

Deactivation Signal: The in-band deactivation signal for a line loopback shall be a framed DS1 signal consisting of repetitions of two "zeros" followed by one "one", lasting for at least 5 seconds, with the framing bits replacing bit of the pattern³

11.3.2 Loopback Control Signaling in the ESF Format

The activation signal for a line loopback shall be by means of the ESF data-link messages specified for that purpose in ANSI T1.403.⁴ Line loopback activate codes shall not be returned to the NI in response to line loopback activation signaling (e.g., by the requested loopback).⁵ Accordingly, signaling for line loopback activation shall be a two step process as follows:

Activation Signal: The line loopback activation code shall be sent as a preamble to line loopback request. The end of the transmission of the preamble shall constitute a request for line loopback activation. The activation signal for a payload loopback shall be by means of the ESF data-link message specified in ANSI T1.403.

Deactivation Signal: Signaling for line loopback deactivation and payload loopback deactivation may be accomplished in several ways. First, deactivation shall be signaled by the use of the deactivation codes specified in ANSI T1.403. In addition, deactivation of both line loopback and payload loopback shall be signaled by any of the following:

- Universal loopback deactivate codeword defined in ANSI T1.403
- AIS
- A data-link signal consisting of two occurrences of the one per second PRM separated by uninterrupted idle code.

11.4 DS1 Idle Signal

Generation and detection of the DS1 Idle Signal is optional. If provided, the DS1 Idle Signal shall meet the requirements defined in Annex D of ANSI T1.403. The Idle Signal indicates that the normal signal source is not present. The DS1 Idle Signal is not to be confused with the ESF data link idle code.

³ Embedded network equipment exists which may react to the line loopback deactivate code and block the code from reaching the CI. When this occurs, manual intervention is required to deactivate the CI line loopback.

⁴ Some embedded CI equipment uses either framed or unframed in-band codes to activate and de-active ESF line loopbacks.

⁵ Some embedded CI equipment for ESF operation activates loopback immediately upon identification of the loopback activation codeword and does not delay actual loopback until either transmission of the loopback activation codeword ceases, or is replaced by the loopback retention codeword.

12. References

(need to update list add other BST TRs)

ANSI T1.101-1987, Synchronization Interface Standards for Digital Networks.

ANSI T1.102-1993, Digital Hierarchy - Electrical Interfaces.

ANSI T1.107-1988, Digital Hierarchy - Formats Specifications.

ANSI T1.107b-1991, Digital Hierarchy - Supplement to Formats Specifications (Synchronous Digital Data Format).

ANSI T1.401-1988, Interface between Carriers and Customer Installations - Analog Voicegrade Switched Access Lines Using Loop-Start and Ground-Start Signaling.

ANSI T1.403-1995, Network-to-Customer Installation - DS1 Metallic Interface.

ANSI T1.408-1990, Integrated Services Digital Network (ISDN) Primary Rate - Customer Installation Metallic Interfaces Layer 1 Specifications.

ANSI T1.510-1994, Network Performance Parameters for Dedicated Digital Services - Specifications.

T1 Technical Report No.5, Carrier to Customer Installation Interface Connector Wiring Configuration Catalog, 1990

Code of Federal Regulations, Title 47, FCC Rules and Regulations, Part 68, Revised December, 1987.

CCITT, Red Book, Fascicle VI Recommendation Q.921, ISDN User-Network Interface Data Link Layer Specification.

Rules and Regulations, Part 68, Federal Communications Commission.

TR 53545, SynchroNet® Service Network Interface Specifications, Issue B, October 1990. SynchroNet service is a registered trademark of BellSouth Telecommunications, Inc.

TR 73590, Broadband Exchange Line Service Interface & Performance Specifications, April 1995.

GR-436-CORE, Digital Network Synchronization Plan, Issue 1, June 1994

TR-INS-000342, High-Capacity Digital Special Access Service Transmission Parameter Limits and Interface Combinations, Issue 1, February 1991.

To obtain American National Standards contact

American National Standards Institute
11 West 42nd Street
New York, New York 10036
Telephone: (212) 642-4900

13. Definitions

Alarm Indication Signal (AIS)

A signal transmitted in lieu of the normal signal to maintain transmission continuity, and indicate to the receiving terminal that there is a transmission fault which is located either at the transmitting terminal or upstream of the transmitting terminal.

American National Standards Institute (ANSI)

An organization that has accredited projects undertaken by the telecommunications independent standards committee T1.

Bipolar (Alternate Mark Inversion) Signal

A pseudo-ternary signal, conveying binary digits, in which successive "ones" (marks, pulses) are of alternating, positive (+) and negative (-) polarity, equal in amplitude, and in which a "zero" (space, no pulse) is of zero amplitude.

B8ZS (Bipolar with 8-Zero Substitution)

A code in which eight consecutive "zeros" are replaced with the sequence 000VB0VB, where V is a binary one in which the polarity is in violation of the bipolar rule and B is a binary one in which the polarity is in conformance with the bipolar rule.

Bipolar Violation

In a bipolar signal, a one (mark, pulse) which has the same polarity as its predecessor.

Carrier

An organization that provides telecommunications service to the public.

Clear Channel Capability

A characteristic of a DS1 transmission path in which the 192 "information" bits in a frame can represent any combination of zeros and ones.

Customer Installation (CI)

Equipment and wiring at the customer's location on the customer side of the NI.

Cyclic Redundancy Check (CRC)

A method of checking the integrity of received data, where the check uses a polynomial algorithm based on the content of the data.

DS1 (Digital Signal Level 1)

A digital signal transmitted at the nominal rate of 1.544 Mbit/s.

In-Band

Using or involving the information digit time slots of a DS1 frame; i.e., bit assignments of a frame exclusive of the framing bit.

Isolated Pulse

A pulse free from the effects of the other pulses in the same signal. (A suitable testing signal is a repetitive pattern of one "one" and seven "zeros.")

Jitter

Short-term variation of the significant instants of a digital signal from their ideal positions in time. Short-term implies that these variations are high frequency (greater than 10 Hz).

LAPD

Link Access Procedure for the D Channel.

Line Loopback

A loopback in which the signal transmitted beyond the loopback point (the forward signal), when the loopback is activated, is the same as the received signal at the loopback point.

Loopback

A state of a transmission facility in which the received signal is returned towards the sender.

Mbit/s

Megabits per second.

MegaLink Channel Service (MCS)

The DS1 bit stream channelized to the DS0 level.

Network

A collection of transmission and switching facilities used to establish communications channels.

Network Interface (NI)

The point of demarcation between the Network and the CI.

Payload

The 192 information bits of a DS1 frame.

Pulse Density

A measure of the number of "ones" (marks, pulses) in relation to the total number of digit time slots transmitted.

Quasi-Random Signal (QRS)

A signal consisting of a bit sequence which approximates a random signal.

Regenerator

Equipment that reconstructs and retransmits a received pulse train.

Terminal Equipment (TE)

Equipment which originates or terminates signals at the specified rate.

T1 Line

A full duplex digital transmission facility that is composed of two twisted metallic pairs and regenerators that carry one DS1 signal.

Unit Interval

The nominal difference in time between consecutive significant instants of an isochronous signal.

Wander

Long-term variations of the significant instants of a digital signal from their ideal positions in time. Long-term implies that these variations are low frequency (less than 10 Hz).

ZBTSI (Zero-Byte Time Slot Interchange)

A technique used on a DS1 signal to ensure that pulse density requirements are met, where zero octets are replaced by an address chain which is decoded by the receiving terminal.

***Unbundled Interoffice Transport-Dedicated(UIT-D)
Account Team Information Package
Issue 1
March 31, 1997***

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1. Market Service Description

A. Basic Service Features

Unbundled Interoffice Transport - Dedicated (UIT-D) provides a transmission path, and its associated electronics, between BellSouth end offices that allows a CLEC to transport DS0s (Voice or Data), Basic Rate ISDN (ISDN-BRI), DS1s, or DS3s from one location to another. These facilities are dedicated to a single network provider. These facilities may be configured in various transmission configurations and will provide the same transport capacities that exist in Section 6 of the FCC tariff (i.e., DS0, DS1 and DS3) with the addition of ISDN-BRI which is equal to 3 DS0s. The structure of this UNE will also be consistent with existing interoffice transport elements in BellSouth's FCC tariff.

B. Basic Service Capabilities and Restrictions

CLECs can utilize UIT-D to transport their local, toll and access traffic between BellSouth Central Offices. The interoffice mileage will be computed based on the airline mileage between the BellSouth Central Offices regardless of how UIT-D is actually routed.

C. How Does This Service Work?

UIT-D can be ordered at either the DS0 (Voice or Data), ISDN-BRI (3 DS0s), DS1, or DS3 level in order to allow the CLEC to utilize BellSouth interoffice facilities to complete a service that they are providing for their end user.

1. General Description of Performance Standards and Reliability

Service Performance Objectives:

- This UNE will be designed to meet the transmission standards in our technical publications similar to those facilities used for Switched Access Dedicated interoffice transport.

Diversity Requirements:

- No requirements for UNEs but some level of diversity will exist in BST network (embedded and forward looking)

Performance Monitoring

- No specific requirement, however, network element will be monitored as part of BST network infrastructure.

Special Considerations

- Billing Guarantees do not apply

2. Pricing Structure:

- 1) **Non-recurring charge** - There will be non-recurring charges associated with UIT-D. These charges will be flat rated and will be priced at rates established in each CLEC UNE contract.
- 2) **Recurring charge** - This UNE will have two rate elements: facility termination and per mile. The facility termination will be flat rated and will be priced at market rates. The per mile rate element will be flat rated but will be distance sensitive. The per mile rate element will also be priced at market rates. The rates will be established in each CLEC UNE contract.
- 3) **Credit Terms** - There are also no volume or term options for this service; consequently, only month to month rates will be negotiated..

3. Deployment Schedule

- Ubiquitous deployment assuming current Central Office capabilities
- Additional transport capacities will be developed based on the Bona Fide Request (BFR) process. Special construction may apply as appropriate.

D. Feature Interaction

Since UIT-D is strictly a DS0, ISDN-BRI (3 DS0), DS1, or DS3 interoffice transport service, it is the responsibility of the CLEC to insure that other UNEs purchased from BellSouth and/or portions that they provide themselves are compatible with the UIT-D element options that they are ordering.

This would include such UIT-D options as DS1 framing and formatting (e.g. ESF/B8ZS) matching the type of Unbundled Local Switching (ULS) and Unbundled Packet Switching (UPS) ports with which they are combined.

E. Description of Centers affected and their roles**Local Carrier Service Center (LCSC)**

ASR/LSR will be received, Service Inquiry initiated (in some cases)
Service Order Issuance, Send FOC to CLEC

Circuit Capacity Management (CCM)

Service Inquiry received and answered, CLFs built if required

Circuit Provisioning Group (CPG)

Circuit Designed, WORD Document Issued, DLR generated to CLEC

Central Office Work Group (COWG)

Circuit Installed based on WORD, Circuit Repaired based on WFA ticket

Access Customer Advocacy Center (ACAC)

Receive Trouble Reports, Perform Remote Testing, Issue WFA ticket

AT&T	1/800-517-2511
MCI	1/800-517-5038
Sprint	1/800-988-1402
General Carriers	1/800-307-2513

When reporting a trouble associated with UIT-D:

- Advise the center that the trouble is for Unbundled Interoffice Transport
- Provide the CLEC contact name and call back number
- Provide the BellSouth Circuit ID
- Provide the details of the trouble

2. Tariff References/Price List References

- Short Term: Individual Contract Agreements with each CLEC
- Long Term - 1999 forward: Tariff

3. Installation Intervals

Installation: VG, DS0, BRI, and DS1: 7 days with expedite charge for short intervals
DS3: ICB, based on Service Inquiry

Repair: Same as for tariffed DS0, DS1, and DS3 transport services or as specified in CLEC contract.

4. Service Inquiry & Ordering Guidelines

A CSPS Service Inquiry will be required for UIT-D DS3 level service requests and for DS1 level service requests associated with Unbundled Channelization (UC).

All CLEC requests for UIT-D, except those combined with an Unbundled Local Switching (ULS) port, should be sent to the LCSC via an ASR with UNE** (where ** is a number representing a particular UNE to collocation arrangement or UNE combination). These requests will have the same field requirements as Special Access services as far as NC, NCI, SECNCI, ACTL, SECLOC, ACNA, and other fields. The LCSC will then issue a Service Order for either a CLS or CLF circuit to CABS. The information found in Table 4-1 will allow you to properly fill out the information on the Access Service Request (ASR). It is a requirement for all UNE related ASRs to have the three characters "UNE" in the Project first three positions of the Project Field. If required, other Project Field information should then be entered in the other character positions.

All CLEC requests for UIT-D combined with an Unbundled Local Switching (ULS) port, should be sent to the LCSC via an MSR. The LCSC will then issue a Service Order for a Foreign Exchange type service (Telephone # Format) to the CRIS Billing System.

Unbundled Interoffice Transport - Dedicated Account Team Information Package - 5

UNE Desc	UNE Variation	SC & Mod	NC	NC1	SECNC1	Class	USOC1	USOC2	USOC3	CFA	
Collocation to UIT to Collocation (VG)	2W (LOOP START) 2W (GROUND START) 2W (REV BATTERY) 4W (LOOP START) 4W (GROUND START)	LYFU	LY-	02QC3.000 02QC3.RVO 04QC2.008	02QC3.008 04QC2.000	02QC2.00E 02QC2.RVT 04QC2.00E 04QC2.00C	UEA	PE1P2 or UEAC2 PE1P2 or UEAC2 PE1P2 or UEAC2 PE1P4 or UEAC4 PE1P4 or UEAC4	1LSOX	PE1P2 or UEAC2 PE1P2 or UEAC2 PE1P2 or UEAC2 PE1P4 or UEAC4 PE1P4 or UEAC4	Ca & Pr
Collocation to UIT to Collocation (BPO)	BR	LYFU	LY-	02QC3.006		02QC3.006	UDN	PE1P2 or UEAC2	1LSOX	PE1P2 or UEAC2	Ca & Pr
Collocation to UIT to Collocation (DS2)	56 KBS 64 KBS	LYFU	LY-	04QC3.OOP	04QC3.OOQ	04QC3.OOP 04QC3.OOQ	UDL	PE1P4 or UEAC4	1LSOX	PE1P4 or UEAC4	Ca & Pr
Collocation to UIT to Collocation (DS1)	AM, SF AM, ESF BAZS, ESF BAZS, SF	HCFE	HC-	04QB9.11		04QB9.11	USL	PE1P1 or CNC1X	1LSOX	PE1P1 or CNC1X	T1TIE
Collocation to UIT to Collocation (DS3)	M2/3 FORMAT BAZS COMPATIBLE	HFFE	HF-	04QB8.33		04QB8.33	UE3	PE1P3 or CNC3X	1LSOX	PE1P3 or CNC3X	T3TIE
Collocation to UIT to UC (DS1)	AM, SF AM, ESF BAZS, ESF BAZS, SF	CLF T1 CLF T1F CLF T1ZF CLF T1Z	HC-M HCDM HCEM HCZM	04QB8.11		N/A	USL	PE1P1 or CNC1X	1LSOX	MQ1	T1TIE
Collocation to UIT to UC (DS3)	M2/3 FORMAT BAZS COMPATIBLE	CLF T3 CLF T3Z	HF-4 HFZM	04QB8.33		N/A	UE3	PE1P3 or CNC3X	1LSOX	MQ3CO	T3TIE
Collocation to UIT to UUL	2W (LOOP START) 2W (GROUND START) 2W (REV BATTERY) 4W (LOOP START) 4W (GROUND START)	LYFU	LY-	02QC3.000 02QC3.RVO 04QC2.008	02QC3.008 04QC2.000	02LS2 02GS2 02RV2.T 04LS2 04GS2	UEA	PE1P2 or UEAC2 PE1P2 or UEAC2 PE1P2 or UEAC2 PE1P4 or UEAC4 PE1P4 or UEAC4	1LSOX	UEAL2 UEAL2 UEAL2 UEAL4 UEAL4	Ca & Pr
Collocation to UIT to UDL (DS2)	56 KBS 64 KBS	LYFU	LY-	04QC3.OOP	04QC3.OOQ	04DUS.54 04DUS.84	UDL	PE1P4 or UEAC4	1LSOX	UDLS6 UDLS4	Ca & Pr
Collocation to UIT to UDL (DS1)	AM, SF AM, ESF BAZS, ESF BAZS, SF	HCFE	HC-	04QB9.11		04DUS.8N or 04QB9.1S 04DUS.CN or 04QB9.1K 04DUS.CN or 04QB9.1S 04DUS.CN or 04QB9.1S	USL	PE1P1 or CNC1X	1LSOX	UDLXX	T1TIE
Collocation to UIT to UDL (DS3)	M2/3 FORMAT BAZS COMPATIBLE	HFFE	HF-	04QB8.33		04QB8.44	UE3	PE1P3 or CNC3X	1LSOX	UESPX	T3TIE
UDL to UIT to UDL (DS1)	AM, SF AM, ESF BAZS, ESF BAZS, SF	HCFE	HC-	04DUS.8N or 04QB9.1S 04DUS.CN or 04QB9.1K 04DUS.CN or 04QB9.1S 04DUS.CN or 04QB9.1S		04DUS.8N or 04QB9.1S 04DUS.CN or 04QB9.1K 04DUS.CN or 04QB9.1S 04DUS.CN or 04QB9.1S	USL	UDLXX	1LSOX	UDLXX	None
UDL to UIT to UDL (DS3)	M2/3 FORMAT BAZS COMPATIBLE	HFFE	HF-	04QB8.44		04QB8.44	UE3	UESPX	1LSOX	UESPX	None
Collocation to UIT to UPS (DS2)	56 KBS FR NH 56 KBS FR LH 56 KBS CDS SH 56 KBS CDS SBI 64 KBS FR NH 64 KBS FR LH 64 KBS CDS SH 64 KBS CDS SBI	XHPN XHPN XHPQ XHPQ XDFN XDFN XDFQ XDFQ	XH-H XH-G XH-H XH K XH-H XD-G XD-H XD K	04QC3.OOP 04QC3.OOP 04QC3.OOQ 04QC3.OOQ	04QC3.OOP 04QC3.OOP	04CX8	UDL	PE1P4 or UEAC4	1LSOX	XAPN5 XAPUS XACN5 UPTB5 XAPN5 XAPUS XACN5 UPTB5	None
Collocation to UIT to UPS (DS1)	1.536 MBS FR NH 1.536 MBS FR LH 1.536 MBS CDS SH 1.536 MBS CDS SBI	HCFN HCFN HCFQ HCFQ	HCEO HCEB HCE3 HCEX	04QB9.11		04CX8	USL	PE1P1 or CNC1X	1LSOX	XAPN1 XAPU1 XACN1 UPTB1	None
Collocation to UIT to UPS (DS3)	DS3 FR NH DS3 FR LH DS3 CDS SH DS3 CDS SBI	HFFN HFFN HFFQ HFFQ	HF-E HF-O HF-F HF-X	04QB8.33		04CX8	UE3	PE1P3 or CNC3X	1LSOX	XAPN4 XAPU4 XACN4 UPTB4	None
UDL to UIT to UPS (DS2)	56 KBS FR NH 56 KBS FR LH 56 KBS CDS SH 56 KBS CDS SBI 64 KBS FR NH 64 KBS FR LH 64 KBS CDS SH 64 KBS CDS SBI	XHPN XHPN XHPQ XHPQ XDFN XDFN XDFQ XDFQ	XH-H XH-G XH-H XH K XH-H XD-G XD-H XD K	04DUS.56 04DUS.56 04DUS.56 04DUS.56 04DUS.84 04DUS.84 04DUS.84 04DUS.84		04CX8	UDL	UDLS6 UDLS6 UDLS6 UDLS6 UDLS4 UDLS4 UDLS4 UDLS4	1LSOX	XAPN5 XAPUS XACN5 UPTB5 XAPN5 XAPUS XACN5 UPTB5	None

Figure 4-1. UIT-D Ordering Matrix

5. Customer Education

Customer Education for the ordering of UIT-D is available upon request from the CLEC Account Team.

6. Service Order Exhibits

SERVICE ORDER APPLICATIONS

Classes of Service

Description	USOC
Unbundled voice Loop	UEA
Unbundled ISDN Loop	UDN
Unbundled Digital Loop	UDL
Unbundled DS1 Loop	USL
Unbundled DS3 Loop	UE3
Unbundled Dark Fiber	UDF

The Major Account Number (MAN) will be applied to each service order, inward action coded, left hand justified, in the Bill Section.

This entry is for downstream identification and parity reporting for re-sale services and for unbundled elements.

1. The 1st position will be:
 - a. "U" for single Unbundled Elements
 - b. "R" for a Re-Sale Service
 - c. "C" for recombination of Unbundled Elements into an end to end circuit/service"

2. Positions 2-5 will be filled with the 4 digit OCN (operating company number)

Example of single unbundled element, for BellSouth OCN=5190:

- - - BILL

(example of man application only, all other entries as required)

IMAN C5190

Service & Equipment Section

1. The NC/NCI/SECNCI applications are noted as appropriate at the bottom of each exhibit. These applications can affect the CLS/CLF assignment.
2. When the CKL data is from central office to central office the SN data will be the CLEC ACNA. The LCON data will be NR for not required.
3. The application of fids CA/PR on Cross Connect collocation USOCs is:
 - a. These CA/PR will only apply when CFA is not present.
 - b. The CA is formatted: PXXX (ACNA)##(cable number)
/PR #(pair number)
Example:
11 PE1P2/CA PATX11/PR 1
4. The CTG USOC will be used for assignment when a Loop is not ordered.
5. The use of UNECN/ZRCI is to label the circuit as CLEC owned; for field use. The application of the USOC/FID is:
 - a. It is only applied at CKL level. It does not apply to CKLT.
 - b. The ZRCI fid is followed by the CLEC name, contact number, contact name.
Example:
11 UNECN/ZRCI ATX, 555 555-5555, SAM LEE
6. The exhibits reflect 2 USOCs of most USOCs. One USOC is for provisioning, the other USOC is for billing. The exhibits reflect 1ZZXX as a pseudo USOC, the billing USOC will be applied based upon contract rate. The USOC assignment is not based upon CLEC. The interoffice transport billing USOC pseudo is UITXX; the XX will be assigned alphas based again upon contract rate.
7. ZNEA is applied at the ACTL/POP location, FACS may request application at additional CKLs.

UNBUNDLED INTEROFFICE TRANSPORT - DEDICATED (UIT-D)

Exhibits for Physical Collocation, Cross Connect in both Central Offices

1. DS0
2. ISDN
3. DS1
4. DS3

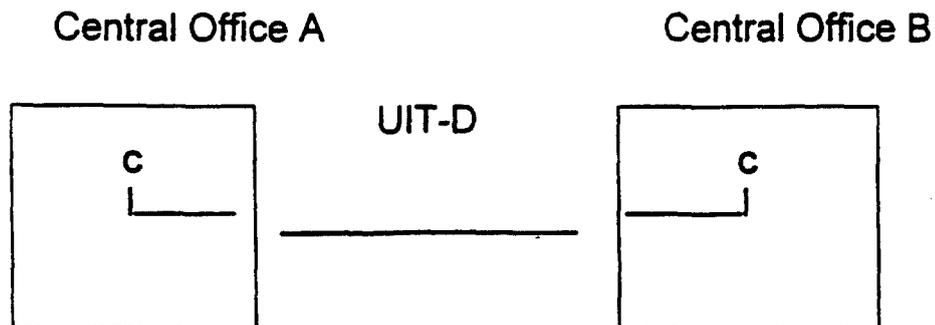


EXHIBIT 1
 UNBUNDLED INTEROFFICE TRANSPORT-DEDICATED
 UIT-D DS0 TO DS0 PHYSICAL COLLOCATION CROSS
 CONNECT IN BOTH C.O.'S

--- S&E

```

IG1  CLS  XX.LYFU.XXXXXX.XX
      /NC LY--/PIU 0
      /CKR DON970611/SSP
I1    UDL                                     (new class of service)
SUB   1-NPA NXX
IG2   CKL 1-CENTRAL OFFICE A ADDRESS, CITY, ST
      /TAR XXX,XXX/NCI 02QC3.OOD           (see table below)
      /LSO NPA NXX/ACTL X/SN XXX/LCON NR
I1    PE1P2/CA PXXX##/PR #                 (cross connect usoc-provisioning)
I1    1ZZXX/CA PXXX##/PR #                 (cross connect usoc-billing)
I1    CTG
I1    UNECN/ZRCI CLEC NAME, CONTACT
      NUMBER, CONTACT NAME                 (identification as UNE)
SUB   2-NPA NXX
IG2   CKL 2-CENTRAL OFFICE B ADDRESS, CITY, ST
      /TAR XXX,XXX/NCI 02QC3/LSO NPA NXX
      /SN XXX/LCON NR/XPOI COLLOCCLLIX
I1    PE1P2/CA PXXX##/PR #                 (cross connect usoc-provisioning)
I1    1ZZXX/CA PXXX##/PR #                 (cross connect usoc-billing)
IX    1L5XX                                 (mileage-standard billing)
IX    U1TXX                                 (UIT-D mileage-billing only)
I1    CTG
I1    UNECN/ZRCI CLEC NAME, CONTACT
      NUMBER, CONTACT NAME                 (identification as UNE)
    
```

--- RMKS

RMK START SERVICE

NOTE: APPLICABILITY OF CROSS CONNECT USOC'S ARE BASED UPON WHETHER PROVISIONING PHYSICAL OR VIRTUAL. PHYSICAL = PE1P2 (2W)/PE1P4 (4W); VIRTUAL UEAC2 (2W)/ UEAC4 (4W)

NCI/SECNCI TABLE		
VOICE	NCI	SEC NCI
LOOP START	02QC3.OOD/04QC2.OOD	02QC2.OOE/04QC2.OOE
GROUND START	02QC3.OOB/04QC2.OOB	02QC2.OOC/04QC2.OOC
REVERSE BATT	02QC3.RVO	02QC2.RVT
DIGITAL DATA	NCI	SECNCI
56 KB/S	04QC5.OOP	04QC5.OOP
64 KB/S	04QC5.OOQ	04QC5.OOQ

EXHIBIT 2
 UNBUNDLED INTEROFFICE TRANSPORT-DEDICATED
 UIT-D ISDN TO ISDN PHYSICAL COLLOCATION CROSS
 CONNECT IN BOTH C.O.'S

--- S&E

IG1 CLS XX.LYFU.XXXXXX.XX
 /NC LY--/PIU 0
 /CKR DON970611/SSP

I1 UDN (new class of service)

SUB 1-NPA NXX

IG2 CKL 1-CENTRAL OFFICE A ADDRESS, CITY, ST
 /TAR XXX,XXX/NCI O2QC5.OOS/ZNEA
 /LSO NPA NXX/ACTL X/SN XXX/LCON NR

I1 PE1P2/CA PXXX##/PR # (cross connect usoc-provisioning)
 I1 1ZZXX/CA PXXX##/PR # (cross connect usoc-billing)
 I1 CTG

I1 UNECN/ZRCI CLEC NAME, CONTACT
 NAME/CONTACT NUMBER (identification as UNE)

SUB 2-NPA NXX

IG2 CKL 2-CENTRAL OFFICE B ADDRESS, CITY, ST
 /TAR XXX,XXX/NCI O2QC5.OOS
 /LSO NPA NXX/SN XXX/LCON NR

I1 PE1P2/CA PXXX##/PR # (cross connect usoc-provisioning)
 I1 1ZZXX/CA PXXX##/PR # (cross connect usoc-billing)
 IX 1L5XX (mileage-standard billing)
 IX U1TXX (UIT-D mileage-billing only)
 I1 CTG

I1 UNECN/ZRCI CLEC NAME, CONTACT
 NAME/CONTACT NUMBER (identification as UNE)

--- RMKS

RMK START SERVICE

NOTE: APPLICABILITY OF CROSS CONNECT USOC'S ARE BASED UPON WHETHER PROVISIONING
 PHYSICAL OR VIRTUAL. PHYSICAL = PE1P2; VIRTUAL = UEAC2

EXHIBIT 3
 UNBUNDLED INTEROFFICE TRANSPORT-DEDICATED
 UIT-D DS1 TO DS1 PHYSICAL COLLOCATION CROSS
 CONNECT IN BOTH C.O.'S

--- S&E

IG1 CLS XX.HCF*.XXXXXX.XX
 /NC HC*/PIU 0
 /CKR DON970611/SSP

I1 USL (new class of service)

SUB 1-NPA NXX

IG2 CKL 1-CENTRAL OFFICE A ADDRESS, CITY, ST
 /TAR XXX,XXX/NCI O4QB9.11/ZNEA
 /CFA XXX T1TIE 1 CLLICODEAXX CLLICODEBXX
 /LSO NPA NXX/ACTL X/SN XXX/LCON NR/ZNHC

I1 PE1P1 (cross connect usoc-provisioning)
 I1 1ZZXX (cross connect usoc-billing)
 I1 CTG

I1 UNECN/ZRCI CLEC NAME, CONTACT
 NUMBER, CONTACT NAME (identification as UNE)

SUB 2-NPA NXX

IG2 CKL 2-CENTRAL OFFICE B ADDRESS, CITY, ST
 /TAR XXX,XXX/NCI O4QB9.11
 /CFA XXX T1TIE 1 CLLICODEAXX CLLICODEBXX
 /LSO NPA NXX/SN XXX/LCON NR/ZNHC

I1 PE1P1 (cross connect usoc-provisioning)
 I1 1ZZXX (cross connect usoc-billing)
 IX 1L5XX (mileage-standard billing)
 IX U1TXX (UIT-D mileage-billing only)
 I1 CTG

I1 UNECN/ZRCI CLEC NAME, CONTACT
 NUMBER, CONTACT NAME (identification as UNE)

--- RMKS

RMK START SERVICE

*CLS ID, SERVICE CODE 4TH POSITION MULTIPLE ENTRIES
 ARE POSSIBLE - SEE MATRIX

*NC 3RD POSITION MULTIPLE ENTRIES ARE POSSIBLE - SEE MATRIX

NOTE: APPLICABILITY OF CROSS CONNECT USOCS ARE BASED UPON WHETHER PROVISIONING
 PHYSICAL OR VIRTUAL. PHYSICAL = PE1P1; VIRTUAL = CNC1X

EXHIBIT 4
UNBUNDLED INTEROFFICE TRANSPORT - DEDICATED
UIT-D DS3 TO DS3 COLLOCATION CROSS CONNECT
IN BOTH C.O.'S

---S&E

IG1 CLS XX.HFF*.XXXXXX.XX
/NC HF*/-PIU 0/SSP/CKR ABCD12345

I1 UE3 (new class of service)

SUB 1-NPA NXX

IG2 CKL 1-CENTRAL OFFICE A ADDRESS, CITY, ST
/TAR XXX,XXX/NCI O4QB6.33/ZNEA
/CFA XXX T3TIE CLLICODEAXX CLLICODEBXX
/LSO NPA NXX/ACTL X/SN XXX/LCON NR/ZNHC

I1 PE1P3 (cross-connect usoc - provisioning)

I1 1ZZXX (cross-connect usoc - billing)

I1 CTG

I1 UNECN/ZRCI CLEC NAME, CONTACT
NUMBER, CONTACT NAME (identification as UNE)

SUB 2-NPA NXX

IG2 CKL 2-CENTRAL OFFICE B ADDRESS, CITY, ST
/TAR XXX,XXX/NCI O4QB6.33
/CFA XXX T3TIE CLLICODEAXX CLLICODEBXX
/LSO NPA NXX/SN XXX/LCON NR/ZNHC

I1 PE1P3 (cross-connect usoc - provisioning)

I1 1ZZXX (cross-connect usoc - billing)

IX 1L5XX (mileage - standard billing)

IX U1TXX (UIT-D mileage - temporary billing only)

I1 CTG

I1 UNECN/ZRCI CLEC NAME, CONTACT
NUMBER, CONTACT NAME (identification as UNE)

---RMKS

RMK START SERVICE

*CLS ID, SERVICE CODE 4TH POSITION MULTIPLE ENTRIES ARE
POSSIBLE - SEE MATRIX

* NC 3RD POSITION MULTIPLE ENTRIES ARE POSSIBLE - SEE MATRIX

NOTE: APPLICABILITY OF CROSS-CONNECT USOCS BASED UPON WHETHER PROVISIONING
PHYSICAL OR VIRTUAL. PHYSICAL = PE1P3; VIRTUAL = CND3X

***Unbundled Interoffice Transport-Dedicated(UIT-D)
CLEC Information Package
Issue 3
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1. Market Service Description

A. Basic Service Features

Unbundled Interoffice Transport - Dedicated (UIT-D) provides a transmission path, and its associated electronics, between BellSouth end offices that allows a CLEC to transport DS0s (Voice or Data), Basic Rate ISDN (ISDN-BRI), DS1s, or DS3s from one location to another. These facilities are dedicated to a single network provider. These facilities may be configured in various transmission configurations and will provide the same transport capacities that exist in Section 6 of the FCC tariff (i.e., DS0, DS1 and DS3) with the addition of ISDN-BRI which is equal to 3 DS0s. The structure of this UNE will also be consistent with existing interoffice transport elements in BellSouth's FCC tariff.

B. Basic Service Capabilities and Restrictions

CLECs can utilize UIT-D to transport their local, toll and access traffic between BellSouth Central Offices. The interoffice mileage will be computed based on the airline mileage between the BellSouth Central Offices regardless of how UIT-D is actually routed.

C. How Does This Service Work?

UIT-D can be ordered at either the DS0 (Voice or Data), ISDN-BRI (3 DS0s), DS1, or DS3 level in order to allow the CLEC to utilize BellSouth interoffice facilities to complete a service that they are providing for their end user.

1. General Description of Performance Standards and Reliability

Service Performance Objectives:

- This UNE will be designed to meet the transmission standards in our technical publications similar to those facilities used for Switched Access Dedicated interoffice transport.

Diversity Requirements:

- No requirements for UNEs but some level of diversity will exist in BST network (embedded and forward looking)

Performance Monitoring

- No specific requirement, however, network element will be monitored as part of BST network infrastructure.

Special Considerations

- Billing Guarantees do not apply

2. Pricing Structure:

- 1) Non-recurring charge - There will be non-recurring charges associated with UIT-D. These charges will be flat rated and will be priced at rates established in each CLEC UNE contract.
- 2) Recurring charge - This UNE will have two rate elements: facility termination and per mile. The facility termination will be flat rated and will be priced at market rates. The per mile rate element will be flat rated but will be distance sensitive. The per mile rate element will also be priced at market rates. The rates will be established in each CLEC UNE contract.
- 3) Credit Terms - There are also no volume or term options for this service; consequently, only month to month rates will be negotiated..

3. Deployment Schedule

- Ubiquitous deployment assuming current Central Office capabilities
- Additional transport capacities will be developed based on the Bona Fide Request (BFR) process. Special construction may apply as appropriate.

D. Feature Interaction

Since UIT-D is strictly a DS0, ISDN-BRI (3 DS0), DS1, or DS3 interoffice transport service, it is the responsibility of the CLEC to insure that other UNEs purchased from BellSouth and/or portions that they provide themselves are compatible with the UIT-D element options that they are ordering.

This would include such UIT-D options as DS1 framing and formatting (e.g. ESF/B8ZS) matching the type of Unbundled Local Switching (ULS) and Unbundled Packet Switching (UPS) ports with which they are combined.

E. Description of Centers affected and their roles**Local Carrier Service Center (LCSC)**

ASR/LSR will be received, Service Inquiry initiated (in some cases)
Service Order Issuance, Send FOC to CLEC

Circuit Capacity Management (CCM)

Service Inquiry received and answered, CLFs built if required

Circuit Provisioning Group (CPG)

Circuit Designed, WORD Document Issued, DLR generated to CLEC

Central Office Work Group (COWG)

Circuit Installed based on WORD, Circuit Repaired based on WFA ticket

Access Customer Advocacy Center (ACAC)

Receive Trouble Reports, Perform Remote Testing, Issue WFA ticket

AT&T	1/800-517-2511
MCI	1/800-517-5038
Sprint	1/800-988-1402
General Carriers	1/800-307-2513

When reporting a trouble associated with UIT-D:

- Advise the center that the trouble is for Unbundled Interoffice Transport
- Provide the CLEC contact name and call back number
- Provide the BellSouth Circuit ID
- Provide the details of the trouble

2. Tariff References/Price List References

- Short Term: Individual Contract Agreements with each CLEC
- Long Term - 1999 forward: Tariff

3. Installation Intervals

Installation: VG, DS0, BRI, and DS1: 7 days with expedite charge for short intervals
DS3: ICB, based on Service Inquiry

Repair: Same as for tariffed DS0, DS1, and DS3 transport services or as specified in CLEC contract.

4. Service Inquiry & Ordering Guidelines

A CSPS Service Inquiry will be required for UIT-D DS3 level service requests and for DS1 level service requests associated with Unbundled Channelization (UC).

All CLEC requests for UIT-D, except those combined with an Unbundled Local Switching (ULS) port, should be sent to the LCSC via an ASR with UNE** (where ** is a number representing a particular UNE to collocation arrangement or UNE combination). These requests will have the same field requirements as Special Access services as far as NC, NCI, SECNCI, ACTL, SECLOC, ACNA, and other fields. The LCSC will then issue a Service Order for either a CLS or CLF circuit to CABS. The information found in Table 4-1 will allow you to properly fill out the information on the Access Service Request (ASR). It is a requirement for all UNE related ASRs to have the three characters "UNE" in the Project first three positions of the Project Field. If required, other Project Field information should then be entered in the other character positions.

All CLEC requests for UIT-D combined with an Unbundled Local Switching (ULS) port, should be sent to the LCSC via an MSR. The LCSC will then issue a Service Order for a Foreign Exchange type service (Telephone # Format) to the CRIS Billing System.