

ACCESS SERVICE**7. Special Access Service****7.1 General**

Special Access Service provides a transmission path to connect two or more customer designated premises* when all designated premises can be connected with facilities provided by the Telephone Company. If only a portion of the facilities can be provided by the Telephone Company, Special Access Service provides the transmission path necessary to connect customer designated premises in the Telephone Company's serving area with the interconnection point with another exchange telephone company. Special Access Service includes all exchange access which does not utilize Telephone Company end office switching.

7.1.1 Rate Elements

There are three basic rate elements which may apply to a Special Access Service in addition to the Special Access Surcharge described in Section 7.4.4, following.

(A) Channel Termination

The Channel Termination provides for the communication path between a customer designated premises and the serving wire center of that premises. One Channel Termination charge applies per customer designated premises, located in the serving area of the Telephone Company, at which the channel is terminated. This charge will apply even if the customer designated premises and the serving wire center are co-located in a Telephone Company building. The rates for Channel Termination are set forth in Sections 12.#.3(A)(1), 12.#.3(B)(1), 12.#.3(C)(1), and 12.#.3(D)(1), following.

Channel Termination is the only Special Access rate element to have both a recurring and non recurring charge applied. All other rate elements for Special Access have only recurring charges.

- * Telephone Company Centrex CO switches are considered to be customer premises for purposes of this tariff.

ACCESS SERVICE7. **Special Access Service** (Cont'd)7.1 **General** (Cont'd)7.1.1 **Rate Elements** (Cont'd)(B) **Channel Mileage**

The Channel Mileage rate category provides for the end office equipment and the transmission facilities between the serving wire centers associated with two customer designated premises, between a serving wire center associated with a customer designated premises and a Telephone Company hub, between two Telephone Company hubs, or between a serving wire center associated with a customer designated premises and the WATS serving office. Channel Mileage rates are made up of the Channel Mileage Facility rate and the Channel Mileage Termination rate.

(1) **Channel Mileage Facility**

The Channel Mileage Facility rate recovers the cost for the transmission path which extends between the Telephone Company serving wire centers and/or hub(s) and includes primarily outside plant used to provide the facility. Rates for Channel Mileage Facility are set forth in Sections 12.#.3(A)(2), 12.#.3(B)(2), 12.#.3(C)(2), and 12.#.3(D)(2), following.

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7. **Special Access Service** (Cont'd)

7.1 **General** (Cont'd)

7.1.1 **Rate Elements** (Cont'd)

(B) **Channel Mileage** (Cont'd)

(2) **Channel Mileage Termination**

The Channel Mileage Termination rate recovers the cost for end office equipment associated with terminating the facility (i.e., basic circuit equipment and terminations at serving wire centers and hubs), including circuit equipment. Channel Mileage Termination rate will apply at the serving wire center(s) for each customer designated premises and Telephone Company hub where the channel is terminated. If the Channel Mileage is between Telephone Company bridging hubs, the Channel Mileage Termination rate will apply per Telephone Company designated hub. Rates for Channel Mileage Termination are set forth in Sections 12.#.3(A)(3), 12.#.3(B)(3), 12.#.3(C)(3), and 12.#.3(D)(3), following.

(C)

ACCESS SERVICE7. **Special Access Service** (Cont'd)7.1 **General** (Cont'd)7.1.1 **Rate Elements** (Cont'd)(C) **Optional Features and Functions**

Optional features and functions may be added to a Special Access Service to meet specific communications requirements. These are not necessarily identifiable with specific equipment, but rather represent the end result in terms of performance characteristics which may be obtained. These characteristics may be obtained by using various combinations of equipment installed at various locations along the path of the service. Bridging and multiplexing are Optional Feature and Functions which must be performed at a Telephone Company hub office as described in Section 7.1.6, following.

Multiplexing Service is required when a customer orders High Capacity DS1 Direct Trunked Switched Access Service, or when a customer orders High Capacity DS1 Special Access for Voice Paths or a combination of voice and data paths. Rates for Multiplexing Service are described in Section 12.#.2(B)(5), following.

(D) **Central Office Bridging Capability**

- (1) Voice Bridging (two-wire and four-wire)
- (2) Data Bridging (two-wire and four-wire)

ACCESS SERVICE7. **Special Access Service** (Cont'd)7.1 **General** (Cont'd)7.1.2 **Design Layout Report**

At the request of the customer, the Telephone Company will provide to the customer the make-up of the facilities and services provided under this tariff as Special Access Service to aid the customer in designing its overall service. This information will be provided in the form of a Design Layout Report. The Design Layout Report will be provided to the customer at no charge, and will be reissued or updated whenever the facilities are materially changed.

7.1.3 **Acceptance Testing**

At no additional charge, the Telephone Company will, at the customer's request, cooperatively test at the time of installation the following parameters:

- (A) For Voice Grade analog services, acceptance test will include tests for loss, 3-tone slope, DC continuity, operational signaling, C-notched noise, and C-message noise when these parameters are applicable and specified in the order for service. Additionally, for Voice Grade services, a balance (improved loss) test will be made if the customer has ordered the improved loss optional feature.
- (B) For Metallic services, Program Audio, Digital Data, and High Capacity service, acceptance tests will include tests for the parameters applicable to the service as specified by the customer in the order for service.

In addition to the above tests, Additional Cooperative Acceptance Testing for Voice Grade service to test other parameters is available at the customer's request. All test results will be made available to the customer upon request. The rates described in Section 12.#.4(B), following, for Additional Labor will apply when additional tests are performed.

ACCESS SERVICE7. **Special Access Service** (Cont'd)7.1 **General** (Cont'd)7.1.4 **Service Descriptions**

For the purposes of ordering, there are five categories of Special Access Service. These are Metallic (MT), Voice (VG), Program Audio (AP), Digital Data (DA), and High Capacity (HC).

Each service consists of a basic channel to which a technical specifications package (customized or predefined), channel interface(s) and, when desired, optional features and functions are added to construct the service desired by the customer. Technical specifications packages are described in this section. Channel interfaces are nonchargeable features of a Special Access Service and are described in Section 11.3, following.

Customized technical specifications packages will be provided where technically feasible. If the Telephone Company determines that the requested parameter specifications are not compatible, the customer will be advised and given the opportunity to change the order.

When a customized channel is ordered the customer will be notified whether Additional Engineering Charges apply. In such cases, the customer will be given an estimate of the hours to be billed before any further action is taken on the order.

The channel description specifies the characteristics of the basic channel and indicates whether the channel is provided between customer designated premises, between a customer designated premises and a Telephone Company hub where bridging or multiplexing functions are performed, or, between a customer designated premises and the WATS serving office.

ACCESS SERVICE7. **Special Access Service** (Cont'd)7.1 **General** (Cont'd)7.1.4 **Service Descriptions** (Cont'd)

- (A) Information pertaining to the technical specifications package described in Section 7.2, following, indicates the transmission parameters that are available with each package. This information is displayed in a matrix with the transmission parameters listed down the left side and the packages listed across the top. Each package is identified by a code, e.g., VGC. The first two letters of the code indicate the category of Special Access Service to which the parameters are applicable. These two letter codes are shown above in parentheses following the category of Special Access Service. The letter "C" following the two letter code indicates the technical specifications package for a customized service. A numeric or alpha-numeric designation following the two letter code indicates the specific predefined package. For a customized service, the customer may select any parameters available with that category of service as long as the parameters are compatible. When appropriate, the Technical Reference which contains detailed specifications for the parameters is shown following the matrix.
- (B) Channel interfaces at each Point of Termination on a two-point service may be symmetrical or asymmetrical. On a multipoint service they may also be symmetrical or asymmetrical, but communications can only be provided between compatible channel interfaces. Only certain channel interfaces are compatible. These are set forth in Section 11.3.5, following, in a combination format.

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7. **Special Access Service** (Cont'd)

7.1 **General** (Cont'd)

7.1.4 **Service Descriptions** (Cont'd)

- (C) Only certain channel interface combinations are available with the predefined technical specification packages. These are delineated in the Technical References set forth in Section 7.1.4(E), following. When a customized channel is requested, all channel interface combinations available with the specified type of service are available with the customized channel.

- (D) The Telephone Company will maintain existing transmission specifications on services installed prior to the effective date of this tariff, except that existing services with performance specifications exceeding the standards listed in the provision will be maintained at the performance levels specified in this tariff.

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.4 Service Descriptions (Cont'd)

(E) All services installed after the effective date of this tariff will conform to the transmission specification standards contained in this tariff or in the following Technical References for each category of service:

Metallic	TR-NPL-000336
Voice Grade	TR-TSY-000335 PUB 41004, Table 4
Program Audio	TR-NPL-000337 and associated Addendum
High Capacity	TR-INS-000342 PUB 62411
Digital Data	TR-NPL-000341 and associated Addendum PUB 62310

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7. **Special Access Service** (Cont'd)

7.1 **General** (Cont'd)

7.1.5 **Ordering Options and Conditions**

Special Access Service is ordered under the Access Order provisions set forth in Section 5., preceding. Also included in that section are other charges which may be associated with ordering Special Access Service (e.g., Service Date Change Charges, Cancellation Charges, etc.).

7.1.6 **Facility Hubs**

A hub is a Telephone Company designated serving wire center at which bridging or multiplexing functions are performed. The bridging functions performed are to connect three or more customer designated premises in a multipoint arrangement. The multiplexing functions are to channelize analog or digital facilities to individual services requiring a lower capacity or bandwidth. NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. No. 4 identifies serving wire centers, hub locations and the type of bridging or multiplexing functions available.

ACCESS SERVICE7. **Special Access Service** (Cont'd)7.2 **Channel Types and Service Descriptions**

There are five basic types of channels used to provide Special Access Services. Each type has its own characteristics. All are subdivided by one or more of the following:

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

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

For purposes of ordering channels, each has been identified as a type of Special Access Service. However, such identification is not intended to limit a customer's use of the channel nor to imply that the channel is limited to a particular use. For example, if a customer's equipment is capable of transmitting voice over a channel that is identified as a Metallic Service in this tariff, there is no restriction against doing so.

7.2.1 **Metallic Service Channel Description**

A Metallic channel is an unconditioned two-wire channel arranged to transmit direct current and capable of transmitting low speed varying signals at rates up to 30 baud. This channel is provided by metallic or equivalent facilities. Metallic channels are provided between customer designated premises or between a customer designated premises and a Telephone Company hub where bridging functions are performed. Interoffice metallic facilities will be limited in length to a total of five miles per channel.

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7. Special Access Service (Cont'd)

7.2 Channel Types and Service Descriptions (Cont'd)

7.2.1 Metallic Service Channel Description (Cont'd)

(A) Technical Specifications Packages

Parameter	Package MT			
	C*	1	2	3
DC Resistance				
Between Conductors	X	X	X	
Loop Resistance	X			X
Shunt Capacitance	X			X

The technical specifications are delineated in Technical Reference TR-NPL-000336.

* All parameters are available within the ranges selected by the customer where technically feasible.

(B) Channel Interfaces

Compatible channel interfaces are set forth in Section 11.3.5(A), following.

7.2.2 Voice Grade Service Channel Description

A Voice Grade channel is a channel which provides voice frequency transmission capability in the nominal frequency range of 300 to 3,000 Hz and may be terminated two-wire or four-wire. Voice Grade channels are provided between customer designated premises, between a customer designated premises and a Telephone Company hub, or between a customer designated premises and a WATS serving office.

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7. Special Access Service (Cont'd)

7.2 Channel Types and Service Descriptions (Cont'd)

7.2.2 Voice Grade Service Channel Description (Cont'd)

(A) Technical Specifications Package

Parameter	Package VG												
	C*	1	2	3	4	5	6	7	8	9	10	11	12
Attenuation													
Distortion	X	X	X	X	X	X	X	X	X	X	X	X	X
C-Conditioning	X					X	X	X	X	X	X		
C-Message Noise	X	X	X	X	X	X	X	X	X	X	X	X	X
Data Capability	X						X	X			X		
Echo Control	X	X	X	X		X	X	X				X	X
Envelope Delay													
Distortion	X						X	X	X	X	X	X	X
Frequency Shift	X						X	X	X	X	X	X	X
Impulse Noise	X					X	X	X	X	X	X	X	X
Intermodulation													
Distortion	X						X	X	X	X	X	X	
Loss Deviation	X	X	X	X	X	X	X	X	X	X	X	X	X
Phase Hits, Gain													
Hits, and Dropouts	X												
Phase Jitter	X						X	X	X	X	X	X	
Signal-to-C													
Message Noise					X								
Signal-to-C													
Notch Noise	X					X	X	X	X	X	X	X	X

*The desire parameters are selected by the customer from the list of available parameters.

The technical specification for these parameters (except for dropouts, gain hits, and phase hits) are delineated in Technical References TR-NPL-000334 and TR-TSY-000335. The technical specifications for dropouts, phase hits, and gain hits are delineated in Technical Reference PUB 41004, Table 4.

ACCESS SERVICE7. **Special Access Service** (Cont'd)7.2 **Channel Types and Service Descriptions** (Cont'd)7.2.2 **Voice Grade Service Channel Description** (Cont'd)(B) **Channel Interfaces**

The following channel interfaces for Voice Grade service do not require signaling capability: AH, DA, DB, DD, DE, DS, NO, PR and TF.

The following channel interfaces for Voice Grade service require signaling capability: AB, AC, CT, DX, DY, EA, EB, EC, EX, GO, GS, LA, LB, LC, LO, LR, LS, RV and SF.

Compatible channel interfaces are set forth in Section 11.3.5(B), following.

(C) **Optional Features and Functions**(1) **Conditioning**

Conditioning provides more specific transmission characteristics for Voice Grade services. C Type Conditioning controls Attenuation Distortion and Envelope Delay Distortion. The rates for Conditioning options are as set forth in Section 12.#.3(A)(4)(a), following.

For two-point services, the parameters apply to each service. For multipoint services, the parameters apply to each mid-link or end-link.

(a) **C-Type Conditioning**

C-Type Conditioning is provided for the additional control of attenuation distortion and envelope delay distortion on data services. The attenuation distortion and envelope delay distortion specifications for C-Type Conditioning are delineated in Technical Reference TR-TSY-000335.

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7. Special Access Service (Cont'd)

7.2 Channel Types and Service Descriptions (Cont'd)

7.2.2 Voice Grade Service Channel Description (Cont'd)

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

(1) Conditioning (Cont'd)

(a) C-Type Conditioning (Cont'd)

The attenuation distortion and envelope delay distortion specifications for C-Type Conditioning are:

Attenuation Distortion
(Frequency Response)
Relative to 1004 Hz

<u>Frequency Range (Hz)</u>	<u>Variation (dB)</u>
400-2800	-1.0 to +2.0
300-3000	-1.0 to +3.0
3000-3200	-2.0 to +6.0

Envelope Delay
Distortion

<u>Frequency Range (Hz)</u>	<u>Variation (micro-seconds)</u>
1000-2600	100
800-2600	200
600-2600	300
500-2800	600
500-3000	3000

ACCESS SERVICE7. **Special Access Service** (Cont'd)7.2 **Channel Types and Service Descriptions** (Cont'd)7.2.2 **Voice Grade Service Channel Description** (Cont'd)(C) **Optional Features and Functions** (Cont'd)(1) **Conditioning** (Cont'd)(b) **Data Capability (D Conditioning)**

Data Capability provides transmission characteristics suitable for data communications. Specifically, Data Capability provides for the control of Signal to C-Notched Noise Ratio and intermodulation distortion. It is available for two-point services or three-point multipoint services.

The Signal to C-Notched Noise Ratio and intermodulation distortion parameter for Data Capability are delineated in Technical Reference TR-TSY-000335.

When a service equipped with Data Capability is used for voice communications, the quality of the voice transmission may not be satisfactory.

(c) **Signaling Capability**

Signaling Capability provides for the ability to transmit signals from one customer premises to another customer premises on the same service.

The following network channel interfaces for Voice Grade service do not require signaling capability: AH, DA, DB, DD, DE, DS, NO, PR and TF.

The following network channel interfaces for Voice Grade service require signaling capability: AB, AC, CT, DX, DY, EA, EB, EC, EX, GO, GS, LA, LB, LC, LO, LR, LS, RV and SF. The signaling capability charge will not apply when used in the provision of WATS access service.

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7. **Special Access Service** (Cont'd)

7.2 **Channel Types and Service Descriptions** (Cont'd)

7.2.2 **Voice Grade Service Channel Description** (Cont'd)

(C) **Optional Features and Functions** (Cont'd)

(3) **Improved Two-Wire Voice Transmission**

(a) **Loss Deviation**

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is -4.0 dB to +4.0 dB.

(b) **Attenuation Distortion**

The maximum Attenuation Distortion in the 404 to 280 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +6.0 dB.

(c) **C-Message Noise**

The maximum C-Message Noise for the transmission path at the route miles listed is less than:

<u>Route Miles</u>	<u>C-Message Noise</u>
less than 50	35 dBrnc0
51 to 100	37 dBrnc0
101 to 200	40 dBrnc0
201 to 400	43 dBrnc0
401 to 1000	45 dBrnc0

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7. **Special Access Service** (Cont'd)

7.2 Channel Types and Service Descriptions (Cont'd)

7.2.2 Voice Grade Service Channel Description (Cont'd)

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

(3) Improved Two-Wire Voice Transmission (Cont'd)

(d) Return Loss

The Return Loss, expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), is equal to or greater than:

ERL	13.0 dB
SRL	6.0 dB

The rate for the provision of Improved Two-Wire Voice Transmission is included as part of the basic Channel Termination rate.

7.2.3 Program Audio Service Channel Description

A Program Audio channel is a channel with a bandwidth measured in Hz for the transmission of a complex signal voltage. The channel is used for transmission of audio signals. The nominal frequency bandwidth is from 50 to 15,000 Hz. Only one-way transmission is provided.

Program Audio Special Access services are typically used in full-time and part-time applications for radio broadcasting, noncommercial educational audio, and wired music. These examples of applications are not intended to limit a customer's use of the channel nor to imply that the channel is limited to a particular use.

Gain conditioning and stereo treatment are optional features which will be provided at additional charge where requested.

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7. Special Access Service (Cont'd)

7.2 Channel Types and Services Descriptions (Cont'd)

7.2.3 Program Audio Service Channel Description (Cont'd)

(A) Technical Specifications Packages Program Audio Service

Parameter	SD Code NC Code	Package				
		<u>APC*</u> <u>PQ</u>	<u>AP1</u> <u>PE</u>	<u>AP2</u> <u>PF</u>	<u>AP3</u> <u>PJ</u>	<u>AP4</u> <u>PK</u>
Actual Measured Loss		X	X	X	X	X
Amplitude Tracking		X				
Crosstalk		X	X	X	X	X
Distortion Tracking		X				
Gain/Frequency Distortion		X	X	X	X	X
Group Delay		X				
Noise		X	X	X	X	X
Phrase Tracking		X				
Short-Term Gain Stability		X				
Short-Term Loss		X				
Total Distortion		X	X	X	X	X
<u>Optional Features and Functions</u>						
Central Office Bridging						
Capability		X	X	X	X	X
Gain Conditioning		X	X	X	X	X
Stereo		X				X

The technical specifications are described in Technical Reference TR-NPL-000337 and associated Addendum.

Compatible channel interfaces are set forth in Section 11.3.5(C), following.

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Issued: December 15, 1995 H.R. Gentsch, President & CEO Effective: February 1, 1996

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Waterloo, IL 62298-0149**

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7. **Special Access Service** (Cont'd)

7.2 **Channel Types and Services Descriptions** (Cont'd)

7.2.4 **Digital Data Service**

A Digital Data channel is a channel for duplex four-wire transmission of synchronous serial data at the rate of 2.4, 4.8, 9.6, 19.2, 56 Kbps, and 64 Kbps Clear Channel (CC)*. The actual bit rate is a function of the channel interfae selected by the customer. The channel provides a synchronous service with timing provided by the Telephone Company through the Telephone Company's facilities to the customer in the received bit stream. Digital Data channels are only available via Telephone Company designated hubs and are provided between customer designated premises and a Telephone Company hub or hubs.

The customer may provide the Channel Service Unit-type equipment or other Network Channel Terminating Equipment associated with the Digital Data channel at the customer premises.

Rates and charges for Special Access Digital Data Service are as set forth in Section 12.#.3.©, following.

(A) **Technical Specifications Packages and Network Channel Interfaces**

- (1) The following network channel interfaces (NCIs) define the bit rates that are available for a Digital Data channel:

<u>NCI</u>	<u>Bit Rate</u>	(S)
PU-2.4	2.4 Kbps	(N)
PU-4.8	4.8 Kbps	
PU 9.6	9.6 Kbps	
PU-19.2	19.2 Kbps	(N)
DU-56	56.0 Kbps	(S)
DU-64*	64.0 Kbps	(N)

* 64 Kbps Clear Channel (CC) is offered where equipment and facilities are available. (N) (N)

(S) Reissued matter with an effective date of January 1, 1996.

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7. **Special Access Service** (Cont'd)

7.2 **Channel Types and Services Descriptions** (Cont'd)

7.2.4 **Digital Data Service** (Cont'd)

(A) **Technical Specifications and Network Channel Interfaces**
(Cont'd)

(2) **Technical Specifications Packages are set forth below:**

<u>Parameter</u>	SD Code NC Code	<u>Package</u>			
		<u>D1</u> <u>XA</u>	<u>D2</u> <u>XB</u>	<u>D3</u> <u>XG</u>	<u>D4</u> <u>XH</u>
Error-Free Seconds		X	X	X	X
<u>Optional Features and Functions</u>					
Central Office					
Bridging Capability		X	X	X	X
PPSN Interfact Transfer Arrangement		X	X	X	X
Transfer Arrangement			X	X	X

The Telephone Company will provide a channel capable of meeting a monthly average performance equal to or greater than 99.875% error-free seconds (if provided through a Digital Data hub) while the channel is in service, if it is measured through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference PUB 62310.

Voltages which are compatible with Digital Data Service are delineated in Technical Reference TR-NPL-000341.

Compatible channel interfaces are set forth in Section 11.3.5(D), following.

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7. **Special Access Service** (Cont'd)

7.2 **Channel Types and Services Descriptions** (Cont'd)

7.2.4 **Digital Data Service** (Cont'd)

(B) **Optional Features and Functions**

(1) **Central Office Bridging Capability**

Reserved for future use.

(2) **Transfer Arrangement**

An arrangement that affords the customer an additional measure of protection and/or flexibility in the use of their access channel(s) on a 1xN basis. The arrangement can be utilized to transfer a leg of Special Access Service to either a spare or working channel that terminates in either the same or a different customer designated premises. This arrangement is only available at a Telephone Company designated hub. A key activated or dial-up control service is required to operate the transfer arrangement. A spare channel, if required, is not included as a part of the option.

(3) **Public Package Switching Network (PPSN) Interface Arrangement**

An arrangement that provides the interface requirements that permit a Digital Data Service to interface with a Public Packet Switching Network packet switch located in a Telephone Company premises. The interface is compatible with X.25 and X.75 packet switching protocols as defined by the CCITT.

The table set forth in Section 7.2.5(A), following, shows the technical specifications packages with which the optional features and functions are available.

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7. **Special Access Service** (Cont'd)

7.2 **Channel Types and Services Descriptions** (Cont'd)

7.2.5 **High Capacity Service**

- * A High Capacity channel is a channel for the transmission of 256*,384*512* Kbps, 1.544, or 44.738 Mbps synchronous serial data. The actual bit rate is a function of the channel interface selected by the customer. High Capacity channels are provided between customer designated premises or between a customer designated premises and a Telephone Company hub or hubs. (N)

The customer may provide the Network Channel Terminating Equipment associated with the High Capacity channel at the customer's premises.

A channel with technical specifications package HC1 will be capable of an error-free second performance of 98.75% over a continuous 24-hour period as measured at the 1.544 Mbps rate through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference PUB 62411.

Where technically feasible, the Telephone Company will offer High Capacity Service at speeds of 256 Kbps, 384 Kbps, and 512 Kbps. The Telephone Company will provision this service at interface levels of up to 1.544 Mbps to an Interexchange Carrier digital POT.

- * 256, 384, and 512 Kbps service is offered only where equipment and facilities are available.

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7. Special Access Service (Cont'd)

7.2 Channel Types and Services Descriptions (Cont'd)

7.2.5 High Capacity Service (Cont'd)

(A) Technical Specifications Packages and Network Channel Interfaces

	SD Code NC Code	Package					
		<u>HCO</u>	<u>HC1</u>	<u>HC1C</u>	<u>HC2</u>	<u>HC3</u>	<u>HC4</u>
		<u>HS</u>	<u>HC</u>	<u>HD</u>	<u>HE</u>	<u>HF</u>	<u>HG</u>
<u>Parameters</u>							
Error-Free Seconds			X				
<u>Optional Features and Functions</u>							
Automatic Loop Transfer			X				
Central Office							
Multiplexing:							
DS4 to DS1							X
DS3 to DS1						X	
DS2 to DS1					X		
DS1C to DS1				X			
DS1 to Voice				X			
DS1 to DSO				X			
DSO to Subrate*	X						
Transfer Arrangement			X				

A channel with technical specifications package HC1 will be capable of an error-free second performance of 98.75% over a continuous 24-hour period as measured at the 1.544 Mbps rate through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference PUB 62411.

Compatible channel interfaces are set forth in Section 11.3.5(E), following:

* Available only on a channel of 1.544 Mbps facility to a Telephone Company hub.

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7. Special Access Service (Cont'd)

7.2 Channel Types and Services Descriptions (Cont'd)

7.2.5 High Capacity Service (Cont'd)

(A) Technical Specifications Packages and Network Channel Interfaces (Cont'd)

The following network channel interfaces (NCIs) define the bit rates that are available for a High Capacity channel:

<u>NCI</u>	<u>Bit Rate</u>
DS-15*	1.544 Mbps (DS1)

(B) Optional Features and Functions

(1) Automatic Loop Transfer

The Automatic Loop Transfer provides protection on a 1xN basis against failure of the facilities between a customer designated premises and the wire center serving that premises. Protection is furnished through the use of a switching arrangement that automatically switches to a spare channel line when a working line fails. The spare channel is not included as a part of the option. This option requires compatible equipment at both the serving wire center and the customer designated premises. The customer is responsible for providing the equipment at its designated premises.

* A 64.0 Kbps channel is available as a channel(s) of a 1.544 Mbps channel to a Telephone Company hub.

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7. **Special Access Service** (Cont'd)

7.2 **Channel Types and Services Descriptions** (Cont'd)

7.2.5 **High Capacity Service** (Cont'd)

(B) **Optional Features and Functions** (Cont'd)

(2) **Transfer Arrangement**

An arrangement that affords the customer an additional measure of flexibility in the use of their access channel(s). The arrangement can be utilized to transfer a leg of a Special Access Service to either a spare or working channel that terminates in either the same or a different customer designated premises. A key activated or dial-up control service is required to operate the transfer arrangement. A spare channel, if required, is not included as part of the option.

ACCESS SERVICE

7. **Special Access Service** (Cont'd)

7.2 **Channel Types and Services Descriptions** (Cont'd)

7.2.5 **High Capacity Service** (Cont'd)

(B) **Optional Features and Functions** (Cont'd)

(3) **Central Office Multiplexing**

(a) **DS1 to Voice**

An arrangement that converts a 1.544 Mbps channel to 24 channels for use with Voice Grade Services. A channel(s) of this DS1 to the Hub can also be used for a Digital Data Service.

(b) **DS1 to DSO**

An arrangement that converts a 1.544 Mbps channel to 23 64.0 Kbps channels utilizing digital time division multiplexing.

The table set forth in Section 7.2.4(A), preceding, shows the technical specifications packages with which the optional features and functions are available.

ACCESS SERVICE

7. **Special Access Service** (Cont'd)

7.3 **Service Configurations**

There are two types of service configurations over which Special Access Service are provided: two-point service and multipoint service.

7.3.1 **Two-Point Service**

A two-point service connects two customer designated premises, either on a directly connected basis or through a hub where multiplexing functions are performed, or a customer designated premises and a WATS Serving Office.

ACCESS SERVICE

7. Special Access Service (Cont'd)

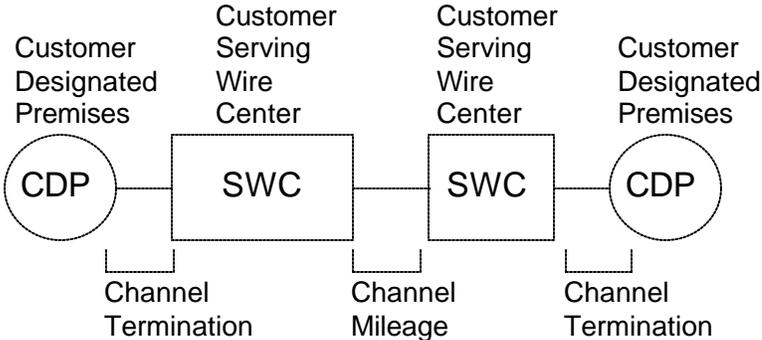
7.3 Service Configurations (Cont'd)

7.3.1 Two-Point Service (Cont'd)

- Applicable rate elements are:
- Channel Terminations
 - Channel Mileage (as applicable)
 - Optional Features and Functions (when applicable)

In addition, a Special Access Surcharge, as set forth in Section 7.4.4, following, may be applicable.

The following diagram depicts a two-point Voice Grade service connecting two customer designated premises (CDP) located 15 miles apart.



- Applicable rate elements are:
- Channel Terminations (1 applicable per CDP)
 - Channel Mileage (1 section, Channel Mileage Facility per mile plus 2 Channel Mileage Terminations)

ACCESS SERVICE7. **Special Access Service** (Cont'd)7.3 **Service Configurations** (Cont'd)7.3.2 **Multipoint Service**

Multipoint service connects three or more customer designated premises through one or more Telephone Company hubs. Only certain types of Special Access Service are provided as multipoint service. These are so designated in the descriptions for the appropriate channel.

The channel between hubs (i.e., bridging locations) on a multipoint service is a mid-link. There is no limitation on the number of mid-links available with a multipoint service. However, when more than three mid-links in tandem are provided the quality of the overall service may be degraded.

Multipoint service utilizing a customized technical specifications package, as set forth in Section 7.1.4, preceding, will be provided when technically possible. If the Telephone Company determines that the requested characteristics for a multipoint service are not compatible, the customer will be advised and given the opportunity to change the order.

When ordering, the customer will specify the desired bridging hub(s). NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. No. 4 identifies serving wire centers, hub locations and the type of bridging functions available.

Applicable Rate Elements are:

- Channel Terminations (one per customer designated premises)
- Channel Mileage (as applicable between the serving wire center for each customer designated premises and the hub and between hubs).
- Additional Optional Features and Functions (when applicable).

ACCESS SERVICE

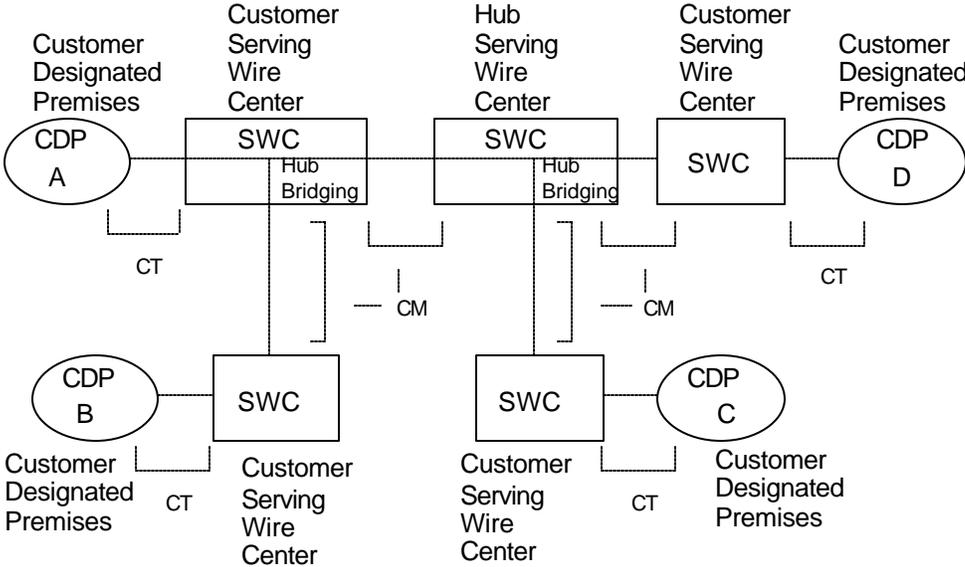
7. Special Access Service (Cont'd)

7.3 Service Configurations (Cont'd)

7.3.2 Multipoint Service (Cont'd)

In addition, the Special Access Surcharge, as set forth in Section 7.4.4, following, following, may be applicable.

Example: Voice Grade multipoint service connecting four customer designated premises (CDP) via two customer specified bridging hubs.



CT - Channel Termination
CM - Channel Mileage

- Applicable rate elements are:
- Channel Terminations (4 applicable)
 - Channel Mileage (4 sections, Channel Mileage Facility per mile plus 2 Channel Mileage Terminations per section)
 - Bridging Optional Feature (6 applicable, i.e., each bridge port)

ACCESS SERVICE**7. Special Access Service (Cont'd)****7.4 Rate Regulations**

This section contains the specific regulations governing the rates and charges that apply for Special Access.

7.4.1 Application of Rates and Charges**(A) Nonrecurring Charges**

Nonrecurring Charges apply to each installation of service as a one time charge. Changes to existing services other than administrative changes described in Section 6.7.1, preceding, will be treated as a discontinuance of the existing service and an installation of a new service.

If an additional leg is added to an existing multipoint service, nonrecurring charges will only apply to the additional termination.

Nonrecurring charges apply for each Channel Termination installed and are set forth in Sections 12.#.3(A)(1), 12.#.3(B)(1), 12.#.3(C)(1), and 12.#.3(D)(1), following.

(B) Recurring Charges

Recurring charges apply to the ongoing provision of Special Access Service to the customer.

Monthly rates are recurring rates that apply each month or fraction thereof that a Special Access Service is provided. For billing purposes, each month is considered to have 30 days.

7.4.2 Minimum Periods

The minimum service period for all services except part-time Program Audio is one month. Part-time Program Audio services will be provided at minimum periods of one continuous 24-hour period, not limited to a calendar day.

ACCESS SERVICE7. **Special Access Service** (Cont'd)7.4 **Rate Regulations** (Cont'd)7.4.3 **Mileage Measurement**

The mileage to be used to determine the monthly rate for the Channel Mileage is calculated on the airline distance between the locations involved, i.e., the serving wire centers associated with two customer designated premises, a serving wire center associated with a customer designated premises and a Telephone Company hub, two Telephone Company hubs or, the serving wire center associated with a customer designated premises and the WATS serving office. The serving wire center associated with a customer designated premises is the serving wire center from which this customer designated premises would normally obtain dial tone.

Mileage charges are shown in Sections 12.#.3(A)(2), 12.#.3(B)(2), 12.#.3(C)(2), and 12.#.3(D)(2), following. To determine the rate to be billed, first compute the mileage using the V&H coordinates method, as set forth in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. No. 4, then multiply the resulting number of miles times the Channel Mileage Facility per mile rate, and add the Channel Mileage Termination Rate for each termination. When the calculation results in a fraction of a mile, always round up to the next whole mile before determining the mileage and applying the rates.

When hubs are involved, mileage is computed and rates applied separately for each section of the Channel Mileage, i.e., customer designated premises serving wire center to hub, hub to hub and/or hub to customer designated premises serving wire center.

However, when any service is routed through a hub for purposes other than customer specified bridging or multiplexing (e.g., the Telephone Company chooses to so route for test access purposes). Rates will be applied only to the distance calculated between the serving wire centers associated with the customer designated premises.

ACCESS SERVICE7. **Special Access Service** (Cont'd)7.4 **Rate Regulations** (Cont'd)7.4.4 **Surcharge for Special Access Service**(A) **General**

The Special Access Surcharge will apply to each interstate Special Access Service that terminates on an end user's PBX or other device where, through a function of the device, the Special Access Service interconnects to the local exchange network. Interconnection functions include but are not limited to wiring and software functions, bridging, switching or patching of calls or stations. The Surcharge will apply irrespective of whether the interconnection function is performed in equipment located at the customer's premises or in a Centrex Co-type switch. The Surcharge rate is set forth in Section 12.#.3(E), following.

(B) **Exemption of Special Access Service**

Special Access Service will be exempted from the Surcharge by the Telephone Company upon receipt of the customer's written certification as described in Section 7.4.4(C), following, for the following Special Access Service terminations:

- (1) an open-end termination in a Telephone Company switch to an FX line, including CCSA and CCSA-equivalent ONALs; or
- (2) an analog channel termination that is used for radio or television program transmission; or
- (3) a termination used for TELEX service; or
- (4) a termination that by the nature of its operating characteristics could not make use of Telephone Company common lines such as, terminations which are restricted through hardware or software;

ACCESS SERVICE

7. **Special Access Service** (Cont'd)

7.4 **Rate Regulations** (Cont'd)

7.4.4 **Surcharge for Special Access Service** (Cont'd)

(B) **Exemption of Special Access Service** (Cont'd)

- (5) or a termination that interconnects either directly or indirectly to the local exchange network where the usage is subject to Carrier Common Line Charges; or
- (6) a termination that the customer certifies to the Telephone Company is not connected to a PBX or other device which interconnects the Special Access Service to a local exchange subscriber line.

(C) **Exemption Certification**

- (1) Special Access Services which are terminated as set forth in Section 7.4.4(B), preceding, will be exempted from the Special Access Surcharge if the customer provides the Telephone Company with written exemption certification. The certification may be provided to the Telephone Company (1) at the time the Special Access Service is ordered or installed; (2) at such time as the service is reterminated to a device which does not interconnect to the service to local exchange facilities, or (3) at such time as the service becomes associated with a Switched Access Service that is subject to Carrier Common Line Charges.

ACCESS SERVICE7. **Special Access Service** (Cont'd)7.4 **Rate Regulations** (Cont'd)7.4.4 **Surcharge for Special Access Service** (Cont'd)(C) **Exemption Certification** (Cont'd)

- (2) The exemption certification is to be provided by the customer ordering the service. The certification must be signed by the customer or authorized representative and include the category of exemption, as set forth in Section 7.4.4(B), preceding, for each termination, and the date which the exemption is effective.
- (3) The customer shall also notify the Telephone Company when an exempted Special Access Service is changed or reterminated such that the exemption is no longer applicable.
- (4) The Telephone Company will work cooperatively with the customer to resolve any questions regarding the exemption certification. In addition, the Telephone Company may withhold exemption of the service until the questions are resolved.

(D) **Application of Surcharge**

- (1) The Telephone Company will bill the appropriate Special Access Surcharge to the ordering customer for each intrastate Special Access Service installed unless exemption certification is provided as set forth in Section 7.4.4, preceding. In the case of multipoint Special Access Services, one Special Access Surcharge will apply for each termination of a Special Access Channel at an end user's premises.

ACCESS SERVICE7. **Special Access Service** (Cont'd)7.4 **Rate Regulations** (Cont'd)7.4.4 **Surcharge for Special Access Service** (Cont'd)(D) **Application of Surcharge** (Cont'd)

- (2) If a written certification is not received at the time the Special Access Service is obtained, the Surcharge will be applied. Exempt status will become effective on the certification date indicated by the customer, subject to the regulations set forth in (3), following.
- (3) The Telephone Company will cease billing the Special Access Surcharge when certification, is received. If the status of the Special Access Service was changed prior to receipt of the exemption certification, the Telephone Company will credit the customer's account not to exceed ninety (90) days, based on the effective date of the change as specified by the customer in the letter of certification.

7.4.5 **Mixed Use Analog and Digital High Capacity Services**

Mixed use refers to a rate application applicable only when the customer orders High Capacity Special Access facilities between a customer designated premises and a Telephone Company hub where the Telephone Company performs multiplexing/de-multiplexing functions and the same customer then orders the derived channels as Special and Switched Access Services. If the customer has Switched Access Service between a customer designated premises and an end office that is multiplexed at a Telephone Company hub and subsequently orders the derived channels as Special and Switched Access Service, rates and charges will apply as if the service were ordered as mixed use.

ACCESS SERVICE

7. **Special Access Service** (Cont'd)

7.4 **Rate Regulations** (Cont'd)

7.4.5 **Mixed Use Analog and Digital High Capacity Services** (Cont'd)

Except as noted above, the High Capacity facility will be ordered, provided and rated as Special Access Service (i.e., channel Termination, Channel Mileage, as appropriate, and Multiplexing Arrangement). The nonrecurring charge that applies when the mixed use facility is installed will be the nonrecurring charge associated with the appropriate Special Access High Capacity Channel Termination.

Rating as Special Access will continue until such time as the customer chooses to use a portion of the available capacity for Switched Access Service. Individual service (i.e., Switched or Special Access) nonrecurring charges will not apply to the individual channels of the mixed use facility.

ACCESS SERVICE7. **Special Access Service** (Cont'd)7.4 **Rate Regulations** (Cont'd)7.4.5 **Mixed Use Analog and Digital High Capacity Services** (Cont'd)

When Special Access Service is provided utilizing a channel of the mixed use facility to a hub, High Capacity rates and charges will apply for the facility to the hub, as set forth preceding, and individual service rates and charges will apply from the hub to the customer designated premises. The rates and charges that will apply to the portion from the hub to the customer designated premises will be dependent on the specific type of Special Access Service that is provided (e.g., Voice Grade, Telegraph, etc.). The applicable rates and charges will include a Channel Termination and Channel Mileage, if applicable, rates and charges for optional features and functions associated with the service, if any, will apply for the appropriate channel type.

As each individual channel is activated for Switched Access Service, the High Capacity Special Access Channel Termination, Channel Mileage, and Multiplexing rates will be reduced accordingly (e.g., 1/24th for a DS1 service, etc.).

Switched Access Service rates and charges, as set forth in Section 12.#.2, following, will apply for each channel that is used to provide a Switched Access Service. Additionally, the Switched Access Service Entrance Facility, Direct Trunked Transport, and Multiplexing charges, if applicable, will be calculated by multiplying their respective rates by the ratio of derived Switched Access Service channels to the total number of channels that can be derived.

The customer must place an order for each individual Switched or Special Access Service utilizing the Mixed Use Facilities and specify the channel assignment for each such service.

ACCESS SERVICE

7. **Special Access Service** (Cont'd)

7.4 **Rate Regulations** (Cont'd)

7.4.6 **High Capacity Optional Rate Plans**

The Term Discount plan applies to Special Access DS1 and DS3 High Capacity Service Channel Termination, Channel Mileage Facility and Channel Mileage Termination monthly rates, as set forth following. The current monthly rates for such services are reduced by a fixed rate. The amount of the discount rate differs based on the length of the service commitment period selected by the customer. The Term Discount rates for High Capacity Service are as set forth in 12.2.3(D) following.

The minimum service period on a monthly rate basis is one month for DS1 and DS3 service.

(A) **Term Discount Plan Description**

DS1 and DS3 High Capacity Special Access Service may be ordered at the customer's option on a monthly rate basis or for Term Discount periods of 12 months (1 year), 36 months (3 years) or 60 months (5 years).

The minimum service period for Term Discount plans is twelve months. The customer must specify the length of the service commitment period at the time the service is ordered.

For customers that subscribe to the Term Discount plan for 12, 36 or 60 months, the Term Discount rate as set forth in 12.2.3(D), following, will be frozen from Telephone Company initiated increases or decreases for the entire discount period. The customer will be billed at the rate in effect at the beginning of the Term Discount period.

(C)
(C)

ACCESS SERVICE

7. **Special Access Service** (Cont'd)

7.4 **Rate Regulations** (Cont'd)

7.4.6 **High Capacity Optional Rate Plans** (Cont'd)

(A) **Term Discount Plan Description** (Cont'd)

(D)

At the end of the Term Discount period, the customer may convert to month-to-month service or subscribe to a new Term Discount Plan. If the customer does not make a choice by the end of the discount period, the rates will automatically convert to month-to-month service rates.

To be included in a Service Term Discount plan all eligible High Capacity rate elements must be ordered for the same commitment term (i.e., all 36 months or all 60 months) and with the same service date. When additional capacity is subsequently added, it will be available only on a month-to-month basis unless the discount period of the entire service is upgraded.

Eligible DS1 and DS3 High Capacity rate elements are those Channel Terminations, Channel Mileage Facility and Channel Mileage Terminations provided to a customer by the Telephone Company. As long as the number of DS1s and DS3 included in a Term Discount plan remains constant, customer requests to install and disconnect DS1 and DS3 services, including changes affecting different wire centers and/or customer designated premises, will not change the current Term Discount period or the minimum service period and Discontinuance of Service charges as set forth in (2) following will not apply.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.6 High Capacity Optional Rate Plans (Cont'd)

(A) Term Discount Plan Description (Cont'd)

(1) Upgrades in Term Discounts

Services provided under monthly rates or Term Discount rates may be upgraded to a Term Discount plan at any time without incurring Channel Termination nonrecurring charges or discontinuance charges for existing services. The new Term Discount plan must meet or exceed the service term of the plan being upgraded. For example, a service with a 36 month commitment period may be upgraded to a new 36 month, or 60 month service period. The monthly rates will be those that are in effect at the time the service is upgraded. A new minimum service period applies to all High Capacity Service that is upgraded.

(2) Discontinuance of Service

If the customer chooses to disconnect all or a portion of the service prior to the expiration of the Term Discount period, discontinuance charges will apply to the portion of the service being discontinued.

Should the customer choose to discontinue a Term Discount plan prior to the completion of the minimum service period, discontinuance charges will apply. Discontinuance charges equal to one-hundred percent of the total undiscounted monthly rates, less any amounts previously paid, will apply for the minimum service period. Additionally, discontinuance charges of fifteen percent of the total undiscounted monthly charges for DS1 and DS3 service will apply to the remaining portion (C) of the discount service term.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.6 High Capacity Optional Rate Plans (Cont'd)

(A) Term Discount Plan Description (Cont'd)

(2) Discontinuance of Service (Cont'd)

Should the customer choose to discontinue service ordered under a Term Discount plan after the minimum service period but before the completion of the discount period, discontinuance charges will apply.

Discontinuance charges of fifteen percent of the total undiscounted monthly charges for DS1 and DS3 service will apply to the remaining portion of the discount period. (C)

For example, a customer has a DS1 and DS3 Service which it chooses to discontinue after 33 months into a 60-month service term. The Discontinuance charge would be 0.15 times 27 months times the undiscounted monthly rates for that service. (C)

7.5 Reserved for Future Use

(D)(C)

(D)

ACCESS SERVICE7. SPECIAL ACCESS SERVICE (Cont'd)7.6 DIGITAL SUBSCRIBER LINES7.6.1 DSL Services

This section contains the rules and regulations pertaining to the provision of Digital Subscriber Line Services (DSL). DSL provides high-speed connections over existing copper facilities which are also used to provision customers' local exchange service. The regulations and rates specified herein are in addition to the applicable regulations and rates specified in other sections of this tariff.

7.6.2 ADSL Services(A) Service Description

Asymmetrical Digital Subscriber Line (ADSL) Service is an access data technology service offered, where available, in speed levels from 256 Kbps to 8 Mbps down and 128 Kbps to 1.086 Mbps up. The "up" speeds represent transmission speeds in kilobits or in megabits from the customer designated location (CDL) to the Telephone Company's ADSL connection point. The "down" speeds represent the transmission speeds in kilobits or in megabits from the Telephone Company's ADSL connection point to the CDL. The connection point is the aggregation point designated by the Telephone Company for connecting multiple Telephone Company serving wire centers of ADSL termination's to other network interface services. Other network services may include, but are not limited to, Frame Relay, ATM, DS1 and/or DS3 facilities. Telephone Company provided ATM, DS1 and DS3 network interface services may not be available for connection with ASDL Service in all areas.

(B) Service Provisioning

ADSL Service is provisioned over existing Telephone Company copper facilities and transported to the Telephone Company's backbone network. ADSL Service provides a connection from the customer designated location (CDL) to the ADSL connection point.

ACCESS SERVICE

N)

7. SPECIAL ACCESS SERVICE (Cont'd)7.6 DIGITAL SUBSCRIBER LINES (Cont'd)7.6.2 ADSL Services (Cont'd)(B) Service Provisioning (Cont'd)

Access from the Telephone Company's ADSL connection point will be provided via Frame Relay Service, Special Access and/or ATM, where facilities permit. Frame Relay Service is available in Section 7.5. A customer may utilize their existing Frame Relay Service or may submit an order to establish new facilities. If a customer utilizes Frame Relay Service from Section 7.5, the associated rates and charges for such facilities shall apply in addition to the rates and charges associated with the ADSL Service rate element.

The Telephone Company will qualify the ADSL Service between the CDL and the serving wire center. The purpose of qualification is to determine the availability and suitability of existing Telephone Company copper facilities to provide the service. The Telephone Company will not provision this service on facilities which are not suitable for ADSL.

The Telephone Company does not undertake to originate data, but offers the use of its service components, where available, to customers for the purpose of transporting customer-originated data.

ADSL Access Service will be provided over existing Telephone Company local exchange service lines. Rates and regulations for ADSL Access Service are in addition to any rates and regulations that apply for the associated local exchange service line provided under the terms and conditions in the Telephone Company's general and/or local exchange service tariffs. The Telephone Company will automatically disconnect ADSL Access Service when the associated local exchange service line is disconnected for any reason.

ADSL will be provided subject to the availability and limitations of Telephone Company wire centers and outside plant facilities and is only available where technical capabilities permit. Downstream data rates depend on a number of factors, including, but not limited to (1) the distance from the CDL to the serving wire center, (2) the type of copper facility (wire gauge) and (3) the physical plant. The Telephone Company does not guarantee data rates in either direction.

(C) Responsibility of the Telephone Company

The Telephone Company will provision and maintain ADSL Service for the customer up to and including the Network Interface Device (NID). The Telephone Company will advise the customer of the equipment necessary to support ADSL Service.

Issued: August 17, 2001

H.R. Gentsch, President & CEO Effective: September 1, 2001

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ACCESS SERVICE7. SPECIAL ACCESS SERVICE (Cont'd)7.6 DIGITAL SUBSCRIBER LINES (Cont'd)7.6.2 ADSL Services (Cont'd)(D) Rights of the Telephone Company

The Telephone Company will not provision ADSL Service if the Telephone Company reasonably determines that (a) it is not technically feasible over existing facilities or (b) it will cause interference problems with existing services.

During the Telephone Company's network maintenance and software updates periods, it may be necessary to place the ADSL wire center out of service. The Telephone Company reserves the right to temporarily interrupt ADSL Service at other times in emergency situations.

(E) Responsibility of the Customer

The customer is responsible for providing compatible customer provided equipment (CPE) that is used for connection to ADSL Service.

The customer is responsible for providing the Telephone Company with the necessary information (e.g., Data Link Connection Identifier(s) (DLCI), Permanent Virtual Circuit (PVC), and/or Internet Protocol (IP)) to provision ADSL Service.

(F) Rate Regulations(1) Rate Elements

A non-recurring charge and a monthly rate apply for the installation of ADSL Service. The non-recurring charge is also applicable when changing bandwidth.

ACCESS SERVICE7. SPECIAL ACCESS SERVICE (Cont'd)7.6 DIGITAL SUBSCRIBER LINES (Cont'd)7.6.2 ADSL Services (Cont'd)(F) Rate Regulations (Cont'd)(1) Rate Elements (Cont'd)

ADSL Service is available in different levels. These levels are based on the downstream and upstream speeds chosen by the customer, but are not guaranteed. A customer may have multiple packages; however, the downstream and upstream speeds may not be substituted within a service level, as the packages are defined by the downstream and upstream speeds.

DSL access service connection service provides for the interconnection of DSL to special access, frame relay, and/or ATM service.

(2) Rate Application

Three rate options are available for ADSL Service.

The monthly rate plan option is available to all end user customers.

The Term Rate Plan (TRP) rate option is available to all end user customers. The regulations applicable to ADSL Service provided under a TRP arrangement are specified below.

The Wholesale rate (WRP) option is available to customers for the purpose of combining these services with its own services to create a bundled retail service sold to its end user customers. Specific provisions apply to customers that purchase service under this option and are specified below.

ACCESS SERVICE

7. SPECIAL ACCESS SERVICE (Cont'd)

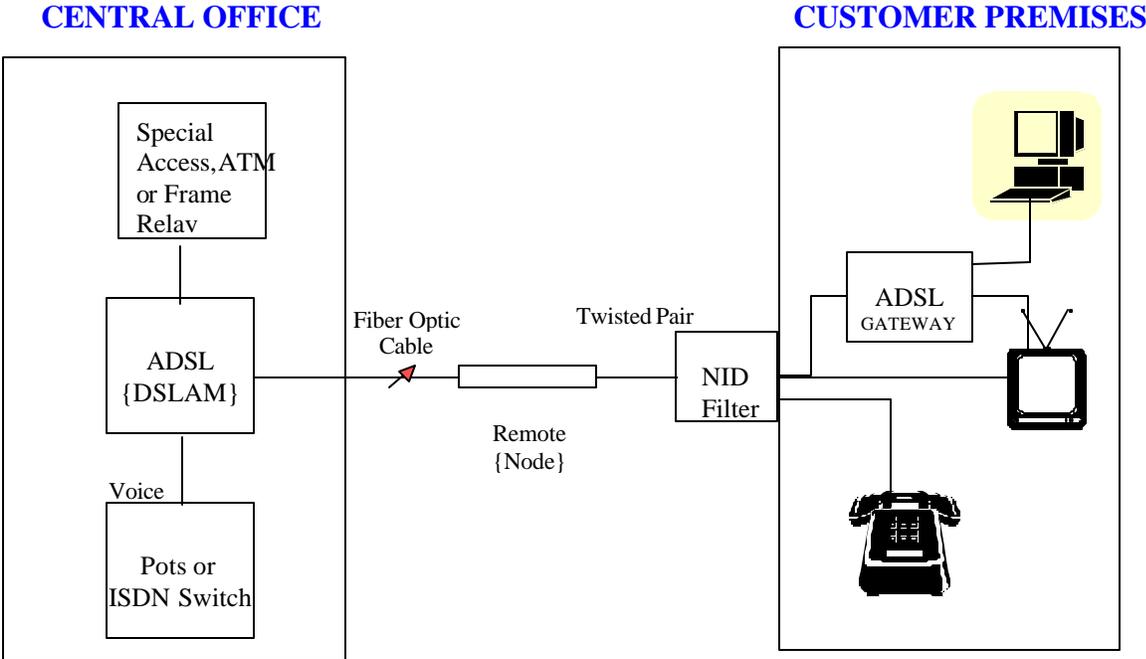
7.6 DIGITAL SUBSCRIBER LINES (Cont'd)

7.6.2 ADSL Services (Cont'd)

(F) Rate Regulations (Cont'd)

(2) Rate Application (Cont'd)

The following diagram depicts a typical ADSL configuration:



(3) Term Rate Plan (TRP)

(a) Description

The terms and conditions specified herein are applicable to ADSL Service and are in addition to other regulations as specified in this tariff.

The ADSL Term Rate Plan (TRP) allows customers discounted access rates based upon term commitment. Rates will be based upon the TRP selected by the customer.

ACCESS SERVICE

Issued: August 17, 2001

H.R. Gentsch, President & CEO
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Effective: September 1, 2001

ACCESS SERVICE7. SPECIAL ACCESS SERVICE (Cont'd)7.6 DIGITAL SUBSCRIBER LINES (Cont'd)7.6.2 ADSL Services (Cont'd)(F) Rate Regulations (Cont'd)(3) Term Rate Plan (TRP) (Cont'd)(a) Description (Cont'd)

Term plans of one (1) and three (3) years are available to all customers at applicable rates set forth in the tariff regardless of when the subscription is made for an ADSL Service TRP arrangement. The customer must designate on the order the type of payment plan selected.

(b) Rate Application

Upon expiration of a TRP period, the customer may choose a new TRP period, convert to month-to-month, or terminate service. The month-to-month will be those rates that are in effect at the time of conversion. If the customer fails to make a choice by the end of the TRP period, the ADSL Service will continue billing at the existing term rates and a new TRP period will begin based on previously effective term commitment. All terms and conditions, including Termination Liabilities will apply to the new TRP period.

Conversion to a month-to-month or different TRP period will require the customer to submit a change order. Conversion of existing TRP service to a different TRP period will be allowed without application of any non-recurring charges.

ACCESS SERVICE7. SPECIAL ACCESS SERVICE (Cont'd)7.6 DIGITAL SUBSCRIBER LINES (Cont'd)7.6.2 ADSL Services (Cont'd)(F) Rate Regulations (Cont'd)(c) Changes in Length of TRP Period

The customer may elect to convert to a new TVP period subject to the following conditions:

- (1) Credit will not be given toward the new payment period for payments made under the original TVP arrangement.
- (2) Nonrecurring charges will not be reapplied for existing service(s).
- (3) If the new TRP period is shorter in length than the time remaining under the existing TRP, the change to the new TRP period constitutes a discontinuance of the existing TRP service and termination liability charges apply.

(d) Rate Changes

The customer may terminate the TRP without penalty or liability should the rates increase during the term of the existing TVP, with the exception of rate changes that may occur as a result of FCC pre-subscription for rate increases.

ACCESS SERVICE

7. SPECIAL ACCESS SERVICE (Cont'd)

7.6. DIGITAL SUBSCRIBER LINES (Cont'd)

7.6.2 ADSL Services (Cont'd)

(F) Rate Regulations (Cont'd)

(e) Termination Liability

When a TRP service is discontinued prior to the end of the commitment period, termination liability charges will apply, as set forth below, based on the remainder of the TRP period in effect at the time of disconnect.

One Year TRP – Prorated payment based on the ADSL Service Level Package mix times the number of remaining months of the first year's recurring charges.

Three Year TRP - Prorated payment based on the ADSL Service Level Package mix times the number of remaining months of the first, second and third year's recurring charges.

ACCESS SERVICE7. SPECIAL ACCESS SERVICE (Cont'd)7.6. DIGITAL SUBSCRIBER LINES (Cont'd)7.6.2 ADSL Services (Cont'd)(F) Rate Regulations (Cont'd)(4) Wholesale Rate Plan (WRP)

The telecommunications services offered under the DSL Access Services Wholesale Rate Plan (WRP) is provided at wholesale rates to the customer under the conditions listed below.

- (A) The customer purchases ADSL and/or SDSL Access Service as described in 7.6.1 and 7.6.2, preceding, for the purpose of combining these telecommunications services with its own information service(s) to create a new retail service for sale to its end user customer(s).
- (B) In addition to the obligations specified in 7.6.2, preceding, the customer assumes the following obligations:
 - (1) The customer will deal directly with its end user customers with respect to all matters pertaining to the service provided, including marketing, sales, ordering, installation, maintenance, trouble reporting, repair, billing and collections. The customer will not direct its end users to contact the Telephone Company for any aspect of the service the customer provides.
 - (2) The customer will submit orders for ADSL and/or SDSL Access Service to the Telephone Company in a format and manner designated by the Telephone Company.
 - (3) The customer will obtain the appropriate authorization to allow the Telephone Company to provision ADSL or SDSL Voice-Data Access Service over the customer's end user's existing telephone exchange service line.

When the customer purchases ADSL and/or SDSL Access Service under the DSL Access Services WRP, the rates and charges in 12.12.3(G), following, will apply in lieu of the rates and charges specified in 12.12.3(F) following, for ADSL Access Service.

A monthly charge applies for each ADSL Access Service line covered under the WRP. A nonrecurring charge applies for the installation of each ADSL Access Service line under the WRP. The Telephone Company will bill the customer an Access Order Charge, per order, to convert in-service ADSL Access Service lines originally purchased under the provisions specified in 7.6.1 and/or 7.6.2, preceding, to the DSL Access Services WRP, provided the customer obtains written authorization from its end users authorizing such conversions, where necessary. Per line nonrecurring charges specified in 12.12.3(G), following, do not apply to conversion of in-service ADSL and/or SDSL Access Lines to a WRP

ACCESS SERVICE

7. SPECIAL ACCESS SERVICE (Cont'd)
 7.6. DIGITAL SUBSCRIBER LINES (Cont'd)
 7.6.3 SDSL Services
 7.6.3.1 General

Symmetric Digital Subscriber Line (SDSL) Access Service provides the customer the ability to transmit data to (upstream rate) and receive data from (downstream rate) a DSL Access Service Connection Point at the same speed using the Telephone Company's existing local exchange copper facilities. A DSL Access Service Connection Point is an interconnection point designated by the Telephone Company that aggregates data traffic from and to Telephone Company SDSL-equipped Serving Wire Centers (SWCs). The DSL Access Service Connection Point may be located within the operating territory of the Telephone Company or in the operating territory of another telephone company, provided both telephone companies agree to such an arrangement.

At the DSL Access Service Connection Point, the customer's SDSL Access Service must be connected to a telecommunications service provider's customer designated premise using either the Telephone Company's Special Access or Frame Relay Access Services when the Connection Point is located within the Telephone Company's operating territory. When the Connection Point is located in the operating territory of another telephone company, the customer's SDSL Access Service must be connected to a telecommunications service provider's customer designated premises using equivalent access services provided by that telephone company.

SDSL Access Service is available as two service options, i.e., SDSL Voice-Data and SDSL Data-Only.

- (A) The SDSL Voice-Data option provides transmission of data signals at a peak data transmission speed of 768 kbps using the Telephone Company's existing local exchange service line. This option may be used for simultaneous voice and data communications.
- (B) The SDSL Data-Only option provides transmission of data signals at peak transmission speeds of 384 kbps or 768 kbps or 1.544 Mbps using the Telephone Company's existing local exchange copper facilities. This option does not provide the ability to transmit voice communications.

ACCESS SERVICE

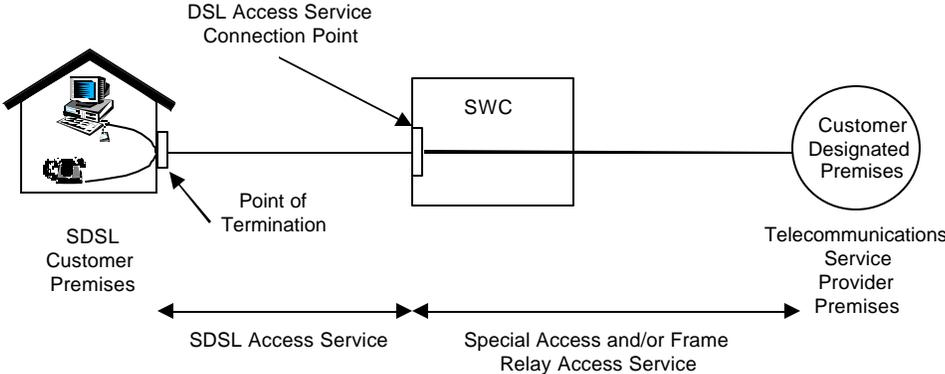
7. SPECIAL ACCESS SERVICE (Cont'd)

7.6. DIGITAL SUBSCRIBER LINES (Cont'd)

7.6.3 SDSL Services

7.6.3.1 General (Cont'd)

A generic view of how SDSL Access Service would be interconnected with a telecommunications service provider's network is depicted in the figure following. In this example, the customer's SDSL-equipped serving wire center is designated as a DSL Access Service Connection Point. The customer orders SDSL Access Service pursuant to the provisions specified in this section. The SDSL Access Service customer's telecommunications service provider orders Special Access Service and/or Frame Relay Access Service pursuant to the provisions specified in Section 7, preceding and Section 16, following, to connect its customer designated premises to the DSL Access Service Connection Point.



ACCESS SERVICE

7. SPECIAL ACCESS SERVICE (Cont'd)
7.6. DIGITAL SUBSCRIBER LINES (Cont'd)
7.6.3 SDSL Services
7.6.3.2 Limitations

SDSL Access Service is available as two service options as described above. Peak speeds are not guaranteed by the Telephone Company due to factors that may affect the actual speeds delivered, including the SDSL Access Service customer's distance from the Telephone Company Serving Wire Center, condition of the existing copper facilities, and limitations in the telecommunications service provider's network design.

The Telephone Company does not provide customer premises equipment (CPE) in conjunction with the SDSL Access Service offering.

SDSL Access Service may not be used in conjunction with multi-point Special Access Service configurations.

SDSL Access Service will be furnished where suitable facilities exist as determined by the Telephone Company. The Telephone Company will identify its SDSL-equipped Serving Wire Centers and DSL Access Service Connection Points in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. Tariff F.C.C. No. 4.

SDSL Access Service will be provided over existing Telephone Company local exchange service facilities. When the customer orders the SDSL Voice-Data option, the rates and regulations for SDSL Access Service are in addition to any rates and regulations that apply for the associated local exchange service line provided under the terms and conditions in the Telephone Company's general and/or local exchange service tariffs. The Telephone Company will automatically disconnect the SDSL Access Service Voice-Data option when the associated local exchange service line is disconnected for any reason.

ACCESS SERVICE

7. SPECIAL ACCESS SERVICE (Cont'd)
7.6. DIGITAL SUBSCRIBER LINES (Cont'd)
7.6.3 SDSL Services
7.6.3.2 Limitations (Cont'd)

Rates and regulations for Special Access Service and Frame Relay Access Service provided under this tariff will apply for the access service(s) provided between the telecommunications service provider's customer designated premises and the DSL Access Service Connection Point, as described in Section 7, preceding.

7.6.3.3 Undertaking of the Telephone Company

The Telephone Company will provide SDSL Access Service at the rates and charges set forth in 12.xx.3(F) and/or 12.xx.3(G) as follows:

- (A) The Telephone Company will determine if the associated local exchange service line or copper facilities are suitable for use with the SDSL Access Service option ordered by the customer. Service will not be provided on facilities that the Telephone Company determines are not suitable for SDSL Access Service or on facilities that produce interference with other services provided by the Telephone Company.
- (B) The Telephone Company, after determining if the facilities are suitable for SDSL Access Service, will notify the customer if the customer's CPE is compatible with the equipment deployed in the Telephone Company's Serving Wire Center and if any additional CPE is necessary to support SDSL Access Service.
- (C) The Telephone Company will provision and maintain SDSL Access Service from the DSL Connection Point to the Point of Termination at the SDSL Access Service customer's premises.

ACCESS SERVICE7. SPECIAL ACCESS SERVICE (Cont'd)7.6. DIGITAL SUBSCRIBER LINES (Cont'd)7.6.3 SDSL Services7.6.3.4 Obligations of the Customer

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

- (A) The customer is responsible for providing the Telephone Company with the necessary information to provision SDSL Access Service (e.g., customer name, telephone number and premises address; billing name and address when different from the customer name and premises address; its Internet Protocol (IP) address; and the contact name and telephone number of the telecommunications service provider with which the customer's SDSL Access Service will interconnect).
- (B) The customer is responsible for providing and maintaining all required customer provided equipment (CPE), which is compatible with SDSL Access Service.

ACCESS SERVICE

7. SPECIAL ACCESS SERVICE (Cont'd)
 7.6. DIGITAL SUBSCRIBER LINES (Cont'd)
 7.6.3 SDSL Services
 7.6.3.5 Rate Regulation

This section contains the regulations governing the rates and charges that apply for SDSL Access Service. Regulations governing the rates and charges for the Special Access and Frame Relay Access Services provided under tariff used in conjunction with SDSL Access Service are as specified in Section 7, preceding, and Section 16, following.

(A) Minimum Period

The minimum period for which SDSL Access Service is provided to a customer and for which charges are applicable is one month.

(B) Moves

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

- The Point of Termination at the SDSL Access Service customer designated premises
- The SDSL Access Service customer designated premises

An Access Order Charge will not apply to move orders for the SDSL Access Service Voice-Data option.

(C) Temporary Suspension of Service

When the associated local exchange service line over which the SDSL Voice-Data option is provided is temporarily suspended, the SDSL Access Service and one-half of the SDSL Line Charge monthly rate will be temporarily suspended for the time period that the associated local exchange service is suspended.

Harrisonville Telephone Company

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ACCESS SERVICE

Issued: August 17, 2001

H.R. Gentsch, President & CEO
213 South Main
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Effective: September 1, 2001

ACCESS SERVICE

7. SPECIAL ACCESS SERVICE (Cont'd)
 7.6. DIGITAL SUBSCRIBER LINES (Cont'd)
 7.6.3 SDSL Services
 7.6.3.5 Rate Regulation (Cont'd)
 D) Rate Categories

There are three types of rates and charges applicable to SDSL Access Service. These are a monthly rate, a nonrecurring charge and a network reconfiguration charge.

The monthly rate applies each month or fraction thereof for each SDSL Voice-Data option and SDSL Data-Only option ordered by the customer.

A nonrecurring charge applies for each SDSL Voice-Data and SDSL Data-Only option ordered by the customer for the installation of SDSL Access Service.

A DSL Network Reconfiguration Charge applies when the SDSL Access Service customer's telecommunications service provider requests the Telephone Company to modify the Telephone Company's network to: 1) accommodate a change in the SDSL Access Service customer's existing IP address or 2) limit the data speed delivered over the customer's existing SDSL Access Service line. A nonrecurring charge applies for each request per SDSL Access Service line. The Telephone Company will bill the DSL Network Reconfiguration Charge to the SDSL Access Service customer's telecommunications service provider.

All changes to existing SDSL Access Service (including but not limited to change of service option, change of service level speed and/or change of telecommunications service provider), other than changes involving DSL network reconfigurations and administrative activities, will be treated as a discontinuance of the existing service and an installation of a new service. A nonrecurring installation charge will apply per SDSL Access Service line for this work activity.

Harrisonville Telephone Company

Original Page 295.16

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ACCESS SERVICE

Issued: August 17, 2001

H.R. Gentsch, President & CEO
213 South Main
Waterloo, IL 62298-0149

Effective: September 1, 2001

ACCESS SERVICE

7. SPECIAL ACCESS SERVICE (Cont'd)
7.6. DIGITAL SUBSCRIBER LINES (Cont'd)
7.6.3 SDSL Services
7.6.3.6 Rate Regulation (Cont'd)

(D) Rate Categories (Cont'd)

The following administrative changes will be made without charge to the customer:

- Change of customer 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),
- Change of billing account number,
- Change of agency authorization that requires no changes to the Telephone Company's network,
- Change of customer contact name or telephone number, and
- Change of jurisdiction.

Rates and charges for SDSL Access Service are as set forth in 12.xx.3(F), or in 12.xx.3(G) following, when the customer purchases SDSL Access Service under the DSL Access Services Discount Pricing Arrangement described in 7.6.2(F)(3), following. The DSL Network Reconfiguration Charge is as specified in 12.xx.3(F), or in 12.xx.3(G) following, if applicable.

ACCESS SERVICE

7. SPECIAL ACCESS SERVICE (Cont'd)

7.6. DIGITAL SUBSCRIBER LINES (Cont'd)

7.6.4 Volume Discount Plans

(A) General

Volume Discount Plans (VPD) provide customers with multiple discounts from the rates for Wholesale Rate Plans (WRP). Volume Discount Plans are available with various volume commitments and term commitments are described below.

(B) Shortfall Liability

(1) 50 – 499 Volume Commitment

The customer purchasing DSL services has the option of a volume commitment for a one (1) year term. If customer selects a volume commitment and does not meet the minimum number of required in service DSL services lines within twelve (12) months, the Customer shall pay a shortfall liability calculated as follows:
Quantity of in service DSL services lines multiplied by \$8.

After completion of the one (1) year term commitment, no commitment or term requirements will remain, but until the customer achieves the minimum number of required DSL services lines, in this case 50 lines, the customer shall pay the full WRP rates as shown in Section 12.2.3(G) going forward beyond the 12 month commitment period until the customer has achieved at least fifty (50) DSL services lines in service. When the customer has achieved 50 DSL services lines, the customer will pay the VDP 1 Year 50-499 Lines rates as shown in Section 12.2.3(H) for all DSL lines in service.

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(2) 500 - 1999 Volume Commitment

The customer purchasing DSL services has the option of a volume commitment for a one (1) year term. If customer selects a volume commitment and does not meet the minimum number of required in service DSL services lines within twelve (12) months, the customer shall pay a shortfall liability calculated as follows:
Quantity of in service DSL services lines multiplied by \$17.

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After completion of the one (1) year term commitment, no commitment or term requirements will remain. If the customer has met the commitment, the VDP 1 Year 500-1999 Line rate applies on an ongoing basis. If the customer has not met the commitment,

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7. SPECIAL ACCESS SERVICE (Cont'd)

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7.6. DIGITAL SUBSCRIBER LINES (Cont'd)

7.6.4 Volume Discount Plans

(B) Shortfall Liability (Cont'd)

(2) 500 - 1999 Volume Commitment (Cont'd)

until the customer achieves the minimum number of required DSL services lines, in this case 500 lines, the customer shall pay the full WRP rates as shown in Section 12.2.3 (G), or the VDP 1 Year 50-499 Lines rates as shown in Section 12.2.3(H) going forward beyond the 12 month commitment period as applicable depending on the number of lines the customer has.

For example, if a customer has achieved 300 DSL lines in service at the end of the 12 month commitment period, the customer will pay the VDP 1 Year 50-499 Lines rates as shown in Section 12.2.3(H) on all 300 lines.

When the customer has achieved 500 or more DSL services lines, the customer will pay the VDP 1 Year 500-1999 Lines rates as shown in Section 12.2.3(H) on all DSL lines in service.

ACCESS SERVICE

7. SPECIAL ACCESS SERVICE (Cont'd)

7.6. DIGITAL SUBSCRIBER LINES (Cont'd)

7.6.4 Volume Discount Plans (Cont'd)

(B) Shortfall Liability (Cont'd)

(3) 2000 or More Volume Commitment

The customer purchasing DSL services has the option of a volume commitment for a four (4) year term. For the purpose of meeting the volume requirement, the customer may aggregate all DSL services lines. At the end of each contract year, the Telephone Company will review the customer's account to determine if the cumulative number of DSL services lines for that contract year has been met, in accordance with the four (4) term outlined below:

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- Contract Year 1 – 500-999 lines
- Contract Year 2 – 1000-1499 lines
- Contract Year 3 – 1500-1999 lines
- Contract Year 4 – 2000 or More lines

If the customer selects a four (4) year volume commitment and does not meet the minimum number of required in service DSL services lines as outlined above, at the end of each year, the customer shall pay a shortfall liability calculated as follows:
Quantity of in service DSL services lines each contract year ending multiplied by \$26.

During the 4 year commitment period, the customer will pay the 2000 or More lines rate. After completion of the 4 year term, no commitment or term requirement will remain. If the customer has met the commitment, the 2000 or More Lines rate applies on an ongoing basis. If the customer has not met the commitment, until the customer achieves the minimum number of required DSL services lines, in this case 2000 lines, the customer shall pay the full WRP rates as shown in Section 12.2.3(G), or the VDP 1 Year 50-499 Lines rates as shown in Section 12.2.3(H), or the VDP 1 Year 500-1999 Lines rates as shown in Section 12.2.3(H) going forward beyond the 4 year commitment period as applicable depending on the number of lines the customer has.

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For example, if the customer has achieved 1200 DSL lines in service at the end of the 4 Year commitment period, the customer will pay the VDP 1 Year 500-1999 lines rates as shown in Section

Material previously found on this page is now found on Page 295.19.1

Harrisonville Telephone Company

ACCESS SERVICE

7. SPECIAL ACCESS SERVICE (Cont'd)

7.6. DIGITAL SUBSCRIBER LINES (Cont'd)

7.6.4 Volume Discount Plans (Cont'd)

(B) Shortfall Liability (Cont'd)

(3) 2000 or More Volume Commitment (Cont'd)

12.2.3(H) on all 1200 lines. When the customer has achieved 2000 or more DSL services lines, the customer will pay the VDP 4 Year 2000 or More Lines rates as shown in Section 12.2.3(H) on all 2000 lines.

(C) Termination Liability

Every DSL services line ordered under the Volume Discount Plans by the customer shall have a minimum term of one year. The customer will be assessed a termination charge for each DSL services line that is terminated by the customer prior to the expiration of the one year term commitment. Termination charges will not apply if the customer terminates DSL services lines within 14 calendar days after the service order is completed. The termination charges shall be the lesser of: 1) \$95.00 per DSL services Line; or 2) the aggregate of the remaining monthly charges until the expiration of the one year minimum service period for each DSL services line.

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Material moved without change from Page 295.19.