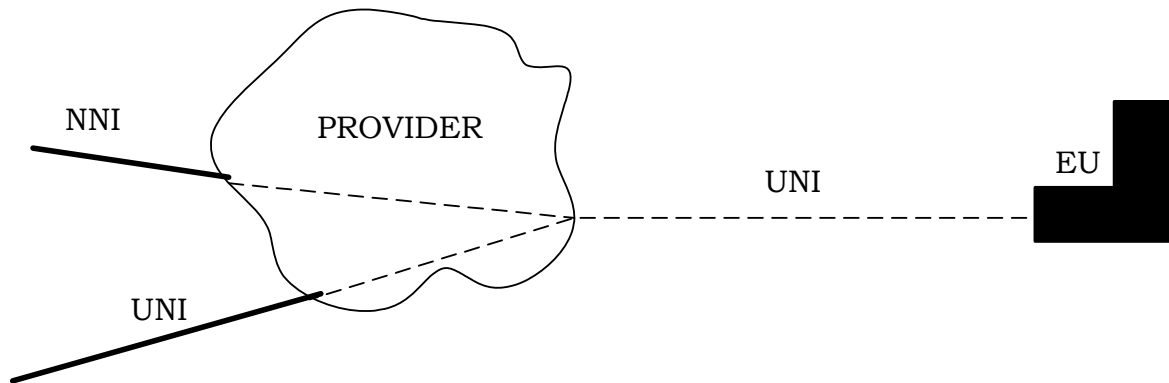
#### Data elements:

| ASR Form:  | TRANSPORT Form: | VC Form:             | SALI Form: |
|------------|-----------------|----------------------|------------|
| REQTYP = V | NVC             | VC NUM (1)           | AFT        |
|            | N/U             | VC ACT               | REF NUM    |
|            | BSC             | RPON, RORD or RECCKT |            |
|            |                 | VC NUM (2)           |            |
|            |                 | VC ACT               |            |
|            |                 | RPON, RORD or RECCKT |            |

### 15.3.2 ESTABLISH NEW UNI WITH VCs

#### ORDERING REQUIREMENTS:

ASR FORM  
EUSA FORM  
SALI FORM  
VC FORM



———— = EXISTING  
----- = NEW

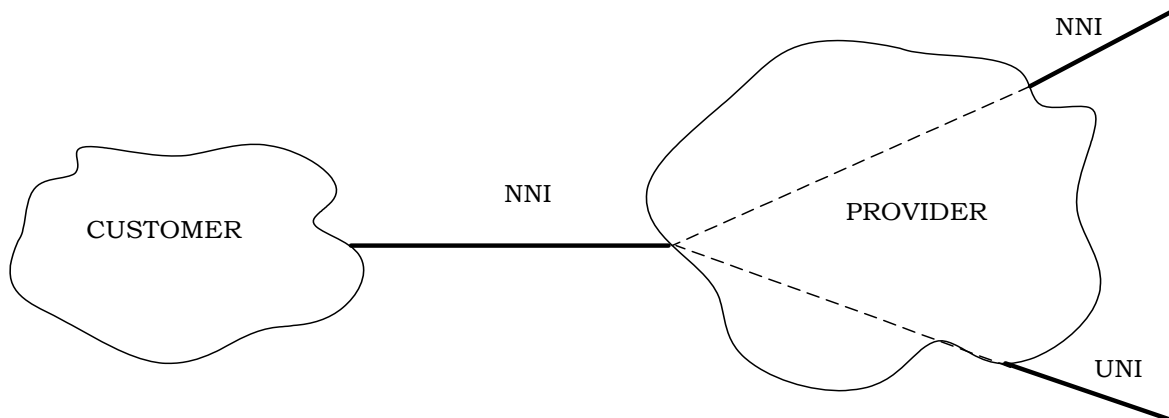
Data elements:

| ASR Form:  | EUSA Form: | VC Form:             | SALI Form: |
|------------|------------|----------------------|------------|
| REQTYP = X |            | VC NUM (1)           |            |
|            | NVC        | VCACT                | AFT        |
|            | N/U        | RPON, RORD or RECCKT | REF NUM    |
|            | BSC        | VC NUM (2)           |            |
|            |            | VCACT                |            |
|            |            | RPON, RORD or RECCKT |            |

### 15.3.3 ESTABLISH VCs OVER EXISTING NNI

#### ORDERING REQUIREMENTS:

ASR FORM  
TRANSPORT FORM  
SALI FORM  
VC FORM



———— = EXISTING  
----- = NEW

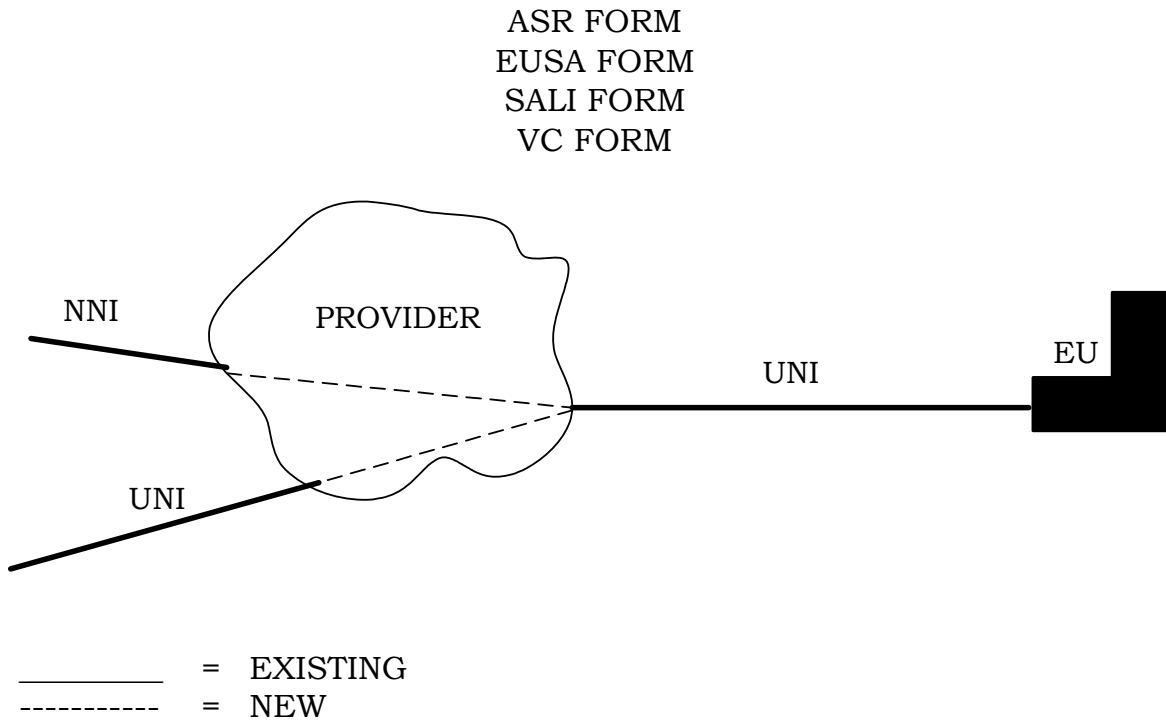
Data elements:

| ASR Form:  | TRANSPORT Form: | VC Form:             | SALI Form: |
|------------|-----------------|----------------------|------------|
| REQTYP = V | NVC             | VC NUM (1)           | AFT        |
|            | N/U             | VCACT                | REF NUM    |
|            | BSC             | RPON, RORD OR RECCKT |            |
|            |                 | VC NUM (2)           |            |
|            |                 | VCACT                |            |
|            |                 | RPON, RORD or RECCKT |            |



### 15.3.4 ESTABLISH VCs OVER EXISTING UNI

#### ORDERING REQUIREMENTS:



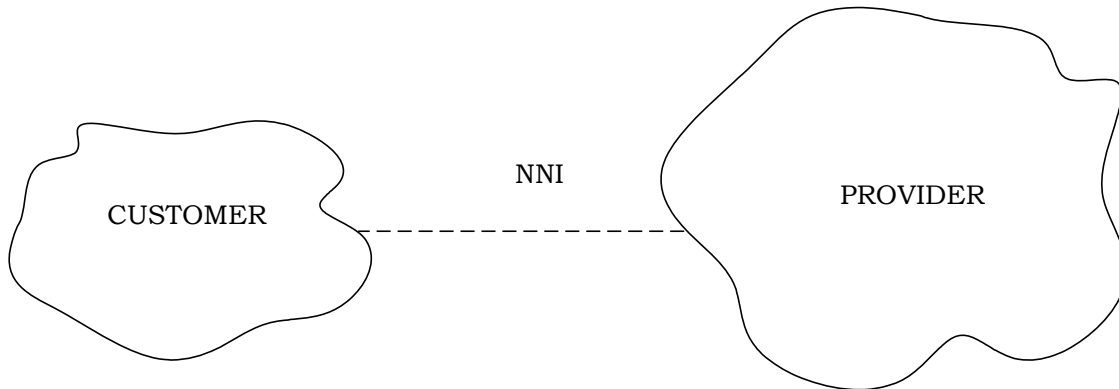
#### Data elements:

| ASR Form:  | EUSA Form: | VC Form:             | SALI Form: |
|------------|------------|----------------------|------------|
| REQTYP = X | NVC        | VC NUM (1)           |            |
|            | N/U        | VC ACT               | AFT        |
|            | BSC        | RPON, RORD or RECCKT | REF NUM    |
|            |            | VC NUM (2)           |            |
|            |            | VC ACT               |            |
|            |            | RPON, RORD or RECCKT |            |

### 15.3.5 ESTABLISH NNI ONLY

#### ORDERING REQUIREMENTS:

ASR FORM  
TRANSPORT FORM  
SALI FORM



\_\_\_\_\_ = EXISTING  
----- = NEW

Data elements:

**ASR Form:**

REQTYP = V

**TRANSPORT Form:**

N/U  
BSC

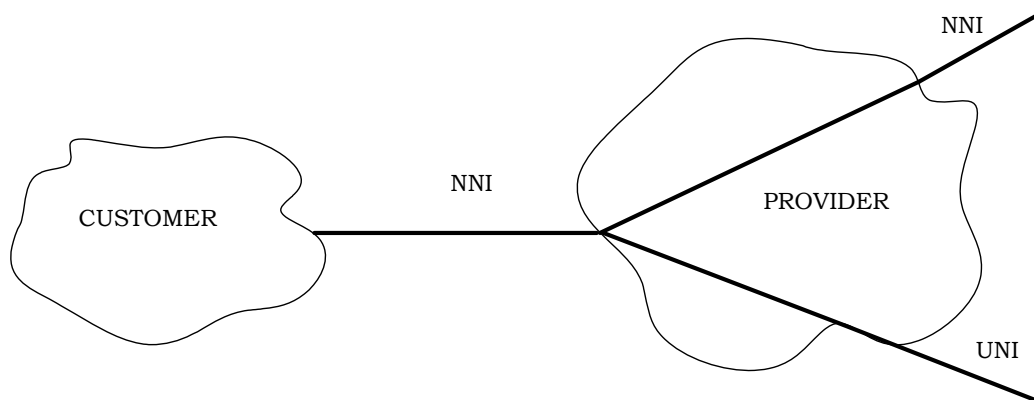
**SALI FORM:**

AFT  
REF NUM

### 15.3.6 CHANGE VC VALUES

#### ORDERING REQUIREMENTS:

ASR FORM  
 TRANSPORT FORM  
 VC FORM



\_\_\_\_\_ = EXISTING  
 ----- = NEW

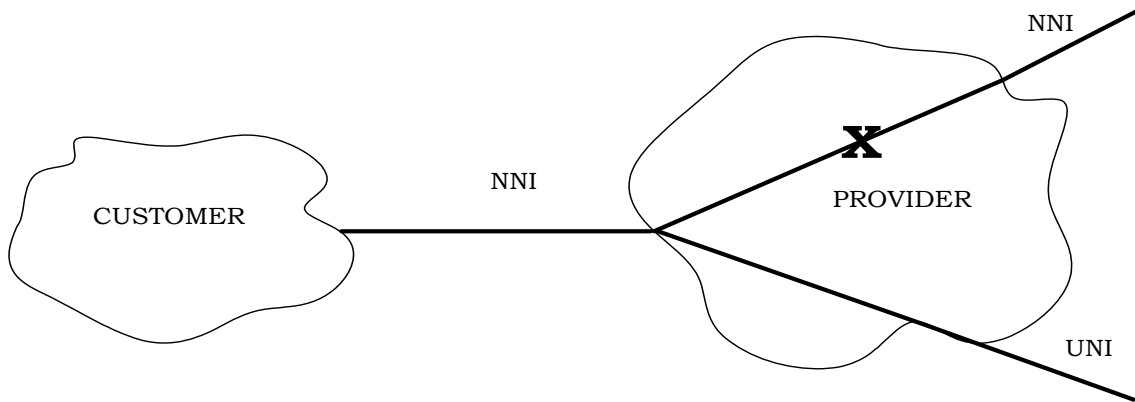
Data elements:

| ASR Form:  | TRANSPORT Form:   | VC Form:   | or | VC Form:   |
|------------|-------------------|--|----|--|
| REQTYP = V | NVC<br>N/U<br>BSC | VC NUM (1)<br>VCACT = C<br>RPON, RORD or<br>RECCKT |    | VC NUM (1)<br>VCACT = D<br>RPON, RORD or<br>RECCKT<br>VC NUM (2)<br>VCACT = N<br>RPON, RORD or<br>RECCKT |

### 15.3.7 DISCONNECT VC

#### ORDERING REQUIREMENTS:

ASR FORM  
TRANSPORT FORM  
VC FORM



\_\_\_\_\_ = EXISTING  
----- = NEW  
X = VC being disconnected

Data elements:

**ASR Form:**

REQTYP = V

**TRANSPORT Form:**

NVC  
BSC

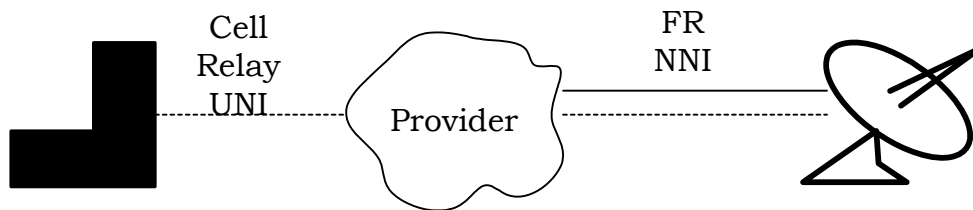
**VC Form:**

VC NUM (1)  
VCACT  
RPON, RORD or RECCKT

### 15.3.8 ESTABLISH NEW UNI WITH VC (CELL RELAY TO FRAME RELAY)

#### ORDERING REQUIREMENTS:

ASR FORM  
EUSA FORM  
VC FORM



\_\_\_\_\_ = EXISTING  
----- = NEW

Data elements:

**ASR Form:**

REQTYP = X

**EUSA Form**

NVC  
N/U  
BSC = C

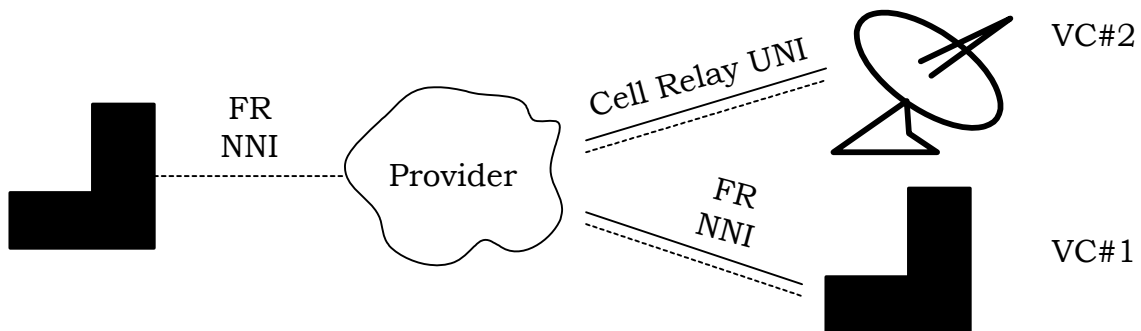
**VC Form:**

VC NUM  
VC ACT  
VST = B  
RPON, RORD, or RECCKT

### 15.3.9 ESTABLISH NEW UNI WITH VCS (VC #1 FRAME RELAY TO FRAME RELAY, VC #2 FRAME RELAY TO CELL RELAY)

#### ORDERING REQUIREMENTS:

ASR FORM  
EUSA FORM  
VC FORM



\_\_\_\_\_ = EXISTING  
----- = NEW

#### Data elements:

| ASR Form:  | EUSA Form: | VC Form #1            | VC Form #2                          |
|------------|------------|-----------------------|-------------------------------------|
| REQTYP = X | NVC        | VC NUM                | VC NUM                              |
|            | N/U        | VC ACT                | VC ACT                              |
|            | BSC=F      | RPON, RORD, or RECCKT | VST = A<br>RPON, RORD,<br>or RECCKT |

## NETWORK PLANNING SESSION

| <u>DESCRIPTION</u>                   | <u>SECTION</u> |
|--------------------------------------|----------------|
| GENERAL _____                        | 16.1           |
| PLANNING SESSION DESCRIPTION _____   | 16.2           |
| PLANNING SESSION ISSUES _____        | 16.3           |
| PLANNING SESSION CHECKOFF LIST _____ | 16.4           |
| EXHIBIT 1 _____                      | 16.5           |

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## **16. NETWORK PLANNING SESSION**

**16.1 GENERAL** This section provides an industry guideline of information that may be exchanged between the Local Exchange Carrier (LEC) and Certified Local Exchange Carrier (CLEC) to facilitate the exchange of traffic.

**16.2 PLANNING SESSION DESCRIPTION** The planning session allows the LEC and CLEC to identify the End Offices and Tandems that they plan to utilize to serve their customer base. Exhibit 1 shows a typical network to be discussed during the session. This session will identify the estimate of trunks desired to start service in the LATA or local geographic area. To help move this session along, a checklist of items that may need to be exchanged has been provided in this overview. It should be noted that this list may or may not satisfy all of the requirements of the planning session and should only be used as a guide.

**16.3 PLANNING SESSION ISSUES** Issues that may need to be addressed at a planning session include:

1. Projected Service Area
  - State/Province
  - LATA
  - MTA/MSA (wireless)
  - CLEC Forecast
2. POI
  - CLEC Location
  - CLEC Type (e.g., customer premises, mid span meet, collocation [physical, virtual and microwave]).
  - ILEC Location
  - ILEC Type (e.g., customer premises, mid span meet, collocation [physical, virtual and microwave]).

### 3. Trunk Group

- A/Z Trunk Group
- Trunk Quantity
- Interface (electrical characteristics: T1/T3/Optical, etc.)
- Directionality
- Signaling (MF/SS7)
- NC/NCI (subset of this is B8ZS/ESF)
- Traffic Type
- Alternate Routing (IH, PH, AF, DF)
- TQ

### 4. Traffic Types

- LT (Local IntraLATA Toll)
- CH (Choke)
- TS
- E9 (E911)
- PN (Portable Numbering for EO DID Trunking)
- OP
- DA
- DC (DA with Call Completion)
- IR (Intercept)
- VR (Verification)

## 16.4 **PLANNING SESSION CHECKOFF LIST**

### CLEC TO PROVIDER

- ACNA/CCNA
- CC
- Access Customer Switch Location/SECLOC/Point Code
- Switch Type, Switch CLLI Code
- ACTL
- Choke Code
- Forecast
- Homing/subtending (NPA/NXX which may be required 60-90 days prior to meeting)
- Projected Due Date
- Class Features Information Exchange
- ASR Contact
- Project ID
- Number Portability (Interim)
- DID Like
- Remote Call Forwarding
- RI
- None
- Tariff/Pricing Information
- # of Digits out pulsed
- Trunk Testing (102/105/108 Test line numbers)
- Milliwatt number for all
  - NPA/NXXs
- CCS7 Requirements

## 16.4 **PLANNING SESSION CHECKOFF LIST (CONTINUED)**

### ILEC TO PROVIDER

- ACNA/CCNA
- CC
- Provider Switch (CLLI Code, Types, OZZ Codes)
- CCS7 Requirements, Compliance and Scheduling (Point Codes, STP, SCRP, etc.)
- ACTL
- Choke Codes
- CIC
- 911/Public Safety Answering Points (PSAP) Location
- E911/Tandem CLLI Code
- Forecast (when applicable)
- Projected In-Service Date
- Class Features Information Exchange
- ASR Contacts
- Project ID
- Number Portability (Interim)
  - DID Like
  - RCF
  - RI
  - None
- Tariff/Pricing Information
- # of Digits Outpulsed
- Trunk Testing (102/105/108 testlines)
- Milliwatt number for all
  - NPA/NXXs
- Non-Standard Dial arrangement (e.g., initiated by Tariff like Service Call Plans and/or PSC mandated)

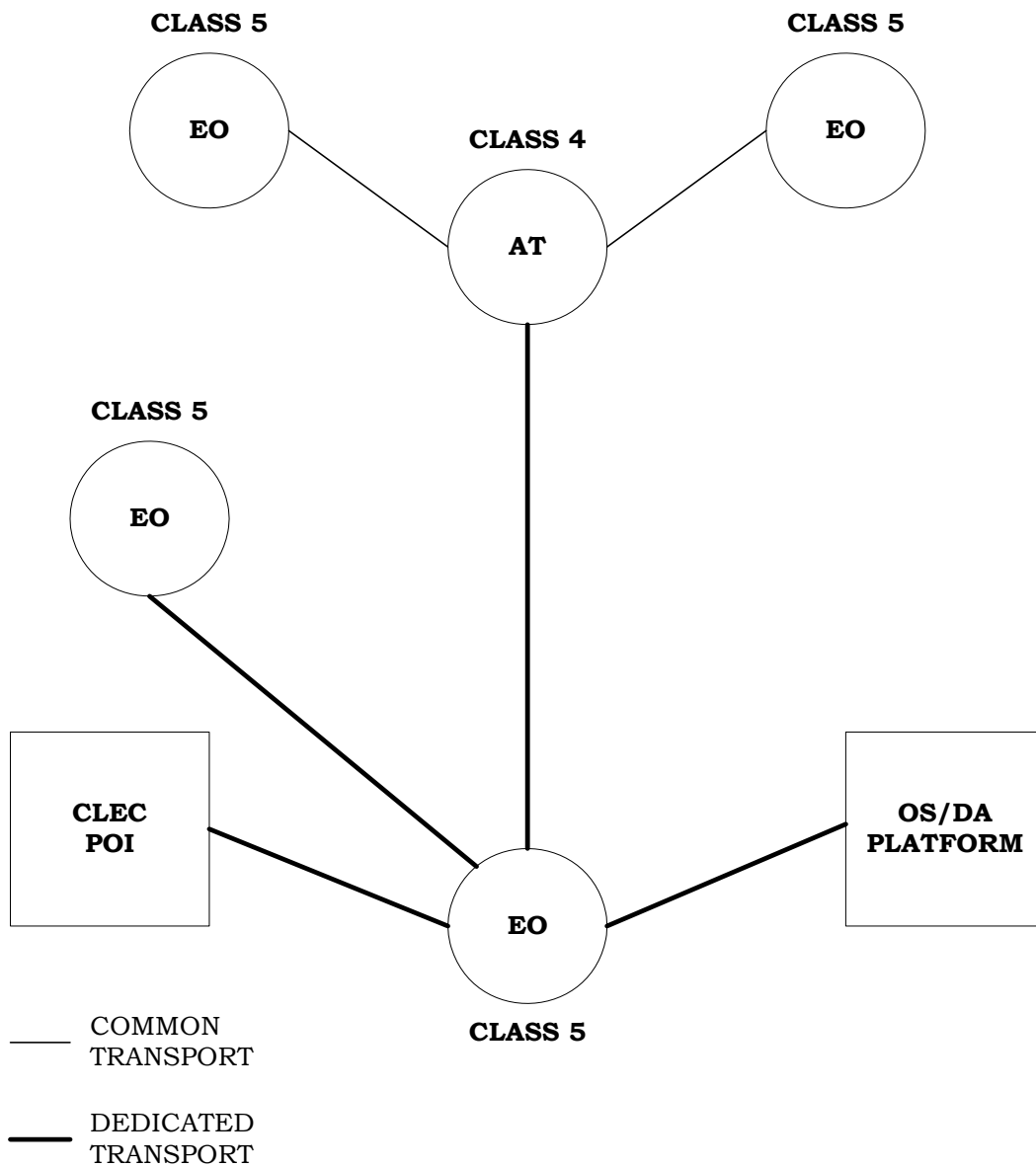
#### OTHER ITEMS FOR DISCUSSION

- LIDB (Name of Provider)
- Service Access Codes (NYY---)
- Loop Types (2w/4w, type/ISDN, HDSL, etc.)
- Ports
- Transport (IOF, Common, Shared)
- Switching Elements (line and trunk Ports)
- Interoffice Transport
- Operator Services and DA
- OSS (Operation Support System)
- NID
- Customize Selective Routing

16.5 **EXHIBIT 1**

**UNBUNDLED TRANSPORT**

**UNBUNDLED SWITCH - LOCAL ONLY**



## NETWORK ASSIGNMENT INFORMATION (NAI)

| <u>DESCRIPTION</u>  | <u>SECTION</u> |
|---|----------------|
| GENERAL_____  | 17.1           |
| ASSUMPTIONS_____  | 17.2           |
| NETWORK ASSIGNMENT INFORMATION ORDERING<br>CONFIGURATIONS_____  | 17.3           |
| 2 POINT SERVICE WITH 1 INTERMEDIATE CFA (ICFA1) _   | 17.3.1         |
| DS1 CIRCUIT ROUTED ON 2 FIBER UNI-DIRECTIONAL<br>NETWORK OVER 3 CUSTOMER DEDICATED RINGS_____   | 17.3.2         |
| DS1 CIRCUIT ROUTED ON 2 FIBER BI-DIRECTIONAL<br>NETWORK OVER 3 CUSTOMER DEDICATED RINGS_____  | 17.3.3         |
| DS1 CIRCUIT ROUTED ON 2 FIBER UNI-DIRECTIONAL<br>NETWORK OVER 3 CUSTOMER DEDICATED RINGS<br>WITH DROP PORT EQUIPMENT ASSIGNMENTS AT<br>LOCATION A OR LOCATION Z (DPEAA/DPEAZ) _____ | 17.3.4         |
| DS1 CIRCUIT DESIGNED AS “DROP AND CONTINUE”<br>WITH DUAL HOME INTERFACE ARRANGEMENTS _____  | 17.3.5         |

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## 17. NETWORK ASSIGNMENT INFORMATION

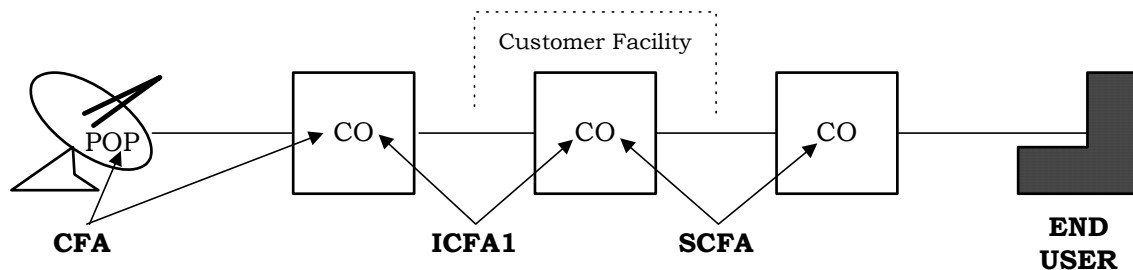
17.1 **GENERAL** Network Assignment Information (NAI) Form is to be used when the customer is providing Intermediate Connecting Facility Assignment(s) (ICFA), alternate facility/ACTL and/or Drop Port Equipment Assignment(s) (DPEAA/DPEAZ). This form may be needed in addition to the service specific form.

### 17.2 ASSUMPTIONS

1. Customers and providers have to agree on availability and use of the NAI Form.
2. The higher level facilities being assigned to will have been previously established.

### 17.3 NETWORK ASSIGNMENT INFORMATION ORDERING CONFIGURATIONS

#### 17.3.1 2 POINT SERVICE WITH 1 INTERMEDIATE CFA (ICFA1)



#### ORDERING REQUIREMENTS

##### ASR FORM

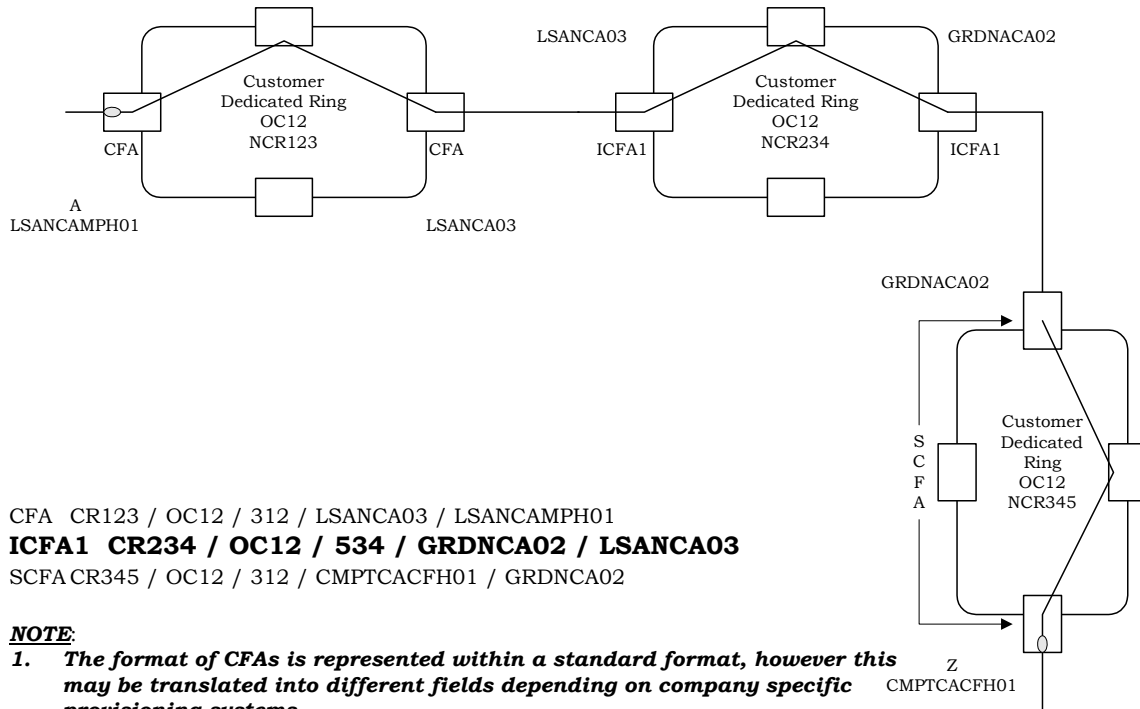
REQTYP = S  
AFO  
QNAI

##### TRANSPORT FORM

##### NAI FORM

REF NUM  
ICFA1

### 17.3.2 DS1 CIRCUIT ROUTED ON 2 FIBER UNI-DIRECTIONAL NETWORK OVER 3 CUSTOMER DEDICATED RINGS



### ORDERING REQUIREMENTS

#### ASR FORM

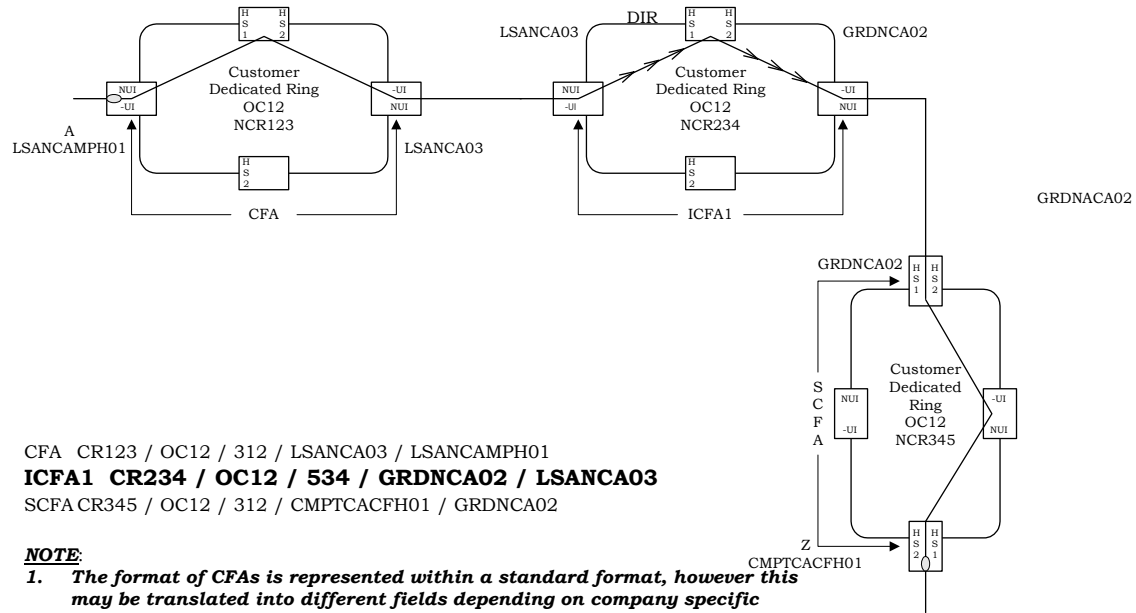
REQTYP = S  
 AFO  
 QNAI

#### TRANSPORT FORM

#### NAI FORM

REF NUM  
 ICFA1  
 IFNI1

### 17.3.3 DS1 CIRCUIT ROUTED ON 2 FIBER BI-DIRECTIONAL NETWORK OVER 3 CUSTOMER DEDICATED RINGS



### ORDERING REQUIREMENTS

#### ASR FORM

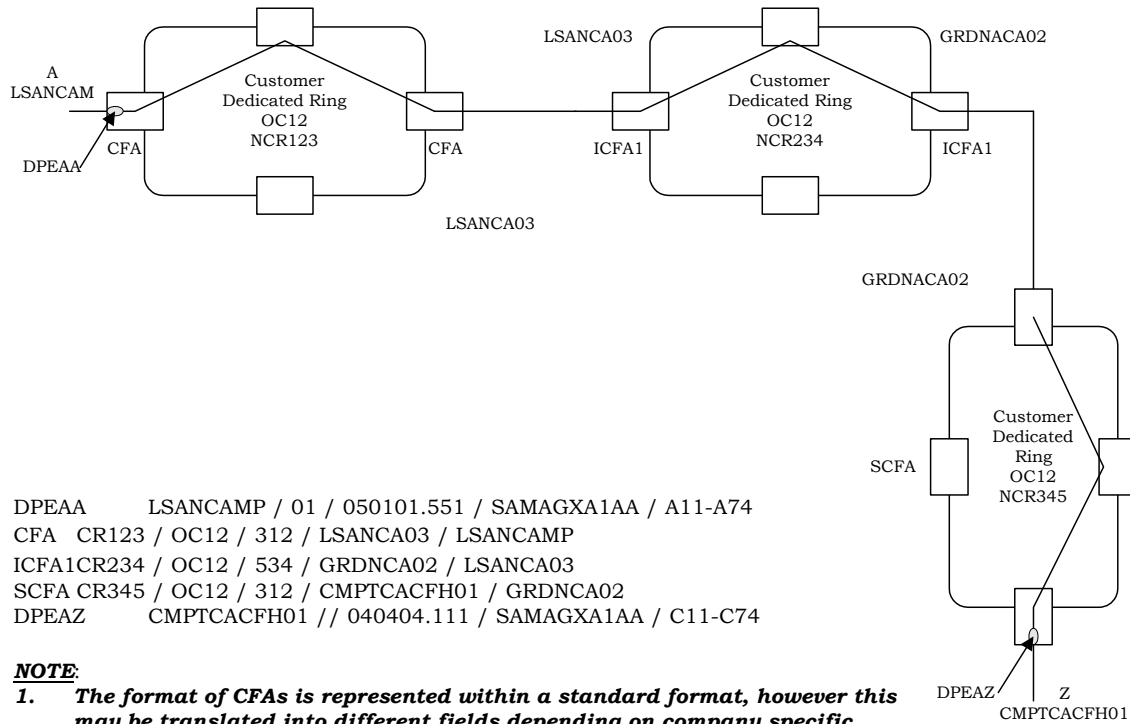
REQTYP = S  
 AFO  
 QNAI

#### TRANSPORT FORM

#### NAI FORM

REF NUM  
 ICFA1  
 DIR  
 IFNI1

### 17.3.4 DS1 CIRCUIT ROUTED ON 2 FIBER UNI-DIRECTIONAL NETWORK OVER 3 CUSTOMER DEDICATED RINGS WITH DROP PORT EQUIPMENT ASSIGNMENTS (DEPAA / DPEAZ)



### ORDERING REQUIREMENTS

#### ASR FORM

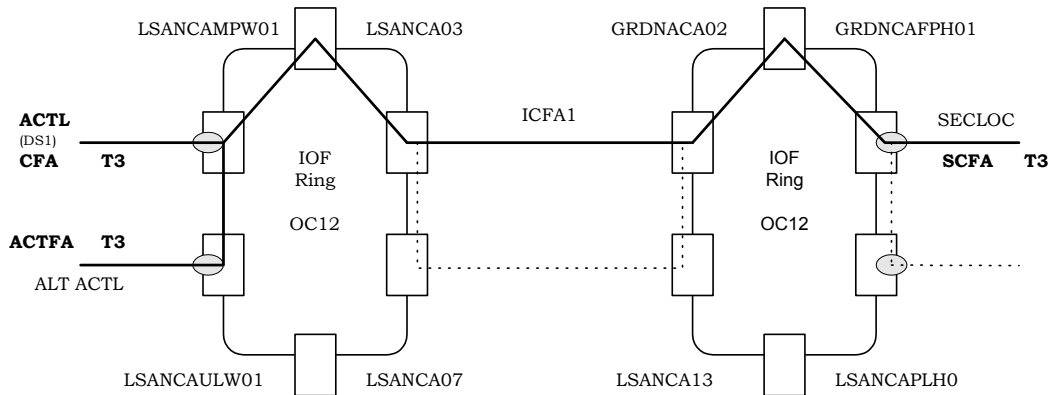
REQTYP = S  
AFO  
QNAI

#### TRANSPORT FORM

#### NAI FORM

REF NUM  
DPEAA  
DPEAZ  
ICFA1  
IFNI1

### 17.3.5 DS1 CIRCUIT DESIGNED AS “DROP & CONTINUE” WITH DUAL HOME INTERFACE ARRANGEMENTS



ACTL LSANCAULW01  
 CFA 201 / T3 / 24 / LSANCAULW01 / LSANCAUL  
 ALT ACTL LSANCAULW01  
 ACFA 201 / T3 / 11 / LSANCAULW01 / LSANCAUL  
 ICFA1202 / T3 / 1 / GRDNCA02 / LSANCA03  
 SECLOC GRDNCAFPH01  
 SCFA 201 / T3 / 13 / GRDNCAFPH01 / GRDNCAFP

**NOTE:**

1. The format of CFAs is represented within a standard format, however this may be translated into different fields depending on company specific provisioning systems.

### ORDERING REQUIREMENTS

#### ASR FORM

REQTYP = S  
 AFO  
 QNAI

#### TRANSPORT FORM

#### NAI FORM

REF NUM  
 ACFA  
 DPEAZ  
 ALT ACTL

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CLARIFICATION/NOTIFICATION REQUEST

DESCRIPTION

SECTION

GENERAL \_\_\_\_\_ 18.1

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## **18. CLARIFICATION/NOTIFICATION REQUEST**

18.1 **GENERAL** The Clarification/Notification Request Form (C/NR) is prepared by the provider and is forwarded to the customer. This form requests information required to continue processing the ASR. The use of this practice is optional.

The intent is to streamline the process between customers and providers to resolve discrepancies on the ASR. It is not intended to replace existing error notification procedures; however, it may be used to augment them.

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## SERVICE ADDRESS LOCATION INFORMATION (SALI)

| <u>DESCRIPTION</u>   | <u>SECTION</u> |
|--|----------------|
| GENERAL _____  | 19.1           |
| ASSUMPTIONS _____  | 19.2           |
| SERVICE ADDRESS LOCATION INFORMATION ORDERING<br>CONFIGURATIONS _____                                  | 19.3           |
| 2 POINT SPECIAL ACCESS SERVICE WITH 1 SERVICE<br>ADDRESS _____   | 19.3.1         |
| MULTIPOINT SPECIAL ACCESS SERVICE WITH<br>2 SERVICE ADDRESSES _____                                    | 19.3.2         |
| A COMBINATION OF SERVICES (A FGA SERVICE<br>IN LATA-A AND A SPECIAL ACCESS SERVICE IN<br>LATA-B) _____ | 19.3.3         |
| 2 POINT END USER SPECIAL ACCESS SERVICE _____  | 19.3.4         |
| 4 NODE RING WITH 2 END USER LOCATIONS _____  | 19.3.5         |

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## **19. SERVICE ADDRESS LOCATION INFORMATION**

**19.1 GENERAL** The Service Address Location Information (SALI) Form is to be used when the customer is providing service address information required for the provisioning of service.

### **19.2 ASSUMPTIONS**

1. The SALI Form will apply to non-telephone company customer designated locations, regardless of the type of service being ordered.
2. A SALI Form may be required by some providers when a customer designated location is identified by a CLLI code, depending on the service being ordered.
3. Individual trading partners will have agreed upon a common set of abbreviations for address information.
4. Each SALI Form will be tied to a specific PRILOC or SECLOC based on REF NUM.
  - a. An entry in the Primary Location Indicator (PI) field on the SALI Form will identify that a specific location is the Primary Location (PRILOC) of the circuit.
  - b. For multi-point service, each SALI REF NUM entry will match the MSL REF NUM with which it is associated.
  - c. PRILOCs and SECLOCs that do not require service address information do not need to be identified on a SALI Form. Section 19 outlines this configuration.
  - d. REF NUM must be presented in sequence of the configuration of the circuit for locations that require service address information be provided.

### 19.3 SERVICE ADDRESS LOCATION INFORMATION ORDERING CONFIGURATIONS

#### 19.3.1 2 POINT SPECIAL ACCESS SERVICE WITH 1 SERVICE ADDRESS

##### ORDERING REQUIREMENTS:

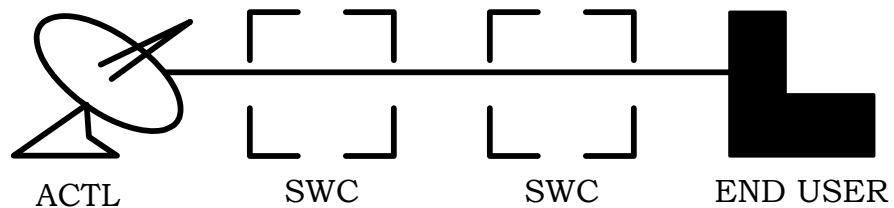
ASR FORM

QSA = 1

TRANSPORT FORM (assumed REF NUM 0001)

SALI FORM

REF NUM = 0001 (assumed REF NUM 0001)



### 19.3.2 MULTI POINT SPECIAL ACCESS SERVICE WITH 2 SERVICE ADDRESSES

#### ORDERING REQUIREMENTS:

ASR FORM

QSA = 2

TRANSPORT FORM

(2) MSL FORMs

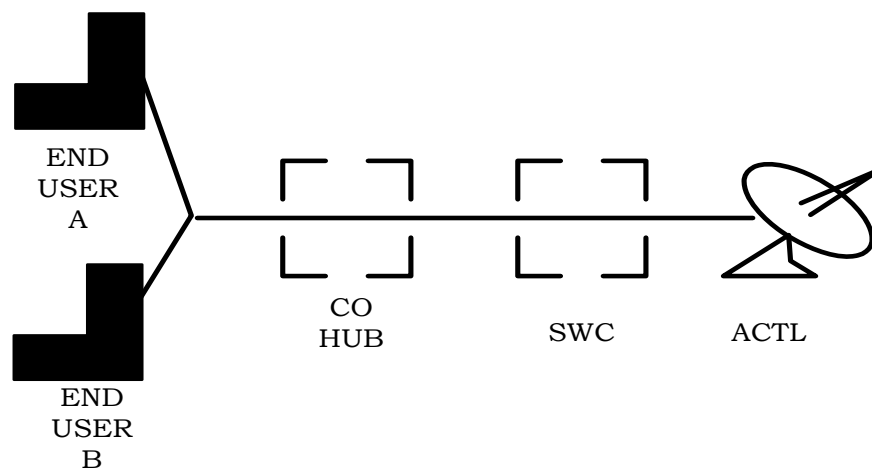
REF NUM = 0002

REF NUM = 0003

(2) SALI FORMs

REF NUM = 0002

REF NUM = 0003

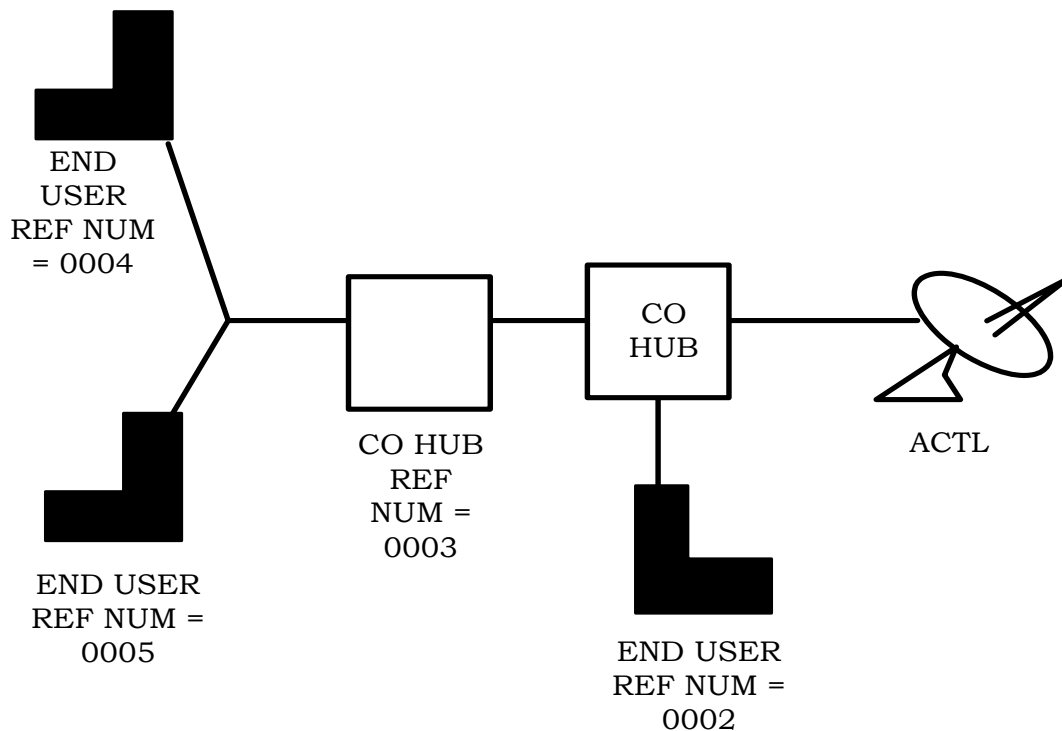


### 19.3.3 A COMBINATION OF SERVICES (A FGA SERVICE IN LATA-A AND A SPECIAL ACCESS SERVICE IN LATA-B)

#### ORDERING REQUIREMENTS:

ASR FORM  
QSA = 3  
TRANSPORT FORM  
(assumed REF NUM = 0001)  
(4) MSL FORMs

SALI FORM  
REF NUM = 0002  
PI = blank  
SALI FORM  
REF NUM = 0004  
PI = blank  
SALI FORM  
REF NUM = 0005  
PI = blank





#### 19.3.4 2 POINT END USER SPECIAL ACCESS SERVICE

##### ORDERING REQUIREMENTS:

ASR FORM

QSA = 2

EUSA FORM

PRILOC

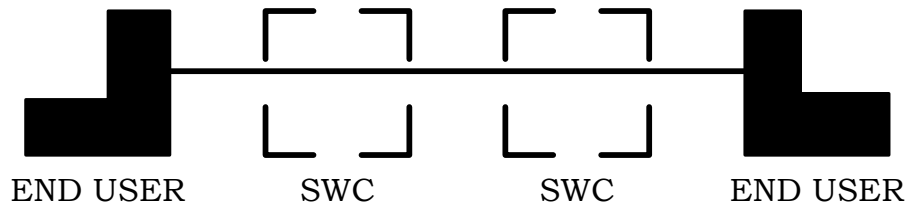
SECLOC

SALI FORM #1

PI = Y (This indicates primary location)

SALI FORM #2

PI = blank



#### 19.3.5 4 NODE RING WITH 2 END USER LOCATIONS

##### ORDERING REQUIREMENTS:

ASR FORM

QSA = 2

RING FORM (Assumed REF NUM = 0001)

ARI FORM #1

REF NUM = 0002

ARI FORM #2

REF NUM = 0003

ARI FORM #3

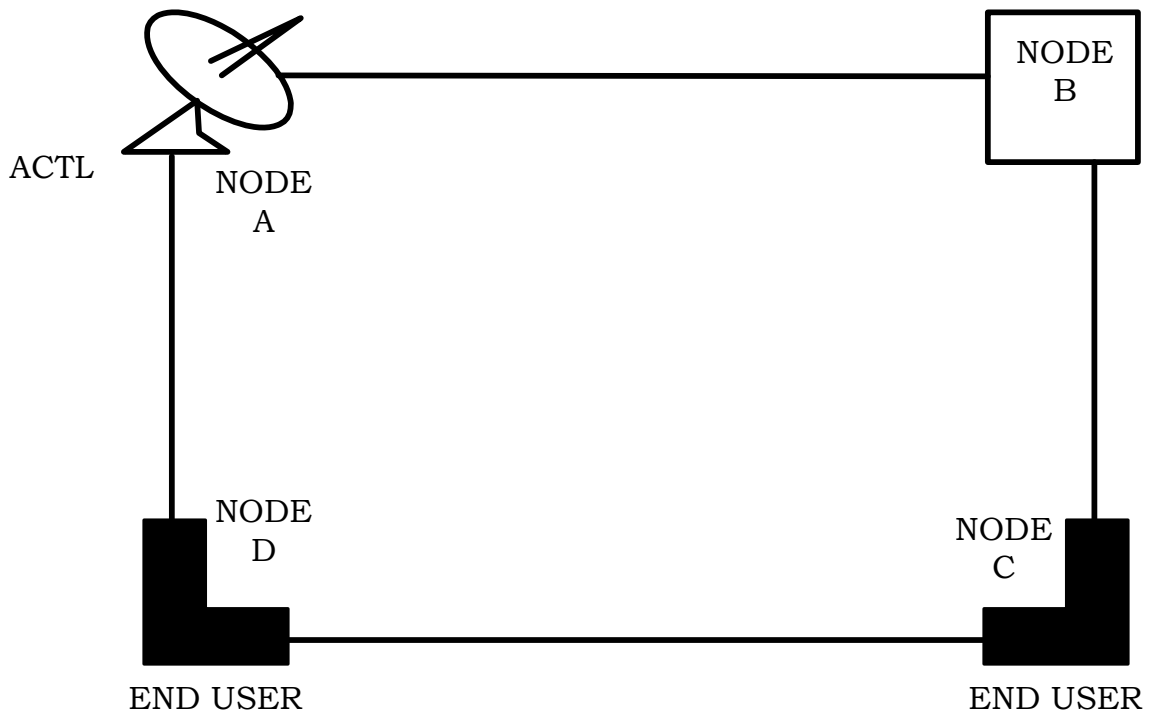
REF NUM = 0004

SALI FORM #1

REF NUM = 0003

SALI FORM #2

REF NUM = 0004



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## PORTS CONFIGURATION (PC)

| <u>DESCRIPTION</u>  | <u>SECTION</u> |
|---|----------------|
| GENERAL _____   | 20.1           |
| ASSUMPTIONS _____   | 20.2           |
| PORTS CONFIGURATION INFORMATION ORDERING _____  | 20.3           |
| 2 POINT SPECIAL ACCESS SERVICE WITH 1 SERVICE<br>ADDRESS WITH PORTS CONFIGURATION REQUIRED __ | 20.3.1         |
| ESTABLISH 4 NODE RING-POP ON RING AT<br>LOCATION C WITH PORTS CONFIGURATION<br>REQUIRED _____ | 20.3.2         |

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## **20. PORTS CONFIGURATION INFORMATION**

**20.1 GENERAL** The Ports Configuration (PC) Form is to be used when the customer is requesting service that utilizes a new generation multiplexer whose ports configuration can not be ascertained within the NCI/SECNCI codes associated with the requested service.

The PC Form may be used in conjunction with the following types of service:

- 2-point Special Access (REQTYP “S”)
- End User Special Access (REQTYP “E”)
- Switched Access (REQTYP “M” combination transport and trunking order only)
- Ring Services (REQTYP “R”)

For Special Access services, the PC Form and the Multipoint Service Legs (MSL) Form are mutually exclusive

### **20.2 ASSUMPTIONS**

1. The PC Form will apply to defining the equipment parameters associated with multiplexers that accommodate drop port combinations that exceed what can typically be defined within the NCI/SECNCI codes.
2. The PORTS field on the Ring Form will continue to be used for Ports information, relative to SONET rings, for multiplexers whose configuration can be defined within the NCI/SECNCI codes.
3. The PC Form will accommodate up to a maximum of ninety-nine (99) port references for a service location (ACTL/FACTL/PRILOC and/or SECLOC).
4. When used in conjunction with REQTYPES “S”, “E”, or “M”, the ports information provided on the PC Form will apply to the specified service location (ACTL/FACTL/PRILOC and/or SECLOC) for all of the circuits requested on the ASR. The customer will enter a value of “0001” in the REF NUM field on the PC Form. REF NUM values greater than “0001” on the PC Form for these REQTYPES are not valid.

## 20.2 **ASSUMPTIONS (CONT'D)**

5. When used in conjunction with REQ TYP "R", the ports information provided on the PC Form will apply to the designated node on the Ring and/or Additional Ring Information (ARI) Forms. The customer will enter the appropriate REF NUM value that matches the REF NUM on the Ring and/or ARI Forms to which the ports information is to be applied.
6. The valid entries defined for the Ports Type (PTYP) field are the known values that are applicable at the time of this ASOG version. Use of the "ZZ" value between trading partners is to be an interim measure and it is expected that those trading partners will follow OBF procedures to acquire a standard code for ongoing purposes.

## 20.3 PORTS CONFIGURATION INFORMATION ORDERING

### 20.3.1 2 POINT SPECIAL ACCESS SERVICE WITH 1 SERVICE ADDRESS WITH PORTS CONFIGURATION REQUIRED AT SECLOC

#### ORDERING REQUIREMENTS:

ASR FORM

QSA = 1

TRANSPORT FORM (assumed REF NUM 0001)

QPR = nn (where 'nn' specifies the number of  
Ports References to be configured)

SALI FORM

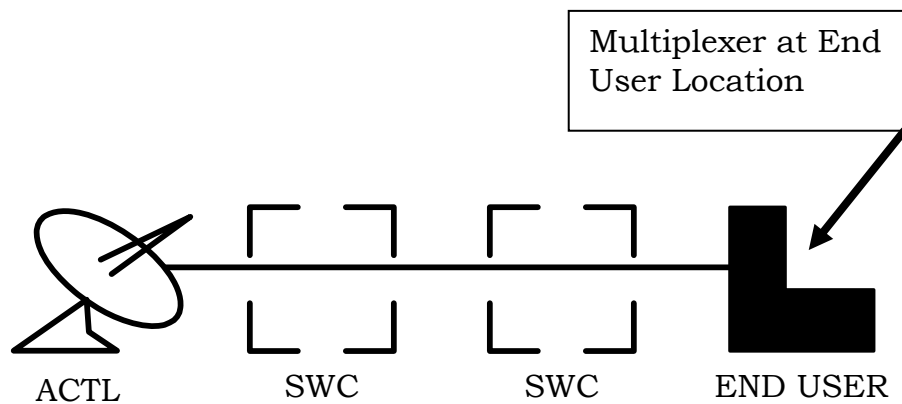
REF NUM = 0001

PC FORM

REF NUM = 0001

PI = blank

PREF = 01 thru 99 equaling the value  
specified in the QPR field on the Transport  
Form

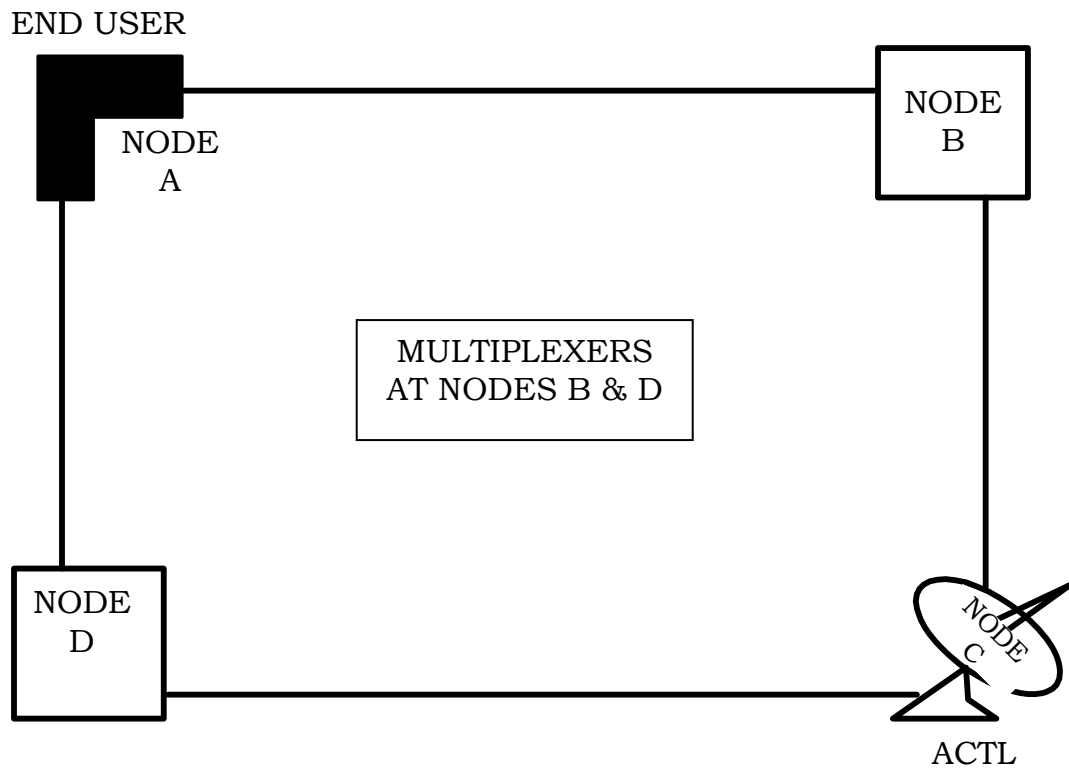




**20.3.2 ESTABLISH A 4 NODE RING-POP ON RING AT LOCATION C  
WITH PORTS CONFIGURATIONS REQUIRED AT 2 NODES**

ORDERING REQUIREMENTS:

ASR FORM  
RING FORM  
(3) ARI FORMs  
SALI FORM  
(2) PC FORMs



### **20.3.2 ESTABLISH A 4 NODE RING-POP ON RING AT LOCATION C WITH PORTS CONFIGURATIONS REQUIRED AT 2 NODES (CONT'D)**

#### ASR FORM

REQTYP = "R"

QTY = "4" (number of segments)

QSA = "1" (number of end user locations with service address)

#### RING FORM (segment A to B)

NC

NCI

PRILOC = "E"

SECLOC = "C" + CLI Code ("B" location)

REF NUM = assumed REF NUM 0001

#### ARI FORM #1 (segment B to C)

NC

NCI

PRILOC = "C" + CLI Code

SECLOC = "C" + CLI Code ("C" location)

REF NUM = "0002"

PQPR = "nn"

#### ARI FORM #2 (segment C to D)

NC

NCI

PRILOC = "C" + CLI Code

SECLOC = "C" + CLI Code ("D" location)

REF NUM = "0003"

#### ARI FORM #3 (segment D to A)

NC

NCI

PRILOC = "C" + CLI Code

SECLOC = "E" + End User Name ("A" location)

REF NUM = "0004"

PQPR = "nn"

**20.3.2 ESTABLISH A 4 NODE RING-POP ON RING AT LOCATION C  
WITH PORTS CONFIGURATIONS REQUIRED AT 2 NODES (CONT'D)**

**SALI FORM**

REF NUM = blank (assumed 0001)  
PI = "Y"  
EU NAME = End User Name  
Service Address Detail as applicable

**PC FORM #1**

REF NUM = "0002" (Node 'B')  
PI = "Y"  
PREF = 01 thru 99 equaling the value specified in the PQPR field on  
the ARI Form#1

**PC FORM #2**

REF NUM = "0004" (Node 'D')  
PI = "Y"  
PREF = 01 thru 99 equaling the value specified in the PQPR field on  
the ARI Form#3

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## ETHERNET VIRTUAL CONNECTION (EVC)

| <u>DESCRIPTION</u>  | <u>SECTION</u> |
|---|----------------|
| GENERAL _____   | 21.1           |
| EVC ORDERING GUIDELINES _____   | 21.2           |
| STAND ALONE ORDERING _____  | 21.2.1         |
| COMBINATION ORDERING _____  | 21.2.2         |
| STAND ALONE EVC CONFIGURATIONS _____  | 21.3           |
| NEW INSTALL MULTIPOINT TO MULTIPOINT _____  | 21.3.1         |
| NEW INSTALL MULTIPOINT TO MULTIPOINT WITH BGP _____   | 21.3.2         |
| CHANGE REQUEST – MULTIPOINT TO MULTIPOINT _____<br>Remove one level of service and changed bandwidth              | 21.3.3         |
| CHANGE REQUEST – MULTIPOINT TO MULTIPOINT _____<br>Remove existing UNI termination and add new<br>UNI termination | 21.3.4         |
| NEW INSTALL - POINT TO POINT _____  | 21.3.5         |
| NEW INSTALL – POINT TO POINT WITH VLAN STACKING _____   | 21.3.6         |
| NEW INSTALL - POINT TO POINT WITH BGP _____   | 21.3.7         |
| NEW INSTALL – EVC MEET POINT _____  | 21.3.8         |
| COMBINATION EVC CONFIGURATIONS _____  | 21.4           |
| NEW INSTALL (REQTYP S)-PHYSICAL PORT WITH<br>MULTIPOINT TO MULTIPOINT EVC _____                                   | 21.4.1         |
| NEW INSTALL (REQTYP E)-PHYSICAL PORT WITH<br>MULTIPOINT TO MULTIPOINT EVC _____                                   | 21.4.2         |
| NEW INSTALL (REQTYP S)-PHYSICAL PORT WITH<br>POINT TO POINT EVC _____   | 21.4.3         |

NEW INSTALL (REQTYP E)-PHYSICAL PORT WITH  
POINT TO POINT EVC \_\_\_\_\_ 21.4.4

DISCONNECT (REQTYP S)-PHYSICAL PORT WITH  
MULTIPOINT TO MULTIPOINT EVC \_\_\_\_\_ 21.4.5

DISCONNECT (REQTYP E)-PHYSICAL PORT WITH  
POINT TO POINT EVC \_\_\_\_\_ 21.4.6

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## **21. ETHERNET VIRTUAL CONNECTION SERVICE (EVC)**

**21.1 GENERAL** Ethernet Virtual Connection Service involves the ordering of the virtual Ethernet path through the network. At least one of the physical ports to which the Ethernet virtual connection service that will either ingress or egress must already be established or be in the ordering process prior to the submission of an EVC request or an EVC and UNI/ENNI (physical port) combination request.

Throughout this document, the term “EVC” shall be interpreted to include both Ethernet Virtual Connections (EVC), and Operator Virtual Connections (OVC).

There are two different service configurations based on the segmented ordering of ports and virtual connections. One being Metro Ethernet Services and the other being specialized Ethernet aggregation services based upon provider service offerings.

Stand alone ordering of an EVC differs from the standard ordering process in that the EVC Form is treated as the service specific form. Therefore an ASR Form and an EVC Form are all that are required when ordering an EVC. The ASR Form will identify that an EVC is being ordered by the population of the Ethernet Virtual Connection Indicator (EVCI=A). The EVC Form will contain all the EVC attributes. No other forms should accompany this request. The REQ TYP associated with ordering of a stand alone EVC is “S”.

Combination ordering follows the standard ordering process in that a service specific form will accompany the request. The different service configurations are as follows:

- Switched Ethernet Services (Metro Ethernet model)
- Specialized Ethernet aggregation services

For Switched Ethernet Services the standard ordering process will include a Switched Ethernet Services (SES) Form. The ASR will identify that a Switched Ethernet combination is being ordered by the population of the Ethernet Virtual Connection Indicator (EVCI=B) and the Switched Ethernet Indicator (SEI = Y). The EVC Form will contain the EVC attributes and the SES Form will contain the UNI/ENNI attributes. The REQ TYP associated with ordering of a Switched Ethernet combination is “S” or “E”.



## 21.1 **GENERAL** (continued)

For specialized Ethernet aggregation services the standard ordering process will include either a Transport or an End User Special Access Form. The ASR will identify that an EVC and a specialized Ethernet aggregation service is being ordered by the population of the Ethernet Virtual Connection Indicator (EVC=I=B), and the SEI field is blank. The EVC Form will contain the EVC attributes and the Transport/EUSA Form will contain the specialized Ethernet aggregation attributes. The REQ TYP associated with ordering of a specialized Ethernet aggregation combination is “S” or “E”.

## 21.2 **ETHERNET VIRTUAL CONNECTION ORDERING GUIDELINES**

### **21.2.1 STAND ALONE ORDERING**

The following items pertain to the ordering of an Ethernet Virtual Connection where no physical connection is included on the same request.

- Only one, (QTY = 1), EVC/OVC can be ordered on a single ASR
- A single EVC/OVC can be ordered with multiple levels of service (LOS) or a single level of service
- Up to 20 UNI/ENNI terminations may be associated to the EVC/OVC on the requested ASR
- If more than 20 UNI/ENNI terminations are needed, additional ASRs must be provided with “C” Activity
- The Ethernet virtual connection switch CLI will be provided on the EVC Form therefore a SALI Form is prohibited
- The EVC Form becomes the service specific form for an EVC/OVC request
- Ordering the physical and virtual connection on a single ASR is not permitted

### **21.2.2 COMBINATION ORDERING**

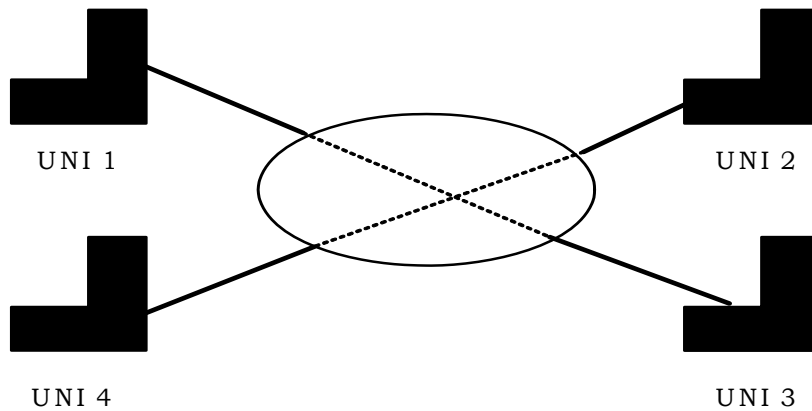
The following items pertain to the ordering of an Ethernet Virtual Connection where the physical connection is included on the same request.

- Only one, (QTY = 1), EVC/OVC can be ordered on a single ASR
- Only one, (QTY=1), UNI/ENNI can be ordered together with the EVC on a single ASR.
- A single EVC/OVC can be ordered with multiple levels of service (LOS) or a single level of service
- Up to 20 UNI/ENNI terminations may be associated to the EVC on the requested ASR
  - If more than 20 UNI/ENNI terminations are needed, multiple ASRs must be provided. Additional ASRs are to be issued as stand alone with “C” Activity.
- A service specific form will accompany an EVC request

### **21.3 STAND ALONE ETHERNET VIRTUAL CONNECTION CONFIGURATIONS**

The following configurations are examples only. The fields listed are common to the EVC service. For specific application, additional data elements may apply.

Throughout these examples, the term “UNI” shall be interpreted to include UNI, and ENNI.



### 21.3.1 NEW INSTALL – MULTIPOINT TO MULTIPOINT

#### Multipoint to Multipoint EVC PORT BASED VLAN with PBIT and 3 LOS

|                            |         |        |         |                                     |           |      |        |
|----------------------------|---------|--------|---------|-------------------------------------|-----------|------|--------|
| <b>ASR Form</b>            |         |        |         |                                     |           |      |        |
| REQTYP = S                 |         |        |         |                                     |           |      |        |
| ACT = N                    |         |        |         |                                     |           |      |        |
| ACTL = Prohibited          |         |        |         |                                     |           |      |        |
| QTY = 1                    |         |        |         |                                     |           |      |        |
| EVC I = A                  |         |        |         |                                     |           |      |        |
| <b>EVC Form</b>            |         |        |         |                                     |           |      |        |
| <b>EVC Detail Section</b>  |         |        |         | <b>UNI Mapping Section – UNI #1</b> |           |      |        |
| EVC NUM = 0001             |         |        |         | UREF = 1                            |           |      |        |
| NC = MP2MP                 |         |        |         | UACT = N                            |           |      |        |
| NUT = 04                   |         |        |         | NCI = Port based/VLAN/PBIT          |           |      |        |
| EVCID = N/A                |         |        |         | L2CP = As needed                    |           |      |        |
|                            |         |        |         | RUID = ECCKT of UNI#1               |           |      |        |
|                            |         |        |         | Or                                  |           |      |        |
|                            |         |        |         | RPON = PON of UNI #1 ASR            |           |      |        |
|                            |         |        |         | EVCSP = CLI                         |           |      |        |
|                            |         |        |         | VACT = Optional                     |           |      |        |
|                            |         |        |         | CE-VLAN = Optional                  |           |      |        |
|                            |         |        |         | S-VACT = As needed                  |           |      |        |
|                            |         |        |         | S-VLAN = As needed                  |           |      |        |
|                            |         |        |         | SVP = As needed                     |           |      |        |
| <b>UREF #1 LOS Mapping</b> |         |        |         |                                     |           |      |        |
| LREF                       | LOS ACT | LOS    | or SPEC | PBIT                                | BDW       | DSCP | or TOS |
| 1                          | N       | GOLD   |         | Priority Bit value 0 - 7            | Bandwidth |      |        |
| 2                          | N       | SILVER |         | Priority Bit value 0 - 7            | Bandwidth |      |        |
| 3                          | N       | BRONZE |         | Priority Bit value 0 - 7            | Bandwidth |      |        |

### 21.3.1 NEW INSTALL – MULTIPOINT TO MULTIPOINT (CONTINUED)

| UNI Mapping Section – UNI #2 |        |                      |                             |           |      |        |
|------------------------------|--------|----------------------|-----------------------------|-----------|------|--------|
| UREF                         | =      | 2                    |                             |           |      |        |
| UACT                         | =      | N                    |                             |           |      |        |
| NCI                          | =      | Port based/VLAN/PBIT |                             |           |      |        |
| L2CP                         | =      | As needed            |                             |           |      |        |
| RUID                         | =      | ECCKT of UNI#2       |                             |           |      |        |
| or                           |        |                      |                             |           |      |        |
| RPON                         | =      | PON of UNI#2 ASR     |                             |           |      |        |
| EVCSP                        | =      | CLLI                 |                             |           |      |        |
| VACT                         | =      | Optional             |                             |           |      |        |
| CE-VLAN                      | =      | Optional             |                             |           |      |        |
| S-VACT                       | =      | As needed            |                             |           |      |        |
| S-VLAN                       | =      | As needed            |                             |           |      |        |
| SVP                          | =      | As needed            |                             |           |      |        |
| UREF #2 LOS Mapping          |        |                      |                             |           |      |        |
| LOS ACT                      | LOS    | or SPEC              | PBIT                        | BDW       | DSCP | or TOS |
| 1) N                         | GOLD   |                      | Priority Bit<br>value 0 - 7 | Bandwidth |      |        |
| 2) N                         | SILVER |                      | Priority Bit<br>value 0 - 7 | Bandwidth |      |        |
| 3) N                         | BRONZE |                      | Priority Bit<br>value 0 - 7 | Bandwidth |      |        |
| UNI Mapping Section – UNI #3 |        |                      |                             |           |      |        |
| UREF                         | =      | 3                    |                             |           |      |        |
| UACT                         | =      | N                    |                             |           |      |        |
| NCI                          | =      | Port based/VLAN/PBIT |                             |           |      |        |
| L2CP                         | =      | As needed            |                             |           |      |        |
| RUID                         | =      | ECCKT of UNI #3      |                             |           |      |        |
| or                           |        |                      |                             |           |      |        |
| RPON                         | =      | PON of UNI #3 ASR    |                             |           |      |        |
| EVCSP                        | =      | CLLI                 |                             |           |      |        |
| VACT                         | =      | Optional             |                             |           |      |        |
| CE-VLAN                      | =      | Optional             |                             |           |      |        |
| S-VACT                       | =      | As needed            |                             |           |      |        |
| S-VLAN                       | =      | As needed            |                             |           |      |        |
| SVP                          | =      | As needed            |                             |           |      |        |

### 21.3.1 NEW INSTALL – MULTIPOINT TO MULTIPOINT (CONTINUED)

| UREF #3 LOS Mapping          |         |             |                      |                          |           |             |  |
|------------------------------|---------|-------------|----------------------|--------------------------|-----------|-------------|--|
| LREF                         | LOS ACT | LOS or SPEC |                      | PBIT                     | BDW       | DSCP or TOS |  |
| 1                            | N       | SILVER      |                      | Priority Bit value 0 - 7 | Bandwidth |             |  |
| 2                            | N       | BRONZE      |                      | Priority Bit value 0 – 7 | Bandwidth |             |  |
| UNI Mapping Section – UNI #4 |         |             |                      |                          |           |             |  |
| UREF                         |         | =           | 4                    |                          |           |             |  |
| UACT                         |         | =           | N                    |                          |           |             |  |
| NCI                          |         | =           | Port based/VLAN/PBIT |                          |           |             |  |
| L2CP                         |         | =           | As needed            |                          |           |             |  |
| RUID                         |         | =           | ECCKT of UNI #4      |                          |           |             |  |
| or                           |         |             |                      |                          |           |             |  |
| RPON                         |         | =           | PON of UNI #4 ASR    |                          |           |             |  |
| EVCSP                        |         | =           | CLLI                 |                          |           |             |  |
| VACT                         |         | =           | Optional             |                          |           |             |  |
| CE-VLAN                      |         | =           | Optional             |                          |           |             |  |
| S-VACT                       |         | =           | As needed            |                          |           |             |  |
| S-VLAN                       |         | =           | As needed            |                          |           |             |  |
| SVP                          |         | =           | As needed            |                          |           |             |  |
| UREF #4 LOS Mapping          |         |             |                      |                          |           |             |  |
| LREF                         | LOS ACT | LOS or SPEC |                      | PBIT                     | BDW       | DSCP or TOS |  |
| 1                            | N       | GOLD        |                      | Priority Bit value 0 - 7 | Bandwidth |             |  |
| 2                            | N       | BRONZE      |                      | Priority Bit value 0 – 7 | Bandwidth |             |  |

## 21.3.2 NEW INSTALL – MULTIPOINT TO MULTIPOINT WITH BGP

### Multipoint to Multipoint EVC with BGP at UNI Termination 3

|                            |            |            |         |                                     |           |                      |        |
|----------------------------|------------|------------|---------|-------------------------------------|-----------|----------------------|--------|
| <b>ASR Form</b>            |            |            |         |                                     |           |                      |        |
| REQTYP                     | =          | S          |         |                                     |           |                      |        |
| ACT                        | =          | N          |         |                                     |           |                      |        |
| ACTL                       | =          | Prohibited |         |                                     |           |                      |        |
| QTY                        | =          | 1          |         |                                     |           |                      |        |
| EVCID                      | =          | A          |         |                                     |           |                      |        |
| <b>EVC Form</b>            |            |            |         |                                     |           |                      |        |
| <b>EVC Detail Section</b>  |            |            |         | <b>UNI Mapping Section – UNI #1</b> |           |                      |        |
| EVC NUM                    | =          | 0001       |         | UREF                                | =         | 1                    |        |
| NC                         | =          | MP2MP      |         | UACT                                | =         | N                    |        |
| NUT                        | =          | 04         |         | NCI                                 | =         | Port based/VLAN/PBIT |        |
| EVCID                      | =          | N/A        |         | L2CP                                | =         | As needed            |        |
|                            |            |            |         | RUID                                | =         | ECCKT of UNI#1       |        |
|                            |            |            |         | Or                                  |           |                      |        |
|                            |            |            |         | RPON                                | =         | PON of UNI #1 ASR    |        |
|                            |            |            |         | EVCSP                               | =         | CLLI                 |        |
|                            |            |            |         | VACT                                | =         | Optional             |        |
|                            |            |            |         | CE-VLAN                             | =         | Optional             |        |
|                            |            |            |         | S-VACT                              | =         | As needed            |        |
|                            |            |            |         | S-VLAN                              | =         | As needed            |        |
|                            |            |            |         | SVP                                 | =         | As needed            |        |
|                            |            |            |         | ASN                                 | =         | Prohibited           |        |
|                            |            |            |         | VPN-ID                              | =         | Prohibited           |        |
| <b>UREF #1 LOS Mapping</b> |            |            |         |                                     |           |                      |        |
| LREF                       | LOS<br>ACT | LOS        | or SPEC | PBIT                                | BDW       | DSCP                 | or TOS |
| 1                          | N          | GOLD       |         | Priority Bit<br>value 0 - 7         | Bandwidth |                      |        |
| 2                          | N          | SILVER     |         | Priority Bit<br>value 0 - 7         | Bandwidth |                      |        |
| 3                          | N          | BRONZE     |         | Priority Bit<br>value 0 - 7         | Bandwidth |                      |        |

### 21.3.2 NEW INSTALL – MULTIPOINT TO MULTIPOINT WITH BGP (CONTINUED)

| UNI Mapping Section – UNI #2 |        |                      |                             |           |      |        |
|------------------------------|--------|----------------------|-----------------------------|-----------|------|--------|
| UREF                         | =      | 2                    |                             |           |      |        |
| UACT                         | =      | N                    |                             |           |      |        |
| NCI                          | =      | Port based/VLAN/PBIT |                             |           |      |        |
| L2CP                         | =      | As needed            |                             |           |      |        |
| RUID                         | =      | ECCKT of UNI#2       |                             |           |      |        |
| or                           |        |                      |                             |           |      |        |
| RPON                         | =      | PON of UNI#2 ASR     |                             |           |      |        |
| EVCSP                        | =      | CLLI                 |                             |           |      |        |
| VACT                         | =      | Optional             |                             |           |      |        |
| CE-VLAN                      | =      | Optional             |                             |           |      |        |
| S-VACT                       | =      | As needed            |                             |           |      |        |
| S-VLAN                       | =      | As needed            |                             |           |      |        |
| SVP                          | =      | As needed            |                             |           |      |        |
| ASN                          | =      | Prohibited           |                             |           |      |        |
| VPN-ID                       | =      | Prohibited           |                             |           |      |        |
| UREF #2 LOS Mapping          |        |                      |                             |           |      |        |
| LOS ACT                      | LOS    | or SPEC              | PBIT                        | BDW       | DSCP | or TOS |
| 1) N                         | GOLD   |                      | Priority Bit<br>value 0 - 7 | Bandwidth |      |        |
| 2) N                         | SILVER |                      | Priority Bit<br>value 0 - 7 | Bandwidth |      |        |
| 3) N                         | BRONZE |                      | Priority Bit<br>value 0 - 7 | Bandwidth |      |        |
| UNI Mapping Section – UNI #3 |        |                      |                             |           |      |        |
| UREF                         | =      | 3                    |                             |           |      |        |
| UACT                         | =      | N                    |                             |           |      |        |
| NCI                          | =      | Required             |                             |           |      |        |
| L2CP                         | =      | As needed            |                             |           |      |        |
| RUID                         | =      | ECCKT of UNI #3      |                             |           |      |        |
| or                           |        |                      |                             |           |      |        |
| RPON                         | =      | PON of UNI #3 ASR    |                             |           |      |        |
| EVCSP                        | =      | CLLI                 |                             |           |      |        |
| VACT                         | =      | Optional             |                             |           |      |        |
| CE-VLAN                      | =      | Optional             |                             |           |      |        |
| S-VACT                       | =      | Prohibited           |                             |           |      |        |
| S-VLAN                       | =      | Prohibited           |                             |           |      |        |
| SVP                          | =      | Prohibited           |                             |           |      |        |
| ASN                          | =      | Required             |                             |           |      |        |
| VPN-ID                       | =      | Optional             |                             |           |      |        |



### 21.3.2 NEW INSTALL – MULTIPOINT TO MULTIPOINT WITH BGP (CONTINUED)

| UREF #3 LOS Mapping          |         |             |                      |                          |           |             |  |
|------------------------------|---------|-------------|----------------------|--------------------------|-----------|-------------|--|
| LREF                         | LOS ACT | LOS or SPEC |                      | PBIT                     | BDW       | DSCP or TOS |  |
| 1                            | N       | SILVER      |                      |                          | Bandwidth |             |  |
| UNI Mapping Section – UNI #4 |         |             |                      |                          |           |             |  |
| UREF                         |         | =           | 4                    |                          |           |             |  |
| UACT                         |         | =           | N                    |                          |           |             |  |
| NCI                          |         | =           | Port based/VLAN/PBIT |                          |           |             |  |
| L2CP                         |         | =           | As needed            |                          |           |             |  |
| RUID                         |         | =           | ECCKT of UNI #4      |                          |           |             |  |
| or                           |         |             |                      |                          |           |             |  |
| RPON                         |         | =           | PON of UNI #4 ASR    |                          |           |             |  |
| EVCSP                        |         | =           | CLLI                 |                          |           |             |  |
| VACT                         |         | =           | Optional             |                          |           |             |  |
| CE-VLAN                      |         | =           | Optional             |                          |           |             |  |
| S-VACT                       |         | =           | As needed            |                          |           |             |  |
| S-VLAN                       |         | =           | As needed            |                          |           |             |  |
| SVP                          |         | =           | As needed            |                          |           |             |  |
| ASN                          |         | =           | Prohibited           |                          |           |             |  |
| VPN-ID                       |         | =           | Prohibited           |                          |           |             |  |
| UREF #4 LOS Mapping          |         |             |                      |                          |           |             |  |
| LREF                         | LOS ACT | LOS or SPEC |                      | PBIT                     | BDW       | DSCP or TOS |  |
| 1                            | N       | GOLD        |                      | Priority Bit value 0 - 7 | Bandwidth |             |  |
| 2                            | N       | BRONZE      |                      | Priority Bit value 0 – 7 | Bandwidth |             |  |

### 21.3.3 CHANGE REQUEST – MULTIPOINT TO MULTIPOINT

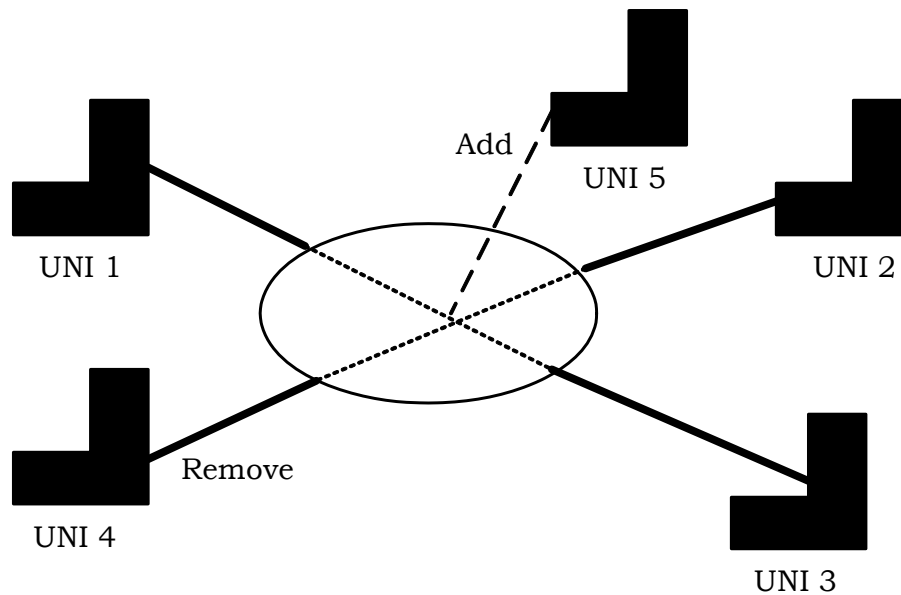
|  |            |        |         |                             |                  |             |  |
|--|------------|--------|---------|-----------------------------|------------------|-------------|--|
| <b>Original -Multipoint to Multipoint EVC PORT BASED VLAN with PBIT and 3 LOS</b>  |            |        |         |                             |                  |             |  |
| <b>Remove Bronze LOS and change bandwidth on Silver LOS</b>  |            |        |         |                             |                  |             |  |
| <b>ASR Form</b>  |            |        |         |                             |                  |             |  |
| REQ TYP        =     S<br>ACT            =     C<br>ACTL          =     Prohibited<br>QTY            =     1<br>EVCI          =     A  |            |        |         |                             |                  |             |  |
| <b>EVC Form</b>  |            |        |         |                             |                  |             |  |
| <b>EVC Detail Section</b>  |            |        |         |                             |                  |             |  |
| EVC NUM       =     0001<br>NC             =     MP2MP<br>NUT            =     04<br>EVCID         =     EVCID   |            |        |         |                             |                  |             |  |
| <b>UNI Mapping Section – UNI #1</b>  |            |        |         |                             |                  |             |  |
| UREF           =     1<br>UACT           =     C<br>NCI            =     Port based/VLAN/PBIT<br>L2CP          =     As Needed<br>RUID          =     ECCKT of UNI #1<br>EVCSP        =     CLI<br>VACT          =     Optional<br>CE-VLAN      =     Optional<br>S-VACT        =     As needed<br>S-VLAN       =     As needed<br>SVP           =     As needed |            |        |         |                             |                  |             |  |
| <b>UREF #1 LOS Mapping</b>   |            |        |         |                             |                  |             |  |
| LREF   | LOS<br>ACT | LOS    | or SPEC | PBIT                        | BDW              | DSCP or TOS |  |
| 1  | C          | SILVER |         | Priority Bit<br>value 0 - 7 | New<br>Bandwidth |             |  |
| 2  | D          | BRONZE |         |                             |                  |             |  |

### 21.3.3 CHANGE REQUEST - MULTIPOINT TO MULTIPOINT (CONTINUED)

| UNI Mapping Section – UNI #2 |         |             |                      |                          |               |             |  |  |
|------------------------------|---------|-------------|----------------------|--------------------------|---------------|-------------|--|--|
| UREF                         |         | =           | 2                    |                          |               |             |  |  |
| UACT                         |         | =           | C                    |                          |               |             |  |  |
| NCI                          |         | =           | Port based/VLAN/PBIT |                          |               |             |  |  |
| L2CP                         |         | =           | As Needed            |                          |               |             |  |  |
| RUID                         |         | =           | ECCKT of UNI #2      |                          |               |             |  |  |
| EVCSP                        |         | =           | CLLI                 |                          |               |             |  |  |
| VACT                         |         | =           | Optional             |                          |               |             |  |  |
| CE-VLAN                      |         | =           | Optional             |                          |               |             |  |  |
| S-VACT                       |         | =           | As needed            |                          |               |             |  |  |
| S-VLAN                       |         | =           | As needed            |                          |               |             |  |  |
| SVP                          |         | =           | As needed            |                          |               |             |  |  |
| UREF #2 LOS Mapping          |         |             |                      |                          |               |             |  |  |
| LREF                         | LOS ACT | LOS or SPEC |                      | PBIT                     | BDW           | DSCP or TOS |  |  |
| 1                            | C       | SILVER      |                      | Priority Bit value 0 - 7 | New Bandwidth |             |  |  |
| 2                            | D       | BRONZE      |                      |                          |               |             |  |  |
| UNI Mapping Section – UNI #3 |         |             |                      |                          |               |             |  |  |
| UREF                         |         | =           | 3                    |                          |               |             |  |  |
| UACT                         |         | =           | C                    |                          |               |             |  |  |
| NCI                          |         | =           | Port based/VLAN/PBIT |                          |               |             |  |  |
| L2CP                         |         | =           | As Needed            |                          |               |             |  |  |
| RUID                         |         | =           | ECCKT of UNI #3      |                          |               |             |  |  |
| EVCSP                        |         | =           | CLLI                 |                          |               |             |  |  |
| VACT                         |         | =           | Optional             |                          |               |             |  |  |
| CE-VLAN                      |         | =           | Optional             |                          |               |             |  |  |
| S-VACT                       |         | =           | As needed            |                          |               |             |  |  |
| S-VLAN                       |         | =           | As needed            |                          |               |             |  |  |
| SVP                          |         | =           | As needed            |                          |               |             |  |  |
| UREF #3 LOS Mapping          |         |             |                      |                          |               |             |  |  |
| LREF                         | LOS ACT | LOS or SPEC |                      | PBIT                     | BDW           | DSCP or TOS |  |  |
| 1                            | C       | SILVER      |                      | Priority Bit value 0 - 7 | New Bandwidth |             |  |  |
| 2                            | D       | BRONZE      |                      |                          |               |             |  |  |

### 21.3.3 CHANGE REQUEST - MULTIPOINT TO MULTIPOINT (CONTINUED)

| UNI Mapping Section – UNI #4 |         |             |  |      |     |             |  |
|------------------------------|---------|-------------|--|------|-----|-------------|--|
| UREF = 4                     |         |             |  |      |     |             |  |
| UACT = C                     |         |             |  |      |     |             |  |
| NCI = Port based/VLAN/PBIT   |         |             |  |      |     |             |  |
| L2CP = As Needed             |         |             |  |      |     |             |  |
| RUID = ECCKT of UNI #4       |         |             |  |      |     |             |  |
| EVCSP = CLLI                 |         |             |  |      |     |             |  |
| VACT = Optional              |         |             |  |      |     |             |  |
| CE-VLAN = Optional           |         |             |  |      |     |             |  |
| S-VACT = As needed           |         |             |  |      |     |             |  |
| S-VLAN = As needed           |         |             |  |      |     |             |  |
| SVP = As needed              |         |             |  |      |     |             |  |
| UREF #4 LOS Mapping          |         |             |  |      |     |             |  |
| LREF                         | LOS ACT | LOS or SPEC |  | PBIT | BDW | DSCP or TOS |  |
| 1                            | D       | BRONZE      |  |      |     |             |  |

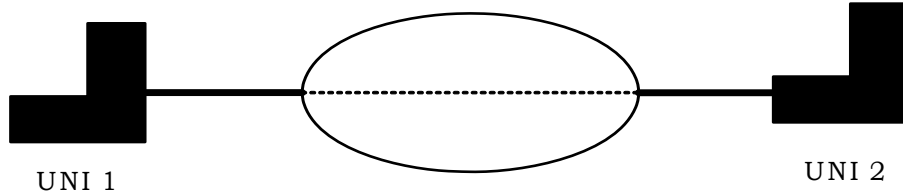


#### 21.3.4 CHANGE REQUEST – MULTIPOINT TO MULTIPOINT

|   |  |
|---|--|
| <b>Original -Multipoint to Multipoint EVC PORT BASED VLAN with PBIT and 3 LOS</b>                   |  |
| <b>Remove UNI Termination Reference #4 and Adding New UNI Reference #5 with Gold and Bronze LOS</b> |  |
| <b>ASR Form</b>   |  |
| REQTYP = S  |  |
| ACT = C   |  |
| ACTL = Prohibited   |  |
| QTY = 1   |  |
| EVCID = A   |  |
| <b>EVC Form</b>   |  |
| <b>EVC Detail Section</b>   |  |
| REF NUM = 0001  |  |
| NC = MP2MP  |  |
| NUT = 02  |  |
| EVCID = EVCID   |  |

### 21.3.4 CHANGE REQUEST - MULTIPOINT TO MULTIPOINT (CONTINUED)

| UNI Mapping Section – UNI #4           |         |             |  |                          |               |             |  |
|--|---------|-------------|--|--------------------------|---------------|-------------|--|
| UREF = 1                               |         |             |  |                          |               |             |  |
| UACT = D                               |         |             |  |                          |               |             |  |
| NCI =                                  |         |             |  |                          |               |             |  |
| L2CP =                                 |         |             |  |                          |               |             |  |
| RUID = ECCKT of UNI to be disconnected |         |             |  |                          |               |             |  |
| EVCSP = CLI                            |         |             |  |                          |               |             |  |
| VACT = Optional                        |         |             |  |                          |               |             |  |
| CE-VLAN = Optional                     |         |             |  |                          |               |             |  |
| S-VACT = As needed                     |         |             |  |                          |               |             |  |
| S-VLAN = As needed                     |         |             |  |                          |               |             |  |
| SVP = As needed                        |         |             |  |                          |               |             |  |
| UREF #1 LOS Mapping                    |         |             |  |                          |               |             |  |
| LREF                                   | LOS ACT | LOS or SPEC |  | PBIT                     | BDW           | DSCP or TOS |  |
|  |         |             |  |                          |               |             |  |
| UNI Mapping Section – UNI #5           |         |             |  |                          |               |             |  |
| UREF = 2                               |         |             |  |                          |               |             |  |
| UACT = N                               |         |             |  |                          |               |             |  |
| NCI = Port based/VLAN/PBIT             |         |             |  |                          |               |             |  |
| L2CP = As Needed                       |         |             |  |                          |               |             |  |
| RUID = ECCKT of UNI to be installed    |         |             |  |                          |               |             |  |
| EVCSP = CLI                            |         |             |  |                          |               |             |  |
| VACT = Optional                        |         |             |  |                          |               |             |  |
| CE-VLAN = Optional                     |         |             |  |                          |               |             |  |
| S-VACT = As needed                     |         |             |  |                          |               |             |  |
| S-VLAN = As needed                     |         |             |  |                          |               |             |  |
| SVP = As needed                        |         |             |  |                          |               |             |  |
| UREF #2 LOS Mapping                    |         |             |  |                          |               |             |  |
| LREF                                   | LOS ACT | LOS or SPEC |  | PBIT                     | BDW           | DSCP or TOS |  |
| 1                                      | N       | GOLD        |  | Priority Bit value 0 - 7 | New Bandwidth |             |  |
| 2                                      | N       | BRONZE      |  | Priority Bit value 0 – 7 | New Bandwidth |             |  |



### 21.3.5 NEW INSTALL – POINT TO POINT

| <b>Point to Point EVC PORT BASED with 1 LOS</b> |            |            |         |                                     |           |                   |        |
|---|------------|------------|---------|-------------------------------------|-----------|-------------------|--------|
| <b>ASR Form</b>                                 |            |            |         |                                     |           |                   |        |
| REQTYP  | =          | S          |         |                                     |           |                   |        |
| ACT   | =          | N          |         |                                     |           |                   |        |
| ACTL  | =          | Prohibited |         |                                     |           |                   |        |
| QTY   | =          | 1          |         |                                     |           |                   |        |
| EVC I   | =          | A          |         |                                     |           |                   |        |
| <b>EVC Form</b>                                 |            |            |         |                                     |           |                   |        |
| <b>EVC Detail Section</b>                       |            |            |         | <b>UNI Mapping Section – UNI #1</b> |           |                   |        |
| EVC NUM   | =          | 0001       |         | UREF                                | =         | 1                 |        |
| NC  | =          | P2P        |         | UACT                                | =         | N                 |        |
| NUT   | =          | 02         |         | NCI                                 | =         | Port based        |        |
| EVCID   | =          | N/A        |         | L2CP                                | =         | As needed         |        |
|   |            |            |         | RUID                                | =         | ECCKT of UNI#1    |        |
|   |            |            |         | Or                                  |           |                   |        |
|   |            |            |         | RPON                                | =         | PON of UNI #1 ASR |        |
|   |            |            |         | EVCSP                               | =         | CLLI              |        |
|   |            |            |         | VACT                                | =         | Optional          |        |
|   |            |            |         | CE-VLAN                             | =         | Optional          |        |
|   |            |            |         | S-VACT                              | =         | As needed         |        |
|   |            |            |         | S-VLAN                              | =         | As needed         |        |
|   |            |            |         | SVP                                 | =         | As needed         |        |
| <b>UREF #1 LOS Mapping</b>                      |            |            |         |                                     |           |                   |        |
| LREF  | LOS<br>ACT | LOS        | or SPEC | PBIT                                | BDW       | DSCP              | or TOS |
| 1   | N          |            | EVCGLD  |                                     | Bandwidth |                   |        |

### 21.3.5 NEW INSTALL – POINT TO POINT (CONTINUED)

| UNI Mapping Section – UNI #2 |         |             |        |      |           |             |  |
|------------------------------|---------|-------------|--------|------|-----------|-------------|--|
| UREF = 2                     |         |             |        |      |           |             |  |
| UACT = N                     |         |             |        |      |           |             |  |
| NCI = Port based             |         |             |        |      |           |             |  |
| L2CP = As needed             |         |             |        |      |           |             |  |
| RUID = ECCKT of UNI#2        |         |             |        |      |           |             |  |
| or                           |         |             |        |      |           |             |  |
| RPON = PON of UNI#2 ASR      |         |             |        |      |           |             |  |
| EVCSP = CLI                  |         |             |        |      |           |             |  |
| VACT = Optional              |         |             |        |      |           |             |  |
| CE-VLAN = Optional           |         |             |        |      |           |             |  |
| S-VACT = As needed           |         |             |        |      |           |             |  |
| S-VLAN = As needed           |         |             |        |      |           |             |  |
| SVP = As needed              |         |             |        |      |           |             |  |
| UREF #2 LOS Mapping          |         |             |        |      |           |             |  |
| LREF                         | LOS ACT | LOS or SPEC |        | PBIT | BDW       | DSCP or TOS |  |
| 1                            | N       |             | EVCGLD |      | Bandwidth |             |  |
|                              |         |             |        |      |           |             |  |
|                              |         |             |        |      |           |             |  |



### 21.3.6 NEW INSTALL – POINT TO POINT with VLAN Stacking

| Point to Point EVC with VLAN Stacking at UNI Termination 2 and 1 LOS |            |            |         |                                     |           |                   |        |
|--|------------|------------|---------|-------------------------------------|-----------|-------------------|--------|
| <b>ASR Form</b>  |            |            |         |                                     |           |                   |        |
| REQTYP   | =          | S          |         |                                     |           |                   |        |
| ACT  | =          | N          |         |                                     |           |                   |        |
| ACTL   | =          | Prohibited |         |                                     |           |                   |        |
| QTY  | =          | 1          |         |                                     |           |                   |        |
| EVC I  | =          | A          |         |                                     |           |                   |        |
| <b>EVC Form</b>  |            |            |         |                                     |           |                   |        |
| <b>EVC Detail Section</b>  |            |            |         | <b>UNI Mapping Section – UNI #1</b> |           |                   |        |
| EVC NUM  | =          | 0001       |         | UREF                                | =         | 1                 |        |
| NC   | =          | P2P        |         | UACT                                | =         | N                 |        |
| NUT  | =          | 02         |         | NCI                                 | =         | VLAN based        |        |
| EVCID  | =          | N/A        |         | L2CP                                | =         | As needed         |        |
|  |            |            |         | RUID                                | =         | ECCKT of UNI#1    |        |
|  |            |            |         | Or                                  |           |                   |        |
|  |            |            |         | RPON                                | =         | PON of UNI #1 ASR |        |
|  |            |            |         | EVCSP                               | =         | CLLI              |        |
|  |            |            |         | VACT                                | =         | Optional          |        |
|  |            |            |         | CE-VLAN                             | =         | Optional          |        |
|  |            |            |         | S-VACT                              | =         | As needed         |        |
|  |            |            |         | S-VLAN                              | =         | As needed         |        |
|  |            |            |         | SVP                                 | =         | As needed         |        |
| <b>UREF #1 LOS Mapping</b>   |            |            |         |                                     |           |                   |        |
| LREF   | LOS<br>ACT | LOS        | or SPEC | PBIT                                | BDW       | DSCP              | or TOS |
| 1  | N          |            | EVCGLD  |                                     | Bandwidth |                   |        |
|  |            |            |         |                                     |           |                   |        |
|  |            |            |         |                                     |           |                   |        |

### 21.3.6 NEW INSTALL - POINT TO POINT VLAN with Stacking (CONTINUED)

| UNI Mapping Section – UNI #2 |         |             |        |      |           |             |  |
|------------------------------|---------|-------------|--------|------|-----------|-------------|--|
| UREF = 2                     |         |             |        |      |           |             |  |
| UACT = N                     |         |             |        |      |           |             |  |
| NCI = VLAN                   |         |             |        |      |           |             |  |
| L2CP = As needed             |         |             |        |      |           |             |  |
| RUID = ECCKT of UNI#2        |         |             |        |      |           |             |  |
| or                           |         |             |        |      |           |             |  |
| RPON = PON of UNI#2 ASR      |         |             |        |      |           |             |  |
| EVCSP = CLI                  |         |             |        |      |           |             |  |
| VACT = Optional              |         |             |        |      |           |             |  |
| CE-VLAN = Optional           |         |             |        |      |           |             |  |
| S-VLAN = Provider assigned   |         |             |        |      |           |             |  |
| SVP = As needed              |         |             |        |      |           |             |  |
| UREF #2 LOS Mapping          |         |             |        |      |           |             |  |
| LREF                         | LOS ACT | LOS or SPEC |        | PBIT | BDW       | DSCP or TOS |  |
| 1                            | N       |             | EVCGLD |      | Bandwidth |             |  |
|                              |         |             |        |      |           |             |  |
|                              |         |             |        |      |           |             |  |

### 21.3.7 NEW INSTALL – POINT TO POINT WITH BGP

| <b>Point to Point EVC with BGP at UNI Termination 2</b>           |            |     |         |   |           |             |  |
|---|------------|-----|---------|---|-----------|-------------|--|
| <b>ASR Form</b>   |            |     |         |   |           |             |  |
| REQTYP = S<br>ACT = N<br>ACTL = Prohibited<br>QTY = 1<br>EVCI = A |            |     |         |   |           |             |  |
| <b>EVC Form</b>   |            |     |         |   |           |             |  |
| <b>EVC Detail Section</b>   |            |     |         | <b>UNI Mapping Section – UNI #1</b>   |           |             |  |
| EVC NUM = 0001<br>NC = P2P<br>NUT = 02<br>EVCID = N/A             |            |     |         | UREF = 1<br>UACT = N<br>NCI = VLAN based<br>L2CP = As needed<br>RUID = ECCKT of UNI#1<br>Or<br>RPON = PON of UNI #1 ASR<br>EVCSP = CLI<br>VACT = Optional<br>CE-VLAN = Optional<br>S-VACT = As needed<br>S-VLAN = As needed<br>SVP = As needed<br>ASN = Prohibited<br>VPN-ID = Prohibited |           |             |  |
| <b>UREF #1 LOS Mapping</b>  |            |     |         |   |           |             |  |
| LREF  | LOS<br>ACT | LOS | or SPEC | PBIT  | BDW       | DSCP or TOS |  |
| 1   | N          |     | EVCGLD  |   | Bandwidth |             |  |
|   |            |     |         |   |           |             |  |
|   |            |     |         |   |           |             |  |

### 21.3.7 NEW INSTALL - POINT TO POINT WITH BGP (CONTINUED)

| UNI Mapping Section – UNI #2 |         |             |        |      |           |             |  |
|------------------------------|---------|-------------|--------|------|-----------|-------------|--|
| UREF = 2                     |         |             |        |      |           |             |  |
| UACT = N                     |         |             |        |      |           |             |  |
| NCI = Required               |         |             |        |      |           |             |  |
| L2CP = As needed             |         |             |        |      |           |             |  |
| RUID = ECCKT of UNI#2        |         |             |        |      |           |             |  |
| or                           |         |             |        |      |           |             |  |
| RPON = PON of UNI#2 ASR      |         |             |        |      |           |             |  |
| EVCSP = CLI                  |         |             |        |      |           |             |  |
| VACT = Required              |         |             |        |      |           |             |  |
| CE-VLAN = Optional           |         |             |        |      |           |             |  |
| S-VACT = Prohibited          |         |             |        |      |           |             |  |
| S-VLAN = Prohibited          |         |             |        |      |           |             |  |
| SVP = Prohibited             |         |             |        |      |           |             |  |
| ASN = Required               |         |             |        |      |           |             |  |
| VPN-ID = Optional            |         |             |        |      |           |             |  |
| UREF #2 LOS Mapping          |         |             |        |      |           |             |  |
| LREF                         | LOS ACT | LOS or SPEC |        | PBIT | BDW       | DSCP or TOS |  |
| 1                            | N       |             | EVCGLD |      | Bandwidth |             |  |
|                              |         |             |        |      |           |             |  |
|                              |         |             |        |      |           |             |  |

### 21.3.8 NEW INSTALL – EVC MEET POINT

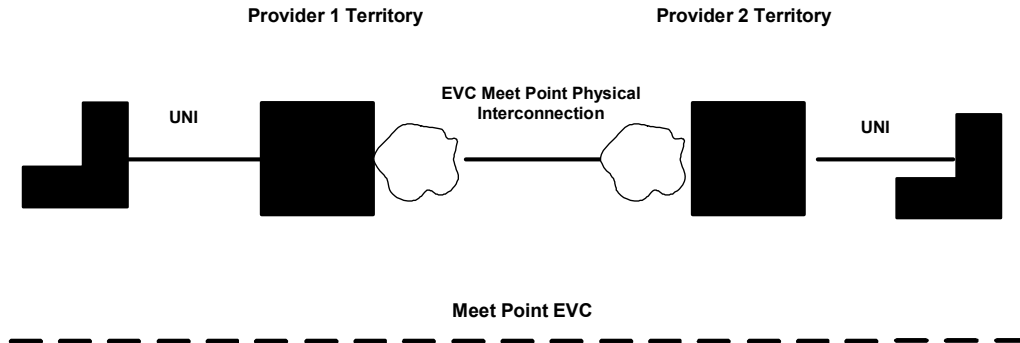
MEF 26 defines the basic architecture of Metro Ethernet Services that cross more than one service provider domain. However, it assumes that the EVC customer interacts with only one provider who in turn places “access” orders (ENNI for the physical interconnect and OVCs for the virtual service instance) 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 all service providers in the end to end path and refers to the physical interconnection point between the two providers. This is the alternative approach:

| <b>EVC with Meet Point ID</b> |   |
|-------------------------------|---|
| <b>ASR Form</b>               |   |
| REQTYP = S                    |   |
| ACT = N                       |   |
| ACTL = Prohibited             |   |
| QTY = 1                       |   |
| EVC I = A                     |   |
| ASC-EC = Required             |   |
| <b>EVC Form</b>               |   |
| <b>EVC Detail Section</b>     | <b>UNI Mapping Section – UNI #1</b>                                 |
| EVC NUM = 0001                | UREF = 1  |
| NC = P2P                      | UACT = N  |
| NUT = 02                      | NCI = Port based/VLAN/BIT   |
| EVCID = N/A                   | L2CP = As needed  |
|                               | RUID = ECCKT of UNI#1   |
|                               | Or  |
|                               | RPON = PON of UNI #1 ASR  |
|                               | EVCSP = CLI   |
|                               | VACT = Optional   |
|                               | CE-VLAN = Optional  |
|                               | S-VACT = As needed  |
|                               | S-VLAN = As needed  |
|                               | SVP = As needed   |
|                               | EVCMPID = CLFI identified during pre-order negotiations. As Needed. |
|                               | OTC = EC/CC Code  |

### 21.3.8 NEW INSTALL – EVC MEET POINT (CONTINUED)

| UNI Mapping Section – UNI #2 |   |  |
|------------------------------|---|--|
| UREF                         | = | 2  |
| UACT                         | = | N  |
| NCI                          | = | Port based/VLAN/PBIT                                     |
| L2CP                         | = | As needed  |
| RUID                         | = | ECCKT of UNI#2   |
| or                           |   |  |
| RPON                         | = | PON of UNI#2 ASR   |
| EVCSP                        | = | CLLI   |
| VACT                         | = | Optional   |
| CE-VLAN                      | = | Optional   |
| S-VACT                       | = | As needed  |
| S-VLAN                       | = | As needed  |
| SVP                          | = | As needed  |
| EVCMPID                      | = | CLFI identified during pre-order negotiation. As Needed. |
| OTC                          | = | EC/CC Code   |

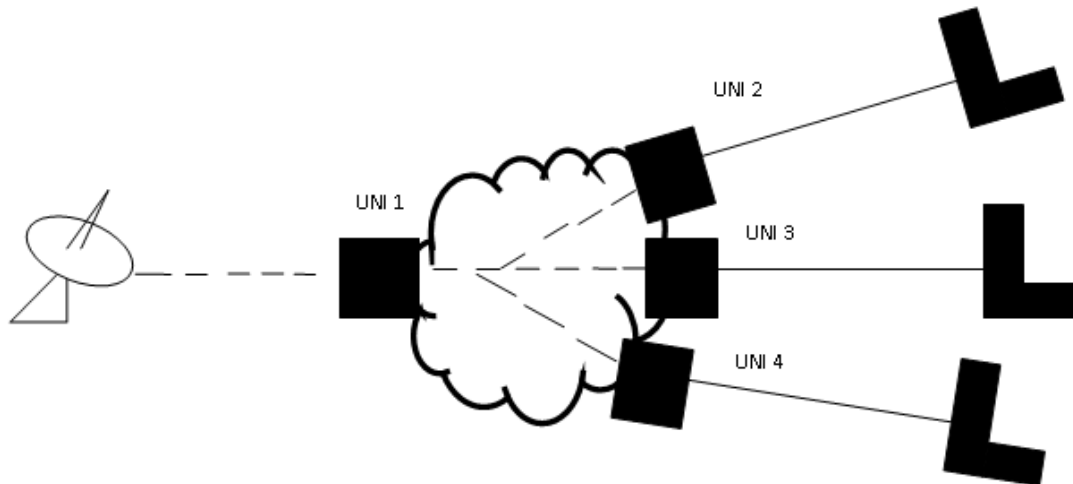
#### NEW INSTALL- EVC MEET POINT



## **21.4 COMBINATION ETHERNET VIRTUAL CONNECTION CONFIGURATIONS**

The following configurations are examples only. The fields listed are common to the EVC service. For specific application, additional data elements may apply.

## 21.4.1 NEW INSTALL (REQTYP S) – PHYSICAL PORT (UNI/ENNI) WITH MULTIPOINT TO MULTIPOINT EVC



### Physical Port (UNI) with Multipoint to Multipoint EVC PORT BASED VLAN with PBIT and 3 LOS

| <b>ASR Form</b> |   |                     |               |      |  |
|-----------------|---|---------------------|---------------|------|--|
| REQTYP          | = | S                   |               | SPEC | = Provider Based and specific to the Physical Port |
| ACT             | = | N                   |               | SEI  | = Y  |
| ACTL            | = | Required            |               |      |  |
| QTY             | = | 1                   |               |      |  |
| EVC             | = | B                   |               |      |  |
| <b>SES Form</b> |   |                     |               |      |  |
| NC              | = | (UNI/ENNI) Ethernet | Based Service | ESP  | = Optional   |
| NCI             | = | (UNI/ENNI) Ethernet | Interface     |      |  |
| SECNCI          | = | (UNI/ENNI) Switched | Ethernet Port |      |  |



### 21.4.1 NEW INSTALL (REQTYP S) – PHYSICAL PORT (UNI) WITH MULTIPOINT TO MULTIPOINT EVC (CONTINUED)

| EVC Form           |                              |
|--------------------|------------------------------|
| EVC Detail Section | UNI Mapping Section – UNI #1 |
| EVC NUM = 0001     | UREF = 01                    |
| NC = MP2MP         | UACT = N                     |
| NUT = 04           | AUNT = A                     |
| EVCID = N/A        | NCI = Port based/VLAN/PBIT   |
| EVCKR = Optional   | L2CP = As needed             |
|                    | RUID = Prohibited            |
|                    | Or                           |
|                    | RPON = Prohibited            |
|                    | EVCSP = Optional             |
|                    | VACT = Optional              |
|                    | CE-VLAN = Optional           |
|                    | S-VACT = As needed           |
|                    | S-VLAN = As needed           |
|                    | SVP = As needed              |

### 21.4.1 NEW INSTALL (REQTYP S) – PHYSICAL PORT (UNI) WITH MULTIPOINT TO MULTIPOINT EVC (CONTINUED)

| UREF #1 LOS Mapping          |         |             |                      |                          |           |             |  |
|------------------------------|---------|-------------|----------------------|--------------------------|-----------|-------------|--|
| LREF                         | LOS ACT | LOS or SPEC |                      | PBIT                     | BDW       | DSCP or TOS |  |
| 1                            | N       | GOLD        |                      | Priority Bit value 0 - 7 | Bandwidth |             |  |
| 2                            | N       | SILVER      |                      | Priority Bit value 0 – 7 | Bandwidth |             |  |
| 3                            | N       | BRONZE      |                      | Priority Bit value 0 – 7 | Bandwidth |             |  |
| UNI Mapping Section – UNI #2 |         |             |                      |                          |           |             |  |
| UREF                         |         | =           | 02                   |                          |           |             |  |
| AUNT                         |         | =           | Prohibited           |                          |           |             |  |
| UACT                         |         | =           | N                    |                          |           |             |  |
| NCI                          |         | =           | Port based/VLAN/PBIT |                          |           |             |  |
| L2CP                         |         | =           | As needed            |                          |           |             |  |
|                              |         | =           |                      |                          |           |             |  |
| RUID                         |         |             | ECCKT of UNI#2       |                          |           |             |  |
| or                           |         |             |                      |                          |           |             |  |
| RPON                         |         | =           | PON of UNI#2 ASR     |                          |           |             |  |
| EVCSP                        |         | =           | CLLI                 |                          |           |             |  |
| VACT                         |         | =           | Optional             |                          |           |             |  |
| CE-VLAN                      |         | =           | Optional             |                          |           |             |  |
| S-VACT                       |         | =           | As needed            |                          |           |             |  |
| S-VLAN                       |         | =           | As needed            |                          |           |             |  |
| SVP                          |         | =           | As needed            |                          |           |             |  |

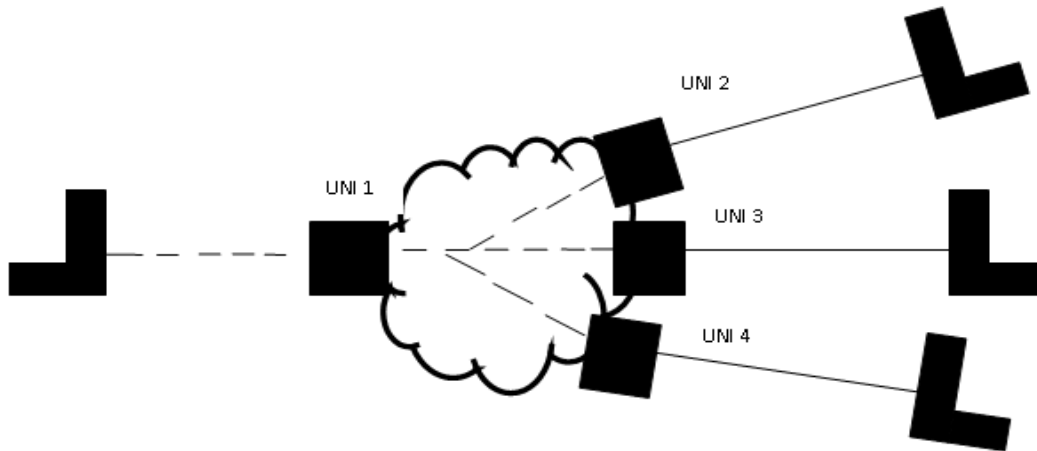
### 21.4.1 NEW INSTALL (REQTYP S) – PHYSICAL PORT (UNI) WITH MULTIPOINT TO MULTIPOINT EVC (CONTINUED)

| UREF #2 LOS Mapping                 |        |                      |                             |           |      |        |
|-------------------------------------|--------|----------------------|-----------------------------|-----------|------|--------|
| LOS ACT                             | LOS    | or SPEC              | PBIT                        | BDW       | DSCP | or TOS |
| 1) N                                | GOLD   |                      | Priority Bit<br>value 0 - 7 | Bandwidth |      |        |
| 2) N                                | SILVER |                      | Priority Bit<br>value 0 - 7 | Bandwidth |      |        |
| 3) N                                | BRONZE |                      | Priority Bit<br>value 0 - 7 | Bandwidth |      |        |
| <b>UNI Mapping Section – UNI #3</b> |        |                      |                             |           |      |        |
| UREF                                | =      | 03                   |                             |           |      |        |
| AUNT                                | =      | Prohibited           |                             |           |      |        |
| UACT                                | =      | N                    |                             |           |      |        |
| NCI                                 | =      | Port based/VLAN/PBIT |                             |           |      |        |
| L2CP                                | =      | As needed            |                             |           |      |        |
| RUID                                | =      | ECCKT of UNI #3      |                             |           |      |        |
| or                                  |        |                      |                             |           |      |        |
| RPON                                | =      | PON of UNI #3 ASR    |                             |           |      |        |
| EVCSP                               | =      | CLLI                 |                             |           |      |        |
| VACT                                | =      | Optional             |                             |           |      |        |
| CE-VLAN                             | =      | Optional             |                             |           |      |        |
| S-VACT                              | =      | As needed            |                             |           |      |        |
| S-VLAN                              | =      | As needed            |                             |           |      |        |
| SVID                                | =      | As needed            |                             |           |      |        |

### 21.4.1 NEW INSTALL (REQTYP S) – PHYSICAL PORT (UNI) WITH MULTIPOINT TO MULTIPOINT EVC (CONTINUED)

| UREF #3 LOS Mapping          |         |             |                      |                          |           |             |  |
|------------------------------|---------|-------------|----------------------|--------------------------|-----------|-------------|--|
| LREF                         | LOS ACT | LOS or SPEC |                      | PBIT                     | BDW       | DSCP or TOS |  |
| 1                            | N       | SILVER      |                      | Priority Bit value 0 - 7 | Bandwidth |             |  |
| 2                            | N       | BRONZE      |                      | Priority Bit value 0 – 7 | Bandwidth |             |  |
| UNI Mapping Section – UNI #4 |         |             |                      |                          |           |             |  |
| UREF                         |         | =           | 04                   |                          |           |             |  |
| AUNT                         |         | =           | Prohibited           |                          |           |             |  |
| UACT                         |         | =           | N                    |                          |           |             |  |
| NCI                          |         | =           | Port based/VLAN/PBIT |                          |           |             |  |
| L2CP                         |         | =           | As needed            |                          |           |             |  |
| RUID                         |         | =           | ECCKT of UNI #4      |                          |           |             |  |
| or                           |         |             |                      |                          |           |             |  |
| RPON                         |         | =           | PON of UNI #4 ASR    |                          |           |             |  |
| EVCSP                        |         | =           | CLLI                 |                          |           |             |  |
| VACT                         |         | =           | Optional             |                          |           |             |  |
| CE-VLAN                      |         | =           | Optional             |                          |           |             |  |
| S-VACT                       |         | =           | As needed            |                          |           |             |  |
| S-VLAN                       |         | =           | As needed            |                          |           |             |  |
| SVP                          |         | =           | As needed            |                          |           |             |  |
| UREF #4 LOS Mapping          |         |             |                      |                          |           |             |  |
| LREF                         | LOS ACT | LOS or SPEC |                      | PBIT                     | BDW       | DSCP or TOS |  |
| 1                            | N       | GOLD        |                      | Priority Bit value 0 - 7 | Bandwidth |             |  |
| 2                            | N       | BRONZE      |                      | Priority Bit value 0 – 7 | Bandwidth |             |  |

## 21.4.2 NEW INSTALL (REQTYP E) – PHYSICAL PORT (UNI/ENNI) WITH MULTIPOINT TO MULTIPOINT EVC



### Physical Port (UNI/ENNI) with Multipoint to Multipoint EVC PORT BASED VLAN with PBIT and 3 LOS

|                  |   |                                   |  |                         |  |
|------------------|---|-----------------------------------|--|-------------------------|--|
| <b>ASR Form</b>  |   |                                   |  |                         |  |
| REQTYP           | = | E                                 |  | SPEC                    | = Provider Based and specific to the Physical Port |
| ACT              | = | N                                 |  | QSA                     | = 01   |
| ACTL             | = | Prohibited                        |  | SEI                     | = Y  |
| QTY              | = | 1                                 |  |                         |  |
| EVC              | = | B                                 |  |                         |  |
| <b>SESForm</b>   |   |                                   |  |                         |  |
| NC               | = | (UNI/ENNI) Ethernet               |  | ESP                     | = Optional   |
| NCI              | = | Based Service Ethernet            |  |                         |  |
| SECNCI           | = | (UNI/ENNI) Interface Ethernet     |  |                         |  |
|                  | = | (UNI/ENNI) Switched Ethernet Port |  |                         |  |
| <b>SALI Form</b> |   |                                   |  |                         |  |
| PI               | = | Y                                 |  | End User Address Detail | = As Needed  |
| REFNUM           | = | 0001                              |  |                         |  |
| EUNAME           | = | Required                          |  |                         |  |

**21.4.2 NEW INSTALL (REQTYP E) – PHYSICAL PORT (UNI/ENNI)  
 WITH MULTIPOINT TO MULTIPOINT EVC (CONTINUED)**

| EVC Form           |   |          |                              |   |                      |
|--------------------|---|----------|------------------------------|---|----------------------|
| EVC Detail Section |   |          | UNI Mapping Section – UNI #1 |   |                      |
| EVC NUM            | = | 0001     | UREF                         | = | 01                   |
| NC                 | = | MP2MP    | UACT                         | = | N                    |
| NUT                | = | 04       | AUNT                         | = | A                    |
| EVCID              | = | N/A      | NCI                          | = | Port based/VLAN/PBIT |
| EVCCR              | = | Optional | L2CP                         | = | As needed            |
|                    |   |          | RUID                         | = | Prohibited           |
|                    |   |          | Or                           |   |                      |
|                    |   |          | RPON                         | = | Prohibited           |
|                    |   |          | EVCSP                        | = | Optional             |
|                    |   |          | VACT                         | = | Optional             |
|                    |   |          | CE-VLAN                      | = | Optional             |
|                    |   |          | S-VACT                       | = | As needed            |
|                    |   |          | S-VLAN                       | = | As needed            |
|                    |   |          | SVP                          | = | As needed            |

## 21.4.2 NEW INSTALL (REQTYP E) – PHYSICAL PORT (UNI/ENNI) WITH MULTIPOINT TO MULTIPOINT EVC (CONTINUED)

| UREF #1 LOS Mapping          |         |             |                      |                          |           |             |  |
|------------------------------|---------|-------------|----------------------|--------------------------|-----------|-------------|--|
| LREF                         | LOS ACT | LOS or SPEC |                      | PBIT                     | BDW       | DSCP or TOS |  |
| 1                            | N       | GOLD        |                      | Priority Bit value 0 - 7 | Bandwidth |             |  |
| 2                            | N       | SILVER      |                      | Priority Bit value 0 – 7 | Bandwidth |             |  |
| 3                            | N       | BRONZE      |                      | Priority Bit value 0 – 7 | Bandwidth |             |  |
| UNI Mapping Section – UNI #2 |         |             |                      |                          |           |             |  |
| UREF                         |         | =           | 02                   |                          |           |             |  |
| AUNT                         |         | =           | Prohibited           |                          |           |             |  |
| UACT                         |         | =           | N                    |                          |           |             |  |
| NCI                          |         | =           | Port based/VLAN/PBIT |                          |           |             |  |
| L2CP                         |         | =           | As needed            |                          |           |             |  |
|                              |         | =           |                      |                          |           |             |  |
| RUID                         |         |             | ECCKT of UNI#2       |                          |           |             |  |
| or                           |         |             |                      |                          |           |             |  |
| RPON                         |         | =           | PON of UNI#2 ASR     |                          |           |             |  |
| EVCSP                        |         | =           | CLLI                 |                          |           |             |  |
| VACT                         |         | =           | Optional             |                          |           |             |  |
| CE-VLAN                      |         | =           | Optional             |                          |           |             |  |
| S-VACT                       |         | =           | As needed            |                          |           |             |  |
| S-VLAN                       |         | =           | As needed            |                          |           |             |  |
| SVP                          |         | =           | As needed            |                          |           |             |  |

## 21.4.2 NEW INSTALL (REQTYP E) – PHYSICAL PORT (UNI/ENNI) WITH MULTIPOINT TO MULTIPOINT EVC (CONTINUED)

| UREF #2 LOS Mapping                 |             |  |                             |           |             |  |
|-------------------------------------|-------------|--|-----------------------------|-----------|-------------|--|
| LOS ACT                             | LOS or SPEC |  | PBIT                        | BDW       | DSCP or TOS |  |
| 1) N                                | GOLD        |  | Priority Bit<br>value 0 - 7 | Bandwidth |             |  |
| 2) N                                | SILVER      |  | Priority Bit<br>value 0 – 7 | Bandwidth |             |  |
| 3) N                                | BRONZE      |  | Priority Bit<br>value 0 – 7 | Bandwidth |             |  |
| <b>UNI Mapping Section – UNI #3</b> |             |  |                             |           |             |  |
| UREF = 03                           |             |  |                             |           |             |  |
| AUNT = Prohibited                   |             |  |                             |           |             |  |
| UACT = N                            |             |  |                             |           |             |  |
| NCI = Port based/VLAN/PBIT          |             |  |                             |           |             |  |
| L2CP = As needed                    |             |  |                             |           |             |  |
| RUID = ECCKT of UNI #3              |             |  |                             |           |             |  |
| or                                  |             |  |                             |           |             |  |
| RPON = PON of UNI #3 ASR            |             |  |                             |           |             |  |
| EVCSP = CLI                         |             |  |                             |           |             |  |
| VACT = Optional                     |             |  |                             |           |             |  |
| CE-VLAN = Optional                  |             |  |                             |           |             |  |
| S-VACT = As needed                  |             |  |                             |           |             |  |
| S-VLAN = As needed                  |             |  |                             |           |             |  |
| SVP = As needed                     |             |  |                             |           |             |  |



## 21.4.2 NEW INSTALL (REQTYP E) – PHYSICAL PORT (UNI/ENNI) WITH MULTIPOINT TO MULTIPOINT EVC (CONTINUED)

| UREF #3 LOS Mapping          |         |             |                      |                          |           |             |  |
|------------------------------|---------|-------------|----------------------|--------------------------|-----------|-------------|--|
| LREF                         | LOS ACT | LOS or SPEC |                      | PBIT                     | BDW       | DSCP or TOS |  |
| 1                            | N       | SILVER      |                      | Priority Bit value 0 - 7 | Bandwidth |             |  |
| 2                            | N       | BRONZE      |                      | Priority Bit value 0 – 7 | Bandwidth |             |  |
| UNI Mapping Section – UNI #4 |         |             |                      |                          |           |             |  |
| UREF                         |         | =           | 04                   |                          |           |             |  |
| AUNT                         |         | =           | Prohibited           |                          |           |             |  |
| UACT                         |         | =           | N                    |                          |           |             |  |
| NCI                          |         | =           | Port based/VLAN/PBIT |                          |           |             |  |
| L2CP                         |         | =           | As needed            |                          |           |             |  |
| RUID                         |         | =           | ECCKT of UNI #4      |                          |           |             |  |
| or                           |         |             |                      |                          |           |             |  |
| RPON                         |         | =           | PON of UNI #4 ASR    |                          |           |             |  |
| EVCSP                        |         | =           | CLLI                 |                          |           |             |  |
| VACT                         |         | =           | Optional             |                          |           |             |  |
| CE-VLAN                      |         | =           | Optional             |                          |           |             |  |
| S-VACT                       |         | =           | As needed            |                          |           |             |  |
| S-VLAN                       |         | =           | As needed            |                          |           |             |  |
| SVP                          |         | =           | As needed            |                          |           |             |  |
| UREF #4 LOS Mapping          |         |             |                      |                          |           |             |  |
| LREF                         | LOS ACT | LOS or SPEC |                      | PBIT                     | BDW       | DSCP or TOS |  |
| 1                            | N       | GOLD        |                      | Priority Bit value 0 - 7 | Bandwidth |             |  |
| 2                            | N       | BRONZE      |                      | Priority Bit value 0 – 7 | Bandwidth |             |  |

### 21.4.3 NEW INSTALL (REQTYP S) – PHYSICAL PORT (UNI/ENNI) WITH POINT TO POINT EVC



| Physical Port (UNI/ENNI) with Point to Point EVC PORT BASED with 1 LOS |                       |                                     |  |
|--|-----------------------|-------------------------------------|--|
| <b>ASR Form</b>  |                       |                                     |  |
| REQTYP   | = S                   | SPEC                                | = Provider Based and specific to the Physical Port |
| ACT  | = N                   | SEI                                 | = Y  |
| ACTL   | = Required            |                                     |  |
| QTY  | = 1                   |                                     |  |
| EVCI   | = B                   |                                     |  |
| <b>SES Form</b>  |                       |                                     |  |
| NC   | = (UNI/ENNI) Ethernet | ESP                                 | = Optional   |
|  | Based Service         |                                     |  |
| NCI  | = (UNI/ENNI) Ethernet |                                     |  |
|  | Interface             |                                     |  |
| SECNCI   | = (UNI/ENNI) Switched |                                     |  |
|  | Ethernet Port         |                                     |  |
| <b>EVC Form</b>  |                       |                                     |  |
| <b>EVC Detail Section</b>  |                       | <b>UNI Mapping Section – UNI #1</b> |  |
| EVC NUM  | = 0001                | UREF                                | = 01   |
|  |                       | AUNT                                | = A  |
| NC   | = P2P                 | UACT                                | = N  |
| NUT  | = 02                  | NCI                                 | = Port based                                       |
| EVCID  | = N/A                 | L2CP                                | = As needed  |
| EVCKR  | = Optional            | RUID or                             | = Prohibited                                       |
|  |                       | RPON                                | = Prohibited                                       |
|  |                       | EVCS                                | = Optional   |
|  |                       | VACT                                | = Optional   |
|  |                       | CE-VLAN                             | = Optional   |
|  |                       | S-VACT                              | = As needed  |
|  |                       | S-VLAN                              | = As needed  |
|  |                       | SVP                                 | = As needed  |

### 21.4.3 NEW INSTALL (REQTYP S) – PHYSICAL PORT (UNI/ENNI) WITH POINT TO POINT EVC (CONTINUED)

| UREF #1 LOS Mapping          |         |             |        |      |           |             |  |
|------------------------------|---------|-------------|--------|------|-----------|-------------|--|
| LREF                         | LOS ACT | LOS or SPEC |        | PBIT | BDW       | DSCP or TOS |  |
| 1                            | N       |             | EVCGLD |      | Bandwidth |             |  |
|                              |         |             |        |      |           |             |  |
| UNI Mapping Section – UNI #2 |         |             |        |      |           |             |  |
| UREF = 02                    |         |             |        |      |           |             |  |
| AUNT = Prohibited            |         |             |        |      |           |             |  |
| UACT = N                     |         |             |        |      |           |             |  |
| NCI = Port based             |         |             |        |      |           |             |  |
| L2CP = As needed             |         |             |        |      |           |             |  |
| RUID = ECCKT of UNI#2        |         |             |        |      |           |             |  |
| Or                           |         |             |        |      |           |             |  |
|                              |         |             |        |      |           |             |  |
| RPON = PON of UNI#2 ASR      |         |             |        |      |           |             |  |
| EVCSP = CLI                  |         |             |        |      |           |             |  |
| VACT = Optional              |         |             |        |      |           |             |  |
| CE-VLAN = Optional           |         |             |        |      |           |             |  |
| S-VACT = As needed           |         |             |        |      |           |             |  |
| S-VLAN = As needed           |         |             |        |      |           |             |  |
| SVP = As needed              |         |             |        |      |           |             |  |
| UREF #2 LOS Mapping          |         |             |        |      |           |             |  |
| LREF                         | LOS ACT | LOS or SPEC |        | PBIT | BDW       | DSCP or TOS |  |
| 1                            | N       |             | EVCGLD |      | Bandwidth |             |  |
|                              |         |             |        |      |           |             |  |
|                              |         |             |        |      |           |             |  |

#### 21.4.4 NEW INSTALL (REQTYP E) – PHYSICAL PORT (UNI/ENNI) WITH POINT TO POINT EVC



| Physical Port (UNI/ENNI) with Point to Point EVC PORT BASED with 1 LOS |   |                                   |  |
|--|---|-----------------------------------|--|
| <b>ASR Form</b>  |   |                                   |  |
| REQTYP   | = | E                                 | SPEC = Provider Based and specific to the Physical Port<br><br>QSA = 01<br>SEI = Y |
| ACT  | = | N                                 |  |
| ACTL   | = | Prohibited                        |  |
| QTY  | = | 1                                 |  |
| EVC  | = | B                                 |  |
|  |   |                                   |  |
| <b>SES Form</b>  |   |                                   |  |
| NC   | = | (UNI/ENNI) Ethernet Based Service | ESP = Optional   |
| NCI  | = | (UNI/ENNI) Ethernet Interface     |  |
| SECNCI   | = | (UNI/ENNI) Switched Ethernet Port |  |
|  |   |                                   |  |
| <b>SALI Form</b>   |   |                                   |  |
| PI   | = | Y                                 | End = As Needed<br>User Address Detail   |
| REFNUM   | = | 0001                              |  |
| EUNAME   | = | Required                          |  |
|  |   |                                   |  |

## 21.4.4 NEW INSTALL (REQTYP E) – PHYSICAL PORT (UNI/ENNI) WITH POINT TO POINT EVC (CONTINUED)

| EVC Form                            |            |                  |         |                                     |           |            |        |
|-------------------------------------|------------|------------------|---------|-------------------------------------|-----------|------------|--------|
| <b>EVC Detail Section</b>           |            |                  |         | <b>UNI Mapping Section – UNI #1</b> |           |            |        |
| EVC NUM                             | =          | 0001             |         | UREF                                | =         | 01         |        |
| NC                                  | =          | P2P              |         | AUNT                                | =         | A          |        |
| NUT                                 | =          | 02               |         | UACT                                | =         | N          |        |
| EVCID                               | =          | N/A              |         | NCI                                 | =         | Port based |        |
| EVCKKR                              | =          | Optional         |         | L2CP                                | =         | As needed  |        |
|                                     |            |                  |         | RUID or                             | =         | Prohibited |        |
|                                     |            |                  |         | RPON                                | =         | Prohibited |        |
|                                     |            |                  |         | EVCSP                               | =         | Optional   |        |
|                                     |            |                  |         | VACT                                | =         | Optional   |        |
|                                     |            |                  |         | CE-VLAN                             | =         | Optional   |        |
|                                     |            |                  |         | S-VACT                              | =         | As needed  |        |
|                                     |            |                  |         | S-VLAN                              | =         | As needed  |        |
|                                     |            |                  |         | SVP                                 | =         | As needed  |        |
| <b>UREF #1 LOS Mapping</b>          |            |                  |         |                                     |           |            |        |
| LREF                                | LOS<br>ACT | LOS              | or SPEC | PBIT                                | BDW       | DSCP       | or TOS |
| 1                                   | N          |                  | EVCGLD  |                                     | Bandwidth |            |        |
| <b>UNI Mapping Section – UNI #2</b> |            |                  |         |                                     |           |            |        |
| UREF                                | =          | 02               |         |                                     |           |            |        |
| AUNT                                | =          | Prohibited       |         |                                     |           |            |        |
| UACT                                | =          | N                |         |                                     |           |            |        |
| NCI                                 | =          | Port based       |         |                                     |           |            |        |
| L2CP                                | =          | As needed        |         |                                     |           |            |        |
| RUID                                | =          | ECCKT of UNI#2   |         |                                     |           |            |        |
| Or                                  |            |                  |         |                                     |           |            |        |
| RPON                                | =          | PON of UNI#2 ASR |         |                                     |           |            |        |
| EVCSP                               | =          | CLLI             |         |                                     |           |            |        |
| VACT                                | =          | Optional         |         |                                     |           |            |        |
| CE-VLAN                             | =          | Optional         |         |                                     |           |            |        |
| S-VACT                              | =          | As needed        |         |                                     |           |            |        |
| S-VLAN                              | =          | As needed        |         |                                     |           |            |        |
| SVP                                 | =          | As needed        |         |                                     |           |            |        |
| <b>UREF #2 LOS Mapping</b>          |            |                  |         |                                     |           |            |        |
| LREF                                | LOS<br>ACT | LOS              | or SPEC | PBIT                                | BDW       | DSCP       | or TOS |
| 1                                   | N          |                  | EVCGLD  |                                     | Bandwidth |            |        |
|                                     |            |                  |         |                                     |           |            |        |

## 21.4.5 DISCONNECT (REQTYP S) – PHYSICAL PORT (UNI/ENNI) WITH MULTIPOINT TO MULTIPOINT EVC

### Physical Port (UNI/ENNI) with Multipoint to Multipoint EVC PORT BASED VLAN with PBIT and 3 LOS

|                           |  |                                     |  |
|---------------------------|--|-------------------------------------|--|
| <b>ASR Form</b>           |  |                                     |  |
| REQTYP                    | = S  | SPEC                                | = Provider Based and specific to the Physical Port |
| ACT                       | = D  | ECCKT                               | = Required   |
| ACTL                      | = Required                                     | SEI                                 | = Y  |
| QTY                       | = 1  |                                     |  |
| EVC I                     | = B  |                                     |  |
| <b>SES Form</b>           |  |                                     |  |
| NC                        | = (UNI/ENNI) Ethernet Based Service (Optional) | ESP                                 | = Optional   |
| NCI                       | = (UNI/ENNI) Ethernet Interface (Optional)     |                                     |  |
| SECNCI                    | = (UNI/ENNI) Switched Ethernet Port (Optional) |                                     |  |
| <b>EVC Form</b>           |  |                                     |  |
| <b>EVC Detail Section</b> |  | <b>UNI Mapping Section – UNI #1</b> |  |
| EVC NUM                   | = 0001   | UREF                                | = 01   |
| NC                        | = MP2MP  | AUNT                                | = A  |
| NUT                       | = 04   | UACT                                | = D  |
| EVCID                     | = Required                                     | NCI                                 | = Port based/VLAN/PBIT                             |
| EVCCR                     | = Optional                                     | L2CP                                | = As needed  |
|                           |  | RUID                                | = ECCKT of UNI#1                                   |
|                           |  | Or                                  |  |
|                           |  | RPON                                | = Optional   |
|                           |  | EVCSP                               | = Optional   |
|                           |  | VACT                                | = Optional   |
|                           |  | CE-VLAN                             | = Optional   |
|                           |  | S-VACT                              | = As needed  |
|                           |  | S-VLAN                              | = As needed  |
|                           |  | SVP                                 | = As needed  |

**21.4.5 DISCONNECT (REQTYP S) – PHYSICAL PORT (UNI/ENNI)  
 WITH MULTIPOINT TO MULTIPOINT EVC (CONTINUED)**

|                                     |                        |  |
|-------------------------------------|------------------------|--|
| <b>UNI Mapping Section – UNI #2</b> |                        |  |
| UREF                                | = 02                   |  |
| AUNT                                | = Prohibited           |  |
| UACT                                | = D                    |  |
| NCI                                 | = Port based/VLAN/PBIT |  |
| L2CP                                | = As needed            |  |
| RUID                                | = ECCKT of UNI#2       |  |
| or                                  |                        |  |
| RPON                                | = Optional             |  |
| EVCSP                               | = Optional             |  |
| VACT                                | = Optional             |  |
| CE-VLAN                             | = Optional             |  |
| S-VACT                              | = As needed            |  |
| S-VLAN                              | = As needed            |  |
| SVP                                 | = As needed            |  |
| <b>UNI Mapping Section – UNI #3</b> |                        |  |
| UREF                                | = 03                   |  |
| AUNT                                | = Prohibited           |  |
| UACT                                | = D                    |  |
| NCI                                 | = Port based/VLAN/PBIT |  |
| L2CP                                | = As needed            |  |
| RUID                                | = ECCKT of UNI#3       |  |
| or                                  |                        |  |
| RPON                                | = Optional             |  |
| EVCSP                               | = Optional             |  |
| VACT                                | = Optional             |  |
| CE-VLAN                             | = Optional             |  |
| S-VACT                              | = As needed            |  |
| S-VLAN                              | = As needed            |  |
| SVP                                 | = As needed            |  |

**21.4.5 DISCONNECT (REQTYP S) – PHYSICAL PORT (UNI/ENNI)  
WITH MULTIPOINT TO MULTIPOINT EVC (CONTINUED)**

| UNI Mapping Section – UNI #4 |   |                      |  |
|------------------------------|---|----------------------|--|
| UREF                         | = | 04                   |  |
| AUNT                         | = | Prohibited           |  |
| UACT                         | = | D                    |  |
| NCI                          | = | Port based/VLAN/PBIT |  |
| L2CP                         | = | As needed            |  |
| RUID                         | = | UNI ECCKT            |  |
| or                           |   |                      |  |
| RPON                         | = | Optional             |  |
| EVCSP                        | = | Optional             |  |
| VACT                         | = | Optional             |  |
| CE-VLAN                      | = | Optional             |  |
| S-VACT                       | = | As needed            |  |
| S-VLAN                       | = | As needed            |  |
| SVP                          | = | As needed            |  |



## 21.4.6 DISCONNECT (REQTYP E) – PHYSICAL PORT (UNI/ENNI) WITH POINT TO POINT EVC

| Physical Port (UNI/ENNI) with Point to Point EVC PORT BASED with 1 LOS |   |
|--|---|
| <b>ASR Form</b>  |   |
| REQTYP = E   | SPEC = Provider Based and specific to the Physical Port |
| ACT = D  | ECCKT = Required  |
| ACTL = Prohibited  | SEI = Y   |
| QTY = 1  |   |
| EVC I = B  |   |
| <b>SES Form</b>  |   |
| NC = (UNI/ENNI) Ethernet Based Service (Optional)                      | ESP = Optional  |
| NCI = (UNI/ENNI) Ethernet Interface (Optional)                         |   |
| SECNCI = (UNI/ENNI) Switched Ethernet Port (Optional)                  |   |
| <b>EVC Form</b>  |   |
| <b>EVC Detail Section</b>  | <b>UNI Mapping Section</b>                              |
| EVC NUM = 0001   |   |
| NC = P2P   |   |
| EVCID = Required   |   |
| EVCKR = Optional   |   |

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## **SWITCHED ETHERNET SERVICES (SES)**

| <u>DESCRIPTION</u>                                 | <u>SECTION</u> |
|--|----------------|
| GENERAL_____                                       | 22.1           |
| SES ORDERING GUIDELINES_____                       | 22.2           |
| SWITCHED ETHERNET SERVICES CONFIGURATIONS_____     | 22.3           |
| NEW INSTALL (REQTYP S) SWITCHED ETHERNET PORT ____ | 22.3.1         |
| NEW INSTALL (REQTYP E) SWITCHED ETHERNET PORT____  | 22.3.2         |
| NEW INSTALL WITH LINK AGGREGATION _____            | 22.3.3         |

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## **22. SWITCHED ETHERNET SERVICES (SES)**

**22.1 GENERAL** Switched Ethernet Services involves the ordering of the UNI or ENNI to which an Ethernet/Operator Virtual Connection (EVC/OVC) service may be connected.

The UNI or ENNI can be ordered by itself by populating the Switched Ethernet Indicator (SEI) field on the ASR Form, and the SES Form will contain the UNI/ENNI attributes. Combination ordering of the UNI/ENNI and the EVC/OVC follows the standard ordering process in that the SES Form will accompany the request. The ASR will identify that a combination is being ordered by the population of the Ethernet Virtual Connection Indicator (EVCI=B) and the SEI field = Y. The EVC Form will contain the EVC/OVC attributes and the SES Form will contain the UNI/ENNI attributes. The REQ TYP associated with ordering of a UNI/ENNI and an EVC is "S" or "E".

### **22.2 SWITCHED ETHERNET SERVICES ORDERING GUIDELINES**

The following items pertain to the ordering of a Switched Ethernet Service where no Ethernet Virtual Connection is included on the same request. Combination ordering is documented in the Ethernet Virtual Connection Service (EVC) section of this document.

- Multiple UNIs/ENNIs can be ordered on a single ASR
- A single UNI/ENNI can be ordered with rate limiting or a shared level of service across the ensuing EVCs
- Ordering the physical and virtual connection on a single ASR is not permitted

## 22.3 SWITCHED ETHERNET SERVICES CONFIGURATIONS

The following configurations are examples only. The UNI/ENNI is the port for the switched Ethernet service. The service may not be a complete service until the connections are made to the EVCs/OVCs. The fields listed are common to the UNI/ENNI service. For specific application, additional data elements may apply.

### 22.3.1 NEW INSTALL (REQTYP S) - SWITCHED ETHERNET PORT

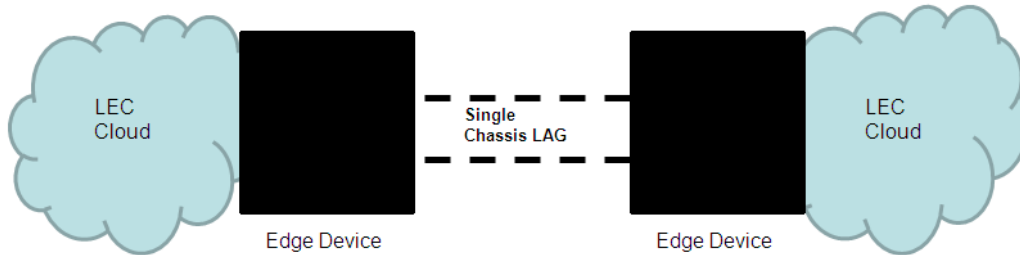
| ASR Form |   |                                   |   |
|----------|---|-----------------------------------|---|
| REQTYP   | = | S                                 | SPEC = Provider Based and specific to the Physical Port |
| ACT      | = | N                                 | SEI = Y   |
| ACTL     | = | Required                          |   |
| QTY      | = | 1                                 |   |
| EVC      | = | Blank                             |   |
| SES Form |   |                                   |   |
| NC       | = | (UNI/ENNI) Ethernet Based Service | CCEA = Optional   |
| NCI      | = | (UNI/ENNI) Ethernet Interface     | ESP = Optional  |
| SECNCI   | = | (UNI/ENNI) Switched Ethernet Port |   |

### 22.3.2 NEW INSTALL (REQTYP E) - SWITCHED ETHERNET PORT

| ASR Form  |   |                                   |   |
|-----------|---|-----------------------------------|---|
| REQTYP    | = | E                                 | SPEC = Provider Based and specific to the Physical Port |
| ACT       | = | N                                 | SEI = Y   |
| QSA       | = | 01                                |   |
| ACTL      | = | Prohibited                        |   |
| QTY       | = | 1                                 |   |
| EVC       | = | Blank                             |   |
| SES Form  |   |                                   |   |
| NC        | = | (UNI/ENNI) Ethernet Based Service | ESP = Optional  |
| NCI       | = | (UNI/ENNI) Ethernet Interface     |   |
| SECNCI    | = | (UNI/ENNI) Switched Ethernet Port |   |
| SALI Form |   |                                   |   |
| PI        | = | Y                                 | End = As Needed   |
| REFNUM    | = | 0001                              | User Address Detail                                     |
| EUNAME    | = | Required                          |   |

### 22.3.3 NEW INSTALL WITH LINK AGGREGATION

Link aggregation allows two or more ENNI's to function as one protected alternate route.



| ASR Form |   |                     |  |       |  |
|----------|---|---------------------|--|-------|--|
| REQTYP   | = | S                   |  | SPEC  | = Provider Based and specific to the Physical Port |
| ACT      | = | N                   |  | SEI   | = Y  |
| LAG      | = | N                   |  |       |  |
| ACTL     | = | Required            |  |       |  |
| QTY      | = | 2                   |  |       |  |
| EVC      | = | Blank               |  |       |  |
| SES Form |   |                     |  |       |  |
| NC       | = | (UNI/ENNI) Ethernet |  | ESP   | = Optional   |
|          |   | Based Service       |  |       |  |
| NCI      | = | (UNI/ENNI) Ethernet |  | LAG-P | = Optional   |
|          |   | Interface           |  |       |  |
| SECNCI   | = | (UNI/ENNI) Switched |  |       |  |
|          |   | Ethernet Port       |  |       |  |
| ACI Form |   |                     |  |       |  |
|          |   |                     |  |       |  |



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## VIRTUAL CONCATENATION (VCAT)

| <u>DESCRIPTION</u>             | <u>SECTION</u> |
|--------------------------------|----------------|
| GENERAL_____                   | 23.1           |
| VCAT ORDERING GUIDELINES _____ | 23.2           |
| VCAT CONFIGURATIONS_____       | 23.3           |
| NEW INSTALLS                   |                |
| POINT TO POINT _____           | 23.3.1         |
| RING _____                     | 23.3.2         |

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## **23. VIRTUAL CONCATENATION (VCAT)**

**23.1 GENERAL** Virtual Concatenated Services involves the ordering of the SONET-based services over two or more hi-capacity channels/timeslots and concatenating the broadband payload at the switch port. An example where virtual concatenation provides a benefit to the customer would be that the requested service is 100 Megabit Ethernet. The customer could not use an STS-1 channel as the throughput would only accommodate approximately 50 Megabits. The next higher level service, STS-3, can handle the requested 100 Megabit service but with a one third waste of the STS-3's capability of 150 Megabits. Using virtual concatenation of two STS-1s, the 100 Megabit service is handled with no loss of bandwidth and no waste.

The VCAT Form may be used in conjunction with the following types of service:

- Transport (REQTYP "S" and "V")
- End User Special Access (REQTYP "E" and "X")
- Ring Services (REQTYP "R")

## **23.2 VIRTUAL CONCATENATION ORDERING GUIDELINES**

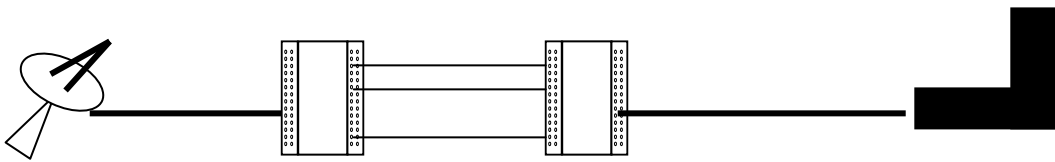
1. The VCAT Form will apply when defining the channels/timeslots to be assigned on the special access facility when the Network Channel (NC) code specifies a virtually concatenated requested service.
2. The VCAT Form can be used to specify the concatenated channels/timeslots associated with the CFA, ICFA1, ICFA2, ICFA3, ICFA4 and SCFA fields for each circuit (REFNUM) on the request.
3. The VCAT Form and the Network Assignment Information (NAI) Form must be used together if concatenation of the channels/timeslots associated with any of the ICFAn fields is required.
4. The VCAT and Additional Circuit Information (ACI) Forms must be used together when the quantity of circuits being ordered is greater than one (1) and the NC code specifies a virtually concatenated request.

### 23.3 VIRTUAL CONCATENATION CONFIGURATIONS

The following configurations are examples only. The fields listed are common to the VCAT service. For specific applications, additional data elements may apply.

#### 23.3.1 VIRTUAL CONCATENATION TWO POINT SPECIAL ACCESS

This configuration depicts the establishment of a virtual concatenated point to point special access service.



#### ORDERING REQUIREMENTS

##### ASR FORM

REQTYP = S  
AFO pos 5 = 'Y'

##### TRANSPORT FORM

CFA = populated  
CFAU = blank  
NC = (specifies VCAT)

##### VCAT FORM

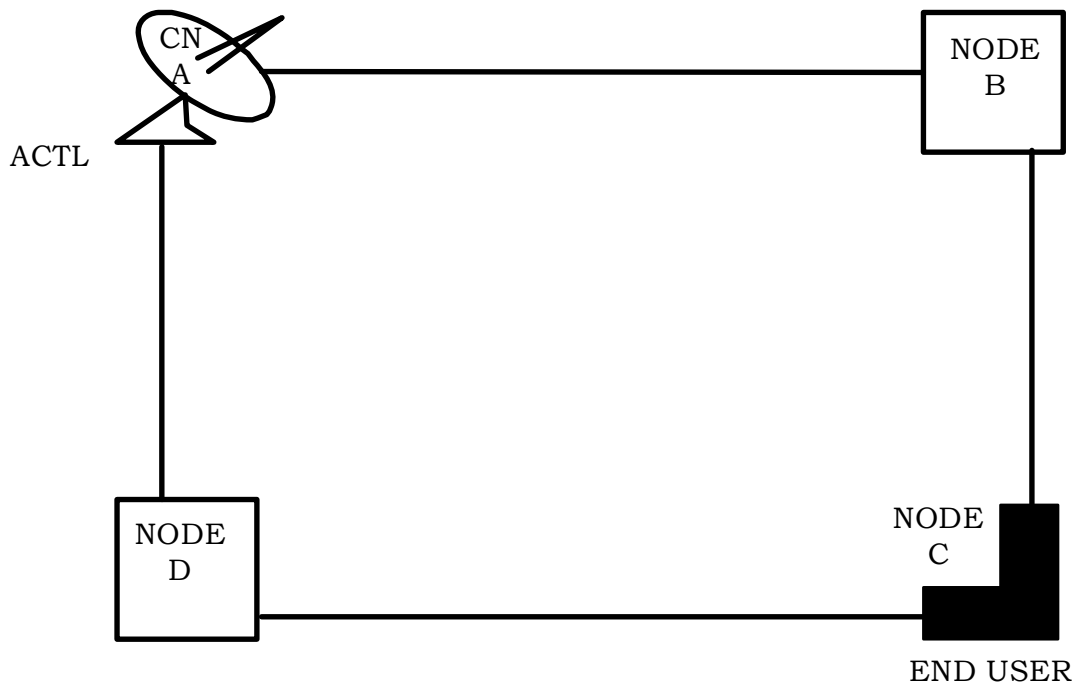
CFA-CTS = populated

### 23.3.2 VIRTUAL CONCATENATION FOUR NODE RING

This configuration depicts the establishment of a 4 node ring with 2 central office nodes and 2 customer nodes and virtual concatenation is requested.

#### ORDERING REQUIREMENTS:

ASR FORM  
RING FORM  
(3) ARI FORMs  
SALI FORM  
(3) VCAT FORMs



## 22.3.2 VIRTUAL CONCATENATION FOUR NODE RING (CONT'D)

|   |  |
|---|--|
| <b>ASR FORM</b><br>REQ TYP = R<br>ACT = N<br>FNI = N or preassigned FNI<br>QTY = 4 (number of segments)<br>ACTL = CLLI Code of POP ("A" location)<br>QSA = 1<br>AFQ (pos = Y<br>5)                          | <b>RING FORM</b><br>Segment A to B<br>NC specifies virtual concatenation<br>NCI<br>SECNCI<br>NID<br>SECLOC ("B" location)<br>CFA = Populated<br>Assumed REF NUM 0001   |
| <b>ARI FORM #1</b><br>Segment B to C<br>NC specifies virtual concatenation<br>NCI<br>SECNCI<br>REF NUM = 0002<br>PRILOC = ("B" location)<br>SPOT (PRI)<br>NID<br>SECLOC = ("C" location)<br>CFA = Populated | <b>ARI FORM #2</b><br>Segment C to D<br>NC specifies virtual concatenation<br>NCI<br>SECNCI<br>REF NUM = 0003<br>PRILOC = ("E" ("C" location)<br>SPOT (PRI)<br>NID<br>SECLOC = ("D" location)<br>CFA = Populated |
| <b>ARI FORM #3</b><br>Segment D to A:<br>NC specifies virtual concatenation<br>NCI<br>SECNCI<br>REF NUM = 0004<br>PRILOC = ("D" location)<br>SPOT (PRI)<br>NID<br>SECLOC = ("A" location)                   | <b>SALI FORM</b><br>REF NUM = 0003<br>PI = "Y"<br>AFT<br>EUNAME = End User Name<br>PRILOC = ("C" location)   |
| <b>VCAT FORM #1</b><br>REF NUM = 0001<br>CFA-CTS = Populated  | <b>VCAT FORM #2</b><br>REF NUM = 0002<br>CFA-CTS = Populated   |
| <b>VCAT FORM #3</b><br>REF NUM = 0003<br>CFA-CTS = Populated  |  |

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**ATIS-0404001-0050**

**Access Service Request (ASR)  
Form Preparation Guide  
Access Service Ordering Guidelines (ASOG)  
Industry Support Interface**

**Version 50**



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ATIS – 0404001-0050

Access Service Request (ASR) Form Preparation Guide - Access Service Ordering Guidelines (ASOG)

Is an ATIS standard developed by the Ordering Solutions Committee - Access Service Ordering Subcommittee under the ATIS Ordering and Billing Forum (OBF)

*Published by*

**Alliance for Telecommunications Industry Solutions**  
**1200 G Street, NW, Suite 500**  
**Washington, DC 20005**

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ACCESS SERVICE REQUEST FORM  
PREPARATION GUIDE

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## **1. GENERAL**

1.1 This guide describes the Access Service Request (ASR) Form entries. The ASR Form must always be associated with a service specific form containing circuit and location detail necessary for the provisioning of this request.

1.2 This practice is reissued to clarify current definitions as recommended by users of this practice. Additions, deletions and significant changes are summarized in the synopsis of changes.

1.3 The Access Service Request does not convey licensing rights to non-COMMON LANGUAGE® licensees to use the COMMON LANGUAGE code sets identified throughout the Access Service Request in their internal operations. Where COMMON LANGUAGE is provided, its intended use by non-COMMON LANGUAGE licensees is limited. Allowable uses will be specified by the COMMON LANGUAGE licensee per their COMMON LANGUAGE contract.

1.4 Options described in this practice may not be applicable to individual provider tariffs; therefore, use of either the field or valid entries within the field is based on provider tariffs/practices.

1.5 Use of certain other non-tariffed items/administrative type data, such as metric date formats, ranging within data elements, certain date fields, etc. are based on customer/provider negotiations; therefore, use of either the field or valid entries within the field is based on customer/provider negotiations.

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## **2. ASR FORM DESCRIPTION**

2.1 All information required for administrative, billing and contact details is provided for in the various fields contained within the ASR Form. The Administrative Section contains information pertaining to the service being ordered such as: quantity, requisition type, desired due date, etc. The Bill Section provides billing name and address information and the Contact Section contains the initiator's information, design contact name, address and telephone number as well as implementation contact name and telephone number.

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### **3. ACCESS SERVICE REQUEST (ASR) FORM ENTRIES**

The ASR 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 addresses the minimal input requirements for disconnect and record order activity. Section 3.5 contains an alphabetic listing of the ASR Form fields cross referenced to the field numbers depicted in the numbered form.

This form is prepared by the customer and is submitted to the ICSC for the ordering of service. The term “ICSC”, (Interexchange Customer Service Center) referenced throughout the ASR practices is used to represent the organization which processes a customer's request for service in an access or local provider offering such access services.

### **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 Form (CN).

**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 code is established prior to the submission of the ASR.

**NOTE 3:** For the casual customer who does not have an IAC code, this field should reflect an entry of "CUS". The customer name should be entered in the CUST field on the ASR.

**NOTE 4:** The IAC designated in the CCNA field is the provider's contact for management of the access ordering/negotiation process for the life of the order. When using "CUS", management of this process may be determined on an individual provider basis.

**NOTE 5:** The CCNA is not intended to indicate the customer being billed for the access service. This is reflected in the ACNA field on the ASR.

#### **VALID ENTRIES:**

IAC Code

CUS = Casual customer

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