

Issued: July 26, 2012

Effective: August 26, 2012

1<sup>st</sup> Revised Page 7

Cancels Original Page 7

## Table of Contents (Cont'd)

	<u>Page</u>	
8.	Digital Subscriber Line Access Service	8-1
9.	Directory Assistance Service	9-1
10.	Special Federal Government Access Service	10-1
10.1	General	10-1
10.2	Emergency Conditions	10-1
10.3	Facility Availability	10-2
10.4	Federal Government Regulations	10-2
10.5	Service Offerings to the Federal Government	10-2
10.6	Rates and Charges	10-5
11.	Special Facilities Routing of Access Services	11-1
12.	Specialized Service or Arrangements	12-1
13.	Additional Engineering, Additional Labor and Miscellaneous Services	13-1
13.1	Additional Engineering	13-1
13.2	Additional Labor	13-2
13.3	Miscellaneous Service	13-3
13.4	Presubscription	13-9
13.5	Verification of Orders for Long Distance Telemarketing	13-11
13.6	Unauthorized PIC Change	13-13
13.7	Presubscription Exceptions	13-14
13.8	Blocking Service	13-14
13.9	Billing Name and Address Service	13-16
13.10	Originating Line Screening (OLS) Service	13-18
13.11	Non-chargeable Confirmation Services	13-18
13.12	Coin Supervision Additive Service	13-19
13.13	Payphone Specific Coding Digits Service	13-19
13.14	Access Recovery Charge	13-19

(N)

Issued: July 26, 2012

Effective: August 1, 2012

1<sup>st</sup> Revised Page 8

Cancels Original Page 8

## Table of Contents (Cont'd)

	<u>Page</u>	
14. Exceptions to Access Service Offerings	14-1	
15. Access Service Interfaces and Transmission Specifications	15-1	
15.1 Switched Access Service	15-1	
15.1.1 Local Transport Interface Groups	15-1	
15.1.2 Standard Transmission Specifications	15-9	
15.1.3 Data Transmission Parameters	15-16	
15.2 Special Access Service	15-19	
15.2.1 Network Channel (NC) Codes	15-22	
15.2.2 Network Channel Interface (NCI) Codes	15-32	
15.3 Directory Access Service	15-50	
16. Public Packet Data Network	16-1	
16.1 Frame Relay Access Service	16-1	
16.1.1 General	16-1	
16.1.2 Rate Regulations	16-5	
16.1.3 Optional Rate Plans	16-13	
16.2 Asynchronous Transfer Mode Cell Relay Access Service	16-17	(N)
16.2.1 General	16-17	(N)
16.2.2 Service Description	16-17	(N)
16.2.3 Obligations of the Customer	16-18	(N)
16.2.4 Rate Regulations	16-19	(N)
16.2.5 ATM-CRS Term Discount Plan	16-32	(N)
16.3 Ethernet Transport Service	16-41	(N)
16.3.1 General	16-41	(N)
16.3.2 Service Description	16-41	(N)
16.3.3 Obligations of the Customer	16-42	(N)
16.3.4 Rate Regulations	16-43	(N)
16.4 Internet Protocol Gateway Access Service	16-72	(N)
16.4.1 General	16-72	(N)
16.4.2 Service Description	16-72	(N)
16.4.3 Obligations of the Customer	16-73	(N)
16.4.4 Rate Regulations	16-74	(N)

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 8-1

## Table of Contents (Cont'd)

	<u>Page</u>	
17. Rate and Charges	17-1	(M)
17.1 Common Line Access Service	17-1	(M)
17.2 Universal Service Fund (USF) Recover Charge	17-1	(M)
17.3 Switched Access Service	17-2	(M)
17.4 Special Access Service	17-8	(M)
17.5 Other Services	17-23	(M)
17.6 Access Recovery Charge	17.35	(N)

## ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.12 Coin Supervision Additive Service

The Telephone Company will provide Coin Supervision Additive Service to Payphone Service Providers (PSPs) who order local exchange service lines for the provision of pay telephone service and where the pay telephone equipment connected to the local exchange service lines requires central office coin supervision capability. The local exchange service lines used for the provision of pay telephone service are obtained from and subject to the terms and conditions under the Telephone Company's general and/or local tariffs.

Coin Supervision Additive Service provides the capability of central office line equipment to pass signals and/or tones from a local exchange service line to a trunk terminating at the PSP's operator service provider. These signals enable an operator service provider to recognize coin deposits and return coins to the pay telephone user. Coin Supervision Additive Service also permits a suitably equipped operator service provider to automatically ring back the originating local exchange service line upon completion of a call.

A Coin Supervision Additive Service charge as set forth in 17.5.4(N) following is assessed monthly to the PSP for each local exchange service line for which Coin Supervision Additive Service is provided.

13.13 Payphone-Specific Coding Digits Service

The Telephone Company will equip local exchange pay telephone lines ordered by Payphone Service Providers (PSPs) from the Telephone Company's general and/or local exchange tariff with the capability to transmit payphone-specific coding digits (e.g., 27 for pay telephones requiring central office coin supervision, 29 for prison/inmate pay telephones, and 70 for pay telephones not requiring central office coin supervision) to the Interexchange Carrier. These digits will be transmitted via Flexible Automatic Number Identification (Flex ANI) to Interexchange Carriers who have trunks equipped with the Flex ANI optional feature as described in Section 6 preceding. The Interexchange Carriers will use this information to compensate the PSPs for subscriber 800 series calls and dial-around access code calls (e.g., 101XXXX) placed from pay telephones.

The Telephone Company will apply a monthly Payphone-Specific Coding Digits Service charge, as set forth in 17.4.4(O) following, to each pay telephone service line that is assigned a payphone-specific coding digit. This charge recovers the initial costs of deploying the Flex ANI capability and will be in effect for the period September 1, 1998 through August 31, 2001.

13.14 Access Recovery Charge

(N)

The Access Recover Charge (ARC) recovers a portion of the Telephone Company's Eligible Recovery as defined in the Federal Communications Commission's Report and Order and Further Notice of Proposed Rulemaking in CC Docket Nos. 96-45 and 01-92; GN Docket No. 09-51; WC Docket Nos. 03-109, 05-337, 07-135 and 10-90; and WT Docket No. 10-208 (76 FR 78384, 76 FR 76623).

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 13-20

## ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.14 Access Recovery Charge (Cont'd)13.14.1 Rate Regulations

(N)

Except as specified below, the Telephone Company will bill an ARC each month as follows:

- (A) For each line or trunk assessed a Residence End User Common Line (EUCL), as specified in Section 4.6.7 (A), preceding, one (1) Residential ARC charge as set forth in Section 17.6, following, will apply.
- (B) For each line or trunk assessed a Single Line Business EUCL, as specified in Section 4.6.4 (A), preceding, one (1) Single Line Business ARC charge as set forth in Section 17.6, following, will apply.
- (C) For each line or trunk assessed a Multiline Business (MLB) EUCL, as specified in Section 4.6.4 (B), preceding, one (1) Multiline Business ARC charge as set forth in Section 17.6, following, will apply.

The Telephone Company's Residential (Res ARC), Single Line Business ARC (SLB ARC) and Multiline Business ARC (MLB ARC) rates are set forth in Sections 17.6, following.

The minimum period for which an ARC is applicable to an end user is the same as that in the general and/or local exchange tariffs for the associated local exchange service line or trunk.

When an end user temporarily suspends its local exchange service that is associated with an ARC, one-half of the monthly ARC charge will be temporarily suspended for the time period the associated local exchange service is suspended.

13.14.2 Exceptions

(N)

(A) Lifeline Customers

(N)

Pursuant to Part 51.917 (e) (6) (v) of the FCC's rules, the Residential ARC charge as set forth in Section 17.6, following, will not apply on lines of Lifeline Customers.

(B) Integrated Services Digital Network (ISDN) Services

(N)

(1) ISDN Basic Rate Interface (BRI)

(N)

When an end user is provided local exchange service under any general and/or local exchange service tariff (s) using an Integrated Services Digital Network (ISDN) Basic Rate Interface (BRI) arrangement, one (1) Residential or one (1) Single Line Business ARC charge as set forth in Section 17.6, following, applies to each ISDN BRI arrangement.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 13-21

**ACCESS SERVICE****13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)****13.14 Access Recovery Charge (Cont'd)****13.14.2 Exceptions (Cont'd)****(B) Integrated Services Digital Network (ISDN) Services (Cont'd)****(2) ISDN Primary Rate Interface (PRI)****(N)**

When an end user is provided local exchange service under any general and/or local exchange service tariff (s) using an Integrated Services Digital Network (ISDN) Primary Rate Interface (PRI) arrangement, five (5) Multiline Business ARC charges as set forth in Section 17.6, following, apply to each ISDN PRI arrangement.

**(C) DS1 Channel Service****(N)**

When an end user is provided local exchange service under any general and/or local exchange tariff (s) using a DS1 (1.544 Mbps) channel service where the customer provides the terminating channelization equipment, five (5) Multiline Business ARC charges as set forth in Section 17.6, following, apply to each DS1 channel service.

**(D) Remote Call Forwarding****(N)**

For each local exchange service provided as Remote Call Forwarding (RFC) residential or business service, under the general and/or local exchange service tariffs, the month ARC charge does not apply.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-17

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service

(N)

16.2.1 General

Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) is a connection-oriented transport service that is based on Asynchronous Transfer Mode (ATM) technology using fixed length, 53-byte cells. ATM cells generated by ATM-compatible customer premises equipment (CPE) are transmitted through the Telephone Company's ATM-CRS network to a pre-specified destination.

ATM-CRS provides customers requiring high-speed data transport for bandwidth intensive data, voice, or video applications with the ability to interconnect multiple locations using the Telephone Company's ATM-CRS network. The customer may use ATM-CRS to interconnect its customer designated premises (CDPs) served by the Telephone Company's ATM-CRS network, to interconnect its local area network (LAN) to the Telephone Company's ATM-CRS network and/or to interconnect its CDPs to an ATM network located outside of the Telephone Company's serving territory.

16.2.2 Service Description

(N)

ATM-CRS is provided using a combination of Ports, Virtual Paths and Virtual Circuit Channels. An ATM\_CRS Port is required to provide the interface into the Telephone Company's ATM-CRS network. A Virtual Path (VP) is required to establish a transmission path between any two ATM-CRS Ports. Virtual Circuit Channels (VCCs) may be ordered from the Telephone Company to establish a communications path between any two CDPs or established by the customer using its own equipment.

Service is provided, where available, between CDPs and designated Telephone Company Serving Wire Centers (SWCs). ATM-CRS will be furnished where suitable facilities exist as determined by the Telephone Company. The Telephone Company will identify its ATM-CRS equipped Serving Wire Centers in the National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4.

Issued July 26, 2012

Effective: August 1, 2012

Original Page 16-18

## ACCESS SERVICE

16 Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.2 Service Description (Cont'd)

(N)

Rates and charges for ATM-CRS are specified in Section 17.4.8(B), following.. The application of rates and charges for ATM-CRS is described later in this section.

16.2.3 Obligations of the Customer

(N)

In addition to the regulations described in other sections of this tariff, the following provisions apply to ATM-CRS:

- (A) The customer is responsible for providing the Telephone Company with the necessary information to provision ATM-CRS as specified in Section 5.2 Ordering Requirements, preceding.
- (B) The customer is responsible for providing and maintaining all required customer premises equipment (CPE), which is compatible with ATM-CRS and complies with the standards specified in the following publications: The ATM Forum Technical Committee ATM User-Network Interface (UNI) Signaling Specification (Version 4.0), Private Network-Network Interface Specification (Version 1.0) and BISDN Inter Carrier Interface (B-ICI) Specification (Version 2.0). A customer ordering Ethernet-based ATM-CRS Ports is also responsible for ensuring that its CPE complies with the standards specified in Technical Reference IEEE Std. 802.3-2008, Part 3, Section 1, Clause 15 for (T)10BASE-F, Section 2, Clause 26 for 100BASE-F, and Section 3, Clauses 34 through 38 for 1000BASE-X connections. A customer ordering the ATM-CRS Port Internet Protocol (IP) Function is also responsible for ensuring that its CPE hands off IP packets to the Telephone Company's ATM-CRS network in a format that complies with the standards specified in the Internet Engineering Task Force Request For Comments (RFC) 791 entitled "INTERNET PROTOCOL, DARPA Internet Program Protocol Specification" (September 1981) and RFC 1483 entitled "Multiprotocol Encapsulation over ATM Adaptation Layer 5" (July 1993).



## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.4 Rate Regulations

(N)

This section contains the regulations governing the rates and charges that apply for ATM-CRS. Regulations governing the rates and charges for Special, ADSL and/or SDSL Access Services provided under this tariff used in conjunction with ATM-CRS are as specified in Sections 7 and 8, preceding.

The following diagrams depict generic views of the components of ATM-CRS. In the first figure, all of the customer's CDPs are served by ATM-CRS equipped SWCs. The ATM-CRS customer orders the applicable ATM-CRS components pursuant to the provisions specified in this section and the applicable Special Access Service components pursuant to the provisions specified in Section 7, preceding.

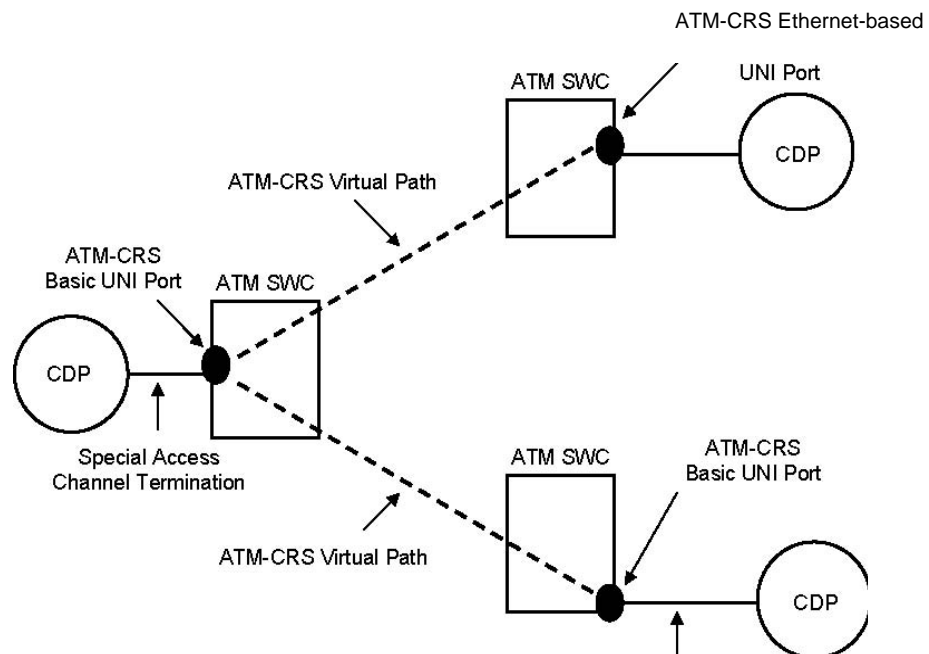


Figure 1

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

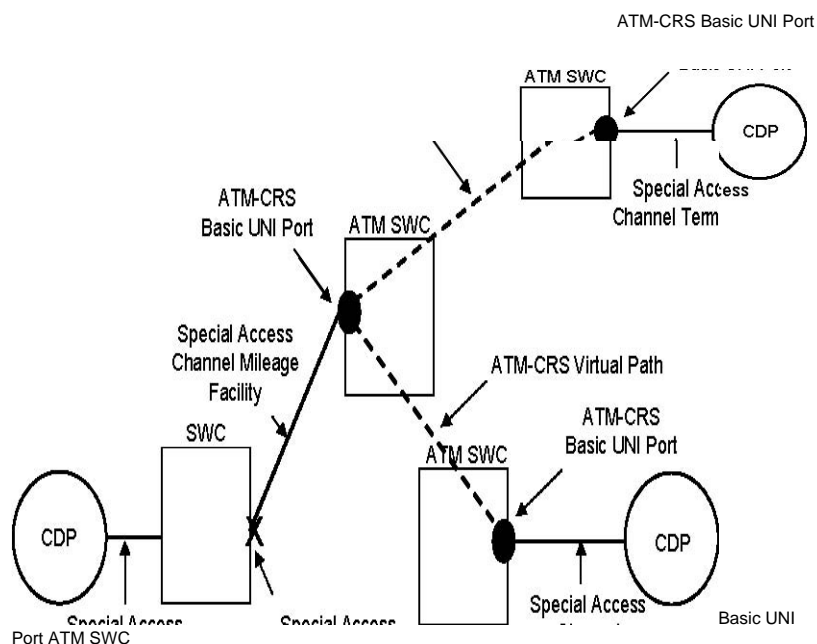
16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.4 Rate Regulations (Cont'd)

(N)

In the second figure, one of the customer's CDPs is not served by an ATM-CRS equipped SWC. The ATM-CRS customer orders the applicable ATM-CRS components pursuant to the provisions specified in this section and the applicable Special Access Service components pursuant to the provisions specified in Section 7, preceding.

Figure 2



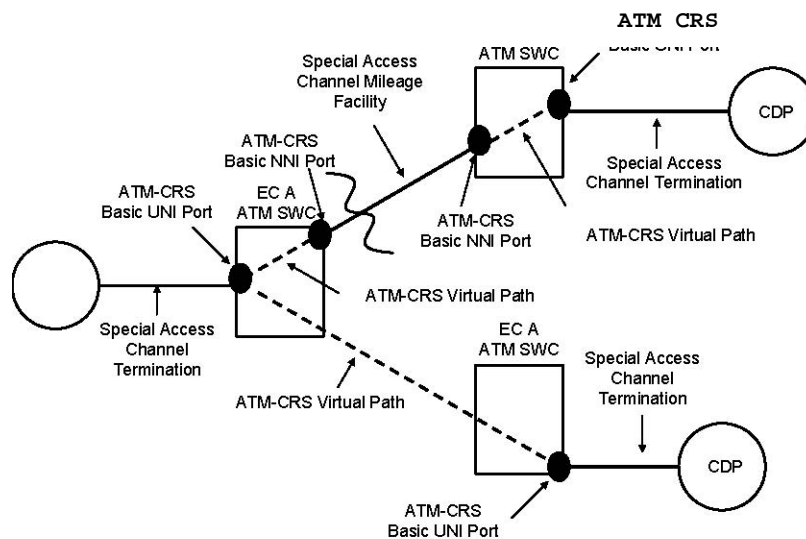
## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.4 Rate Regulations (Cont'd)

(N)

In the third figure, one of the customer's CDPs is served by another telephone company's ATM network. The ATM-CRS customer orders the applicable ATM-CRS components from the Telephone Company pursuant to the provisions specified in this section and the applicable Special Access Service components pursuant to the provisions specified in Section 7, preceding. In addition, the customer will order the applicable ATM and special access services components from the distant telephone company.

Figure 3



\* IF EC B is a non-NECA company, the application of charges will depend on its access tariff.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-22

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.4 Rate Regulations (Cont'd)(A) Rate Categories

(N)

The various ATM-CRS service components are described below.

(1) ATM-CRS Ports

(N)

An ATM-CRS Port receives ATM cells from the customer's ATM-compatible CPE, validates the addressing parameters contained in the cell headers, and transmits the cells into the ATM-CRS network. The ATM-CRS Port also receives ATM cells from the Telephone Company's ATM-CRS network or from an ATM network located outside of the Telephone Company's serving territory, validates the addressing parameters contained in the cell headers, and transmits the cells to the pre-designated CDP.

ATM-CRS Ports are available with a User Network Interface (UNI) or a Network to Network Interface (NNI) as described below. Each ATM-CRS Port must be associated with a minimum of one ATM-CRS Virtual Path or DSL Access Service Connection optional function.

Interconnection of the Telephone Company's ATM-CRS network to another ATM network located outside of the Telephone Company's serving territory is provided using ATM-CRS Basic NNI ports and Telephone Company provided Special Access Services.

(a) Basic User Network Interface (UNI) Port

(N)

Basic UNI Ports provide a port only interface to the Telephone Company's ATM-CRS network and do not include the required transport facility between the CDP and the Telephone Company's SWC at which the basic UNI Port is located. Transport to connect the CDP with the basic UNI Port is provided using Telephone Company provided DS1 and DS3 High Capacity and/or OC3 or OC12 Synchronous Optical Channel Special Access Services as described in Sections 7.10 and 7.11, preceding. Basic UNI Ports are available at bandwidth speeds of 1.544 Mbps, 44.736 Mbps, 155.32 Mbps and 622.08 Mbps.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-23

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(1) ATM-CRS Ports (Cont'd)(b) Ethernet-based User Network Interface (UNI) Port (N)

Ethernet-based UNI Ports are used to interconnect the customer's Ethernet-compatible CPE with the Telephone Company's ATM-CRS network and include the transport facility between the CDP and the Telephone Company's SWC, provided that the CDP is served by the SWC in which the Ethernet-based UNI Port is located. Ethernet-based UNI Ports are available at bandwidth speeds of up to 10 Mbps (i.e., 10 BASE-F), up to 100 Mbps (i.e., 100BASE-F) and up to 1 Gbps (i.e., 1000BASE-X).

(c) Basic Network to Network Interface (NNI) Port (N)

Basic NNI Ports provide a port only interface to the Telephone Company's ATM-CRS network and do not include the required transport facility between the CDP and the Telephone Company's SWC at which the basic NNI Port is located. Transport to connect the CDP with the basic NNI Port is provided using Telephone Company provided DS1 or DS3 High Capacity and/or OC3 or OC12 Synchronous Optical Channel Special Access Services as described in Sections 7310 and 7.11, preceding. Basic NNI Ports are available at bandwidth speeds of 1.544 Mbps, 44.736 Mbps, 155.52 Mbps and 622.08 Mbps.

(d) Ethernet-based Network to Network Interface (NNI) Port (N)

Ethernet-based NNI Ports are used to interconnect the customer's Ethernet-compatible CPE with the Telephone Company's ATM-CRS network and include a fiber only connection between the CDP and the Telephone Company's SWC, provided that the CDP is served by the SWC in which the Ethernet-based NNI is located. Ethernet-based NNI Ports are available at bandwidth speeds of up to 10 Mbps (i.e., 10BASE-F), up to 100 Mbps (i.e., 100BASE-F), and up to 1 Gbps (i.e., 1000BASE-X). Monthly and nonrecurring charges apply for each ATM-CRS Port.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-24

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(2) ATM-CRS Virtual Paths

(N)

An ATM-CRS Virtual Path (VP) is a pre-defined, logical circuit established by the Telephone Company that is required to route ATM cells between any two ATM-CRS Ports located within the Telephone Company's ATM-CRS network. VPs may be established between two ATM-CRS UNI Ports, between an ATM-RS UNI Port and an ATM-CRS NNI Port, or between two ATM-CRS NNI Ports. VPs are available in increments of 1 Mbps. The bandwidth capacity on a VP may not exceed the maximum bandwidth of the associated ATM-CRS Ports. In addition to specifying the bandwidth capacity required on its order, the customer must specify one of the following traffic routing prioritization parameters for each VP ordered.

(a) Constant Bit Rate (CBR)

(N)

CBR supports applications that require special network timing and minimal delay to ensure steady data flow of user information through the ATM-CRS network. Examples of applications requiring CBR include voice, some types of video and circuit emulation for higher speed special access services. CBR is the highest priority traffic on the network.

(b) Variable Bit Rate – real time (VB –rt)

(N)

VBR-rt supports applications for which the data flow is bursty and requires low delay variance in ATM cell transmissions. Examples of applications requiring VBR-rt include voice and video.

(c) Variable Bit Rate – Non real time (VBR-nrt)

(N)

VBR-nrt supports applications for which the data flow is bursty and variable delays in ATM cell transmissions can be tolerated. Examples of applications requiring VBR-nrt include file transfer, multimedia and computer aided design/computer aided manufacturing (CAD/CAM).

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-25

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(2) ATM-CRS Virtual Paths (Cont'd)(d) Unspecified Bit Rate (UBR) (N)

UBR supports applications for which the data flow is bursty and delay tolerant using "best effort" engineering. The Telephone Company will attempt to deliver all ATM cells received on a UBR VP, however, network congestion may result in a loss of ATM cells. Examples of applications requiring UBR include interactive data sessions, file transfers, monitoring and signaling.

Monthly and nonrecurring charges apply for each VP ordered. The monthly recurring charge is comprised of a fixed path charge and a variable bandwidth capacity charge, which is calculated based on the total bandwidth of the VP.

(3) ATM-CRS Virtual Circuit Channels (VCCs) (N)

An ATM-CRS Virtual Circuit Channel (VCC) is a pre-defined logical circuit used to route ATM cells between any two CDPs served by the Telephone Company's ATM-CRS network. VCCs may be established by the customer using its CPE or by the Telephone Company in its ATM-CRS network via the service order process.

Monthly and nonrecurring charges apply for each VCC ordered by the customer. Rates and charges specified in Sections 17.5.8 (B)(3), following, do not apply to VCCs established by the customer.

(4) Optional Features and Functions (N)(a) DSL Access Service Connection (N)

Where available, ATM-CRS UNI and/or NNI Ports may be equipped with the DSL Access Service Connection function. This function provides for the interconnection of ATM-CRS with ADSL Access Service as described in Section 8.1, preceding, and with SDSL Access Service as described in Section 8.2, preceding, provided by the Telephone Company under this tariff. The function also provides for the interconnection of ATM-CRS with a wireline broadband Internet transmission service provided

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(4) Optional Features and Functions (Cont'd)(a) DSL Access Service Connection (Cont'd)

(N)

on a non-tariffed, common carrier basis. This optional function allows the ATM-CRS customer to receive ADSL,SDSL, and/or wireline broadband Internet transmission service data traffic from and transmit ADSL, SDSL, and/or wireline broadband Internet transmission service data traffic to its end user customers using a UBR (M)traffic routing prioritization parameter.

It is available only at Telephone Company designated DSL Access Service Connection Point SWCs located within the Telephone Company's serving territory. The speed of the DSL Access Service Connection function ordered by the customer may not exceed the speed of the associated ATM-CRS Port.

A nonrecurring charge applies per port to equip the ATM-CRS UNI or NNI Port with the DSL Access Service Connection function.

- (i) A customer that requires a VBR-nrt traffic routing prioritization parameter may also order a DSL VCC between its CDP and the premises of its end user customer, provided such end user customer's premises is equipped with ADSL and/or SDSL Access Service provided by the Telephone Company under this tariff as described in Sections 8.1 and 8.2, preceding. Each DSL VCC is available with a maximum bandwidth capacity of 1 Mbps, however, the maximum speed to or from the ADSL and/or SDSL Access Service customer will not exceed the maximum peak speeds for the services as specified in Sections 8.1 and 8.2, preceding. The customer is responsible for specifying in its order the premises locations and number of DSL VCCs it wants established to each

(N)



Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-27

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(4) Optional Features and Functions (Cont'd)(a) DSL Access Service Connection (Cont'd)

## (i) (Cont'd) (N)

of its end user customers. Monthly and nonrecurring charges apply to each DSL VCC established by the Telephone Company. The DSL VCC charges apply in addition to the nonrecurring charge for equipping the ATM-CRS UNI or NNI Port with the DSL Access Service Connection function.

## (ii) (N)

Where suitable facilities exist, a customer that requires the ability to send high speed multimedia transmissions may also order a MultiMedia VCC (MM-VCC) between its CDP and the premises of its end user customer, provided such end user customer's premises is equipped with ADSL Access Service provided by the Telephone Company under this tariff as described in Section 8.1, preceding. The MM-VCC is available in increments of 1 Mbps, or 4 Mbps. The customer is responsible for specifying in its order the premises locations and the capacity of each MM-VCC. Transmission speed across the MM-VCC is not guaranteed and may be affected by factors that affect the actual speeds delivered, including the ADSL Access Service customer's distance from the Telephone Company Serving Wire Center, condition of the facilities, and any capacity limitations in the ATM-CRS customer's network design. Monthly and nonrecurring charges apply to each MM-VCC established by the Telephone Company. The MM-VCC charges apply in addition to the nonrecurring charge for equipping the ATM-CRS UNI or NNI Port with the DSL Access Service Connection function.

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(4) Optional Features and Functions (Cont'd)(a) DSL Access Service Connection (Cont'd)

## (ii) (Cont'd) (N)

When a customer elects to change the bandwidth capacity of an existing MM-VCC or to remove an existing MM-VCC from an associated ADSL Access Service line, the MM-VCC nonrecurring charge specified in Section 17.5.8 (B) (4) (a) (iv), will not apply. In lieu of such charge will apply, as specified in Section 16.2.4 (b) (2) (d), following.

When a customer disconnects a MM-VCC and the associated ADSL Access Service line at the same time, neither the MM-VCC nonrecurring charge or MM-VCC Design Change Charge will apply.

(b) ATM-CRS Port Internet Protocol (IP) Function (N)

Where available, ATM-CRS UNI and/or NNI Ports may be equipped with the ATM-CRS Port Internet Protocol (IP) Function. This non-chargeable optional function allows the customer to transmit IP packets, which were formatted by the customer's CPE in conformance with the standards specified in the Internet Engineering Task Force Request For comments (RFC) 791 entitled "INTERNET PROTOCOL, DARPA Internet Program Protocol Specification" (September 1981) and RFC 1483 entitled "Multiprotocol Encapsulation over ATM Adaptation Layer5" (July 1993), through the Telephone Company's ATM-CRS network. Monthly and nonrecurring charges do not apply to the ATM-CRS Port IP Function. When this function is installed subsequent to the installation of the ATM-CRS Port or removed from an existing ATM-CRS Port, an Access Order Charge as specified in Section 17.5.1, following, will apply per order.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-29

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (N)

There are two types of rates and charges. They are monthly rates and nonrecurring charges. The rates and charges are described below:

(1) Monthly Rates (N)

Monthly rates are recurring rates that apply each month or fraction thereof that an ATM-CRS service component is provided. For billing purposes, each month is considered to have 30 days

(2) Nonrecurring Charges (N)

Nonrecurring charges are one-time charges that apply for specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for ATM-CRS are installation of service, service rearrangements, moves and MM-VCC Design Changes. Except as specified below, these charges are in addition to the Access Order Charge as Specified in Section 17.4.1, following.

(a) Installation of Service (N)

Nonrecurring charges apply for installation of Ports, VPs, VCCs, and Optional Features and Functions ordered by the customer.

(b) Service Rearrangements (N)

Service rearrangements are changes to existing (i.e., installed) services, which may be administrative only in nature as set forth below or, that involve an actual physical change to the service.

The VP nonrecurring charge will apply per VP to change the bandwidth capacity and/or to change the traffic routing prioritization parameter on an existing VP.

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd)(2) Nonrecurring Charges (Cont'd)(b) Service Rearrangements (Cont'd)

(N)

Administrative changes will be made without charge (s) to the customer. Administrative changes are as follows:

- Change of customer name,
- change of customer or customer's end user premises address when the change of address is not a result of physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of agency authorization,
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction

(c) Moves

(N)

A move involves a change in the physical location of one of the following:

- The Point of Termination at the customer's premises
- The customer's premises

The charges for moving ATM-CRS service components are dependent on whether the move is to a different location within the same building, to a different building within the same SWC, or to a different building in a different SWC. The charges specified below apply in addition to any applicable charges for moving the associated Special Access Services as specified in Section 7.2.3, preceding.

(i) Moves Within the Same Building

(N)

Port only interfaces (i.e., Basic UNI/NNI Ports), VPs and VCCs are not impacted when a customer moves its Point of Termination to a different location within the same building. The charge for moving an

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd)(2) Nonrecurring Charges (Cont'd)(c) Moves (Cont'd)(i) Moves Within the Same Building (Cont'd) (N)

Ethernet-based UNI or Ethernet-based NNI Port within the same building will be an amount equal to one half of the nonrecurring (i.e., installation) charge for the port. There will be no change in the minimum period requirements.

(ii) Moves To a Different Building Within the Same SWC (N)

Port only interfaces (i.e., Basic UNI/NNI Ports), VPs and VCCs are not impacted when a customer moves its Point of Termination to a different building within the same SWC. The move of an Ethernet-based UNI or Ethernet-based NNI Port will be treated as a discontinuance and start of service. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new services. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

(iii) Moves to a Different Building in a Different SWC (N)

A move to a different building in a different SWC will be treated as a discontinuance and start of service of all associated ATM-CRS service components. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new services. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd)(2) Nonrecurring Charges (Cont'd)(d) MM-VCC Design Changes

(N)

The MM-VCC Design Change Charges specified in Section 17.5.8 (B) (4) (a) (v), following, will apply per MM-VCC, when the customer elects to change the bandwidth capacity of an existing MM-VCC or to remove an existing MM-VCC from an associated ADSL Access Service line. Access Order Charges will not apply when MM-VCC Design Change Charges are applicable.

(C) Minimum Periods

(N)

The minimum period of ATM-CRS service components provided to a customer and for which charges are applicable are:

- Twelve month for ATM-CRS Ports
- One month for ATM-CRS Virtual Paths and Virtual Circuit Channels

When a customer replaces its existing ATM-CRS service with a new Ethernet Transport Service provided pursuant to Section 16.3, following, the Telephone Company will waive any unsatisfied minimum period charges that may otherwise be applicable.

16.2.5 ATM-CRS Term Discount Plan

(N)

An optional term discount plan is available for Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS). Under the ATM-CRS Term Discount Plan, the monthly rates for eligible ATM-CRS service elements are reduced by a fixed percentage. The amount of the discount percentage differs based on the length of the term commitment period selected by the ATM-CRS customer.

ATM-CRS may be ordered at the customer's option on a month-to-month basis or, under a single term commitment period of either 36 months or 60 months. The customer must notify the Telephone Company in writing of the length of its selected term commitment period. For purposes of this plan, all ATM-CRS Basic User Network Interface (UNI), ATM-CRS Basic Network to Network Interface (NNI), ATM-CRS Ethernet-based UNI and ATM-CRS Ethernet-based NNI Ports included in a customer's ATM-CRS Term Discount Plan are referred to as committed ATM-CRS Ports. To be included in an ATM-CRS Term Discount, all committed ATM-CRS Ports must be ordered for the same term commitment period (i.e., all 36 months or all 60 months) and remain in-service at the

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-33

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.5 ATM-CRS Term Discount Plan (Cont'd)

(N)

same bandwidth capacity throughout the entire term commitment period. ATM-CRS Ports installed after the establishment of the customer's ATM-CRS Term Discount Plan may be ordered on a month-to-month basis or added as additional committed ATM-CRS Ports to a customer's existing term commitment period as described in (A), below.

Access Order Charges as described in Section 5.4.1, preceding, do not apply to establish a new or make any changes to an existing ATM-CRS Term Discount Plan.

The monthly rates for ATM-CRS service elements are set forth in Section 17.5.8 (B) (5), following. The ATM-CRS Term Discount Plan is only available from those Telephone Companies listed in Section 17.36.10 (A) (1), following.

The term discount percentage for the customer's selected term commitment period applies to all committed ATM-CRS Ports provided within the Telephone Company's Operating territory. The term discount percentage also applies to the following eligible ATM-CRS elements when these elements are provided within the Telephone Company's operating territory and associated with a committed ATM-CRS Port: 1) ATM-CRS Virtual Paths (VPs); 2) ATM-CRS Virtual Circuit Channels (VCCs); 3) ATM-CRS Digital Subscriber Line VCCs (DSL VCCs); and 4) ATM-CRS MultiMedia VCCs (MM-VCCs). Since there are no bandwidth or in-service requirements for ATM-CRS VPs, ATM-CRS VCCs, ATM-CRS DSL VCCs and ATM-CRS MM-VCCs associated with committed ATM-CRS Ports under the ATM-CRS Term Discount Plan, customer ordered disconnects of or changes to the number or bandwidth capacities for these elements do not affect the customer's ATM-CRS Term Discount Plan.

The term discount percentage does not apply to: 1) ATM-CRS Ports ordered on a month-to-month basis; 2) ATM-CRS VPs, ATM-CRS VCCs, ATM-CRS DSL VCCs and ATM-CRS MM-VCCs that are not associated with committed ATM-CRS Port; 3) ATM-CRS nonrecurring charges; and 4) special access services connected to an ATM-CRS Port.

Except as specified in (A) – (C), below, discontinuance charges will apply when the customer fails to satisfy the term commitment period or the in-service requirements for its committed ATM-CRS Ports.

The term discount percentage set forth in Section 17.5.8 (B) (5), following will not be subject to Telephone Company initiated decrease during the customer's selected term commitment period.

If a term discount percentage increase occurs during the term of an existing ATM-CRS Term Discount Plan, the increased percentage will be applied automatically for the remainder of the customer's existing term commitment period.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-34

## ACCESS SERVICE

16. Public Packet Data Network16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.5 ATM-CRS Term Discount Plan (Cont'd)

(N)

At the end of the term commitment period, the customer may subscribe to a new ATM-CRS Term Discount Plan commitment period or revert to month-to-month rates. If the customer does not notify the Telephone Company in writing of its choice by the end of its existing term commitment period, the Telephone Company will automatically convert the customer's ATM-CRS billing to month-to-month rates. An Access Order Change will not apply when a customer at the end of its existing ATM-CRS Term Discount Plan or reverts to month-to-month rates.

(A) ATM-CRS Port Additions

(N)

An ATM-CRS Term Discount Plan customer will choose one of the following options when ordering a new ATM-CRS Port during its existing term commitment period:

- (1) Add the new ATM-CRS Port to its existing ATM-CRS Term Discount Plan provided: 1) the customer commits to retain the newly installed ATM-CRS Port in-service at the same bandwidth capacity for the remainder of the existing term commitment period and 2) the ATM-CRS Port is being added before the last year of an existing term commitment period. The term commitment period of the customer's existing ATM-CRS Term Discount Plan will continue uninterrupted. During the last year of the commitment period, ATM-CRS Ports may not be added to an existing term commitment period.
- (2) Order the new ATM-CRS Port on a month-to-month basis. No term discount percentage would apply to the newly installed ATM-CRS Port. The term commitment period of the customer's existing ATM-CRS Term Discount Plan will continue uninterrupted.
- (3) Replace the existing ATM-CRS Term Discount Plan in its entirety with a new ATM-CRS Term Discount Plan as described in (C), below.



Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-35

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.5 ATM-CRS Term Discount Plan (Cont'd)(B) Committed ATM-CRS Port Replacements

(N)

- (1) An ATM-CRS Term Discount Plan customer may disconnect a committed ATM-CRS Port before the end of its existing term commitment period and replace it with one or more newly installed committed ATM-CRS Port (s) without the application of a discontinuance charge as described in (D), below, provided: 1) the bandwidth capacity of the replacement committed ATM-CRS Port (s) is equal to or greater than the bandwidth capacity of the disconnected committed ATM-CRS Port; 2) the customer commits to retain the replacement committed ATM-CRS Port (s) in-service at the same bandwidth capacity for the remainder of the existing term commitment period; 3) the replacement committed ATM-CRS Port (s) is added to the existing term commitment before the last year of an existing term commitment period; and 4) the customer's orders for the disconnection of the originally committed ATM-CRS Port and installation of the replacement committed ATM-CRS Port (s) are submitted to the Telephone Company at the same time and include cross references as described in Section 5.2.7, preceding.
- (2) If the bandwidth capacity of the newly installed committed ATM-CRS Port (s) is less than the bandwidth capacity of the disconnected committed ATM-CRS Port, the disconnected committed ATM-CRS Port will be subject to a discontinuance charge as described in (D), below. The newly installed port (s) can be added as a committed ATM-CRS Port to the existing term commitment period or ordered on a month-to-month basis as described in (A), above.
- (3) Since newly installed ATM-CRS Ports cannot be added to an existing term commitment period during the last year of the commitment period, and existing committed ATM-CRS Port disconnected during the last year of the commitment period cannot be replaced as described in (B) (1), above. The disconnected committed ATM-CRS Port will be subject to a discontinuance charge as described in (D), below. During the last year of the term commitment period, newly installed ATM-CRS Ports can be ordered as described in (A), above.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-36

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.5 ATM-CRS Term Discount Plan (Cont'd)(B) Committed ATM-CRS Port Replacements (Cont'd)

(N)

- (4) An ATM-CRS Term Discount Plan customer may disconnect a committed ATM-CRS Port before the end of its existing term commitment period and replace it with one or more newly installed committed ETS Port (s) added to the customer's existing ETS Term Discount Plan without the application of a discontinuance charge as described in (D), below, provided: 1) the bandwidth capacity of the replacement committed ETS Port (s) is equal to or greater than the bandwidth capacity of the disconnected committed ATM-CRS Port; 2) the term commitment period remaining in the customer's existing ETS Term Discount Plan meets or exceeds the number of months remaining in the customer's existing ATM-CRS Term Discount Plan; 3) the customer commits to retain the replacement committed ETS Port (s) in-service at the same bandwidth capacity for the remainder of the customer's existing ETS Term Discount Plan term commitment period; 4) the replacement committed ETS Port (s) is added to the customer's existing ETS Term Discount Plan term commitment before the last year of an existing term commitment period; and 5) the customer's orders for the disconnection of the originally committed ATM-CRS Port and installation of the replacement committed ETS Port (s) are submitted to the Telephone Company at the same time and include cross references as described in Section 5.2.7, preceding.

Terms and conditions for the ETS Term Discount Plan are specified in Section 16.3.5, following.

(C) ATM-CRS Term Discount Plan Replacements

(N)

- (1) The customer may replace an existing ATM-CRS Term Discount Plan in its entirety with a new ATM-CRS Term Discount Plan without the application of a discontinuance charge as described in (D), below, provided: 1) the term commitment period of the new ATM-CRS Term Discount Plan meets or exceeds the number of months remaining in the customer's existing ATM-CRS term commitment period and 2) the bandwidth capacity of the committed ATM-CRS Ports under the new ATM-CRS Term Discount Plan meets or exceeds the bandwidth capacity of the committed ATM-CRS Ports in the customer's existing ATM-CRS term commitment period. The term discount percentage applicable for the new ATM-CRS Term Discount Plan will apply on a going forward basis based on the customer's written request to establish a new ATM-CRS Term Discount Plan commitment period under this provision.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-37

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.5 ATM-CRS Term Discount Plan (Cont'd)(C) ATM-CRS Term Discount Plan Replacements (Cont'd)

(N)

## (1) (Cont'd)

For example, a customer with an existing 36 month term commitment period and 30 Mbps of bandwidth capacity for its committed ATM-CRS Ports can replace that term commitment in its entirety with a new 36 month or 60 month term commitment period at any time during the existing term commitment period without the application of a discontinuance charge provided the bandwidth capacity of the customer's committed ATM-CRS Ports under the new term commitment period is at least 30 Mbps.

(2) When the term commitment period of a replacement ATM-CRS Term Discount Plan does not meet or exceed the number of months remaining in the customer's existing ATM-CRS Term Discount Plan commitment period, a discontinuance charge as described in (D), below will apply.

(3) When the term commitment period of the new ATM-CRS Term Discount Plan meets or exceeds the number of months remaining in the customer's existing ATM-CRS term commitment period, but the bandwidth capacity of the customer's committed ATM-CRS Ports under the new term commitment period is less than the bandwidth capacity of the committed ATM-CRS Ports under the customer's existing term commitment period, the following provisions will apply.

(a) When the total monthly undiscounted charges for the number and type of committed ATM-CRS Ports to be included in the customer's replacement ATM-CRS Term Discount Plan is equal to or greater than the total monthly undiscounted charges for the number and type of committed ATM-CRS Ports in the customer's existing ATM-CRS Term Discount Plan, the customer will be permitted to replace its existing ATM-CRS Term Discount Plan without the application of either a discontinuance charge as described in (D), below, or a commitment shortfall charge as described in (b), below.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-38

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.5 ATM-CRS Term Discount Plan (Cont'd)(C) ATM-CRS Term Discount Plan Replacements (Cont'd)

(N)

## (3) (Cont'd)

- (b) When the total monthly undiscounted charges for the number and type of committed ATM-CRS Ports to be included in the customer's replacement ATM-CRS Term Discount Plan is less than the total monthly undiscounted charges for the number and type of committed ATM-CRS Ports included in the customer's existing ATM-CRS Term Discount Plan, the customer will be permitted to replace its existing ATM-CRS Term Discount Plan under this provision, however, a commitment shortfall charge will apply. The commitment shortfall charge will apply in lieu of a discontinuance charge as described in (D), below, and will be calculated as follows:

Step 1: Determine the difference between the total monthly undiscounted charges for the number and type of committed ATM-CRS Ports included in the customer's existing ATM-CRS Term Discount Plan and the total monthly undiscounted charges for the number and type of committed ATM-CRS Ports to be included in the customer's replacement ATM-CRS Term Discount Plan.

Step 2: Multiply the result from Step 1 by 35%.

Step 3: Multiply the result from Step 2 times the number of months remaining in the existing term commitment period.

- (4) The customer may replace an existing ATM-CRS Term Discount Plan in its entirety with a new ETS Term Discount Plan without the application of a discontinuance charge as described in (D), below. Provided: 1) the term commitment period of the new ETS Term Discount Plan meets or exceeds the number of months remaining in the customer's existing ATM-CRS term commitment period and 2) the bandwidth capacity of the committed ETS Ports under the new ETS Term Discount Plan meets or exceeds the bandwidth capacity of the committed ATM-CRS Ports in the customer's existing ATM-CRS term commitment period. The term discount percentage applicable for the new ETS Term Discount plan will apply on a going forward basis based on the customer's written request to establish a new ETS Term Discount Plan commitment period under this provision

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-39

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)16.2.5 ATM-CRS Term Discount Plan (Cont'd)(C) ATM-CRS Term Discount Plan Replacements (Cont'd)

(N)

## (4) (Cont'd)

When the term commitment period of a replacement ETS Term Discount Plan does not meet or exceed the number of months remaining in the customer's existing ATM-CRS Term Discount Plan commitment period, a discontinuance charge as described in (D), below, will apply.

Terms and conditions for the ETS Term Discount Plan are specified in Section 16.3.5, following.

(D) Discontinuance Charges

(N)

Except as proved for in (B) and (C), above, discontinuance charges will apply when: 1) the customer disconnects a committed ATM-CRS Port prior to the end of the term commitment period; 2) the customer disconnects a committed ATM-CRS Port prior to the end of the term commitment period and the replacement omitted ATM-CRS or ETS Port (s) does not satisfy the requirements specified in (B), above; 3) the customer discontinues an existing ATM-CRS Term Discount Plan with a new ATM-CRS Term Discount Plan or new ETS Term Discount Plan that does not satisfy the requirements specified in (C), above.

Example 1

A customer discontinues its existing ATM-CRS Term Discount Plan in its entirety in the 20<sup>th</sup> month of a 36 month term commitment period. The customer included three 100 Mbps committed ATM-CRS Ethernet-based UNI Ports when it established its initial term plan commitment.

Using an illustrative undiscounted monthly rate of \$982.38 for a 100Mbps ATM-CRS Ethernet-based UNI Port, the Telephone Company would bill the customer a term plan discontinuance charge totaling \$16,503.84 (i.e., \$982.38 x 35% x 3 ports x 16 months).

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-40

ACCESS SERVICE

16. Public Packet Data Network (Cont'd)

16.2 Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

16.2.5 ATM-CRS Term Discount Plan (Cont'd)

(D) Discontinuance Charges (Cont'd)

(N)

Example 2

A customer disconnects one of the four 10 Mbps committed ATM-CRS Ethernet-based UNI Ports included in its ATM-CRS Term Discount Plan in the 39<sup>th</sup> month of a 60 month term commitment period. The customer included all four of these ports when it established its initial term plan commitment.

Using an illustrative undiscounted monthly rate of \$689.01 for a 10 Mbps ATM-CRS Ethernet-based UNIT Port, the Telephone Company would bill the customer a port discontinuance charge totaling \$5,064.15 (i.e., \$698.01 x 35% x 21 months).

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-41

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service

(N)

16.3.1 General

(N)

Ethernet Transport Service (ETS) is a high speed data transport service that provides end-to-end transmission using Ethernet packet technology at transport speeds ranging from 2 Mbps to 1 Gbps, where available. ETS is ideal for transport of broadband multimedia traffic (i.e., voice, data and video) using variable length Ethernet packets which the ability of interconnect multiple locations using the Telephone Company's ETS network. Ethernet packets generated by Ethernet-compatible customer premises equipment (CPE) are transmitted using available capacity on shared transmission paths through the Telephone Company's ETS network to a pre-specified destination. The ETS customer may ETS to: (1) interconnect customer designated premises (CDPs) served by the Telephone Company's ETS network, (2) interconnect with its local area network (LAN) to the Telephone Company's ETS network and/or (3) interconnect its CDPs to an Ethernet network located outside of the Telephone Company's serving territory.

16.3.2 Service Description

(N)

ETS is provided using a combination of ETS Channel Terminations (ETS CTs), ETS Ports, ETS Ethernet Virtual Connections (ETS EVCs), ETS Extended Ethernet Virtual Connections (ETS E-EVCs) and ETS Interconnected Ethernet Virtual Connections (ETS I-EVCs). As described below, ETS may be used in conjunction with Special Access High Capacity DS3 and Synchronous Optical Channel Service OC3 and OC12 Services as specified in Section 7, preceding, and with DSL Access Services as specified in Section 8, preceding.

An ETS Port is required to provide the interface into the Telephone Company's ETS network. ETS EVCs establish a shared transmission path between any two ETS Ports on the Telephone Company's ETS network. ETS E-EVCs may be ordered to connect the Telephone Company's ETS network to an adjacent telephone company's Ethernet network. ETS I-EVCs may be ordered to connect the Telephone Company's ETS network to non-adjacent telephone company's Section 16.3.4 (A) (5), below.

The transmission quality of ETS is not guaranteed and is offered to ETS customers at a best effort level. The Telephone Company will attempt to deliver all Ethernet packets received; however, network congestion may result in a loss of Ethernet packets. Transmission speeds using copper facilities may be affected by distance from the Telephone Company central office and other technical limitations in the Telephone Company's copper network and are also not guaranteed.

Service is provided, where available, between CDPs and designated Telephone Company serving Wire Centers (SWCs). ETS will be furnished where suitable facilities exist as determined by the Telephone Company. The Telephone Company will identify its ETS-equipped Serving Wire Centers (SWCs) in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-42

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.2 Service Description (Cont'd)

(N)

Rates and charges for ETS are specified in Section 17.5.8(C), following. The application of rates and charges (C) for ETS is described later in this section.

16.3.3 Obligations of the Customer

(N)

In addition to the regulations described in other sections of this tariff, the following provisions apply to ETS:

- (A) The ETS customer is responsible for providing the Telephone Company with the necessary information to provision ETS as specified in Section 5.2 Ordering Requirements, preceding.
- (B) The ETS customer is responsible for providing and maintaining all required CPE, which is compatible with ETS and complies with the standards specified in Technical Reference IEEE Standard 802.3-2008, (T)Part 3, Sections 1 through 5.



## ACCESS SERVICE

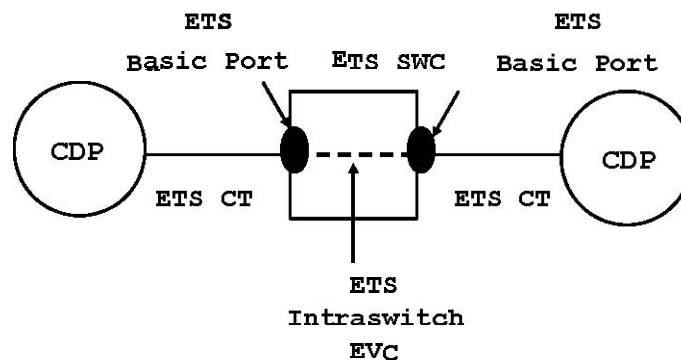
16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations

(N)

This section contains the regulations governing the rates and charges that apply for ETS. Regulations governing the rates and charges for Special Access and DSL Access Services provided under this tariff used in conjunction with ETS are as specified in Sections 7 and 8, preceding.

The following diagrams depict generic views of the elements of ETS. In the first figure, the ETS customer's CDPs are served by a single ETS SWC. ETS EVCs ordered between two ETS Ports in the same SWC are classified as ETS Intraswitch EVCs. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section.

Figure 1



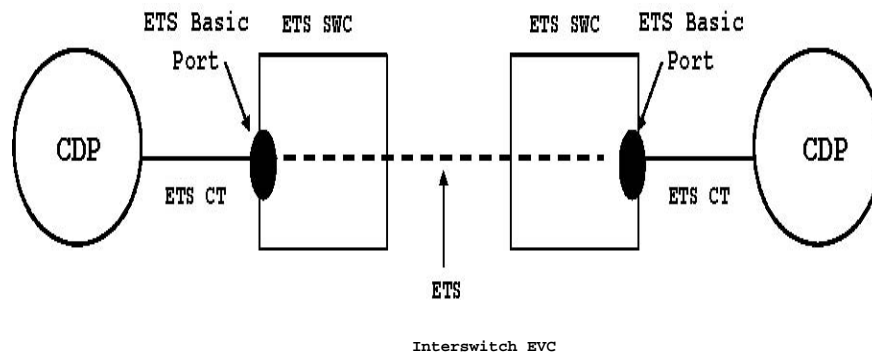
## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)

(N)

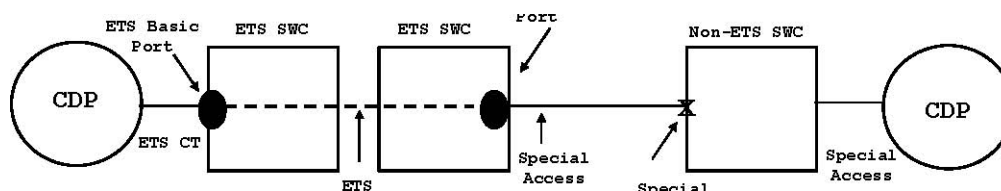
In the second figure, the ETS customer's CDPs are reserved by different ETS SWCs. ETS EVCs ordered between two ETS Ports in different SWCs are classified as ETS Interswitch EVCs. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section.

Figure 2



In the third figure, one of the ETS customer's CDPs is served by a non-ETS SWC. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section and the applicable Special Access facilities pursuant to the provisions specified in Section 7, preceding.

Figure 3



## ACCESS SERVICE

### 16. Public Packet Data Network (Cont'd)

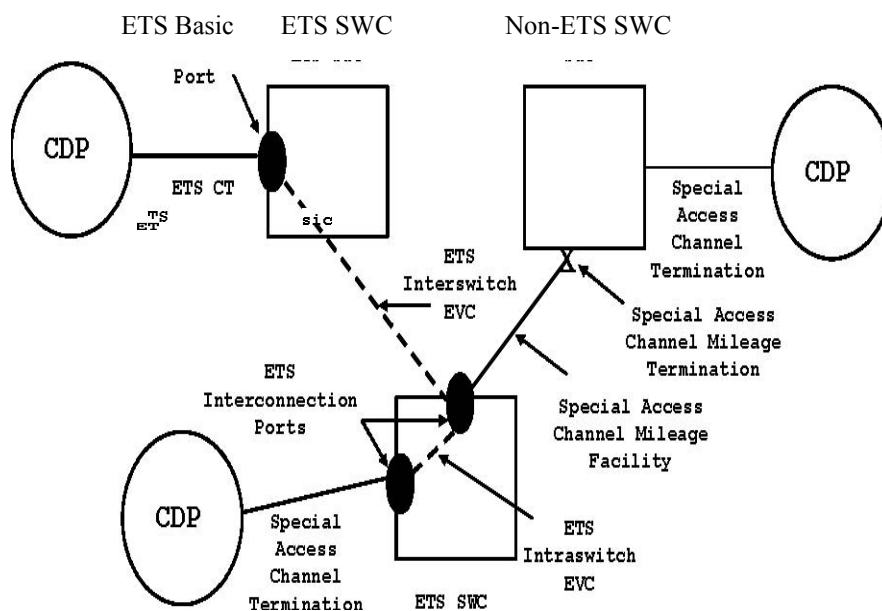
#### 16.3 Ethernet Transport Service (Cont'd)

##### 16.3.4 Rate Regulations (Cont'd)

(N)

In the fourth figure, a multipoint configuration is depicted where the customer chose to order Special Access Service to an ETS SWC. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section and the applicable Special Access facilities pursuant to the provisions specified in Section 7, preceding.

Figure 4



P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-46

## ACCESS SERVICE

### 16. Public Packet Data Network (Cont'd)

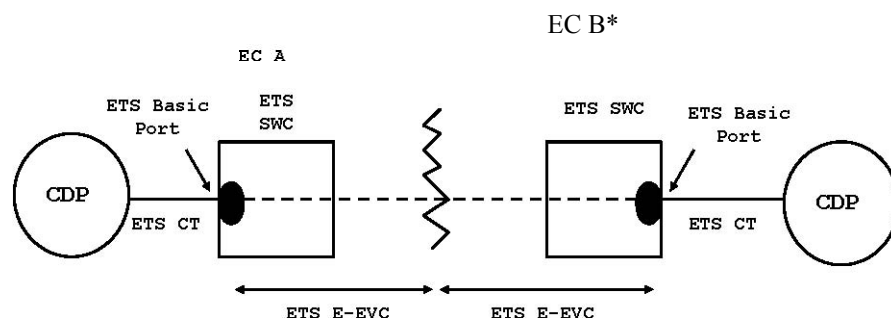
#### 16.3 Ethernet Transport Service (Cont'd)

##### 16.3.4 Rate Regulations (Cont'd)

(N)

In the fifth figure, one of the ETS customer's CDPs is served by an adjacent telephone company's Ethernet network. The ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section. In addition, the ETS customer will order the applicable Ethernet service elements from the adjacent telephone company.

Figure 5



\* If EC B is a non-NECA company, the application of charges will depend on its access tariff

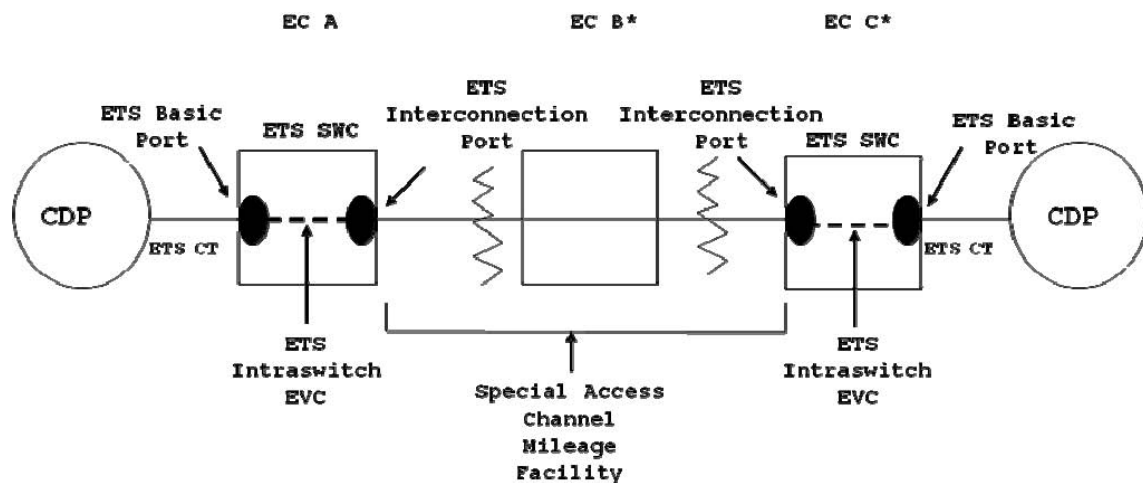
## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)

(N)

In the sixth figure, one of the ETS customer's CDPs is served by a non-adjacent telephone company's Ethernet network. When the number of airline miles between the ETS SWCs serving the ETS customer's CDPs is greater than seventy-five, the ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section and applicable Special Access facilities pursuant to the provisions specified in Section 7, preceding. In addition, the ETS customer will order the applicable special access service and Ethernet service elements from the interconnecting telephone companies.

Figure 6



\* If EC B and C are non-NECA companies, the application of charges will depend on their access tariffs.

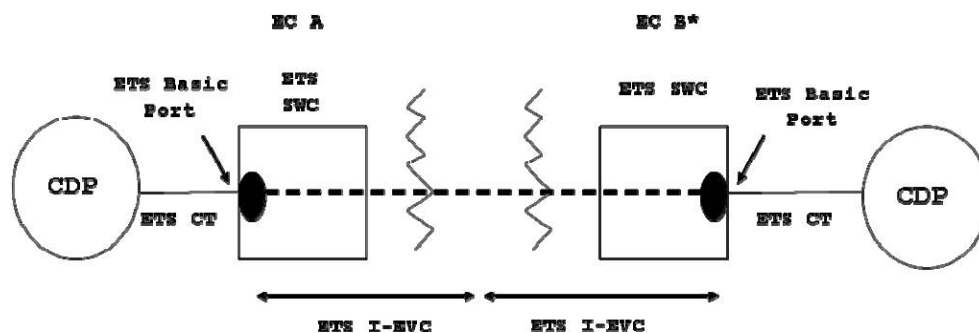
## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)

(N)

In the seventh figure, one of the ETS customer's CDPs is served by a non-adjacent telephone company's Ethernet network. When the number of airline miles between the ETS SWCs serving the ETS customer's CDPs is equal to or less than seventy-five, the ETS customer orders the applicable ETS elements from the Telephone Company pursuant to the provisions specified in this section. In addition, the ETS customer will order the applicable Ethernet service elements from the non-adjacent telephone company.

Figure 7



\* If EC B is a non-NECA company, the application of charges will depend on its access tariff.

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories

(N)

The various ETS service elements are described below.

(1) ETS Channel Terminations (CTs)

(N)

An ETS CT provides the transport facility between the customer's designated premises and an ETS Basic Port at the Telephone Company's ETS SWC.

ETS CTs are available at bandwidth speeds of 2 Mbps, 5 Mbps, 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 250 Mbps, 500 Mbps, 750 Mbps and 1 Gbps. The ETS customer orders the type of ETS CT it needs based on its bandwidth requirements. Bandwidth speeds of 50 Mbps and above require use of a fiber loop facility, where such fiber facilities exist. ETS CTs are available only from suitably equipped ETS SWCs for connection to ETS Basic Ports.

A Special Access High Capacity DS3 or Synchronous Optical Channel Service OC3 or OC12 Channel Termination may also be used to connect a CDP to the Telephone Company's ETS SWC for connection to an ETS Interconnection Port. The provisions for Special Access Channel Terminations are specified in Section 7, preceding.

Monthly and nonrecurring charges apply for each ETS CT ordered. The monthly recurring rate and nonrecurring charge are based upon the bandwidth capacity ordered and whether the CDP is located within 300 feet of the ETS SWC or more than 300 feet from the ETS SWC. Rates and charges are specified in Section 17.5.8 (C) (1), following, or when applicable, as specified in Section 17.5.8 (C) (9), following.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-50

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(2) ETS Ports

(N)

ETS Ports provide the interface at the Telephone Company's ETS SWC for data traffic to and from the customer premises equipment as well as for connecting the Telephone Company's ETS network with the ethernet network of another telephone company. An ETS Port receives Ethernet packets from the ETS customer's Ethernet-compatible CPE, validates the addressing parameters contained in the packet headers, and transmits the packets into the ETS network. The ETS Port also receives Ethernet packets from the Telephone Company's ETS network or from an Ethernet network located outside of the Telephone Company's serving territory, validates the addressing parameters contained in the packet headers, and transmits the packets to the pre-designated CDP.

There are two types of ETS Ports available, i.e., ETS Basic Ports and ETS Interconnection Ports.

- (a) ETS Basic Ports provide the interface to the Telephone Company's ETS network and do not include the required transport facility between the CDP and the Telephone Company's ETS SWC.

ETS Basic Ports are available with bandwidth speeds of 2 Mbps, 5 Mbps, (C)10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 250 Mbps, 500 Mbps, 750 Mbps and 1 Gbps.

(C)Required transport to the ETS Basic Port is provided using an ETS CT as described above. Each ETS Basic Port must be associated with a minimum of one ETS EVC, one ETS E-EVC, one ETS I-EVC or one optional DSL Access Service Connection function. An ETS Basic Port may be associated with more than one ETS EVC, ETS E-EVC or ETS I-EVC. The bandwidth speed of an ETS Basic Port must be equal to or greater than the bandwidth speed of the associated ETS CT. The bandwidth speed of an optional DSL Access Service Connection function must be equal to the bandwidth speed of the associated ETS Basic Port.



## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(2) ETS Ports (Cont'd)

(N)

- (b) ETS Interconnection Ports also provide the interface to the Telephone Company's ETS network and do not include the required transport facility between the CDP and the Telephone Company's ETS SWC. Used in conjunction with Special Access DS3, OC3, and/or OC12 Services, ETS Interconnection Ports permit the ETS customer to : 1) connect a CDP served by an ETS or non-ETS SWC to the Telephone Company's ETS network or 2) interconnect the Telephone Company's ETS network to an Ethernet network located in the serving territory of a non-adjacent telephone company.

ETS Interconnection Ports are available at bandwidth speeds of 44.736 Mbps (DS3), 155.52 Mbps (OC3) and 622.08 Mbps (OC12).

Required transport to the ETS Interconnection Port is provided using Special Access DS3, OC3 and/or OC12 Service facilities as described in Section 7, preceding. Each ETS Interconnection Port must be associated with a minimum of one ETS EVC, one ETSE-EVC, one ETS I-EVC or one optional DSL Access Service Connection function. An ETS Interconnection Port may be associated with more than one ETS EVC, ETS E-EVC or ETS I-EVC. The bandwidth speed of an ETS Interconnection Port must be equal to the bandwidth speed of the associated Special Access Service Channel Termination. The bandwidth speed of an optional DSL Access Service Connection function must be equal to the bandwidth speed of the associated ETS Interconnection Port.

Monthly and nonrecurring charges apply for each ETS Port ordered. The monthly recurring rate and nonrecurring charge are determined by the capacity and type of ETS Port ordered. Rates and charges are specified in Section 17.5.8(C)(2), following, or when applicable, as specified in Section 17.5.8(C)(9), following. The Telephone Company specific rate band assignment for the ETS Port rate element is specified in the Local Transport/Special Access column in Section 17.5.1, following, or when applicable, as specified in Section 17.5.8(C)(9), following.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-52

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(3) ETS Ethernet Virtual Connections (ETS EVCs)

(N)

ETS EVCs are logical associations established by the Telephone Company across a shared transmission path that allow the ETS customer to transmit packets between any two ETS Ports located on the Telephone Company's ETS network. ETS EVCs are available in fixed bandwidth amounts of 2 Mbps, 5 Mbps, 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 250 Mbps, 500 Mbps, 750 Mbps and 1 Gbps. The Telephone Company will establish ETS EVCs based upon the bandwidth capacity specified by the ETS customer on its Access Order.

When ETS EVCs are ordered between two ETS Ports in the same SWC, the ETS customer will be charged the ETS Intrswitch EVC rate.

When ETS EVCs are ordered between ETS Ports that are in different SWCs within the Telephone Company's serving territory, the ETS customer will be billed the ETS Interswitch EVC rate.

An ETS customer may chose to order one or more Class of Service (CoS) levels on an existing ETS EVC or when ordering a new ETS EVC.

A CoS level provides priority routing of the ETS customer's traffic through the Telephone Company's network. When the customer orders a CoS level, the Telephone Company will configure its network equipment to recognize and transmit customer traffic according to the user priority value (s) populated by the ETS customer's CPE.

A CoS level is available for use only on an ETS customer's ETS Intrswitch or Interswitch EVC when provided between two ETS Basic Ports located within the Telephone Company's serving territory.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-53

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(3) ETS Ethernet Virtual Connections (ETS EVCs) (Cont'd) (N)

The CoS levels of Real Time and Near Real Time are as described below:

- Real Time CoS supports applications that require minimal delay and low latency to facilitate steady data flow of user information through the ETS network. Examples of applications requiring a Real Time CoS level may include voice, high quality video, and circuit emulation for higher speed special access services. When ordered by the ETS customer, the Telephone Company's network will transport traffic provided the user priority value field with a value of 6. When the ETS customer's CPE populates its packets with a user priority value of 6, the Telephone company will provide the highest level of priority routing through its network of those packets up to the Real Time CoS level bandwidth capacity ordered before routing any of the ETS customer's other packets received with a user priority value of less than 6.
- Near Real Time CoS supports applications for which the data flow requires low delay variance and can tolerate some latency in ETS packet transmissions. Examples of applications requiring a Near Real Time CoS level may include priority business applications, multimedia transmissions and streaming video services. When ordered by the ETS customer, the Telephone Company's network will transport traffic provided the ETS customer's CPE populates the user priority value field with a value of 3,4 or 5. When the ETS customer's CPE populates its packets with a user priority value of 5,4, or 3, the Telephone Company will provide priority routing through its network of those packets up to the Near Real Time CoS level bandwidth capacity ordered before routing any of the ETS customer's other packets received with a user priority value of less than 3. Unless otherwise requested by the customer and agreed upon by the Telephone Company, Near Real Time CoS level priority routing provides that: 1) packets received with a user priority value of 5 will receive higher priority routing through the Telephone Company's network than packets received with user priority values of 4 or 3 and 2) packets received with a user priority of 4 will receive higher priority routing than packets received with a priority value of 3.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-54

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(3) ETS Ethernet Virtual Connections (ETS EVCs) (Cont'd) (N)

When an ETS customer orders a CoS, it must specify by the CoS level(s) needed, the total bandwidth capacity for each CoS level and the associated ETS EVC(s). The ETS customer may order a CoS level to be established at the same time as the associated ETS Intraswitch or Interswitch EVC is established. The ETS customer may also order a CoS level to be added to an existing associated ETS Intraswitch or Interswitch EVC.

An ETS customer may order multiple CoS levels for use on the same ETS EVC. The total bandwidth capacity ordered for all CoS levels associated with a single ETS EVC cannot exceed the bandwidth capacity of the ETS EVC. For example, an ETS customer with a 500 Mbps ETS Interswitch EVC between two 500 Mbps ETS Basic Ports could order 300 Mbps of Near Real Time CoS and 200 Mbps of Real Time CoS.

The ETS customer's traffic will receive priority routing treatment up to the available bandwidth capacity of the CoS level ordered. Any ETS customer traffic received by the Telephone Company's network beyond the available bandwidth capacity of the CoS level(s) ordered will be transported by the Telephone Company's network at best effort.

If an ETS customer orders a CoS level with a bandwidth capacity that is less than the total bandwidth capacity of the associated ETS EVC, the remaining non-assigned capacity will be transported by the Telephone Company's network at best effort. For example, an ETS customer with a 100 Mbps ETS Interswitch EVC between two 100 Mbps ETS Basic Ports orders 70 Mbps of Near Real Time CoS. If the ETS customer's CPE populated the user priority value field with a value of 3 and transmits at the full capacity of the ETS EVC, the Telephone Company's network would transport 70 Mbps of the ETS customer's traffic using Near Real Time CoS routing treatment and the remaining non-assigned 30 Mbps at best effort.

The total bandwidth capacity of all CoS levels associated with one or more ETS EVCs connected to the same ETS Basic Port may not exceed the total bandwidth capacity available on that ETS Basic Port.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-55

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(3) ETS Ethernet Virtual Connections (ETS EVCs) (Cont'd)

(N)

When a CoS level has been established on an associated ETS EVC and the user priority value field is populated with a value that is equal to or less than the CoS level ordered, the Telephone Company's network will transport the ETS customer's traffic using the user priority value populated. For example, if an ETS customer has a 250 Mbps ETS Intraswitch EVC, orders 100 Mbps of Real Time CoS (i.e., associated with user priority value of 6) and transmits 250 Mbps of traffic with a user priority value of 3 populated (i.e., Near Real Time CoS), the Telephone Company's network would transport 100 Mbps of ETS customer's traffic using Near Real Time CoS routing treatment and the remaining non-assigned 150 Mbps at best effort.

When a CoS level has been established on an associated ETS EVC and the user priority value field is populated with a value greater than the CoS level ordered, the Telephone Company's network will transport the ETS customer's traffic using the user priority value of the CoS level ordered. For example, if an ETS customer has a 250 Mbps EST Intraswitch EVC, orders 100 Mbps of Near Real Time CoS (i.e., associated with user priority value of 3, 4 or 5) and transmits 250 Mbps of traffic with a user priority value of 6 populated (i.e., Real Time CoS), the Telephone Company's network would transport 100 Mbps of the ETS customer's traffic using Near Real Time CoS routing treatment and the remaining non-assigned 150 Mbps at vest effort.

When a CoS level has been established on an associated ETS EVC and the user priority value field is not populated, the Telephone Company's network will transport the ETS customer's traffic at best effort.

When a CoS level has not been ordered for use on an associated ETS EVC, the Telephone Company's network will transport the ETS customer's traffic that transits the ETS EVC at best effort.

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(3) ETS Ethernet Virtual Connections (ETS EVCs) (Cont'd) (N)

Monthly and nonrecurring charges apply for each ETS EVC ordered. The monthly recurring rate and nonrecurring charge are based upon the bandwidth capacity ordered and whether the associated ETS Ports are located within one SWC (Intraswitch) or between different SWCs (Interswitch). Rates and charges are specified in Sections 17.5.8 (C) (3), following, or when applicable, as specified in Section 17.5.8 (C) (9), following.

A monthly recurring charge applies based on the total bandwidth capacity of each CoS level ordered and the type (i.e., Intraswitch or Interswitch) and bandwidth capacity of the associated ETS EVC. The monthly recurring charge is calculated by multiplying the applicable per megabit rate for the specified CoS level, which is based upon the type (i.e., Intraswitch or Interswitch) and bandwidth capacity of the associated ETS EVC, by the number of megabits ordered. Rates are specified in Section 17.5.8 (C) (3) (a) and (b), following, or when applicable, as specified in Section 17.5.8 (C) (9), following.

As an example, an ETS customer with a single 100 Mbps ETS Interswitch EVC between two 100 Mbps ETS Basic Ports orders a total of 30 Mbps of Near Real Time CoS. The monthly charge would be calculated by multiplying the per megabit rate for the Near Real Time CoS level for the associated 100 Mbps ETS Interswitch EVC by 30. The monthly recurring charge for the CoS level in this example would apply in addition to the monthly recurring charges for the 100 Mbps ETS Interswitch EVC and two 100 Mbps ETS Basic Ports.

An Access Order Charge applies to establish the initial CoS level on an existing ETS EVC. Only one Access Order Charge would apply to establish multiple CoS levels on an existing ETS EVC with no existing CoS level on the same access order. An Access Order Charge does not apply to make CoS level changes on an existing ETS EVC that has at least one CoS level already established.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-57

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(3) ETS Ethernet Virtual Connections (ETS EVCs) (Cont'd) (N)

The ETS Design Change Charge will apply per ETS EVC, as described in Section 16.3.4 (B) (2) (d), below, when an ETS customer elects to make one or more of the following changes on an existing ETS EVC that has at least one CoS level already established: (1) changing the bandwidth capacity of an existing CoS level; (2) adding an additional CoS level; (3) replacing one type of CoS level with another type of CoS level; or (4) removing an existing CoS level from the associated ETS EVC.

(4) ETS Extended Ethernet Virtual Connections (ETS E-EVCs) (N)

ETS E-EVCs are logical associations established by the Telephone Company across a shared transmission path that allow the ETS customer to transmit packets to and receive packets from an ETS Port located in the Telephone Company's ETS network to another telephone company's Ethernet network located in an adjacent serving territory. ETS E-EVCs can be established between two ETS Basic Ports, between two ETS Interconnection Ports or between an ETS Basic Port and an ETS Interconnection Port. ETS E-EVCs are available in fixed bandwidth amounts of 2 Mbps, 5 Mbps, 10 Mbps, 20 Mbps, 50 Mbps, (C)100 Mbps, 250 Mbps, 500 Mbps, 750 Mbps and (C)1 Gbps. The Telephone Company will establish ETS E-EVCs based upon the bandwidth capacity specified by the ETS customer on its Access Order.

Monthly and nonrecurring charges apply for each ETS E-EVC ordered. The monthly recurring rate and nonrecurring charge are based upon the bandwidth capacity of the ETS E-EVC ordered. Rates and charges are specified in Section 17.5.8(C)(4), following, or when applicable, as specified in Section 17.5.8(C)(9), following.

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(5) ETS Interconnected Ethernet Virtual Connections (ETS I-EVCS)

(N)

ETS I-EVCs are logical associations established by the Telephone Company across a shared transmission path that allow the ETS customer to transmit packets to and receive packets from an ETS Port located in the Telephone Company's ETS network to another telephone company's Ethernet network located in a non-adjacent serving territory. ETS I-EVCs can only be used when the airline distance between the ETS SWCs serving the ETS customer's CDPs is seventy-five miles or less. When the airline distance is greater than seventy-five miles, the ETS customer will use a combination of ETS elements and Special Access Service elements as depicted in Figure 6, above, to connect to its CDP in the non-adjacent serving territory. The Telephone Company will determine the airline distance between the ETS SWCs using the V&H Coordinates method, as described in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C.NO. 4.

ETS I-EVCs can be established between two ETS Basic Ports, between two ETS Interconnection Ports or between an ETS Basic Port and an ETS Interconnection Port. ETS I-EVCs are available in fixed bandwidth amounts of 2 Mbps, 5 Mbps, 10 Mbps, 20 Mbps, 50 Mbps, 100 Mbps, 250 Mbps, 500 Mbps, 750 Mbps and 1 Gbps. The Telephone Company will establish ETS I-EVCs based upon the bandwidth capacity specified by the ETS customer on its Access Order.

Monthly and nonrecurring charges apply for each ETS I-EVC based upon the bandwidth capacity ordered by the ETS (C)customer and whether the airline distance between the ETS SWCs serving the ETS customer's CDPs is: 1) less than or equal to fifty miles or 2) between fifty-one and seventy-five miles. Rates and charges are (C)specified in Section 17.5.8(C)(5), following, or when applicable, as specified in Section 17.5.8(C)(9), following.



Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-59

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(6) Optional Features and Functions

(N)

(a) DSL Access Service Connection

(N)

Where available, ETS Basic or Interconnection Ports may be equipped with the DSL Access Service Connection function. The function provides for the interconnection of ETS with ADSL Access Service as described in Section 8.1, preceding, and with SDSL Access Service as described in Section 8.2, preceding, provided by the Telephone Company under this tariff. The function also provides for the interconnection of ETS with a wireline broadband Internet transmission service provided on a non-tariffed, common carrier basis. This optional function allows the ETS customer to receive ADSL, SDSL, and/or wireline broadband Internet transmission service data traffic from and transmit ADSL, SDSL, and/or wireline broadband Internet transmission service data traffic to its end user customers.

The speed of the DSL Access Service Connection function ordered by the ETS customer must equal the speed of the associated ETS Port.

As described in Sections 8.1 and 8.2, preceding, the DSL Access Service Connection Point may be located within the serving territory of the Telephone Company, or in the serving territory of an adjacent telephone company when used in conjunction with ETS.

The availability of the DSL Access Service Connection function is designated by the Telephone Company in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4.

A nonrecurring charge applies per port to equip the ETS Port with the DSL Access Service Connection function. Rates and charges are specified in Section 17.5.8(C)(6)(a)(i) and (ii), following, or when applicable, as specified in Section 17.5.8(C)(9), following.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-60

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(6) Optional Features and Functions (Cont'd)(a) DSL Access Service Connection (Cont'd)

(N)

- (i) Where suitable facilities exist, an ETS customer that requires the ability to send high speed multimedia transmissions may also order an ETS MultiMedia Virtual Circuit Channel (ETSMM-VCC) between its CDP and the premises of its end user customer, provided such end user customer's premises is equipped with ADSL Access Service provided by the Telephone Company under this tariff as described in Section 8.1, preceding. ETS MM-VCCs are only available when the ETS customer's CDP, the ETS customer's end user premises and the Telephone Company's DSL Access Service Connection Point SWC are all located within the serving territory of the Telephone Company. ETS MM-VCCs do not increase the bandwidth capacity of ETS CTs, ETS Ports, ETS EVCs and/or Special Access Service Channel Terminations, Channel Mileage Facility and Channel Mileage Terminations used by the ETS customer to connect its CDP to the DSL Access Service Connection Point SWC.

Transmission speed across the ETS MM-VCC is not guaranteed and maybe affected by factors that affect the actual speeds delivered, including the ADSL Access Service customer's distance from the Telephone Company SWC, condition of the facilities, and any capacity limitations in the ETS customer's network design

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-61

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(6) Optional Features and Functions (Cont'd)(a) DSL Access Service Connection (Cont'd)

(N)

At each premises to which the ETS customer wants to transmit multimedia content using an ETS MM-VCC, the ETS customer must specify on its Access Order its end user customer's premises location and the total number of 10 Mbps bandwidth capacity increments required to that location. For example, an ETS customer requires an additional 40 Mbps of bandwidth capacity to one of its end user customers. On its Access Order to the Telephone Company, the ETS customer would specify the end user customer premises address and order one ETS MM-VCC made up of four 10 Mbps increments.

In the above example, the Telephone Company would bill the ETS customer for one ETS MM-VCC nonrecurring charge and one Access Order Charge. The monthly recurring rate for this ETS MM-VCC would be calculated at four times the 10 Mbps increment rate.

Monthly and nonrecurring charges apply to each ETS MM-VCC established by the Telephone Company in addition to any applicable Access Order Charges specified in Section 5.4.1, preceding. The ETS customer may order multiple ETS MM-VCCs to multiple end users' locations on a single Access Order, in which case only one Access Order Charge would apply for that order in addition to the applicable nonrecurring charge for each ETS MM-VCC established. The ETS MM-VCC charges apply in addition to the nonrecurring charge for equipping the ETS Port with the DSL Access Service Connection function. Rates and charges are specified in Section 17.5.8(C)(6)(a)(iii), following, or when applicable, as specified in Section 17.5.8(C)(9), following.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-62

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(6) Optional Features and Functions (Cont'd)(a) DSL Access Service Connection (Cont'd)

(N)

The Telephone Company will waive the ETS MM-VCC monthly rate when the local exchange telephone service, ADSL Access Service and ETS MM-VCC are provided from the same serving wire center where the Telephone Company has located its DSL Access Service Connection Point. The ETS MM-VCC nonrecurring charge specified will apply.

When an ETS customer elects to change the bandwidth capacity of an existing ETS MM-VCC or to remove an existing ETS MM-VCC from its associated ADSL Access Service line, the ETS MM-VCC nonrecurring charge will not apply. In lieu of such charge, the ETS Design Change Charge will apply, as described in (d), below.

When an ETS customer disconnects an ETS MM-VCC and the associated ADSL Access Service line at the same time, neither the ETS MM-VCC nonrecurring charge nor the ETS Design Change Charge will apply.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-63

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(6) Optional Features and Functions (Cont'd)(a) DSL Access Service Connection (Cont'd)

(N)

- (ii) Where suitable facilities exist, an ETS customer that requires the ability to transmit and receive low speed data using virtual local area network tagged frames may also order an ETS Low Bit Rate Virtual Circuit Channel (DTS LBR-VCC) between its CDP and the premises of its end user customer, provided such end user customer's premises is equipped with ADSL or SDSL Access Service provided by the Telephone Company under this tariff as described in Sections 8.1 and 8.2, preceding. This optional function allows the customer to transmit and receive tagged frames which were formatted by the customer's CPE. ETS LBR-VCCs are only available when ETS customer's CDP, the ETS customer's end user premises and the Telephone Company's DSL Access Service Connection Point SWC are all located within the serving territory of the Telephone Company. ETS LBT-VCCs do not increase the bandwidth capacity of ETS CTs, ETS Ports, ETS EVCs and/or Special Access Service Channel Terminations, Channel Mileage Facility and Channel Mileage Terminations used by the ETS customer to connect its CDP to the DSL Access Service Connection Point SWC.

Transmission speed across the ETS LBR-VCC is not guaranteed and may be affected by factors that affect the actual speeds delivered, including the ADSL or SDSL Access Service customer's distance from the Telephone Company's SWC, condition of the facilities, and any capacity limitations in the ETS customer's network design.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-64

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(6) Optional Features and Functions (Cont'd)(a) DSL Access Service Connection (Cont'd)

(N)

At each premises to which the ETS customer wants to transmit and receive low speed data using an ETS LBR-VCC, the ETS customer must specify on its Access Order its end user customer's premises locations and the total number of 64 kbps bandwidth capacity increments required to that location. For example, an ETS customer requires an additional 128 kbps or bandwidth capacity to one of its end user customers. On its Access Order to the Telephone Company, the ETS customer would specify the end user customer premises address and order one ETS LBR-VCC made up of two 64 kbps increments.

In the above example, the Telephone Company would bill the ETS customer for one ETS LBR-VCC nonrecurring charge and one Access Order Charge. The monthly recurring rate for this ETS LBR-VCC would be calculated at two times the 64 kbps increment rate

Monthly and nonrecurring charges apply to each ETS LBR-VCC established by the Telephone Company in addition to any applicable Access Order Charges specified in Section 5.4.1, preceding. The ETS customer may order multiple ETS LBR-VCCs to multiple end users' locations on a single Access Order, in which case only one Access Order Charge would apply for that order in addition to the applicable nonrecurring charge for each ETS LBR-VCC established. The ETS LBR-VCC charges apply in addition to the nonrecurring charge for equipping the ETS Port with the DSL Access Service Connection function. Rates and charges are specified in Section 17.5.8(C)(6)(a)(iv), following, or when applicable, as specified in Section 17.5.8(C)(9), following.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-65

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(6) Optional Features and Functions (Cont'd)(a) DSL Access Service Connection (Cont'd)

(N)

When an ETS customer elects to change the bandwidth capacity of an existing ETS LBR-VCC or to remove an existing ETS LBR-VCC from its associated ADSL or SDSL Access Service line, the ETS LBR-VCC nonrecurring charge will not apply. In lieu of such charge, the ETS Design Change Charge will apply, as described in (d), below.

When an ETS customer disconnects and ETS LBR-VCC and associated ADSL or SDSL Access Service line at the same time, neither the ETS LBR-VCC nonrecurring charge nor the ETS Design Change Charge will apply.

(B) Types of Rates and Charges

(N)

There are two types of rates and charges. They are monthly rates and nonrecurring charges. The rates and charges are described below:

(1) Monthly Rates

Monthly rates are recurring rates that apply each month or fraction thereof when an ETS service element is provided. For billing purposes, each month is considered to have 30 days

(2) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for specific work activity(i.e., installation or change to an existing service). The types of nonrecurring charges that apply for ETS are installation of service, service rearrangements, moves and design changes.

Except as specified below, these charges are in addition to the Access Order Charge as specified in Section 17.4.1, following.

(a) Installation of Service

Nonrecurring charges apply for installation of ETS CTs, ETS Ports, ETS EVCs, ETS E-EVCs, ETS I-EVCs and ETS Optional Features and Functions ordered by the ETS customer.

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd)(2) Nonrecurring Charges (Cont'd) (N)(b) Service Rearrangements (N)

Service rearrangements are changes to existing (i.e., installed) services, which may be administrative only in nature as set forth below or, that involve an actual physical change to the service.

When the ETS customer elects to decrease the bandwidth capacity on existing ETS Ports, associated DSL Access Service Connection functions (where applicable), and associated ETS CTs, the request will be considered a discontinuance of service for the former capacity and start of service for the new capacity. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new ETS elements. The ETS customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued ETS elements.

When the ETS customer elects to increase the bandwidth capacity on existing ETS Ports, associated DSL Access Service Connection functions (where applicable), and associated ETS CTs, the request will be considered a discontinuance of service for the former capacity and start of service for the new capacity. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new ETS elements. Any outstanding minimum period charges associated with the discontinued ETS elements that would otherwise be applicable for the bandwidth capacity upgrades described in this paragraph will be waived.

When the ETS customer elects to change the bandwidth capacity on existing ETS EVCs, ETS E-EVCs, ETS I-EVCs, ETS MM-VCCs and/or ETS LBR-VCCs (i.e., the customer requests an increase or decrease in capacity), the ETS Design Change Charge described in (d), below, will apply per ETS element changed.



Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-67

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd) (N)(2) Nonrecurring Charges (Cont'd) (N)(b) Service Rearrangements (Cont'd) (N)

When the ETS customer elects to remove existing ETS EVCs, ETS E-EVCs, or ETS I-EVCs, the ETS Design Change Charge described in (d), below, will apply per ETS EVC, ETS E-EVC or ETS I-EVC removed.

The ETS Design Change Charge will apply per ETS EVC, as described in (d), below, when an ETS customer elects to make one or more of the following changes on an existing ETS EVC that has at least one CoS level already established: (1) changing the bandwidth capacity of an existing CoS level; (2) adding an additional CoS level; (3) replacing one type of CoS level with another type of CoS level; or (4) removing an existing CoS level from the associated ETS EVC. Only one ETS Design Change Charge will apply when more than one of the above changes is made to the same associated ETS EVC at the same time on the same access order.

When the ETS customer elects to remove an existing ETS MM-VCC from its associated ADSL Access Service line, the ETS Design Change Charge described in (d), below, will apply per ETS MM-VCC removed.

When the ETS customer elects to remove an existing ETS LBR-VCC from its associated ADSL or SDSL Access Service line, the ETS Design Change Charge described in (d), below, will apply per ETS LBR-VCC removed.

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd) (N)(2) Nonrecurring Charges (Cont'd) (N)(b) Service Rearrangements (Cont'd) (N)

Administrative changes will be made without charge(s) to the ETS customer. Administrative changes are as follows:

- Change of customer name,
- Change of customer or customer's end user premises address when the change of address is not a result of physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of agency authorization,
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction

(c) Moves (N)

A move involves a change in the physical location of one of the following:

- The Point of Termination at the customer's premises
- The customer's premises

The charges for moving ETS elements are dependent on whether the move is to a different location within the same building, to a different building within the same SWC, or to a different building in a different SWC. The charges specified below apply in addition to any applicable charges for moving any applicable Special Access Services as specified in Section 7.2.3, preceding

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd)(2) Nonrecurring Charges (Cont'd)(c) Moves (Cont'd) (N)(i) Moves Within the Same Building (N)

ETS Basic and Interconnection Ports, ETS EVCs, ETS E-EVCs, and (T)ETS I-EVCs are not impacted (C) when an ETS customer moves its Point of Termination to a different location within the same building. The charge for moving an ETS CT within the same building will be an amount equal to one half of the nonrecurring (i.e., installation) charge for the ETS CT. There will be no change in the minimum period requirements.

(ii) Moves To a Different Building Within the Same SWC (N)

ETS Basic and Interconnection Ports, ETS EVCs, ETS E-EVCs and ETS I-EVCs are not impacted when an ETS customer moves its Point of Termination to a different building within the same SWC. The move of an ETS CT will be treated as a discontinuance and start of service. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new services. The ETS customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd)(2) Nonrecurring Charges (Cont'd)(c) Moves (Cont'd)(iii) Moves to a Different Building in a Different SWC (N)

A move to a different building in a different SWC will be treated as a discontinuance and start of service of all associated ETS elements. Associated nonrecurring(i.e., installation) charges will apply. New minimum period requirements will be established for the new services. The ETS customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

(d) ETS Design Changes (N)

As described in (b), above, the ETS Design Change Charge specified in Section 17.5.8(C)(6)(a)(v), following, or when applicable, as specified in Section 17.5.8(C)(9), following, will apply when the ETS customer elects to: (1) change the bandwidth capacity of existing ETSEVCs, ETS E-EVCs, ETS I-EVCs, ETSMM-VCCs and/or ETS LBR-VCCs; (2) remove existing ETS EVCs, ETS E-EVCs, or ETS I-EVCs; (3) remove an existing ETS MM-VCC from its associated ADSL Access Service line; or (4) remove an existing ETS LBR-VCC from its associated ADSL or SDSL Access Service line.

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.3 Ethernet Transport Service (Cont'd)16.3.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd)(2) Nonrecurring Charges (Cont'd)(d) ETS Design Changes (Cont'd) (N)

The ETS Design Change Charge will apply per ETS EVC when the ETS customer elects to: (1) change the bandwidth capacity of an existing CoS level; (2) add an additional CoS level; (3) replace one type of CoS level with another type of CoS level; or (4) remove an existing CoS level from the associated ETS EVC. Only one ETS Design Change Charge will apply when more than one of the above changes is made to the same associated ETS EVC at the same time on the same access order.

When applicable the ETS Design Change Charge applies in lieu of the ETS-EVC, ETS E-EVC, ETS I-EVC, ETS MM-VCC, or ETS LBR-VCC nonrecurring charge.

The Access Order Charge will not apply when the ETS Design Change Charge is applicable.

(C) Minimum Periods (N)

The minimum period for ETS service elements provided to an ETS customer and for which charges are applicable is:

- Twelve months for ETS Basic Ports, ETS Interconnection Ports, ETS Channel Terminations and
- One month for all other ETS elements.

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (N)16.4.1 General (N)

Internet Protocol Gateway Access Service (IPG) is an optional two-way packet transport service that provides an end-to-end transmission path using packet technology at transport speeds of either 1.544 Mbps or 44.736 Mbps, where available. IPG enables the customer to interconnect its Internet Protocol (IP) based network with the Telephone Company's switched network at a Telephone Company provided IP gateway. IPG is only available to connect the customer's designated premises (CDP) to a Telephone Company provided IP gateway serving wire center (IPG SWC) when both the CDP and IPG SWC are located within the Telephone Company's serving territory.

IPG provides the customer with voice transmission and call set up signaling paths between its CDP and the IPG SWC. Available for use in conjunction with Feature Group D (FGD) Switched Access Service as described in Section 6.8.1, preceding, IPG provides the customer with the ability to deliver interexchange voice traffic originated on or transported across its IP based network for termination to the Telephone Company's local exchange service subscribers and to accept interexchange voice traffic originated on or transported across the Telephone Company's network.

16.4.2 Service Description (N)

As described below, IPG is provided using a combination of IPG Transport and IPG Ports. IPG can only be used in conjunction with FGD Switched Access Service, which is ordered separately by the IPG customer.

IPG Transport is required to provide the connection between the CDP and Telephone Company IPG SWC. IPG Transport consists of an IPG Transport Termination and, where required, an IPG Transport Mileage Facility and IPG Transport Mileage Termination. Which IPG Transport rate elements apply will depend on where in its network the Telephone Company deploys its IP gateway. An IPG Port is required to provide the interface at the IPG SWC to the Telephone Company's switched network.

The transmission quality of IPG is not guaranteed and is offered to the IPG customer at a best effort level. The Telephone Company will attempt to deliver all interexchange voice traffic received that was originated on or transported across the IPG customer's IP based network.

The Telephone Company will provide the IPG customer accurate call signaling data for interexchange voice traffic that originates on or is transported across the Telephone Company's network. The call signaling data will either: 1) conform to an active 10-digit North American Numbering Plan or directory number, which is associated with the geographic location of the originating calling party (i.e., Calling Party Number and/or Automatic Number Identification) or 2) represent IP equivalent call signaling that is mutually agreed upon by the IPG customer and Telephone Company at the time the customer places its order for IPG.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-73

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (Cont'd)16.4.2 Service Description (Cont'd)

(N)

Service is provided, where available, between CDPs and designated Telephone Company IPG SWCs located within the Telephone Company's serving territory. IPG will be furnished where suitable facilities exist as determined by the Telephone Company. The Telephone Company will identify its IPG SWCs in the ATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

Rates and charges for IPG are specified in Section 17.5.8(D), following. The application of rates and charges for IPG is described later in this section.

16.4.3 Obligations of the Customer

(N)

In addition to the regulations described in other sections of this tariff, the following provisions apply to IPG.

- (A) The IPG customer is responsible for providing the Telephone Company with the necessary information to provision IPG as specified in Section 5.2 Ordering Requirements, preceding.
- (B) The IPG customer is responsible for passing to the Telephone Company accurate call signaling data that will enable the Telephone Company to accurately bill for the associated terminating FGD Switched Access Service network usage. Such call signaling data must either: 1) conform to an active 10-digit North American Numbering Plan or directory number, which is associated with the geographic location of the originating calling party (i.e., Calling Party Number and/or Automatic Number Identification) or 2) represent IP equivalent call signaling that is mutually agreed upon by the IPG customer and Telephone Company at the time the customer places its order for IPG.

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (Cont'd)16.4.3 Obligations of the Customer (Cont'd) (N)

- (C) The IPG customer is responsible for providing and maintaining all required CPE, which is compatible with IPG and the customer selected signaling interface and bearer channel format that comply with the requirements specified in the following Technical References:

- IETF RFC 3261 – June 2002;
- IETF RFC 3262 - June 2002;
- IETF RFC 3263 – June 2002;
- IETF RFC 3264 – June 2002;
- IETF RFC 3265 – June 2002;
- IETF RFC 3550 – July 2003;
- ITU-T G.711 – November 1988;
- ITU-T G.723.1 – May 2006;
- ITU-T G.729 – January 2007;
- ITU-T G.7041/Y.1303 – August 2005;
- ITU-T G.8040/Y.1340 – September 2005;
- ITU-T H.225.0 – May 2006;
- ITU-T H.245 – June 2008; and/or
- ITU-T H.323 – June 2006.

16.4.4 Rate Regulations (N)

This section contains the regulations governing the rates and charges that apply for IPG. Regulations governing the rates and charges for FGD Switched Access Service provided under this tariff used in conjunction with IPG are as specified in Section 6.8.1, preceding. The following diagrams depict generic views of the elements of IPG.



## ACCESS SERVICE

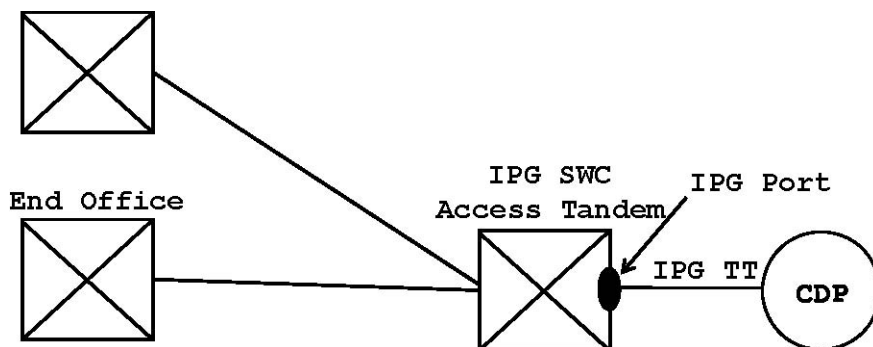
16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (Cont'd)16.4.4 Rate Regulations (Cont'd)

(N)

In the first figure, the IPG customer's CDP is served by the Telephone Company's IPG SWC. The Telephone Company deployed its IP gateway at its access tandem office. The IPG customer obtains the ability to deliver traffic originated on or transported across its IP based network for termination to local exchange service subscribers served by end offices subtending this access tandem office and to accept traffic originated on or transported across the Telephone Company's network. The IPG customer orders the applicable IPG service elements from the Telephone Company pursuant to the provisions specified in this section and the applicable FGD Switched Access Service elements pursuant to the provisions specified in Section 6.8.1, preceding.

Figure 1

End Office



• Tandem Switched Facility •  
• Tandem Switched Termination •  
• Tandem Switching • Local  
Switching • Information  
Surcharge

• IPG Transport Termination • IPG  
Port

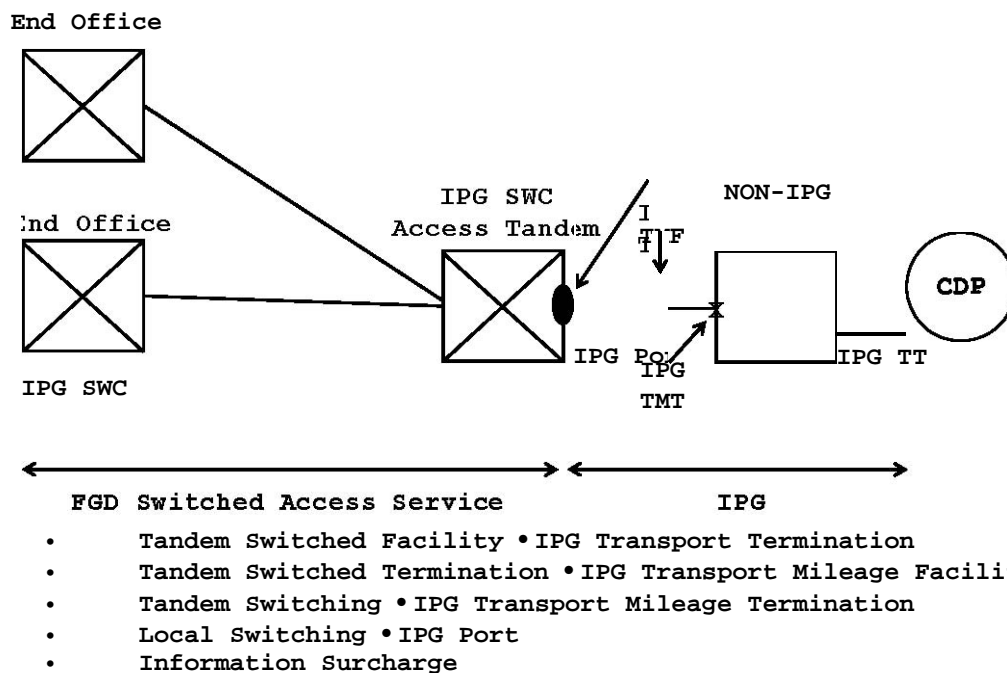
## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (Cont'd)16.4.4 Rate Regulations (Cont'd)

(N)

In the second figure, the IPG customer's CDP is served by a SWC that is not the IPG SWC. The Telephone Company deployed its IP gateway at its access tandem office. The IPG customer obtains the ability to deliver traffic originated on or transported across its IP based network for termination to local exchange service subscribers served by end offices subtending this access tandem office and to accept traffic originated on or transported across the Telephone Company's network. The IPG customer orders the applicable IPG service elements from the Telephone Company pursuant to the provisions specified in this section and the applicable FGD Switched Access Service elements pursuant to the provisions specified in Section 6.8.1, preceding.

Figure 2



(C)

(C)

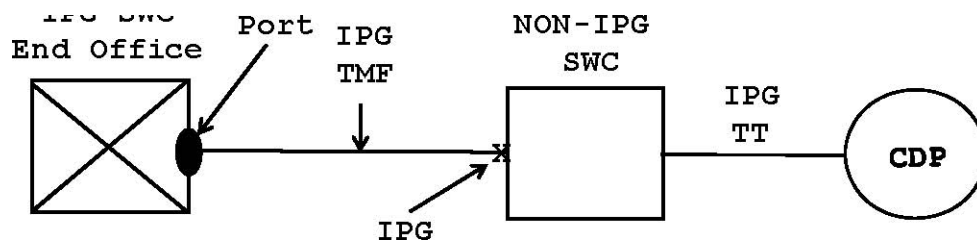
## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (Cont'd)16.4.4 Rate Regulations (Cont'd)

(N)

In the third figure, the IPG customer's CDP is served by a SWC that is not the IPG SWC. The Telephone Company deployed its IP gateway at its end office. The IPG customer obtains the ability to deliver traffic originated on or transported across its IP based network for termination to local exchange service subscribers served by this end office and to accept traffic originated on or transported across the Telephone Company's network. The IPG customer orders the applicable IPG service elements from the Telephone Company pursuant to the provisions specified in this section and the applicable FGD Switched Access Service elements pursuant to the provisions specified in Section 6.8.1, preceding.

Figure 3

FGD Switched  
Access Service

IPG

- Local Switching
- Information Surcharge

IPG Transport Termination  
IPG Transport Mileage Facility  
IPG Transport Mileage Termination  
IPG Port

## ACCESS SERVICE

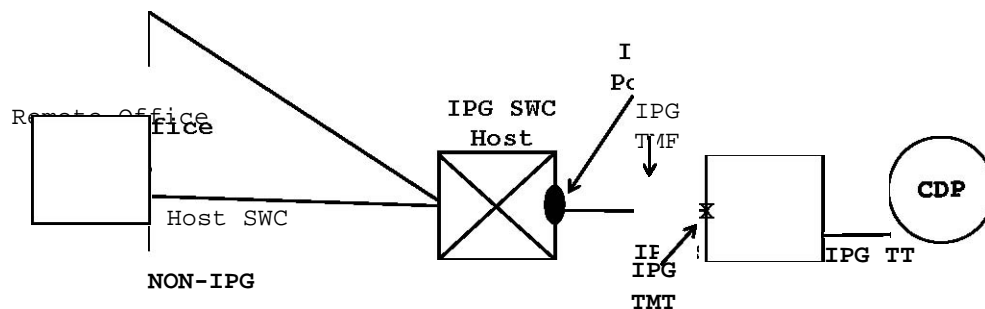
16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (Cont'd)16.4.4 Rate Regulations (Cont'd)

(N)

In the fourth figure, the IPG customer's CDP is served by a SWC that is not the IPG SWC. The Telephone Company deployed its IP gateway at its host office. The IPG customer obtains the ability to deliver traffic originated on or transported across its IP based network for termination to local exchange service subscribers served by this host office and its subtending remote offices and to accept traffic originated on or transported across the Telephone Company's network. The IPG customer orders the applicable IPG service elements from the Telephone Company pursuant to the provisions specified in this section and the applicable FGD Switched Access Service elements pursuant to the provisions specified in Section 6.8.1, preceding.

Figure 4

Remote Office



FGD Switched Access Service

IPG

- Tandem Switched Facility • IPG Transport Termination
- Tandem Switched Termination • IPG Transport Mileage Facility
- Local Switching • IPG Transport Mileage Termination
- Information Surcharge • IPG Port

(C)

(C)

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (Cont'd)16.4.4 Rate Regulations (Cont'd) (N)(A) Rate Categories (N)

IPG service elements are described below. Rates and charges are specified in Section 17.5.8 (D), following.

(1) IPG Transport Termination (TT) (N)

An IPG TT provides the transport facility between the customer's designated premises and the Telephone Company's SWC. The IPG TT rate element is designed to recover the costs associated with this transport facility.

IPG TTs are available at bandwidth speeds of 1.544 Mbps and 44.736 Mbps. The IPG customer orders the quantity and type of IPG TT it needs based on its bandwidth requirements. An IPG TT may be connected to: 1) an IPG Port when the IPG SWC is the SWC serving the customer's designated premises or 2) an IPG Transport Mileage Facility and IPG Transport Mileage Termination when the SWC serving the customer's designated premises is not IPG equipped.

Monthly and nonrecurring charges apply for each IPG TT ordered. The charges are based upon the bandwidth capacity ordered by the customer. The IPG TT will apply even if the customer's designated premises and the IPG SWC are located in the same Telephone Company building.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-80

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)

(N)

(2) IPG Transport Mileage Facility (TMF)

(N)

IPG TMF is required when the SWC serving the customer's designated premises is not IPG equipped. The IPG TMF provides the transport facility between the SWC serving the customer's designated premises and the Telephone Company's IPG SWC. The IPG TMF rate element is designed to recover the costs associated with this transport facility.

IPG TMF is available at bandwidth speeds of 1.544 Mbps and 44.736 Mbps. The IPG customer orders the quantity and type of IPG TMF it needs based on its bandwidth requirements.

A monthly charge applies for each IPG TMF ordered. The monthly charge for each IPG TMF is based upon the bandwidth speed ordered and the number of airline miles between the SWC serving the customer's designated premises and the Telephone Company's IPG SWC. To determine the applicable monthly charge, first compute the airline mileage using the V&H coordinates method described in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO.4. When the calculation results in a fraction of a mile, always round up to the next whole mile before determining the total airline mileage. Once the total airline mileage for each IPG TMF is determined, multiply the number of airline miles times the IPG Transport Mileage Facility per mile rate for the bandwidth speed ordered.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-81

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(A) Rate Categories (Cont'd)(3) IPG Transport Mileage Termination (TMT) (N)

An IPG TMT is required whenever the customer orders IPG TMF as described in (2), above. The IPG TMT provides the circuit equipment needed to terminate an IPG TMF at the SWC serving the customer's designated premises. The IPG TMT rate element is designed to recover the costs associated with this circuit equipment.

IPG TMT is available at bandwidth speeds of 1.544 Mbps and 44.736 Mbps.

For each IPG TMF ordered by the customer, one IPG TMT at the same speed as the associated IPG TMF applies. A monthly charge applies for each IPG TMT based upon the bandwidth speed ordered by the customer.

(4) IPG Port (N)

An IPG Port provides network and signaling interfaces at the Telephone Company's IPG SWC. The IPG Port also provides for the establishment of a trunk-side bearer channel transmission path to allow voice call information to be passed between the customer's IP based network and the Telephone Company's switched network. The IPG Port rate element is designed to recover the costs associated with providing the interface for the bearer channel transmission path.

IPG Ports are available with bandwidth speeds of 1.544 Mbps and 44.736 Mbps. Required IPG Transport into the IPG Port is provided using either: 1) an IPG TT when the SWC serving the customer's designated premises is IPG equipped or 2) a combination of an IPG TT, and IPG TMF and IPG TMT when the SWC serving the customer's designated premises is not IPG equipped. The bandwidth speed of an IPG Port must be equal to the bandwidth speed of the associated IPG Transport.

A monthly charge applies for each IPG Port ordered. The monthly charge for each IPG Port is based upon the bandwidth speed ordered by the customer.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-82

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (N)

There are two types of rates and charges applicable to IPG. They are monthly rates and nonrecurring charges as described below.

(1) Monthly Rates (N)

Monthly rates are recurring rates that apply each month or fraction thereof when an IPG service element is provided. For billing purposes, each month is considered to have 30 days.

(2) Nonrecurring Charges (N)

Nonrecurring charges are one-time charges that apply for specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for IPG are installation of service, service rearrangements and moves.

Except as specified below, these charges are in addition to the Access Order Charge as specified in Section 17.4.1, following.

(a) Installation of Service (N)

Nonrecurring charges apply for the installation of IPG Transport Terminations.

(b) Service Rearrangements (N)

Service rearrangements are changes to existing (i.e., installed) services, which may be administrative only in nature as set forth below or, that involve an actual physical change to the service.



Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-83

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd)(2) Nonrecurring Charges (Cont'd)(b) Service Rearrangements (Cont'd) N)

When the IPG customer elects to change the bandwidth capacity on existing IPG Ports and associated IPG Transport, the request will be considered a discontinuance of service for the former capacity and start of service for the new capacity. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new IPG service elements. THE IPG customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued IPG service elements, if applicable.

Following the initial installation of service, the IPG customer may request a change to its existing signaling interface and/or bearer channel format provided the requested signaling interface and/or bearer channel format conforms to the transmission standards specified in the Technical References list in Section 16.4.3 (B), above. The Telephone Company and IPG customer will work cooperatively to ensure that proper call addressing and billing information will continue to be exchanged as described in Section 16.4.3 (C), above, after the requested change is made. An Access Order Charge per order will apply for this type of request.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-84

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd)(2) Nonrecurring Charges (Cont'd)(b) Service Rearrangements (Cont'd) (N)

Administrative changes will be made without charge(s) to the IPG customer. Administrative changes are as follows:

- Change of customer name,
- Change of customer or customer's end user premises address when the change of address is not a result of physical relocation of equipment,
- Change in billing data (name, address, or contact name or telephone number),
- Change of agency authorization,
- Change of customer circuit identification,
- Change of billing account number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction.

(c) Moves (N)

A move involves a change in the physical location of one of the following:

- The Point of Termination at the customer's premises
- The customer's premises

The charges for moving IPG service elements are dependent on whether the move is to a different location within the same building, to a different building within the same SWC, or to a different building in a different SWC.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-85

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd)(2) Nonrecurring Charges (Cont'd)(c) Moves (Cont'd)(i) Moves Within the Same Building (N)

IPG Ports and, where required, IPT TMFs and IPG TMTs are not impacted when the IPG customer moves its Point of Termination to a different location within the same building. The charge for moving an IPG TT to a new location within the same building will be an amount equal to one half of the nonrecurring (i.e., installation) charge for the IPG TT. There will be no change in the minimum period requirements.

(ii) Moves to a Different Building Within the Same SWC (N)

IPG Ports and, where required, IPG TMFs and IPG TMTs are not impacted when IPG customer moves its Point of Termination to a different building within the same SWC. The move of an IPG TT will be treated as a discontinuance and start of service. A nonrecurring (i.e., installation) charge will apply per IPG TT. A new minimum period requirement will be established for the IPG TT. The IPG customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued IPG TT, if applicable.

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 16-86

## ACCESS SERVICE

16. Public Packet Data Network (Cont'd)16.4 Internet Protocol Gateway Access Service (Cont'd)16.4.4 Rate Regulations (Cont'd)(B) Types of Rates and Charges (Cont'd)(2) Nonrecurring Charges (Cont'd)(c) Moves (Cont'd)(iii) Moves to a Different Building in a Different SWC (N)

A move to a different building in a different SWC will be treated as a discontinuance and start of service of all associated IPG elements. Associated nonrecurring (i.e., installation) charges will apply. New minimum period requirements will be established for the new IPG service elements. The IPG customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued IPG service elements, if applicable.

(C) Minimum Periods (N)

The minimum period for all IPG service elements provided to the IPG customer and for which charges are applicable is twelve (12) months.

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
6<sup>th</sup> Revised Page 17-8  
Cancels 5<sup>th</sup> Revised Page 17-8

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.4 Special Access Service

17.4.1	<u>Surcharge for Special Access Service</u>	<u>Monthly Rate</u>	<u>Tariff Section Reference</u>
-	Per Voice Grade Equivalent	\$25.00	7.3

#### 17.4.2 Metallic Service

Regulations concerning Metallic Service are set forth in 7.4 preceding.

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
A. Channel Termination per Termination	\$20.26 R	\$450.00
B. Channel Mileage		
1. Channel Mileage Facility Per Mile	\$29.15 R	
2. Channel Mileage Termination Per Termination	\$ 2.03 R	
C. Optional Features and Functions		
1. Bridging		
(a). Three Premises Bridging Per Port	\$ 4.54 R	
(b). Series Bridging Per Port	\$ 4.54 R	

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
6<sup>th</sup> Revised Page 17-9  
Cancels 5<sup>th</sup> Revised Page 17-9

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.4 Special Access Service (Cont'd)

##### 17.4.3 Telegraph Grade Service

Regulations concerning Telegraph Grade Service are set forth in 7.5 preceding.

	Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>
A. Channel Termination Per Termination		
- Two-Wire	\$20.26 R	\$450.00
- Four-Wire	\$40.51 R	\$450.00
B. Channel Mileage		
1. Channel Mileage Facility Per Mile	\$ 2.43 R	
2. Channel Mileage Termination Per Termination	\$24.36 R	
C. Optional Features and Functions		
1. Telegraph Bridging Per Port		
- Two-Wire	\$ 4.54 R	
- Four-Wire	\$ 4.54 R	

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
6<sup>th</sup> Revised Page 17-10  
Cancels 5<sup>th</sup> Revised Page 17-10

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.4 Special Access Service (Cont'd)

##### 17.4.4 Voice Grade Service

Regulations concerning Voice Grade Service are set forth in 7.6 preceding.

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
A. Channel Termination Per Termination		
- Two-Wire	\$34.03 R	\$450.00
- Four-Wire	\$54.44 R	\$450.00
B. Channel Mileage		
1. Channel Mileage Facility Per Mile	\$ 2.43 R	
2. Channel Mileage Termination Per Termination	\$24.36 R	
C. Optional Features and Functions		
1. Bridging		
(a). Voice Bridging Per Port		
- Two-Wire	\$ 4.54 R	
- Four-Wire	\$ 4.54 R	
(b). Data Bridging per port		
- Two-Wire	\$ 4.54 R	
- Four-Wire	\$ 4.54 R	
(c). Telephoto Bridging per port		
- Two-Wire	\$ 4.54 R	
- Four-Wire	\$ 4.54 R	
(d). DATAPHONE Select-A-Station Bridging		
Sequential Arrangement, Ports Per channel connected		
- Two-wire	\$ 15.48 R	
- Four-wire	\$ 82.09 R	
Addressable Arrangement, Ports Per channel connected		
- Two-wire	\$ 16.56 R	
- Four-wire	\$ 71.70 R	

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
5<sup>th</sup> Revised Page 17-11  
Cancels 4<sup>th</sup> Revised Page 17-11

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.4 Special Access Service (Cont'd)

##### 17.4.4 Voice Grade Service (Cont'd)

#### C. Optional Features and Functions (Cont'd)

##### 1. Bridging (Cont'd)

Monthly  
Rate

##### (e). Telemetry and Alarm Bridging

Active Bridging Channel Connections  
Per channel connected

- Split Band	\$ 7.23	R
- Summation	\$ 2.83	R

Passive Bridging Channel Connections  
Per channel connected

\$ 0.20 R

##### 2. Conditioning Per Termination

- C-Type	\$ 7.08	I
- Improved Attenuation Distortion*	None	
- Improved Envelope Delay Distortion*	None	
- Data Capability	\$ 6.29	I
- Telephoto Capability	\$ 6.30	R
- Sealing Current	None	

##### 3. Improved Return Loss for Effective Two-Wire or Four-Wire Transmission Per Termination

- Two-Wire	\$ 10.11	R
- Four-Wire	\$ 10.11	R

##### 4. Customer Specified Receive Level per two-wire termination

\$ 7.50 I

##### 5. Multiplexing Per arrangement Voice to Telegraph Grade

\$157.75 R

##### 6. Signaling Capability Per termination

\$ 16.19 I

##### 7. Selective Signaling Arrangement Per arrangement

\$ 4.54 R



P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
5<sup>th</sup> Revised Page 17-12  
Cancels 4<sup>th</sup> Revised Page 17-12

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.4 Special Access Service (Cont'd)

##### 17.4.4 Voice Grade Service (Cont'd)

#### C. Optional Features and Functions (Cont'd)

	<u>Monthly Rate</u>
8. Transfer Arrangement (key activated* or Dial-Up**)	
- Per four port arrangement including control channel termination***	\$ 2.18 R
- Per five port arrangement including control channel termination***	\$ 4.99 R
9. Public Packet Switching Network (PPSN) Interface Arrangement Per arrangement	ICB

\* The key activated control channel is rated as a Metallic Channel Termination and Channel Mileage, if applicable.

\*\* The Dial-Up option requires the customer to purchase the Controller Arrangement from 13.3.4 preceding.

\*\*\* An additional Channel Termination charge will apply whenever a spare channel is configured as a leg to the customer designated premises. Additional channel mileage charges will also apply when the transfer arrangement is not located in the customer designated premises serving wire center.

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
6<sup>th</sup> Revised Page 17-13  
Cancels 5<sup>th</sup> Revised Page 17-13

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.4 Special Access Service (Cont'd)

##### 17.4.5 Program Audio Service

Regulations concerning Program Audio Service are set forth in 7.7 preceding.

		Monthly	Daily*	Nonrecurring	
		<u>Rate</u>	<u>Rate</u>	<u>Monthly</u>	<u>Daily</u>
A.	Channel Termination				
	Per Termination				
-	200 to 3500 Hz	\$36.06 R	\$3.61 R	\$450.00	\$450.00
-	100 to 5000 Hz	62.80 R	6.28 R	450.00	450.00
-	50 to 8000 Hz	62.80 R	6.28 R	450.00	450.00
-	50 to 15000 Hz	62.80 R	6.28 R	450.00	450.00
B.	Channel Mileage				
	1. Channel Mileage Facility				
	Per Mile				
-	200 to 3500 Hz	\$ 2.43 R	\$0.24 R		
-	100 to 5000 Hz	4.85 R	0.49 R		
-	50 to 8000 Hz	7.27 R	0.73 R		
-	50 to 15000 Hz	9.70 R	0.97 R		
	2. Channel Mileage Termination				
	Per Termination				
-	200 to 3500 Hz	\$24.36 R	\$2.44 R		
-	100 to 5000 Hz	48.71 R	4.87 R		
-	50 to 8000 Hz	73.07 R	7.31 R		
-	50 to 15000 Hz	97.42 R	9.74 R		
C.	Optional Features and Functions				
	1. Bridging, Distribution				
	Amplifier Per Port	\$13.92 R	\$1.39 R		
	2. Gain Conditioning				
	per service	\$10.32 R	\$1.03 R		
	3. Stereo per service	\$18.27 R	\$1.83 R		

\* Daily rates will be topped and maximum rates derived as set forth in 7.2.2(B) preceding.

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
6<sup>th</sup> Revised Page 17-14  
Cancels 5<sup>th</sup> Revised Page 17-14

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.4 Special Access Service (Cont'd)

##### 17.4.6 Video Service

Regulations concerning Video Service are set forth in 7.8 preceding.

		Monthly	Daily*	Nonrecurring	
		<u>Rate</u>	<u>Rate</u>	<u>Charge</u>	
				<u>Monthly</u>	<u>Daily</u>
A.	Channel Termination				
	Per Termination				
-	TV-1 or 2	\$372.61 R	\$204.94 R	\$330.00	\$330.00
-	4TV-5	372.61 R	204.94 R	330.00	330.00
-	6TV-5	372.61 R	204.94 R	330.00	330.00
-	TV-15	372.61 R	204.94 R	330.00	330.00
B.	Channel Mileage				
	1. Channel Mileage Facility				
	Per Mile				
-	All	\$317.15 R	\$174.43 R		
	2. Channel Mileage Termination				
	Per Termination				
-	All	\$337.90 R	\$185.85 R		

\* Daily rates will be topped and maximum rates derived as set forth in 7.2.2(B) preceding.

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
6<sup>th</sup> Revised Page 17-15  
Cancels 5<sup>h</sup> Revised Page 17-15

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.4 Special Access Service (Cont'd)

##### 17.4.7 Digital Data Service

Regulations concerning Digital Data Service are set forth in 7.9 preceding.

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
A. Channel Termination Per termination		
- 2.4 kbps	\$62.80 R	\$390.00
- 4.8 kbps	62.80 R	390.00
- 9.6 kbps	62.80 R	390.00
- 19.2 kbps	62.80 R	390.00
- 56.0 kbps	62.80 R	390.00
- 64.0 kbps	62.80 R	390.00
B. Channel Mileage		
1. Channel Mileage Facility Per Mile		
- 2.4 kbps	\$ 2.30 R	
- 4.8 kbps	2.30 R	
- 9.6 kbps	2.30 R	
- 19.2 kbps	2.30 R	
- 56.0 kbps	3.26 R	
- 64.0 kbps	3.26 R	
2. Channel Mileage Termination Per Termination		
- 2.4 kbps	\$23.14 R	
- 4.8 kbps	23.14 R	
- 9.6 kbps	23.14 R	
- 19.2 kbps	23.14 R	
- 56.0 kbps	32.78 R	
- 64.0 kbps	32.78 R	

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
5<sup>th</sup> Revised Page 17-16  
Cancels 4<sup>th</sup> Revised Page 17-16

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.4 Special Access Service (Cont'd)

##### 17.4.7 Digital Data Service (Cont'd)

	Monthly <u>Rate</u>
C. Optional Features and Functions	
1. Bridging Per port	\$ 6.50 R
2. Loop Transfer Arrangement Per four port arrangement* Key activated** or Dial-Up***	\$ 4.34 R
3. Public Packet Switching Network Interface Arrangement	
- Per 9.6 kbps arrangement	ICB
- Per 56.0 kbps arrangement	ICB
D. Channel Service Unit Per Termination****	
- 2.4 kbps	\$21.66 I
- 4.8 kbps	21.66 I
- 9.6 kbps	21.66 I
- 56.0 kbps	21.66 I

\* An additional Channel Termination charge will apply whenever a spare channel is configured as a leg to the customer designated premises. Additional Channel Mileage charges will also apply when the transfer arrangement is not located in the customer designated premises serving wire center.

\*\* The key activated control channel is rated as a Metallic Channel Termination and Channel Mileage, if applicable.

\*\*\* The Dial-Up option requires the customer to purchase the Controller Arrangement from 13.3.4 preceding.

\*\*\*\* Channel Service Units will only be provided under tariff if they existed in the Telephone Company's inventory as of December 1, 1999.

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
6<sup>th</sup> Revised Page 17-17  
Cancels 5<sup>th</sup> Revised Page 17-17

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.4 Special Access Service (Cont'd)

##### 17.4.8 High Capacity Service

Regulations concerning High Capacity Service are set forth in 7.10 preceding.

		Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>
A.	Channel Termination Per Termination		
-	DS1 1.544 Mbps	\$177.56 R	\$330.00
-	DS1C 3.152 Mbps	ICB	ICB
-	DS2 6.312 Mbps	ICB	ICB
	DS3 44.736 Mbps	1,311.54 R	445.00
-	DS4 274.176 Mbps	ICB	ICB
B.	Channel Mileage		
1.	Channel Mileage Facility Per Mile		
-	64 kbps*	\$ 3.26 R	
-	1.544 Mbps	9.84 R	
-	3.152 Mbps	ICB	
-	6.312 Mbps	ICB	
-	44.736 Mbps	85.73 R	
-	274.176 Mbps	ICB	

\* Applies to through connections of 2.4, 4.8, 9.6, 56.0 and 64 kbps.

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
6<sup>th</sup> Revised Page 17-18  
Cancels 5<sup>th</sup> Revised Page 17-18

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.4 Special Access Service (Cont'd)

##### 17.4.8 High Capacity Service (Cont'd)

#### B. Channel Mileage (Cont'd)

##### 2. Channel Mileage Termination Per Termination

	<u>Monthly Rate</u>
- 64 kbps*	\$ 32.78 R
- 1.544 Mbps	51.07 R
- 3.152 Mbps	ICB
- 6.312 Mbps	ICB
- 44.736 Mbps	327.87 R
- 274.176 Mbps	ICB

C. <u>Term Discounts</u>	<u>Percentage</u>
DS1 and DS3 services	
12 months	3%
24 months	5%
36 months	10%
60 months	20%

D. <u>Optional Features and Functions</u>	<u>Monthly Rate</u>
1. <u>Multiplexing, per arrangement</u>	
DS4 to DS1	ICB
DS3 to DS1	\$330.81 R
DS2 to DS1	ICB
DS1C to DS1	ICB
DS1 to Voice **	\$144.94 R
DS1 to DS0	\$144.94 R
DS0 to Subrates	
- Up to 20 2.4 kbps services	\$326.41 R
- Up to 10 4.8 kbps services	221.80 R
- Up to 5 9.6 kbps services	196.67 R

\* Applies to through connections of 2.4, 4.8, 9.6, 56.0 and 64 kbps.

\*\* A channel of this DS1 to the Hub can be used for Digital Data service.

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
5<sup>th</sup> Revised Page 17-19  
Cancels 4<sup>th</sup> Revised Page 17-19

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.4 Special Access Service (Cont'd)

##### 17.4.8 High Capacity Service (Cont'd)

##### D. Optional Features and Functions (Cont'd)

	Monthly Rate	Nonrecurring Charge
2. Automatic Loop Transfer Per arrangement*	\$ 110.19 R	
3. Transfer Arrangement (key activated** or Dial-Up***) Per four port arrangement including control channel termination****	\$ 120.10 R	
4. Clear Channel Capability - per 1.544 Mbps transmission path	None	
5. Shared SONET Ring Interoffice Transport - per DS3 Channel Mileage Facility	None	
E. Network Channel Terminating Equipment (NCTE) Per termination#		
- 1.544 Mbps	\$ 62.49 R	
- Automatic Loop Transfer	251.09 R	
F. DSL Access Service Connection		
- per 1.544 Mbps	\$ 175.47 R	\$ 450.00
- per 44.736 Mbps	\$1,218.60 R	\$ 650.00

\* An additional Channel Termination charge will apply whenever the spare line is provided as a leg to the customer designated premises.

\*\* The key activated control channel is rated as a Metallic Channel Termination and Channel Mileage, if applicable.

\*\*\* The Dial-Up option requires the customer to purchase the Controller Arrangement from 13.3.4 preceding.

\*\*\*\* An additional Channel Termination charge will apply whenever a spare channel is configured as a leg to the customer designated premises. Additional channel mileage charges will also apply when the transfer arrangement is not located in the customer designated premises serving wire center.

# NCTE will only be provided under tariff if it existed in the Telephone Company's inventory as of December 1, 1999.



P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
6<sup>th</sup> Revised Page 17-21  
Cancels 5<sup>th</sup> Revised Page 17-21

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.4 Special Access Service (Cont'd)

##### 17.4.10 Synchronous Optical Channel Service

Regulations concerning Synchronous Optical Channel Service are set forth in 7.11 preceding.

		<u>Monthly Rate</u>		<u>Nonrecurring Charge</u>
A.	Channel Termination Per Termination			
-	OC3/OC3c 155.52 Mbps	\$1,445.81	R	\$360.00
-	OC12 622.08 Mbps	1,929.58	R	360.00
B.	Channel Mileage Facility Per Mile			
-	OC3/OC3c 155.52 Mbps	\$ 99.21	R	
-	OC12 622.08 Mbps	124.53	R	
C.	Channel Mileage Termination Per Termination			
-	OC3/OC3c 155.52 Mbps	\$ 369.07	R	
-	OC12 622.08 Mbps	803.58	R	
D.	Term Discounts	<u>Percentage</u>		
	OC3/OC3c and OC12 Services			
	36 months	10%		
	60 months	20%		
E.	Optional Features and Functions	<u>Monthly Rate</u>		<u>Nonrecurring Charge</u>
1.	Customer Node Per Node			
-	OC3/OC3c 155.52 Mbps	\$ 335.72	R	\$640.00
-	OC12 622.08 Mbps	969.88	R	640.00
	Customer Premises Port Per Port			
-	OC3/OC3c 155.52 Mbps	\$ 137.70	R	
-	STS-1 51.84 Mbps	132.26	R	\$640.00
-	DS3 44.736 Mbps	132.26	R	640.00
-	DS1 1.544 Mbps	33.90	R	640.00
2.	Add/Drop Multiplexing Central Office Port Per Port			
-	OC3/OC3c 155.52 Mbps	\$ 137.70	R	
-	DS3 44.736 Mbps	67.82	R	
-	DS1 1.544 Mbps	27.12	R	

Issued: July 26, 2012

Effective: August 1, 2012  
5<sup>th</sup> Revised Page 17-22  
Cancels 4<sup>th</sup> Revised Page 17-22

## ACCESS SERVICE

17. Rates and Charges (Cont'd)17.4 Special Access Service (Cont'd)17.4.10 Synchronous Optical Channel Service (Cont'd)E. Optional Features and Functions (Cont'd)

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
3. Shared SONET Ring Interoffice Transport Per Channel Mileage Facility		
- OC3/OC3c	None	
- OC12	None	
4. DSL Access Service		
- Connection	\$2,135.00	R
- Per OC3/OC3c	\$1,200.00	

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
5<sup>th</sup> Revised Page 17-33  
Cancels 4<sup>th</sup> Revised Page 17-33

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.5 Other Services (Cont'd)

##### 17.5.8 Public Packet Data Network

##### A. Frame Relay Access Service

Regulations concerning Frame Relay Access Service are set forth in 16.1 preceding.

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
<u>Connections</u>		
1. <u>Frame Relay Access Connection (FRAC)</u> (per FRAC)		
56.0 kbps	\$127.72 R	\$345.00
64.0 kbps	\$127.72 R	\$345.00
1.544 Mbps	\$2673.44 R	\$345.00
44.736 Mbps	\$1,879.14 R	\$345.00
2. <u>Frame Relay Inter-network Connection (FRIC)</u> (per FRIC)		
1.544 Mbps	\$267.44 R	\$345.00
44.736 Mbps	\$ 1,879.14 R	\$345.00
3. <u>End User Port</u> (per port)		
56.0 kbps	\$ 48.53 R	
64.0 kbps	\$ 48.53 R	
1.544 Mbps	\$113.02 R	
44.736 Mbps	\$915.80 R	
4. <u>Inter-network Customer Port</u> (per port)		
1.544 Mbps	\$113.02 R	
44.736 Mbps	\$915.80 R	
5. <u>Term Discounts</u>	<u>Percentage</u>	
36 months	10%	
60 months	20%	

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
5<sup>th</sup> Revised Page 17-34  
Cancels 4<sup>th</sup> Revised Page 17-34

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.5 Other Services (Cont'd)

##### 17.5.8 Public Packet Data Network (Cont'd)

##### A. Frame Relay Access Service (Cont'd)

##### 6. Permanent Virtual Connections (PVCs)

(a). Standard	<u>CIR</u>	Monthly <u>Rate</u>
	8 kbps	\$ 3.46 R
	16 kbps	\$ 3.46 R
	28 kbps	\$ 4.16 R
	32 kbps	\$ 4.16 R
	56 kbps	\$ 4.86 R
	64 kbps	\$ 4.86 R
	128 kbps	\$ 6.22 R
	192 kbps	\$ 8.33 R
	256 kbps	\$ 9.71 R
	384 kbps	\$ 13.87 R
	512 kbps	\$ 19.40 R
	768 kbps	\$ 24.97 R

(b). Extended	<u>CIR</u>	Monthly <u>Rate</u>
	8 kbps	\$ 4.16 R
	16 kbps	\$ 4.16 R
	28 kbps	\$ 5.02 R
	32 kbps	\$ 5.02 R
	56 kbps	\$10.03 R
	64 kbps	\$10.03 R
	128 kbps	\$ 20.05 R
	192 kbps	\$ 30.07 R
	256 kbps	\$ 40.09 R
	384 kbps	\$ 60.12 R
	512 kbps	\$ 80.17 R
	768 kbps	\$120.26 R

	Nonrecurring <u>Charge</u>
7. <u>PVC Installation Charge</u>	\$64.00
8. <u>PVC Rearrangement Charge</u>	\$32.00

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
Original Page 17-34.1

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.5 Other Services (Cont'd)

##### 17.5.8 Public Packet Data Network (Cont'd)

#### B. Asynchronous Transfer Mode Cell Relay Access Service

(N)

Regulations concerning Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) are set forth in Section 16.2, preceding.

#### (1) Ports

(N)

##### (a) Per Basic UNI or NNI Port

(N)

	Monthly Rate	Nonrecurring Charge
1.544 Mbps	\$ 309.87	\$390.00
44.736 Mbps	\$1,721.46	\$390.00
155.52 Mbps	\$2,667.43	\$390.00
622.08 Mbps	\$3,871.91	\$390.00

##### (b) Per Ethernet-based UNI or NNI Port

(N)

	Monthly Rate	Nonrecurring Charge
10 Mbps	\$ 477.28	\$1,780.00
100 Mbps	\$ 954.14	\$1,780.00
1 Gbps	\$1,741.70	\$3,233.00

#### (2) Virtual Paths

(N)

##### (a) Path Charge, Per Path

\$ 3.46 \$64.00

(N)

##### (b) Capacity Charge, Per Megabit of Capacity, Per Path

(N)

#### Traffic Routing Prioritization Parameter

##### Monthly Rates

<u>Path Size</u>	<u>CBR</u>	<u>VBR-rt</u>	<u>VBR-nrt</u>	<u>UBR</u>
1 – 50 Mbps	\$21.16	\$16.93	\$12.71	\$10.58
51 – 150 Mbps	\$19.04	\$14.81	\$10.58	\$ 8.46
150 Mbps – above	\$14.81	\$10.58	\$ 8.46	\$ 6.34

#### (3) Virtual Circuit Channels, Per Virtual Circuit Channel

(N)

Monthly Rate	Nonrecurring Charge
\$3.46	\$64.00

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
Original Page 17-34.2

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.5 Other Services (Cont'd)

##### 17.5.8 Public Packet Data Network (Cont'd)

#### B. Asynchronous Transfer Mode Cell Relay Access Service (Cont'd)

##### (4) Optional Features and Functions (N)

##### (a) DSL Access Service Connection (N)

##### (i) Per Basic UNI or NNI Port Equipped (N)

<u>Port Speed</u>	<u>Nonrecurring Charge</u>
1.544 Mbps	\$ 450.00
44.736 Mbps	\$ 650.00
155.52 Mbps	\$ 1,200.00
622.08 Mbps	\$ 1,608.00

##### (ii) Per Ethernet-based UNI or NNI Port Equipped (N)

<u>Port Speed</u>	<u>Nonrecurring Charge</u>
10 Mbps	\$ 450.00
100 Mbps	\$ 650.00
1 Gbps	\$ 1,608.00

##### (iii) Per 1 Mbps DSL VCC (N)

<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
\$20.78	\$64.00

##### (iv) Per MM- VCC (N)

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
Per 1 Mbps increment	\$1.45	\$7.00
Per 4 Mbps increment	\$2.81	\$7.00

##### (v) Per MM- VCC Design Charge (N)

##### (5) ATM-CRS Term Discount Plan (N)

<u>Term Commitment</u>	<u>Percentage</u>
36 months	10%
60 months	20%

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 17-34.3

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.5 Other Services (Cont'd)

##### 17.5.8 Public Packet Data Network (Cont'd)

#### C. Ethernet Transport Service

(N)

Regulations concerning Ethernet Transport Service (ETS) are set forth in Section 16.3, preceding. Except as provided for in Section 16.3.5 (F), preceding, the following monthly rates and nonrecurring charges apply for ETS.

#### (1) ETS Channel Terminations

(N)

- (a) Per termination when customer designated premises located within 300 feet of ETS SWC

	Monthly Rate	Nonrecurring Charge
2 Mbps	\$ 64.27	\$295.00
5 Mbps	\$ 78.88	\$295.00
10 Mbps	\$ 91.10	\$295.00
20 Mbps	\$ 99.99	\$295.00
50 Mbps	\$119.99	\$295.00
100 Mbps	\$133.33	\$295.00
250 Mbps	\$189.88	\$295.00
500 Mbps	\$248.87	\$442.00
750 Mbps	\$289.20	\$442.00
1 Gbps	\$331.08	\$442.00

- (b) Per termination when customer designated premises located more than 300 feet of ETS SWC

(N)

	Monthly Rate	Nonrecurring Charge
2 Mbps	\$225.87	\$295.00
5 Mbps	\$228.36	\$295.00
10 Mbps	\$231.60	\$295.00
20 Mbps	\$262.01	\$295.00
50 Mbps	\$307.40	\$295.00
100 Mbps	\$321.67	\$295.00
250 Mbps	\$335.94	\$295.00
500 Mbps	\$444.41	\$442.00
750 Mbps	\$511.21	\$442.00
1 Gbps	\$592.54	\$442.00

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
Original Page 17-34.4

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.5 Other Services (Cont'd)

##### 17.5.8 Public Packet Data Network (Cont'd)

##### C. Ethernet Transport Service (Cont'd)

##### (2) Ports

(N)

##### (a) Per ETS Basic Port

(N)

	Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>
2 Mbps	\$ 81.79	\$259.00
5 Mbps	\$ 90.55	\$259.00
10 Mbps	\$ 99.99	\$259.00
20 Mbps	\$111.10	\$259.00
50 Mbps	\$122.21	\$295.00
100 Mbps	\$133.33	\$295.00
250 Mbps	\$184.03	\$295.00
500 Mbps	\$233.32	\$388.00
750 Mbps	\$295.04	\$388.00
1 Gbps	\$355.53	\$388.00

##### (b) Per ETS Interconnection Port

(N)

	Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>
44.736 Mbps	\$1,333.24	\$175.00
155.52 Mbps	\$1,599.89	\$262.00
622.08 Mbps	\$2,666.47	\$262.00



P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
Original Page 17-34.5

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.5 Other Services (Cont'd)

##### 17.5.8 Public Packet Data Network (Cont'd)

#### C. Ethernet Transport Service (Cont'd)

##### (3) ETS Ethernet Virtual Connections (EVCs)

#### (a) Per Intraswitch ETS EVC

(N)

	Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>
2 Mbps	\$ 0.00	\$205.00
5 Mbps	\$ 0.00	\$205.00
10 Mbps	\$ 0.00	\$205.00
20 Mbps	\$ 0.00	\$205.00
50 Mbps	\$ 0.00	\$205.00
100 Mbps	\$ 0.00	\$205.00
250 Mbps	\$ 0.00	\$205.00
500 Mbps	\$ 0.00	\$307.00
750 Mbps	\$ 0.00	\$307.00
1 Gbps	\$ 0.00	\$307.00

Class of Service (CoS) Levels for Intraswitch ETS EVC at speeds of  
2 Mbps to 20 Mbps, 50 Mbps to 250 Mbps, 500 Mbps to 1 Gbps

#### Monthly Rate Per CoS Level, Per Megabit

	<u>Near Real Time</u>	<u>Real Time</u>
2 Mbps – 20 Mbps	\$0.50	\$1.01
50 Mbps – 250 Mbps	\$0.29	\$0.58
500 Mbps – 1 Gbps	\$0.24	\$0.50

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
Original Page 17-34.6

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.5 Other Services (Cont'd)

##### 17.5.8 Public Packet Data Network (Cont'd)

#### C. Ethernet Transport Service (Cont'd)

##### (3) ETS Ethernet Virtual Connections (EVCs) (Cont'd)

#### (b) Per Interswitch ETS EVC

(N)

	Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>
2 Mbps	\$ 35.06	\$205.00
5 Mbps	\$ 47.41	\$205.00
10 Mbps	\$ 88.88	\$205.00
20 Mbps	\$ 177.76	\$205.00
50 Mbps	\$ 248.87	\$205.00
100 Mbps	\$ 397.00	\$205.00
250 Mbps	\$ 817.94	\$205.00
500 Mbps	\$1,362.87	\$307.00
750 Mbps	\$1,811.15	\$307.00
1 Gbps	\$2,370.20	\$307.00

Class of Service (CoS) Levels for Interswitch ETS EVC at speeds of  
2 Mbps to 20 Mbps, 50 Mbps to 250 Mbps, 500 Mbps to 1 Gbps

#### Monthly Rate Per CoS Level, Per Megabit

	<u>Near Real Time</u>	<u>Real Time</u>
2 Mbps – 20 Mbps	\$1.67	\$3.34
50 Mbps – 250 Mbps	\$1.04	\$2.08
500 Mbps – 1 Gbps	\$0.63	\$1.25

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
Original Page 17-34.7

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.5 Other Services (Cont'd)

##### 17.5.8 Public Packet Data Network (Cont'd)

#### C. Ethernet Transport Service (Cont'd)

##### (4) ETS Extended Ethernet Virtual Connections (E-EVCs)

(N)

#### Per ETS E-EVC

	Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>
2 Mbps	\$ 23.37	\$410.00
5 Mbps	\$ 29.62	\$410.00
10 Mbps	\$ 53.33	\$410.00
20 Mbps	\$ 106.66	\$410.00
50 Mbps	\$ 165.92	\$410.00
100 Mbps	\$ 266.64	\$410.00
250 Mbps	\$ 555.03	\$410.00
500 Mbps	\$ 859.20	\$615.00
750 Mbps	\$1,168.48	\$615.00
1 Gbps	\$1,481.37	\$615.00

##### (5) ETS Interconnected Ethernet Virtual Connections (I-EVCs)

(N)

- (a) Per ETS I-EVC when the airline distance between the ETS SWCs serving the customer designated premises is less than or equal to fifty miles.

	Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>
2 Mbps	\$ 64.49	\$410.00
5 Mbps	\$ 83.71	\$410.00
10 Mbps	\$ 162.36	\$410.00
20 Mbps	\$ 308.42	\$410.00
50 Mbps	\$ 530.25	\$410.00
100 Mbps	\$ 749.02	\$410.00
250 Mbps	\$1,704.45	\$410.00
500 Mbps	\$2,335.16	\$615.00
750 Mbps	\$3,132.49	\$615.00
1 Gbps	\$3,965.37	\$615.00

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012

Original Page 17-34.8

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.5 Other Services (Cont'd)

##### 17.5.8 Public Packet Data Network (Cont'd)

#### C. Ethernet Transport Service (Cont'd)

##### (5) ETS Interconnected Ethernet Virtual Connections (I-EVCs) (Cont'd)

- (b) Per ETS I-EVC when the airline distance between the ETS SWCs serving the customer designated premises is between fifty-one and seventy-five miles. (N)

	Monthly Rate	Nonrecurring Charge
2 Mbps	\$ 108.00	\$410.00
5 Mbps	\$ 171.00	\$410.00
10 Mbps	\$ 333.00	\$410.00
20 Mbps	\$ 450.00	\$410.00
50 Mbps	\$ 945.00	\$410.00
100 Mbps	\$1,150.00	\$410.00
250 Mbps	\$1,998.00	\$410.00
500 Mbps	\$2,736.00	\$615.00
750 Mbps	\$3,681.00	\$615.00
1 Gbps	\$4,680.00	\$615.00

##### (6) Optional Features and Functions (N)

#### (a) DSL Access Service Connection

- (i) Per ETS Basic Port equipped (N)

	Nonrecurring Charge
2 Mbps	\$150.00
5 Mbps	\$150.00
10 Mbps	\$150.00
20 Mbps	\$150.00
50 Mbps	\$150.00
100 Mbps	\$150.00
250 Mbps	\$150.00
500 Mbps	\$225.00
750 Mbps	\$225.00
1 Gbps	\$225.00

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
Original Page 17-34.9

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.5 Other Services (Cont'd)

##### 17.5.8 Public Packet Data Network (Cont'd)

#### C. Ethernet Transport Service (Cont'd)

##### (6) Optional Features and Functions (Cont'd)

(a) DSL Access Service Connection (Cont'd) (N)

(ii) Per ETS Interconnection Port equipped (N)

<u>Capacity</u>	<u>Nonrecurring Charge</u>
44.736 Mbps	\$150.00
155.52 Mbps	\$225.00
622.08 Mbps	\$225.00

(iii) Per ETS MM-VCC (N)

<u>Monthly Rate Per 10 Mbps</u>	<u>Nonrecurring Charge Per MM-VCC</u>
\$2.66	\$7.00

(iv) Per ETS LBR-VCC (N)

<u>Monthly Rate Per 64 kbps</u>	<u>Nonrecurring Charge Per LBR-VCC</u>
\$0.32	\$7.00

(v) Per ETS Design Change (N)

<u>Nonrecurring Charge</u>
\$6.00

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
Original Page 17-34.10

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.5 Other Services (Cont'd)

##### 17.5.8 Public Packet Data Network (Cont'd)

#### D. Internet Protocol Gateway Access Service

(N)

##### (1) IPG Transport Termination Per termination

(N)

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
1.544 Mbps	\$ 177.56	\$330.00
44.736 Mbps	\$1,311.54	\$445.00

##### (2) IPG Transport Mileage Facility Per mile

(N)

	<u>Monthly Rate</u>
1.544 Mbps	\$ 9.84
44.736 Mbps	\$ 85.73

##### (3) IPG Transport Mileage Termination Per termination

(N)

	<u>Monthly Rate</u>
1.544 Mbps	\$ 51.07
44.736 Mbps	\$ 327.87

##### (4) IPG Port Per port

(N)

	<u>Monthly Rate</u>
1.544 Mbps	\$ 51.07
44.736 Mbps	\$ 658.68

P.O. Box 1249  
235 O'Brien Dr  
Crossville, TN 38557

Issued: July 26, 2012

Effective: August 1, 2012  
2<sup>nd</sup> Revised Page 17-35  
Cancels 1<sup>st</sup> Revised Page 17-35

## ACCESS SERVICE

### 17. Rates and Charges (Cont'd)

#### 17.5 Other Services (Cont'd)

##### 17.5.9 Digital Subscriber Line Access Services

###### A. Asymmetric Digital Subscriber Line Access Service

Regulations concerning Asymmetric Digital Subscriber Line Access Service are set forth in Section 8.1, preceding.

<u>ADSL Access Service Charge</u>	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
- Tier Rates 2,		
R DSL Pkg 256/192	\$ 19.95	\$99.00 I
R1 DSL Pkg 384/192	\$ 29.95	\$99.00 I
R2 DSL Pkg 768/384	\$ 36.95	\$99.00 I
R3 DSL Pkg 1.5/512	\$ 42.95	\$99.00 I
B DSL Pkg 1.5/768	\$ 79.95	\$99.00 I
B1 DSL Pkg 2.0/768	\$139.95	\$99.00 I
B2 DSL Pkg 3.0/768	\$159.95	\$99.00 I

###### B. DSL Access Services Discount Pricing Arrangement

Available on ICB

#### 17.6 Access Recovery Charge

(N)

	<u>Monthly Rate</u>
Residential (RES)	\$0.50
Single Line Business (SLB)	\$0.50
Multiline Business (MLB)	\$1.00

Issued: July 26, 2012

Effective: August 1, 2012  
10<sup>th</sup> Revised C.S. Page 1  
Cancels C.S. 9<sup>th</sup> Revised Page 1

## Check Sheet

<u>Page</u>	<u>Number of Revision Except as Indicated</u>	<u>Page</u>	<u>Number of Revision Except as Indicated</u>	<u>Page</u>	<u>Number of Revision Except as Indicated</u>
C.S. 1	10 <sup>th</sup> Revised*	2-33	Original	5-8	Original
C.S. 2	Original	2-34	Original	5-9	Original
C.S. 3	10 <sup>th</sup> Revised*	2-35	Original	5-10	Original
C.S. 4	Original*	2-36	Original	5-11	Original
Title	Original	2-37	Original	5-12	Original
1	Original	2-38	Original	5-13	Original
2	Original	2-39	Original	5-14	Original
3	Original	2-40	Original	5-15	Original
4	Original	2-41	Original	5-16	Original
5	Original	2-42	Original	5-17	Original
6	Original	2-43	Original	5-18	Original
7	1 <sup>st</sup> Revised*	2-44	Original	5-19	Original
8	Original	2-45	Original	5-20	Original
8-1	Original*	2-46	Original	5-21	Original
9	Original	2-47	Original	5-22	Original
1-1	Original	2-48	Original	5-23	Original
2-1	Original	2-49	Original	6-1	Original
2-2	Original	2-50	Original	6-2	Original
2-3	Original	2-51	Original	6-3	Original
2-4	Original	2-52	Original	6-4	Original
2-5	Original	2-53	Original	6-5	Original
2-6	Original	2-54	Original	6-6	Original
2-7	Original	2-55	Original	6-7	Original
2-8	Original	2-56	Original	6-8	Original
2-9	Original	3-1	Original	6-9	Original
2-10	Original	3-2	Original	6-10	Original
2-11	Original	3-3	Original	6-11	Original
2-12	Original	3-4	Original	6-12	Original
2-13	Original	3-5	Original	6-13	Original
2-14	Original	3-6	Original	6-14	Original
2-15	Original	3-7	Original	6-15	Original
2-16	Original	3-8	Original	6-16	Original
2-17	Original	3-9	Original	6-17	Original
2-18	Original	3-10	Original	6-18	Original
2-19	Original	4-1	Original	6-19	Original
2-20	Original	4-2	Original	6-20	Original
2-21	Original	4-3	Original	6-21	Original
2-22	Original	4-4	Original	6-22	Original
2-23	Original	4-5	Original	6-23	Original
2-24	Original	5-1	Original	6-24	Original
2-25	Original	5-2	Original	6-25	Original
2-26	Original	5-3	Original	6-26	Original
2-27	Original	5-4	Original	6-27	Original
2-28	Original	5-5	Original	6-28	Original
2-29	Original	5-6	Original	6-29	Original
2-30	Original	5-7	Original	6-30	Original
2-31	Original				
2-32	Original				



Effective: July 26, 2012

Effective: August 1, 2012

C.S. 10<sup>th</sup> Revised Page 3Cancels C.S. 9<sup>th</sup> Revised Page 3

## Check Sheet

<u>Page</u>	<u>Number of Revision Except as Indicated</u>	<u>Page</u>	<u>Number of Revision Except as Indicated</u>	<u>Page</u>	<u>Number of Revision Except as Indicated</u>
13-11	Original	15-36	Original	16-35	Original*
13-12	Original	15-37	Original	16-36	Original*
13-13	Original	15-38	Original	16-37	Original*
13-14	Original	15-39	Original	16-38	Original*
13-15	Original	15-40	Original	16-39	Original*
13-16	Original	15-41	Original	16-40	Original*
13-17	Original	15-42	Original	16-41	Original*
13-18	Original	15-43	Original	16-42	Original*
13-19	1 <sup>st</sup> Revised*	15-44	Original	16-43	Original*
13-20	Original*	15-45	Original	16-44	Original*
13-21	Original*	15-46	Original	16-45	Original*
14-1	Original	15-47	Original	16-46	Original*
15-1	Original	15-48	Original	16-47	Original*
15-2	Original	15-49	Original	16-48	Original*
15-3	Original	15-50	Original	16-49	Original*
15-4	Original	16-1	Original	16-50	Original*
15-5	Original	16-2	Original	16-51	Original*
15-6	Original	16-3	Original	16-52	Original*
15-7	Original	16-4	Original	16-53	Original*
15-8	Original	16-5	Original	16-54	Original*
15-9	Original	16-6	Original	16-55	Original*
15-10	Original	16-7	Original	16-56	Original*
15-11	Original	16-8	Original	16-57	Original*
15-12	Original	16-9	Original	16-58	Original*
15-13	Original	16-10	Original	16-59	Original*
15-14	Original	16-11	Original	16-60	Original*
15-15	Original	16-12	Original	16-61	Original*
15-16	Original	16-13	Original	16-62	Original*
15-17	Original	16-14	Original	16-63	Original*
15-18	Original	16-15	Original	16-64	Original*
15-19	Original	16-16	Original	16-65	Original*
15-20	Original	16-17	Original*	16-66	Original*
15-21	Original	16-18	Original*	16-67	Original*
15-22	Original	16-19	Original*	16-68	Original*
15-23	Original	16-20	Original*	16-69	Original*
15-24	Original	16-21	Original*	16-70	Original*
15-25	Original	16-22	Original*	16-71	Original*
15-26	Original	16-23	Original*	16-72	Original*
15-27	Original	16-24	Original*	16-73	Original*
15-28	Original	16-25	Original*	16-74	Original*
15-29	Original	16-26	Original*	17-1	9 <sup>th</sup> Revised
15-30	Original	16-27	Original*	17-2	1 <sup>st</sup> Revised
15-31	Original	16-28	Original*	17-3	5 <sup>th</sup> Revised
15-32	Original	16-29	Original*	17-4	Original
15-33	Original	16-30	Original*	17-5	6 <sup>th</sup> Revised
15-34	Original	16-31	Original*	17-6	1 <sup>st</sup> Revised
15-35	Original	16-32	Original*	17-7	Original
		16-33	Original*	17-8	6 <sup>th</sup> Revised*
		16-34	Original*	17-9	6 <sup>th</sup> Revised*

P.O. Box 1249

235 O'Brien Dr

Crossville, TN 38557

Effective: July 26, 2012

Effective: August 1, 2012

C.S. 11<sup>th</sup> Revised Page 4Cancels C.S. 10<sup>th</sup> Revised Page 4

## Check Sheet

<u>Page</u>	<u>Number of Revision Except as Indicated</u>	<u>Page</u>	<u>Number of Revision Except as Indicated</u>	<u>Page</u>	<u>Number of Revision Except as Indicated</u>
17-10	6 <sup>th</sup> Revised*				
17-11	5 <sup>th</sup> Revised*				
17-12	5 <sup>th</sup> Revised*				
17-13	6 <sup>th</sup> Revised*				
17-14	6 <sup>th</sup> Revised*				
17-15	6 <sup>th</sup> Revised*				
17-16	5 <sup>th</sup> Revised*				
17-17	6 <sup>th</sup> Revised*				
17-18	6 <sup>th</sup> Revised*				
17-19	5 <sup>th</sup> Revised*				
17-20	Original				
17-21	6 <sup>th</sup> Revised*				
17-22	5 <sup>th</sup> Revised*				
17-23	3 <sup>rd</sup> Revised				
17-24	1 <sup>st</sup> Revised				
17-25	Original				
17-26	Original				
17-27	Original				
17-28	1 <sup>st</sup> Revised				
17-29	Original				
17-30	Original				
17-31	Original				
17-32	Original				
17-33	5 <sup>th</sup> Revised*				
17-34	5 <sup>th</sup> Revised*				
17-34.1	Original*				
17-34.2	Original*				
17-34.3	Original*				
17-34.4	Original*				
17-34.5	Original*				
17-34.6	Original*				
17-34.7	Original*				
17-34.8	Original*				
17-34.9	Original*				
17-34.10	Original*				
17-35	2 <sup>nd</sup> Revised*				
17-36	Original				
17-37	Original				
17-38	Original				
17-39	Original				