

ACCESS SERVICE

7. Special Access Service7.1 General

Special Access Service, provides a transmission path to connect customer designated premises*, a customer designated premises and a WATS Serving Office (WSO), or a customer designated premises and an Expanded Interconnection multiplexing node or virtual collocation arrangement. The connection may be made either directly or through a Telephone Company Hub where bridging or multiplexing functions are performed. Special Access Service includes all exchange access not utilizing Telephone Company end office switches.

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

7.1.1 Channel Types

There are four 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.

- * The following Telephone Company locations are considered to be customer premises for purposes of administering regulations and rates contained in this tariff.

Answering Service Concentrators
Centrex-CO (including Intellipath Digital Centrex Services) switches
Digital Automatic Call Distribution Service central offices
INTELLIHUB Dedicated Network Service nodes
Packet switches and Packet Assembler/Disassemblers included in INFOPATH public packet switching network (PPSN) service
V PATH Custom Network Service serving nodes

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.1 Channel Types (Cont'd)

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.

Following is a brief description of each type of channel:¹

Voice Grade* - a channel for the transmission of analog signals within an approximate bandwidth of 300-3000 Hz. (N)

Digital Data* - a channel for the digital transmission of synchronous serial data at rates of 2.4, 4.8, 9.6 or 56.0 kbps. (N)

High Capacity - a channel for the transmission of isochronous serial digital data at rates of 1.544 Mbps or 44.736 Mbps.

WATS Access Line (WAL)* - a channel between a customer designated premises and a WATS Serving Office. (N)

¹ Wideband Data Service has been withdrawn from the tariff effective December 19, 2013.

* Effective January 15, 2020, Voice Grade, Digital Data and WATS Access Line (WAL) Services are no longer available. Moves, additions or changes to subscribers existing services will not be permitted. (N)

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.1 Channel Types (Cont'd)

Detailed descriptions of each of the channel types are provided in 7.2 following.

The customer also has the option of ordering digital High Capacity facilities (i.e., 1.544 Mbps or 44.736 Mbps) to a Telephone Company Hub for multiplexing to individual channels of a lower capacity or bandwidth. Descriptions of the types of multiplexing available at the Hubs, as well as the number of individual channels which may be derived from each type of facility, are set forth in 7.2 following. Additionally, the customer may specify optional features for the individual channels derived from the facility to further tailor the channel to meet specific communications requirements. Descriptions of the optional features and functions available are also set forth in 7.2 following.

For example, a customer may order a 44.736 Mbps facility from a customer designated premises to a Telephone Company Hub for multiplexing to twenty-eight 1.544 Mbps channels. The 1.544 Mbps channels may be further multiplexed at the same or a different Hub to Voice Grade* (N) channels or may be extended to other customer designated premises. Optional features may be (N) added to the 44.736 Mbps, 1.544 Mbps or Voice Grade* channels.

* Effective January 15, 2020, Voice Grade Channels are no longer available. Moves, additions or changes to subscribers existing service will not be permitted. (N)
(N)

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.2. Rate Categories

There are three basic rate categories which apply to Special Access Service:

- Channel Terminations (described in 7.1.2(A) following)
- Channel Mileage (described in 7.1.2(B) following)
- Optional Features and Functions (described in 7.1.2(C) following)

(A) Channel Termination

The Channel Termination rate element is divided into three categories, Standard Channel Termination, Office Channel Termination Cross Connect and Virtual Office Channel Termination.

The Standard Channel Termination rate category provides for the communications path between a customer designated premises and the serving wire center of that premises or for the communications path within a building which connects a customer's facilities with a customer designated premises without routing through the serving wire center. The Office Channel Termination Cross Connect rate category provides for the communications between customer provided fiber optic or microwave facilities and transmission equipment and the Telephone Company serving wire centers. The Virtual Office Channel Termination rate category provides for the communications path between customer provided fiber optic facilities and transmission equipment and the Telephone Company serving wire center. Included as part of the Standard Channel Termination or Office Channel Termination Cross Connect is a standard channel interface arrangement which defines the technical characteristics associated with the type of facilities to which the access service is to be connected at the Point of Termination (POT) and the type of signaling capability, if any. The signaling capability itself is provided as an optional feature as set forth in (C) following. One Channel Termination charge applies per customer designated premises at which the channel is terminated.

Except for 44.736 Mbps High Capacity Service, the rates for Channel Terminations do not vary with distance or number of services. The rates for 44.736 Mbps Service Channel Terminations vary as set forth in 7.4.8(B) following.

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.2. Rate Categories (Cont'd)(A) Channel Termination (Cont'd)

- (1) One Standard Channel Termination applies per channel terminated at each customer designated premises.

The Standard Channel Termination rate element will apply for all Telephone Company Access connections except High Capacity Services utilizing an Expanded Interconnection multiplexing node. A Standard Channel Termination monthly rate will apply even when the customer designated premises and the serving wire center are located in the same Telephone Company building unless the customer establishes an Expanded Interconnection multiplexing node, in which case an Office Channel Termination Cross Connect will apply as specified in (2) following.

- (2) An Office Channel Termination Cross Connect will apply in lieu of the Standard Channel Termination for each High Capacity Service channel terminated at an Expanded Interconnection multiplexing node. In addition, an OCT Termination Charge applies for each Office Channel Termination cross-connected to either a Telephone Company-provided POT Bay or a customer-provided, Telephone Company-maintained POT Bay at an Expanded Interconnection multiplexing node. A Virtual Office Channel Termination (VOCT) will apply in lieu of the Standard Channel Termination for each High Capacity channel terminated at a virtual collocation arrangement.

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.2. Rate Categories (Cont'd)(B) Channel Mileage

The Channel Mileage rate category provides for the transmission facilities between the serving wire centers associated with two customer designated premises, between a serving wire center associated with an end user premises and a WATS Serving Office (WSO): between the serving wire center associated with a customer designated premises and an Expanded Interconnection multiplexing node; between an Expanded Interconnection multiplexing node or virtual collocation arrangement and Telephone Company multiplexer node or between two Telephone Company Hubs. Except for 44.736 Mbps Service, Channel Mileage is portrayed in mileage bands. There are two rates that apply for each band, i.e., a fixed rate per band and a rate per mile. For 44.736 Mbps Service, there are two rates that apply, i.e., a fixed rate and a rate per mile.

The following regulations apply to WAL Service* for use with Feature Groups A* B and D arranged for originating only calling, not equipped with the End Office End User Line Service Screening optional feature, as detailed in Section 6. preceding, or arranged for two way calling, and to WAL Service* for use with Feature Groups A* and B arranged for terminating only calling: (N)

When the WSO which normally serves the customer designated premises (normal WSO) is not a suitably equipped WSO equipped with FGD capability, the WAL Service* will be provided from the nearest WSO so equipped. Channel Mileage charges, if applicable, will apply only for the distance between the serving wire center of the customer designated premises and the normal WSO. (N)

When the normal WSO is modified to be a suitably equipped WSO equipped with FGD capability, the WAL Service* will be rearranged to be provided from the normal WSO. No charge will apply for such rearrangement. At the option of the customer, however, the WAL Service* may continue to be provided from other than the normal WSO. Channel Mileage charges will then apply for the distance between the serving wire center of the customer designated premises and the serving WSO. (N)

* Effective January 15, 2020, Feature Group A (FGA) and WATS Access Line (WAL) Services are no longer available. Moves, additions or changes to subscribers existing services will not be permitted. (N)

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.2. Rate Categories (Cont'd)(C) Optional Features and Functions

The Optional Features and Functions rate category provides for optional features and functions which may be added to a Special Access Service to improve its quality or utility 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. Although the equipment necessary to perform a specified function may be installed at various locations along the path of the service, they will be charged for as a single rate element.

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.2. Rate Categories (Cont'd)(C) Optional Features and Functions (Cont'd)

Examples of Optional Features and Functions that are available include, but are not limited to, the following:

- Signaling Capability
- Hubbing Functions
- Conditioning
- Transfer Arrangements

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 function available.

Descriptions for each of the available Optional Features and Functions are set forth in 7.2 following.

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations

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

(A) Two-Point Service

Except for Expanded Interconnection, two-point service connects two customer designated premises, or a customer designated premises, For Expanded Interconnection, a two-point service connects a customer designated premises and an Expanded Interconnection multiplexing node or virtual collocation arrangement either on a directly connected basis or through a Hub where multiplexing functions are performed.

Applicable rate elements are:

- Channel Termination*
- Channel Mileage (as applicable)
- Optional Features and Functions (when applicable)

*The Channel Termination rate element applies as follows:

<u>Service</u>	<u>Type of Channel Termination</u>	
(1) WATS Access line Service* Extension Service provided for an additional termination of WAL Service* as specified in 7.2.10(D)(2) following.	One Standard Channel Termination rate element applies at the customer designated premises.	(N) (N)

* Effective January 15, 2020, WATS Access Line (WAL) Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted. (N)
(N)

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(A) Two-Point Service (Cont'd)
ServiceType of Channel Termination

(2) High Capacity Services (except 44.736 Mbps with an Optical Fiber Interface Option) provided between an Expanded Interconnection multiplexing node and

- a customer designated premises

One Standard Channel Termination rate element applies at the customer designated premises and One Office Channel Termination Cross Connect rate element applies at the Expanded Interconnection multiplexing node.*

- a Telephone Company Hub

One Office Channel Termination Cross Connect rate element applies at the Expanded Interconnection multiplexing node.*

(3) High Capacity Services (except 44.736 Mbps with an Optical Fiber Interface Option) provided between an Expanded Interconnection virtual collocation arrangement and

- a customer designated premises

One Standard Channel Termination rate element applies at the customer designated premises and One Virtual Office Channel Termination rate element applies at the virtual collocation arrangement.

- a Telephone Company hub

One Virtual Office Channel Termination rate element applies at the virtual collocation arrangement.

* An OCT Termination Charge also applies for each Office Channel Termination cross-connected to either a Telephone Company-provided POT Bay or a customer-provided Telephone Company-maintained POT Bay.

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(A) Two-Point Service (Cont'd)ServiceType of Channel Termination

(4) For all Special Access Services
(except as specified in (1)
preceding provided between
a customer designated
premises and

- another customer
designated premises

One Standard Channel Termination
rate element applies at each
customer designated premises.

- a Telephone Company Hub

One Standard Channel Termination
rate element applies at the
customer designated premises.

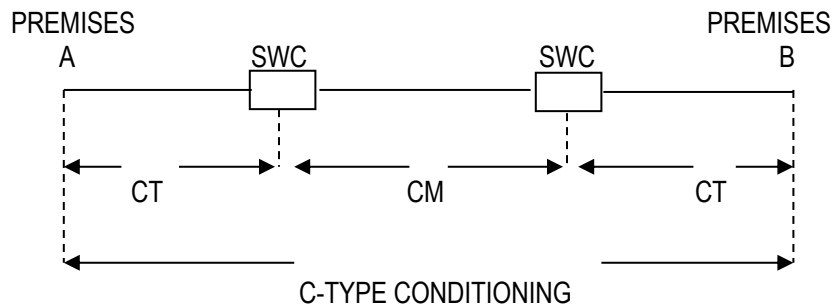
* An OCT Termination Charge also applies for each Office Channel Termination cross-connected to either a Telephone Company-provided POT Bay or a customer-provided, Telephone Company-maintained POT Bay.

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(A) Two-Point Service (Cont'd)

In addition, a Special Access Surcharge, as set forth in 7.4.2 following, and a Message Station Equipment Recovery Charge, as set forth in 7.4.3 following may be applicable.

The following diagram depicts a two-point Voice Grade service* connecting two customer designated premises located 15 miles apart. The service is provided with C-Type Conditioning. (N)



CT - Channel Termination
 CM - Channel Mileage
 SWC - Serving Wire Center

Applicable rate elements are:

- Channel Terminations (2 applicable)
- Channel Mileage (mileage band Over 8 to 25 miles)
- C-Type Conditioning Optional Feature

* Effective January 15, 2020, Voice Grade service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted. (N)
 (N)

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(B) Multipoint Service

Multipoint service connects three or more customer designated premises through a Telephone Company Hub. There is no limitation on the number of mid-links available with multipoint service. However, when more than three mid-links are provided in tandem, the quality of the service may be degraded. A mid-link is a channel between Hubs (i.e., bridging locations). Only certain types of Special Access Service are provided as multipoint service. These are so designated in the Service Descriptions set forth in 7.2 following.

Multipoint service utilizing a customized technical specifications package as set forth in 7.2 following 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:

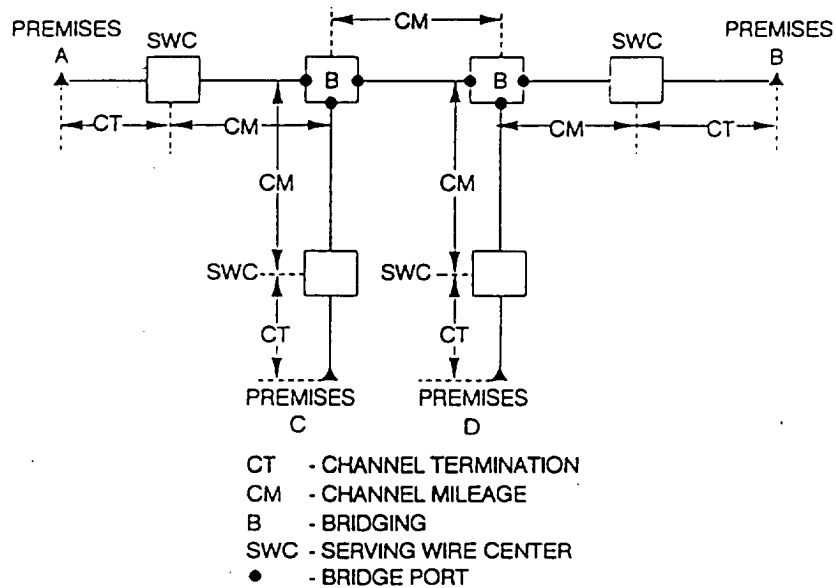
- Channel Terminations (one per customer designated premises)
- Channel Mileage (as applicable between each designated customer premises and the Hub and between Hubs)
- Bridging (one bridge port per point of a circuit which terminates [enters or exits] at a Bridging Cross Connect System)
- Additional Optional Features and Functions (when applicable)

In addition, a Special Access Surcharge, as set forth in 7.4.2 following, and a Message Station Equipment Recovery Charge, as set forth in 7.4.3 following may be applicable.

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(B) Multipoint Service (Cont'd)

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



Applicable rate elements are:Nz

- Channel Termination (4 applicable)
- Channel Mileage (5 sections, each from appropriate mileage band)
- Bridging Optional Feature (6 applicable, i.e., each bridge port)

* Effective January 15, 2020, Voice Grade service is no longer available. Moves, additions or changes to subscribers existing services will not be permitted. (N)
(N)

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.4 Alternate Use

Alternate Use occurs when a service is arranged by the Telephone Company so that the customer can select different types of transmission at different times. A customer may use a service in any privately beneficial manner. However, where technical or engineering changes are required to effectuate an alternate use, the Telephone Company will make such special arrangements available on an individual case basis.

The arrangement required to transfer the service from one operation to the other (i.e., the transfer relay and control leads) will be rated and provided on an individual case basis as set forth in Section 11., Specialized Ancillary Services or Arrangements. The customer will pay the stated tariff rates for the Access Service rate elements for the service ordered (i.e., Channel Terminations, Channel Mileage [as applicable] and Optional Features and Functions [if any]).

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.5 Special Facilities Routing

A customer may request that the facilities used to provide Special Access Service be specially routed. The regulations, rates and charges for Special Facilities Routing (i.e., Avoidance and Diversity) are set forth in 8. following.

7.1.6 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 reissued or updated whenever these facilities are materially changed.

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7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.7 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* and WATS Access Line Services*, acceptance tests 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, a balance (improved loss) test will be made if the customer has ordered the improved loss optional feature. (N)
- (B) For other analog services¹ (i.e., WATS Access Line*) and for digital services (i.e., Digital Data and High Capacity Services), acceptance tests will include tests for the parameters applicable to the service as specified by the customer in the order for service. (N)

In addition to the above tests, Additional Cooperative Acceptance Testing for Voice Grade Service* to test other parameters, as described in 9.3.4(B) following, is available at the customer's request. All tests results will be made available to the customer upon request. (N)

7.1.8 Ordering Options and Conditions

Special Access Service is ordered under the Access Order provisions set forth in 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.).

¹ Wideband Data Service has been withdrawn from the tariff effective December 19, 2013.

* Effective January 15, 2020, Voice Grade, Digital Data and WATS Access Line (WAL) Services are no longer available. Moves, additions or changes to subscribers existing services will not be permitted. (N)

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7. Special Access Service (Cont'd)7.2 Service Descriptions¹

For the purposes of ordering, there are four categories of Special Access Service. These are:

Voice Grade (VG)*	(N)
Digital Data (DA)*	(N)
High Capacity (HC)	
WATS Access Line (WAL)*	(N)

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. Each of the components of the service is described in this section.

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 or between a customer designated premises and a Telephone Company Hub where bridging or multiplexing functions are performed.

¹ Wideband Data Service has been withdrawn from the tariff effective December 19, 2013.

* Effective January 15, 2020, Voice Grade, Digital Data and WATS Access Line (WAL) services are no longer available. Moves, additions or changes to subscribers existing services will not be permitted. (N)
(N)

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7. Special Access Service (Cont'd)
7.2 Service Descriptions (Cont'd)

Information pertaining to the technical specifications packages 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.

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 the appropriate Technical Reference(s) for the service ordered.

Only certain channel interface combinations are available with the predefined technical specifications packages. These are delineated in the Technical References set forth at the end of this 7.2. When a customized channel is requested, all channel interface combinations available with the specified type of service are available with the customized channel.

The optional features and functions available with each type of Special Access Service are described in this section. The optional features and functions information also indicates with which technical specifications packages they are available. Such information is displayed in a matrix with the optional feature or function listed down the left side and the technical specifications package listed across the top.

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7. Special Access Service (Cont'd)7.2 Service Descriptions¹ (Cont'd)

All services will conform to the transmission specification standards contained in this tariff or in the following Technical References for each category of service:

Voice Grade*	TR-TSY-000335	(N)
	PUB 41004, Table 4	
Digital Data*	TR-NPL-000341	(N)
	PUB 62310	
High Capacity	TR-INS-000342	
	PUB 62411	
WATS Access Line*	TR-NWT-000334	
	TR-NPL-000341	(N)

¹ Wideband Data Service has been withdrawn from the tariff effective December 19, 2013.

* Effective January 15, 2020, Voice Grade, Digital Data and WATS Access Line (WAL) services are no longer available. Moves, additions or changes to subscribers existing services will not be permitted. (N)

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7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)

(N)

7.2.1 Voice Grade Service*(A) Basic Channel Description

A Voice Grade channel is a channel which provides voice frequency transmission capability in the nominal frequency range of 300 to 3000 Hz and may be terminated two-wire or four-wire. Voice Grade channels are provided between customer designated premises or between a customer designated premises and a Telephone Company Hub.

(B) Technical Specifications Packages

	Package VG-												
<u>Parameter</u>	<u>C*</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>
Attenuation													
Distortion	X	X	X	X	X	X	X	X	X	X	X	X	X
C-Message Noise	X	X	X	X	X	X	X	X	X	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 desired parameters are selected by the customer from the list of available parameters.

* Effective January 15, 2020, Voice Grade Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted. (N)
(N)

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7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.1 Voice Grade Service* (Cont'd)

(N)

(B) Technical Specifications Packages (Cont'd)

The technical specifications for these parameters (except) for dropouts, gain hits, and phase hits) are delineated in Technical Reference TR-NPL-000335, Issue No. 2. The technical specifications for dropouts, phase hits, and gain hits are delineated in Technical Reference PUB 41004, Table. 4.

(C) Channel Interfaces

The following channel interfaces for Voice Grade service do not require signaling capability: 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 Technical Reference TR-NPL-000335, Issue No. 2.

(D) Optional Features and Functions(1) Central Office Bridging Capability

(a) Voice Bridging (two-wire and four-wire)

(b) Data Bridging (two-wire and four-wire)

(c) Telephoto Bridging (two-wire and four-wire)

(d) DATAPHONE Select-A-Station Bridging with sequential arrangement ports or addressable arrangement ports

* Effective January 15, 2020, Voice Grade Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted. (N)
(N)

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7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.1 Voice Grade Service* (Cont'd)

(N)

(D) Optional Features and Functions (Cont'd)(1) Central Office Bridging Capability (Cont'd)

(e) Telemetry and Alarm Bridging

Split Band, Active Bridging

Passive Bridging

Summation, Active Bridging

(2) Conditioning

Conditioning provides more specific transmission characteristics for Voice Grade services. C-Type conditioning controls attenuation distortion and envelope delay distortion. Sealing Current helps maintain continuity on dry metallic loops.

For two-point services, the parameters apply to each service. For multipoint services, the parameters apply to each mid-link or end-link. C-Type conditioning and Data Capability may be combined on the same service.

* Effective January 15, 2020, Voice Grade Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted. (N)
(N)

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7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.1 Voice Grade Service* (Cont'd)

(N)

(D) Optional Features and Functions (Cont'd)(2) Conditioning (Cont'd)(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:

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

<u>Envelope Delay Distortion</u>	
<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

Effective January 15, 2020, Voice Grade Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted.

(N)

(N)

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7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.1 Voice Grade Service* (Cont'd)

(N)

(D) Optional Features and Functions (Cont'd)(2) Conditioning (Cont'd)(b) Sealing Current Conditioning

Sealing Current Conditioning is provided to help maintain continuity on dry metallic loops. It is usually associated with four-wire DA or NO type channel interfaces.

(3) Customer Specified Premises Receive Level

This option allows the customer to specify the receive level at the Point of Termination. The level must be within a specific range on effective four-wire transmission. The ranges are delineated in Technical Reference TR-NPL-000335, Issue No. 2.

* Effective January 15, 2020, Voice Grade Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted. (N)
(N)

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7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.1 Voice Grade Service* (Cont'd)

(N)

(D) Optional Features and Functions (Cont'd)(4) Improved Return Loss

- (a) On Effective Four-Wire Transmission at Four-Wire Point of Termination (applicable to each two-wire port): Provides for a fixed 600 ohm impedance, variable level range and simplex reversal. Telephone Company equipment is required at the customer's premises where this option is ordered. The Improved Return Loss parameters are delineated in Technical Reference TR-NPL-000335, Issue No. 2.
- (b) On Effective Two-Wire Transmission at Two-Wire Point of Termination: Provides for more stringent Echo Control Specifications. In order for this option to be applicable, the transmission path must be four-wire at one POT and two-wire at the other POT. Placement of Telephone Company equipment may be required at the customer's premises with the two-wire POT. The Improved Return Loss parameters are delineated in Technical Reference TR-NPL-000335, Issue No. 2.

(5) Data Capability

Data Capability (also known as D-Type Conditioning) 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 multipoint services.

The Signal to C-Notched Noise Ratio and intermodulation distortion parameters for Data Capability are:

- Signal to C-Notched Noise Ratio is equal to or greater than 32dB

* Effective January 15, 2020, Voice Grade Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted.

(N)
(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.1 Voice Grade Service* (Cont'd)

(N)

(D) Optional Features and Functions (Cont'd)(5) Data Capability (Cont'd)

- Intermodulation distortion:
- Signal to second order modulation products (R2) is equal to or greater than 38dB
- Signal to third order modulation products (R3) is equal to or greater than 42dB

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

(6) Telephoto Capability

Telephoto Capability provides transmission characteristics suitable for telephotographic communications. Specifically, Telephoto Capability is provided for the control of attenuation distortion and envelope delay distortion on telephotographic services. The attenuation distortion and envelope delay distortion parameters for Telephoto Capability are:

Attenuation Distortion
(2204 Hz Reference)

Frequency <u>Range (Hz)</u>	Variation <u>(dB)</u>
500-3000	-0.5 to +1.5
300-3200	-1.0 to +2.5

Envelope Delay Distortion

Frequency <u>Range (Hz)</u>	Variation <u>mcs</u>
1000-2600	110
800-2800	180

Effective January 15, 2020, Voice Grade Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted.

(N)

(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.1 Voice Grade Service* (Cont'd)

(N)

(D) Optional Features and Functions (Cont'd)(7) Signaling Capability

Signaling Capability provides for the process by which one customer premises alerts another customer premises on the same service with which it wishes to communicate.

(8) Selective Signaling Arrangement

An arrangement that permits code selective ringing for up to ten codes on a multipoint service.

(9) 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 channel of a Special Access Service to another channel that terminates in either the same or a different customer premises. A dial-up control service is required to operate the transfer arrangement. A spare channel, if required, is not included as part of the option.

Effective January 15, 2020, Voice Grade Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted.

(N)

(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.1 Voice Grade Service* (Cont'd)

(N)

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

The following table shows the technical specifications packages with which the optional features and functions are available.

	Available with Technical Specifications Package VG-												
	<u>C</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>
C-Type Conditioning	X					X	X	X	X	X	X		
Central Office													
Bridging Capability	X		X			X	X				X	X	X
Customer Specified													
Premises Receive													
Level	X		X	X				X	X	X			
Data Capability	X						X	X			X		
Improved Return Loss													
For Effective													
Four-Wire													
Transmission	X		X	X	X	X	X	X	X	X	X	X	X
For Effective													
Two-Wire													
Transmission	X		X	X				X					
Sealing Current													
Conditioning	X						X						
Selective Signaling													
Arrangement	X		X										
Signaling Capability	X	X	X	X				X	X	X			
Telephoto Capability	X											X	
Transfer Arrangement	X	X	X	X	X	X	X	X	X	X	X	X	X

(E) Four-Wire/Two-Wire Conversions

When a customer requests that an effective four-wire channel be terminated with a two-wire channel interface at the customer designated premises, a four-wire to two-wire conversion is required. The rate for the conversion is included as part of the basic Channel Termination rate.

* Effective January 15, 2020, Voice Grade Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted. (N)
(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions¹ (Cont'd)

(C)

7.2.2 Reserved for future use

(C)

7

(D)

┘

¹ Wideband Data Service has been withdrawn from the tariff effective December 19, 2013.

(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.3 Digital Data Service*

(N)

(A) Basic Channel Description

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, or 56.0 kbps. The actual bit rate is a function of the channel interface 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 or between a customer designated premises and a Telephone Company Hub.

(B) Technical Specifications Packages

<u>Parameter</u>	<u>Package DA-</u>			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Error-Free Seconds	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>

The Telephone Company will provide a channel capable of meeting a monthly average performance equal to or greater than 99.875% error-free seconds 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, Issue No. 1.

* Effective January 15, 2020, Digital Data Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted.

(N)
(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.3 Digital Data Service* (Cont'd)

(N)

(C) Channel Interfaces

The following channel interfaces (CIs) define the bit rates that are available for a Digital Data channel:

<u>CI</u>	<u>Bit Rate</u>
DU-24	2.4 kbps
DU-48	4.8 kbps
DU-96	9.6 kbps
DU-56	56.0 kbps

Compatible channel interfaces are set forth in the Technical Reference shown in (B) above.

(D) Optional Features and Functions(1) Central Office Bridging Capability(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 channel of a 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 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.

* Effective January 15, 2020, Digital Data Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted.

(N)

(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.3 Digital Data Service* (Cont'd)

(N)

(D) Optional Features and Functions (Cont'd)(3) Secondary Channel Capability (SCC)

- (a) Secondary Channel Capability (SCC) is an optional feature for a 56 kbps channel and operates as a derived companion digital transmission path independent of but parallel to the primary data path and at a substantially lower bit rate of 2.666 kbps as described in Technical Reference TR-NPL-000157, Issue No. 2. The secondary channel can provide simultaneous two-way transmission of digital signals between customer premises. This feature is available on a point to point or multipoint basis, where facilities permit, but is not available with INFOPATH packet switching service or DDS channels which require regenerative repeaters in the loop to the customer premises.
- (b) This optional feature may be ordered at the same time the primary channel is ordered or it may be ordered as an addition to an existing Digital Data Service 56 kbps channel. Customers must agree to out-of-service periods required to add this feature to an existing 56 kbps channel.
- (c) Customers must provide customer premises equipment which is compatible with the secondary channel interface requirements specified in Technical Reference TR-NPL-00157, Issue No. 2.

The following table shows the technical specifications packages with which the optional features and functions are available.

	<u>Available with Technical Specifications Package DA-</u>			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
Central Office Bridging Capability	X	X	X	X
Secondary Channel Capability				X
Transfer Arrangement	X	X	X	X

* Effective January 15, 2020, Digital Data Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted.

(N)
(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.4 High Capacity Service(A) Basic Channel Description

A High Capacity channel is a digital channel for the transmission of nominal 64.0 kbps*, 1.544 Mbps (or Superpath 1.5 megabit/sec service) or 44.736 Mbps (or Superpath Optical 45 megabit/sec service) isochronous serial data. The actual bit rate and the framing format 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 multiplexing and/or Expanded Interconnection multiplexing node Hub.

The 44.736 Mbps High Capacity Service is provided on digital optical equipment and lightwave facilities selected by the Telephone Company, and it is provided only through serving wire centers equipped to furnish such service at the customers designated premises. An optical fiber interface and digital optical equipment convert the signal from optical to electrical.

110 volt, AC, 15 amperes, separately fused, non-switched controlled, single power outlet must be provided by the customer at the customer designated premises.

* Available only as a channel of a 1.544 Mbps facility between two Telephone Company digital Hubs or as a cross connect of two 2.4, 4.8, 9.6, 56.0 or 64.0 kbps channels of two 1.544 Mbps facilities at a digital Hub. The customer must provide system and channel assignment data. Digital Hubs include both Digital Data Hubs and High Capacity Multiplexing Hubs.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.4 High Capacity Service (Cont'd)(B) Technical Specifications Packages

<u>Parameter</u>	<u>Package HC-</u>		
	<u>0</u>	<u>1</u>	<u>3</u>
Error-Free Seconds		X	
Error-Free Transmission			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 and TR-NPL-000054.

44.736 Mbps High Capacity Service is designed to provide an average performance of at least 98% error-free transmission measured over a continuous 24 hour period at the Company interface. The Technical Specifications are delineated in TR-TSY-000342.

(C) Channel Interfaces

The following channel interfaces (CIs) define the bit rates that are available for a High Capacity Channel.

<u>CI</u>	<u>Bit Rate</u>
DS-15*	1.544 Mbps (DS1)
DS-44	44.736 Mbps (DS3)

Compatible channel interfaces are set forth in the Technical References shown in (B) above.

* A 64.0 kbps channel is available as a channel(s) of a 1.544 Mbps facility to a Telephone Company Hub.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.4 High Capacity Service (Cont'd)(D) 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 when a working channel 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 premises. The customer is responsible for providing the equipment at its premises.

(2) Battery Backup

Battery Backup for the customer's 44.736 Mbps High Capacity Service may be provided by the Telephone Company at charges based on an ICB.

(3)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.4 High Capacity Service (Cont'd)(D) Optional Features and Functions (Cont'd)(4) Shared Billing Arrangement

A Shared Billing Arrangement allows for the connection of one or more Service Users' Special Access, Switched Access or Common Channel Signaling Access Services to a Host Customer's multiplexed High Capacity Service in Telephone Company serving wire centers designated as Hubs capable of multiplexing High Capacity services, with the Telephone Company maintaining separate records and billing for each. The Telephone Company will split the billing after the multiplexer for each service connected to the High Capacity multiplexer. Each customer will be billed for those rate elements associated with its own portion of the service configuration. Under no circumstances will the rates or charges for individual rate elements be split. This arrangement is only available when (1) a 44.736 Mbps High Capacity Service is multiplexed to a 1.544 Mbps High Capacity Service; or (2) when a 1.544 Mbps High Capacity Service is multiplexed to a Voice Grade service or (3) a Switched Access or Common Channel Signaling Access Service is provided over a High Capacity facility under regulations set forth in Section 5.2.7 preceding. Hubbing locations are set forth in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. NO. 4.

Each customer may order its individual portion of the multiplexed service separately from the Telephone Company. The ordering customer(s) must obtain and provide a copy of a signed letter(s) of authorization, as described in 5.2 preceding, to the Telephone Company when placing an order for a Shared Billing Arrangement. The letter of authorization must be signed by both the Host Customer and the Service User and include the applicable Connecting Facility Assignments and Billing Account Numbers of the customers involved.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.4 High Capacity Service (Cont'd)(D) Optional Features and Functions (Cont'd)(4) Shared Billing Arrangement (Cont'd)

Each customer will be billed the applicable tariff rates and charges set forth in Section 7.5. following for its individual service(s). The rates and charges for Central Office Multiplexing will be the responsibility of the Host Customer.

Each customer shall be responsible for reporting service outages for its portion of the multiplexed service. Out of service adjustments will be handled in accordance with Credit Allowance for Service Interruptions as set forth in Section 2.4.4 preceding. The Maintenance of Service charge applies, as set forth in Section 9.3.1 following, to the customer whose service is reported in trouble.

Under a Shared Billing Arrangement, the Telephone Company may share with the Host Customer record information pertaining to the multiplexed service(s) of the Service User(s). Such disclosure will be at the sole discretion of the Telephone Company as necessary to perform billing reconciliations or other functions required in connection with maintaining separate account records.

A customer may request a Shared Billing Arrangement for an existing multiplexed High Capacity Service with an existing Service Discount Plan. The regulations pertaining to such requests are set forth in Section 7.4.9 following.

Section 7.4.10 contains rate regulations specific to Shared Billing Arrangements.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.4 High Capacity Service (Cont'd)(D) Optional Features and Functions (Cont'd)(5) Central Office Multiplexing

(T)

(a) DS3 to DS1

An arrangement that converts a 44.736 Mbps channel to 28 DS1 channels using digital time division multiplexing.

(b) DS1 to Voice

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

(c) DS1 to DS0

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

(d) DS0 to Subrate

An arrangement that converts a 64.0 kbps channel to subspeeds of up to twenty 2.4 kbps, ten 4.8 kbps, or five 9.6 kbps channels using digital time division multiplexing.

The following table shows the technical specifications packages with which the optional features and functions are available.

	Available with Technical Specifications Package HC-		
	<u>0</u>	<u>1</u>	<u>3</u>
Automatic Loop Transfer		X	
Battery Backup			X
Central Office Multiplexing:			
DS3 to DS1			X
DS1 to Voice		X	
DS1 to DS0		X	
DS0 to Subrate*	X		

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.5 WATS Access Line (WAL) Service**

(N)

(A) Basic Channel Description

A WATS Access Line Service provides a channel for voice frequency transmission capability. The service provides a connection between a customer designated premises and a WATS Serving Office associated with the closed end of 800 Service, WATS or similar services. It is provided for use with Feature Groups A, B or D Switched Access Service as set forth in Section 6. preceding and subject to the following state requirements:

WAL Service may, at the option of the customer, be arranged for originating calling only, terminating calling only or two way calling. WAL Service arranged for originating calling only which is not equipped with the End Office End User Line Service Screening optional feature, as detailed in Section 6. preceding, for two way calling or (for FGA**and FGB) for terminating calling only is available from suitably equipped equal access WATS Serving Offices with FGD capability. WAL Service arranged for two way calling is not available with Company Centrex-CO Service.

(N)

As specified in Section 6. preceding, WAL Service is provided with either dial pulse or dual tone multifrequency address signaling and either loop start, ground start*, E&M or reverse battery* supervisory signaling. Reverse battery* supervisory signaling is provided only for one-way WAL Service. The choice of the type of signaling is at the option of the customer and subject to the technical limitations identified in the Technical Reference TR-NPL-000334, Issue No. 1. WATS Access Line Service is provided as an effective two-wire or effective four-wire transmission path.

* Ground start and reverse battery may not be provided over fiber facilities and are only available where suitable facilities exist.

** Effective January 15, 2020, WATS Access Line (WAL) Service and Feature Group A (FGA) are no longer available. Moves, additions or changes to subscribers existing services will not be permitted.

(N)

(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.5 WATS Access Line (WAL) Service* (Cont'd)

(N)

(B) Technical Specification Packages

<u>Parameter</u>	<u>Package WAL –</u>	
	<u>1</u>	<u>2</u>
Attenuation Distortion	X	X
C-Message Noise	X	X
Echo Control	X	X
Envelop Delay Distortion	X	X
Frequency Shift	X	X
Impulse Noise	X	X
Intermodulation Distortion	X	X
Loss Deviation	X	X
Phase Jitter	X	X
Signal-to-C Notch Noise	X	X

The technical specifications for acceptance limits and immediate action limits are delineated in Technical Reference TR-NPL-000334, Issue No. 1.

** Effective January 15, 2020, WATS Access Line (WAL) Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted.

(N)

(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.5 WATS Access Line (WAL) Service* (Cont'd)

(N)

(C) Channel Interfaces

The following channel interfaces are available with WAL Service:
EA, EB, GO, GS, LO, LS, RV

Compatible channel interfaces are shown below:

<u>Premises Interface</u>	<u>WSO Supervisory Signaling</u>
6EA2-E	EA, EB
6EA2-M	EA, EB
8EB2-E	EA, EB
8EB2-M	EA, EB
2GS2	GO
2GS3	GO
4GS2	GO
2LS2	LO
2LS3	LO
4LS2	LO
2RV2-T	RV
2RV3-T	RV
2RV2-O	RV
2RV3-O	RV
4RV2-T	RV

* Effective January 15, 2020, WATS Access Line (WAL) Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted.

(N)
(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.5 WATS Access Line (WAL) Service* (Cont'd)

(N)

(D) Optional Features and Functions

(1) Improved two-wire voice transmission specifications

(a) Loss Deviation

The maximum Loss Deviation of the 1044 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 2804 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 dBmC0
51 to 100	37 dBmC0
101 to 200	40 dBmC0
201 to 400	43 dBmC0
401 to 1000	45 dBmC0

* Effective January 15, 2020, WATS Access Line (WAL) Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted.

(N)

(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.5 WATS Access Line (WAL) Service* (Cont'd)

(N)

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

(1) Improved two-wire voice transmission specifications (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

(2) Extension Service

Extension Service provides for an additional termination(s) of WAL Service at another building(s) in the same or different LATA.

A WAL Service channel termination charge applies for the communications path between the customer designated premises and the serving wire center of that premises. In addition, where the wire center for the customer designated premises is different from the serving wire center for the premises where the WAL Service is terminated, channel mileage charges apply for the transmission facilities between the serving wire center of the customer designated premises and the WATS Serving Office. The Special Access Surcharge as specified in 7.4.2 may be applicable.

* Effective January 15, 2020, WATS Access Line (WAL) Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted.

(N)
(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Service Descriptions (Cont'd)7.2.5 WATS Access Line (WAL) Service* (Cont'd)

(N)

(D) Optional Features and Functions (Cont'd)(2) Extension Service (Cont'd)

Compatible channel interfaces are set forth in 7.3 following.

The following table shows the technical specifications packages with which the optional features and functions are available.

	Available with Technical Specifications Package WAL-	
	<u>1</u>	<u>2</u>
Improved Two Wire Voice Transmissions Specifications	X	X
Extension Service	X	X

Certain other options associated with WAL Services are provided as either WATS Access Line Service, Line Termination or Common Switching Optional Features as defined in Section 6. preceding.

* Effective January 15, 2020, WATS Access Line (WAL) Service is no longer available. Moves, additions or changes to subscribers existing service will not be permitted. (N)
(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Channel Interface and Network Channel Codes

This section explains the Channel Interface codes and Network Channel codes that the customer must specify when ordering Special Access Service. Included is an example which explains the specific characters of the code, a glossary of Channel Interface codes, impedance levels and Network Channel codes.

Example: If the customer specifies a LB Network Channel Code and a 2LS2-M Channel Interface, the following is being requested:

LB = Voice Grade Channel with a Predefined Technical Specification Package (1)

2 = Number of physical wires

LS = Facility interface for loop start loop signaling

2 = Impedance level of 600 ohms

M = Option for terminating in central office located answering service concentrator

7.3.1 Glossary of Channel Interface Codes and Options

<u>Code</u>	<u>Option</u>	<u>Definition</u>
AB -		accepts 20 Hz ringing signal at customer's point of termination
AC -		accepts 20 Hz ringing signal at customer's end user's point of termination
CT -		Centrex Tie Trunk Termination
DA -		data stream in VF frequency band at customer's end user's point of termination
DB -		data stream in VF frequency band at customer's point of termination

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Channel Interface and Network Channel Codes (Cont'd)7.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
DD	-	DATAPHONE Select-A-Station (and TABS) interface at customer's point of termination
DE	-	DATAPHONE Select-A-Station (and TABS) interface at the customer's end user's point of termination
DS	-	digital hierarchy interface
	- 15	1.544 Mbps (DS1) format per PUB 62411 plus D4
	- 15E	8-bit PCM encoded in one 64 kbps of the DS1 signal
	- 15F	8-bit PCM encoded in two 64 kbps of the DS1 signal
	- 15G	8-bit PCM encoded in three 64 kbps of the DS1 signal
	- 15H	14/11-bit PCM encoded in six 64 kbps of the DS1 signal
	- 15J	1.544 Mbps format per PUB 62411
	- 15K	1.544 Mbps format per PUB 62411 plus extended framing format
	- 15L	1.544 Mbps (DS1) with SF signaling
	- 44	44.736 Mbps (DS3)
	- 44L	44.736 Mbps (DS3) with SF signaling
DU	-	digital access interface
	- 24	2.4 kbps
	- 48	4.8 kbps
	- 56	56.0 kbps
	- 56S	56.0 kbps with Secondary Channel Capability
	- 96	9.6 kbps
	- A	1.544 Mbps format per PUB 62411
	- B	1.544 Mbps format per PUB 62411 plus D4
	- C	1.544 Mbps format per PUB 62411 plus extended framing format

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Channel Interface and Network Channel Codes (Cont'd)7.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>	
DX	-	duplex signaling interface at customer's point of termination	
DY	-	duplex signaling interface at customer's end user's point of termination	
EA	- E	Type I E&M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead.	
EA	- M	Type I E&M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead.	
EB	- E	Type II E&M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead.	
EB	- M	Type II E&M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead.	
EC	-	Type III E&M signaling at customer POT	
EX	- A	tandem channel unit signaling for loop start or ground start* and customer supplies open end (dial tone, etc.) functions.	
EX	- B	tandem channel unit signaling for loop start or ground start* and customer supplies closed end (dial pulsing, etc.) functions.	
GO	-	ground start** loop signaling – open end function by customer or customer's end user	(C)
GS	-	ground start** loop signaling – closed end function by customer or customer's end user	(C)
	- C	Centrex foreign exchange termination	
	- M	termination in central office located answering service concentrator.	
IA	-	E.I.A. (25 pin RS-232)	
LA	-	end user loop start loop signaling – Type A OPS registered port open end	
LB	-	end user loop start loop signaling – Type B OPS registered port open end	
LC	-	end user loop start loop signaling – Type C OPS registered port open end	
LO	-	loop start loop signaling – open end function by customer or customer's end User	
LR	-	20 Hz automatic ringdown interface at customer POT with Telephone Company provided PLAR	
	- A*	DA Type PLAR channel unit signaling format	
	- B*	DS Type PLAR channel unit signaling format	

* The designation of the A or B option signifies the type of channel unit employed at the distant end.

** Ground start may not be provided over fiber facilities and is only available where suitable facilities exist. (N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Channel Interface and Network Channel Codes (Cont'd)7.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>	
LS	-	loop start loop signaling – closed end function by customer or customer's end user	
	- M	for terminating in central office located answering service concentrator	
NO	-	no signaling interface, transmission only	
PR	-	protective relaying*	
RV	- O	reverse battery** signaling, one way operation, originate by customer	(C)
	- T	reverse battery** signaling, one way operation, terminate function by customer or customer's end user	(C)
SF	-	single frequency signaling with VF band at either customer POT or customer's end user POT	
TF	-	telephotograph interface	

* Available only for the transmission of audio tone protective relaying signals used in the protection of electric power systems during fault conditions.

¹ Wideband Data Service has been withdrawn from the tariff effective December 19, 2013.

** Reverse battery may not be provided over fiber facilities and is only available where suitable facilities exist. (N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Channel Interface and Network Channel Codes (Cont'd)7.3.2 Impedance

The nominal reference impedance with which the channel will be terminated for the purpose of evaluating transmission performance:

<u>Value (ohms)</u>	<u>Codes</u>
110	0
150	1
600	2
900	3+
135	5
75	6
124	7
Variable	8
100	9

- + For those interface codes with a 4-wire transmission path at the customer designated POT, rather than a standard 900 ohm impedance, the code (3) denotes a customer provided transmission equipment termination. Such terminations were provided to customers in accordance with the F.C.C. Docket No. 20099 Settlement Agreement.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Channel Interface and Network Channel Codes (Cont'd)7.3.3 Digital Channel Interface Codes (4DS)

Customers selecting the multiplexed four-wire DS1 or DS3 facility interface option at the customer designated premises will be requested to provide subsequent system and channel assignment data. The various digital bit rates in the digital hierarchy employ channel interface code 4DS9 or 4DS6 plus the speed options indicated below:

<u>Interface Code and Speed Option</u>	<u>Nominal Bit Rate (Mbps)</u>	<u>Digital Hierarchy Level</u>
4DS9 - 15	1.544	DS1
4DS6 - 44	44.736	DS3

7.3.4 Service Designator/Network Channel Code Conversion Table

The purpose of this table is to show the relationship between the service designator codes (e.g., VGC, MT2, etc.) and the network channel codes that are used for various administrative purposes.

<u>Service Designator Code</u>	<u>Network Channel Code</u>
VGC	LQ
VG1	LB
VG2	LC
VG3	LD
VG4	LE
VG5	LF
VG6	LG
VG7	LH
VG8	LJ
VG9	LK
VG10	LN
VG11	LP
VG12	LR

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Channel Interface and Network Channel Codes (Cont'd)7.3.4 Service Designator/Network Channel Code Conversion Table (Cont'd)

<u>Service Designator Code</u>	<u>Network Channel Code</u>
WD1	WB
WD2	WE
WD3	WF
DA1	XA
DA2	XB
DA3	XG
DA4	XH
HC0	HS
HC1	HC
HC3	HF
WAL 1	SE
WAL 2	SF

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Channel Interface and Network Channel Codes (Cont'd)7.3.5 Compatible Channel Interfaces(A) WATS Access Line (WAL)WATS Serving Office
Supervisory SignalingCustomer Premises
Interface Code

Loop-Start (LO)

2LS2, 2LS3
4LS2

Ground-Start* (G)

2GS2, 2GS3
4GS2

(C)

Loop-Reverse-Battery* (RV)

2RV2-O, 2RV3-O, 2RV2-T,
2RV3-T, 4RV2-T, 6EA2-E,
6EA2-M, 8EB2-E, 8EB2-M

(C)

E&M

6EA2-E, 6EA2-M, 8EB2-E,
8EB2-M

* Ground start and reverse battery may not be provided over fiber facilities and are only available where suitable facilities exist.

(N)
(N)

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 Service.

7.4.1 Types of Rates and Charges

There are two types of rates and charges. These are monthly rates and nonrecurring charges. The rates and charges are described as follows:

(A) Monthly Rates

Monthly rates are flat 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.

(B) 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 Special Access Service are: installation of service, installation of optional features and functions, and service rearrangements.

(1) Installation of Service

Nonrecurring charges apply to each Special Access Service installed. Orders for the installation of Voice Grade, High Capacity and WATS placed on or after August 26, 1991, will be subject to a first and additional nonrecurring charge rate structure. A First Nonrecurring Charge will apply, per channel termination, for the initial service ordered. An Additional Nonrecurring Charge will apply, per channel termination, for each additional service which is ordered at the same time on the same Access Order, for the same due date and between the same premises, provided the service and operating characteristics (e.g., bridging) are identical to the initial service ordered. The nonrecurring charges for the installation of service are set forth in 7.5 following as a nonrecurring charge for the Channel Termination rate element.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.1 Types of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(2) Installation of Optional Features and Functions

Nonrecurring charges apply for the installation of some of the optional features and functions available with Special Access Service. The charge applies whether the feature or function is installed coincident with the initial installation of service or at any time subsequent to the installation of the service.

The optional features for which nonrecurring charges apply are:

- Voice Grade Data Capability
- Voice Grade Telephoto Capability
-
- 44.736 Mbps High Capacity Service
- DS3 to DS1 Multiplexing
- WATS Access Line Extension Service

(D)¹

¹ Wideband Data Service has been withdrawn from the tariff effective December 19, 2013.

(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.1 Types of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(3) Service Rearrangements

Service rearrangements are changes to existing (installed) services which do not result in either a change in the minimum period requirements (i.e., change from one type of Special Access Service to another or a change from one type of channel termination to another) or a change in the physical location of the point of termination at a customer designated premises. Changes in the type of service or channel termination are treated as discontinuances of existing service and installations of new service. Changes in the physical location of the point of termination are treated as moves and are described and charged for as set forth in 7.4.5 following.

The charge to the customer for the service rearrangement is dependent on whether the change is administrative only in nature or involves actual physical change to the service.

Administrative changes, as follow, will be made without charge(s) to the customer:

- Change of customer name,
- Change of customer or customer's end user premises address when the change of address is not a result of a 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 test line number,
- Change of customer or customer's end user contact name or telephone number, and
- Change of jurisdiction.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.1 Types of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(3) Service Rearrangements (Cont'd)

All other service rearrangements will be charged for as follows:

- If the change involves the addition of one or more channel terminations to an existing multipoint service, the appropriate nonrecurring charge(s) will apply as set forth in (1) preceding. The charge(s) will apply only for the channel termination(s) that is being added.
- If the change involves the addition of an optional feature or function which has a separate nonrecurring charge, that nonrecurring charge will apply.
- If the change involves changing the type of signaling on a Voice Grade service, a charge equal to the Voice Grade channel termination rate element nonrecurring charge will apply on a first and additional basis. The charge will apply per channel termination affected.
- If the change involves the rearrangement of an existing Voice Grade Service or an existing multiplexed Voice Grade Service (e.g., Voice Grade Service multiplexed to High Capacity Service), a Voice Grade to DS1 Rearrangement Charge will apply. The Voice Grade to DS1 Rearrangement Charge, as set forth in 7.5.1(C)(10) will apply to each Voice Grade Service rearranged.
- If the change involves the rearrangement of an existing Voice Grade Service derived from a High Capacity Service to a different High Capacity Service, a Voice Grade to DS1 Rearrangement Charge will apply. The charge applies only when both High Capacity Services involved are between the same customer premises and Telephone Company

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.1 Types of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(3) Service Rearrangements (Cont'd)

Hub where the multiplexing function is performed. The Voice Grade to DS1 Rearrangement Charge, as set forth in 7.5.1(C)(10), will apply to each Voice Grade Service rearranged.

- If the change involves the rearrangement of an existing High Capacity Service or an existing multiplexed High Capacity Service into a greater bit rate High Capacity Service, into an optical fiber interface arrangement or into Switched Access Service Interface Group 9, a Digital to Digital Rearrangement Charge as set forth in 7.5.4(D) following, will apply for each service reconfigured. No charge applies to the multiplexed services on the existing High Capacity Service unless the customer changes service type, in which case the appropriate nonrecurring charge for each change will apply.
- For all other changes, including the addition of optional features or functions without separate nonrecurring charges, a charge equal to a channel termination rate element nonrecurring charge will apply as set forth in (1) preceding. Only one such charge will apply per service, per change.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.2 Surcharge for Special Access Service(A) General

In addition to the rates and charges described in 7.4.1 preceding, there is a monthly surcharge that applies to Special Access Service. The Special Access Surcharge compensates the Telephone Company for use of the local exchange network when Special Access Service is connected to a PBX or equivalent device which is capable of interconnecting the Special Access Service with local exchange service.

The Telephone Company will automatically bill the surcharge on each Special Access Service installed irrespective of whether the interconnection capability exists in the customer's premises equipment or in a Centrex-CO type switch unless written certification is received from the customer certifying exemption status as set forth in (B) following.

(B) Special Access Surcharge Exemptions

The Special Access Service will be exempted from the surcharge if the customer provides the Telephone Company written certification that the Special Access Service termination is one of the following:

- a termination that interconnects either directly or indirectly to the local exchange network where the usage is subject to Carrier Common Lines charges such as, where the Special Access Service accesses only FGA and no local exchange lines, or Special Access Service between customer points of termination.
- a termination that the customer certifies to the Telephone Company is not connected to a PBX or other device capable of interconnecting the special access facility to a local exchange subscriber line; or
- a termination that the customer certifies to the Telephone Company is connected to a PBX or other device which, through either hardware or software restrictions, is not capable of interconnecting the special access facility to a local exchange subscriber line.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.2 Surcharge for Special Access Service (Cont'd)(C) Exemption Certification

- (1) Special Access Services which are terminated as set forth in (B) preceding will be exempted from the Special Access Surcharge if the customer provides the Telephone Company with a written notification certifying exemption. Such notification shall be provided by the customer (1) at the time the Special Access Service is ordered or installed; (2) at such time as the Special Access Service is reterminated to a device not capable of interconnecting to the local exchange network, or (3) at such time as the Special Access Service becomes associated with a Switched Access Service that is subject to Carrier Common Line charges.
- (2) If 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 in (D) following.
- (3) 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 (B) preceding, for each termination, and the date which the exemption is effective.
- (4) 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.

ACCESS SERVICE

7. Special Access Service (Cont'd)
7.4 Rate Regulations (Cont'd)
7.4.2 Surcharge for Special Access Service (Cont'd)

(D) Crediting the Surcharge

The Telephone Company will cease billing the Special Access Surcharge when certification that the Special Access Service has become exempt from the surcharge, as set forth in (B) preceding is received. If the status of the Special Access Service was changed prior to receipt for 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 specified by the customer in the letter of certification.

(E) Application of Rates

- (1) The monthly Special Access Surcharge applies on a per voice grade equivalent as shown in the following example.

<u>Special Access Service</u>	<u>Voice Grade Equivalent</u>		<u>Surcharge</u>	<u>Monthly Charge</u>
Voice Grade	1	X	\$25	\$ 25.00
DS1	24	X	25	600.00
DS3	672	X	25	16,800.00

- (2) In the case of multipoint Special Access Service, one Special Access Surcharge will apply for each termination at a customer designated premises except that no surcharge applies at the customer designated premises at which the Special Access Service is connected to the customer's interstate facilities.

For example, a multipoint Special Access Service connects three customer designated premises, A, B and C. Customer designated premises A is where the Special Access Service is connected to the customer's interstate facilities, and no Special Access Surcharge will apply to that termination. However, the Special Access Surcharge will apply, per termination, to customer designated premises B and C.

- (3) The Telephone Company will bill the surcharge to the customer who orders the Special Access Service unless the Service is exempt as set forth in (B) preceding.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.3 Message Station Equipment Recovery Charge

The Message Station Equipment Recovery Charge is a charge to recover that portion of message station equipment that is assigned to Special Access Service. The rate for the Message Station Equipment Recovery Charge is set forth in 7.5.5 following.

7.4.4 Minimum Periods

The minimum service period for all services except 44.736 Mbps High Capacity Service is three months. The minimum service period for 44.736 Mbps High Capacity Service is twelve months, unless a different minimum service period is established with an ICB rate.

ACCESS SERVICE

7. Special Access Service (Cont'd)
7.4 Rate Regulations (Cont'd)7.4.5 Moves

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

- The Point of Termination at the customer designated premises
- The customer designated premises

The charges for the move are dependent on whether the move is to a new location within the same building or to a different building.

(A) Moves Within the Same Building

When the move is to a new location within the same building, the charge for the move will be an amount equal to one half of the nonrecurring (i.e., installation) charge for the service termination affected. There will be no change in the minimum period requirements or termination liability.

(B) Moves To a Different Building

Moves to a different building will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply. New minimum period requirements and, if appropriate, a new termination liability will be established for the new services. The customer will also remain responsible for satisfying all outstanding minimum period charges and/or termination charges, for the discontinued service.

ACCESS SERVICE

7. Special Access Service (Cont'd)
7.4 Rate Regulations (Cont'd)7.4.6 Mileage Measurement

A 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 WATS Serving Office; or two Telephone Company Hubs. The serving wire center associated with a customer designated premises is the serving wire center from which the customer designated premises would normally obtain dial tone.

Except for 44.736 Mbps Service, mileage is shown in 7.5 following in terms of mileage bands. 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 find the band into which the computed mileage falls and apply the rates shown for that band. When the calculation results in a fraction of a mile, always round up to the next whole mile before determining the mileage band and applying the rates.

For 44.736 Mbps Service, Channel Mileage is shown in 7.5.4(B) following in terms of fixed and per mile rates. 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 apply the rates shown. When the calculation results in a fraction of a mile, always round up to the next whole mile before 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 SERVICE

7. Special Access Service (Cont'd)
7.4 Rate Regulations (Cont'd)7.4.7 Facility Hubs

A customer has the option of ordering digital high capacity facilities (i.e., DS3 or DS1) to a facility Hub for channelizing to individual services requiring lower capacity facilities (e.g., Voice).

Different locations may be designated as Hubs for different facility capacities, e.g., multiplexing from digital to digital may occur at one location while multiplexing from digital to analog may occur at a different location. Locations (wire centers) that provide DS3 to DS1 multiplexing have been designated as Intermediate Hubs, Super-Intermediate Hubs or Terminus Hubs (described in 2.6 preceding). Locations (wire centers) that provide DS3 to DS1 multiplexing have been designated as Terminus Hubs. When placing an Access Order, the customer will specify the desired Hub. The NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4 identifies serving wire centers, hub locations and the type of multiplexing functions available.

Some of the types of multiplexing available include the following:

- from higher to lower bit rate
- from higher to lower bandwidth
- from digital to voice frequency channels

End to end services may be provided on channels of these facilities to a Hub. The transmission performance for the end to end service provided between customer designated premises will be that of the lower capacity or bit rate. For example, when a 1.544 Mbps facility is multiplexed to voice frequency channels, the transmission performance of the channelized services will be Voice Grade, not High Capacity.

ACCESS SERVICE

- 7. Special Access Service (Cont'd)
- 7.4 Rate Regulations (Cont'd)
- 7.4.7 Facility Hubs (Cont'd)

The Telephone Company will commence billing the monthly rate for the facility to the Hub on the date specified by the customer on the service order. Individual services utilizing these facilities may be installed coincident with the installation of the facility to the Hub or may be ordered and/or installed at a later date, at the option of the customer. The customer will be billed for a high capacity digital Channel Termination, Channel Mileage (when applicable) and the multiplexer at the time the facility is installed. Individual service rates (by service type) will apply for a Channel Termination and additional Channel Mileage (as required) for each channelized service. These will be billed to the customer as each individual service is installed.

Cascading multiplexing occurs when a high capacity digital channel is de-multiplexed to provide channels with a lesser capacity and one of the lesser capacity channels is further de-multiplexed. For example, a DS3 facility is de-multiplexed to twenty-eight DS1 channels and then one of the DS1 channels is further de-multiplexed to individual Voice Grade channels.

When cascading multiplexing is performed, whether in the same or a different Hub, a charge for the additional multiplexing unit also applies. When cascading multiplexing is performed at different Hubbing locations, Channel Mileage charges also apply between the Hubs.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.8 44.736 Mbps High Capacity Service Rate Regulations(A) General

Standard rates and charges apply to 44.736 Mbps Service, and 44.736 Mbps Service.

(B) Channel Termination Monthly Rates

The channel termination rate structure for 44.736 Mbps Service (electrical) differs based upon whether or not the channel termination is at a primary or secondary premises. A Primary Premises is a customer designated premises where a 44.736 Mbps Service channel is either originated or terminated. Only one end of the channel can be a primary premises. A Secondary Premises is any customer designated premises other than the primary premises.

If one end of a 44.736 Mbps Service is connected to a multiplexing node or virtual collocation arrangement, the location with the standard channel termination is classified as a Secondary Premises.

Monthly rates for 44.736 Mbps High Capacity Service channel terminations at a primary premises apply on a tapered schedule as set forth in 7.5.4 following. The rate to be billed for each channel termination is based on a count of the total eligible Switched and Special Access channel terminations that are in service and in billing at the end of the bill period whether provided on a month to month basis, under one or more discount plans or a combination of both.

The following Switched and Special Access channel termination rate elements are eligible for inclusion in the Telephone Company's monthly count:

- 44.736 Mbps High Capacity Special Access standard channel terminations (electrical) at a primary premises as described herein; and
- DS3 Switched Access Entrance Facilities standard channel terminations (electrical) as described in 6.7.1(A) preceding.

Once a month, the Telephone Company will count all eligible 44.736 Mbps High Capacity Special Access Services that are in service at a primary premises. The Telephone Company will then count all eligible DS3 Switched Access Entrance Facility channel terminations that are in service at that location as specified in 6.7.1(A) preceding. The results are added to obtain the total count applicable for a particular customer designated premises and determine the applicable rate band. This step is repeated for each customer designated premises.

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(D)

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ACCESS SERVICE

- 7. Special Access Service (Cont'd)
 - 7.4 Rate Regulations (Cont'd)
 - 7.4.8 44.736 Mbps High Capacity Service Rate Regulations (Cont'd)
 - (B) Channel Termination Monthly Rates (Cont'd)

The Telephone Company will conduct a count on the first day of each month to use for that month's billing.

For example, the Telephone Company's total DS3 count for a customer on the first day of December is 16. A customer has ten eligible High Capacity 44.736 Mbps Special Access Service channel terminations and six eligible DS3 Switched Access Entrance Facilities in service at its premises. The applicable rate band for each category (Special or Switched) is band 16. In December, each of the ten High Capacity 44.736 Mbps Special Access Services is billed at the then effective rate under band 16 (for Special Access) and each of the six DS3 Switched Access Entrance Facilities is billed at the then effective rate under band 16 (for Switched Access).

The rate band determined by the last count taken shall be used to calculate all charges incurred by and credits due to the customer for 44.736 Mbps High Capacity Special Access Service channel terminations established or discontinued during the preceding billing period. The count will not be adjusted for any reason for service order activity occurring after the count is made, including services that were installed prior to the count but were not in billing when the count was taken.

A secondary premises channel termination monthly rate applies to channel terminations at secondary premises locations.

ACCESS SERVICE

- 7. Special Access Service (Cont'd)
 - 7.4 Rate Regulations (Cont'd)
 - 7.4.8 44.736 Mbps High Capacity Service Rate Regulations (Cont'd)

(C) Channel Mileage Measurement

Channel Mileage Measurement for 44.736 Mbps Service is specified in 7.4.6 preceding.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.9 Service Discount Plans(A) General

Service Discount Plans are available for the following types of Special Access Services.

- Digital Data Service
- 1.544 Mbps Service
- 44.736 Mbps Service
- Voice Grade Service

A customer with one or more services has the option of requesting, at any time, a Service Discount Plan for some or all services of the same type and, in the case of certain digital services, of the same speed (i.e., 2.4, 4.8, 9.6 or 56.0 kbps Digital Data Services, 1.544 Mbps Service or 44.736 Mbps Service with an optical fiber interface option). In the case of 1.544 Mbps and 44.736 Mbps Service, the services must be provided within the same Telephone Company operating territory. For all other services, the services must be billed on the same billing account.

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(D)

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ACCESS SERVICE

- 7. Special Access Service (Cont'd)
 - 7.4 Rate Regulations (Cont'd)
 - 7.4.9 Service Discount Plans (Cont'd)
 - (A) General (Cont'd)

When a Host Customer with an existing multiplexed High Capacity requests a Shared Billing Arrangement as set forth in 7.2.4(D)(4) preceding, and a Service Discount Plan is currently in effect on the portion of the multiplexed service that will be billed to a Service User, the Service User will have the option of (1) continuing the existing discount plan and terms and conditions in effect as set forth in 7.4.9(C)(1) following or, (2) requesting a new Service Discount Plan for a commitment period equal to or longer than the original commitment period at the then effective discount percentage. If the Service User does not agree to (1) or (2) preceding, the existing customer will be responsible for payment of any termination liability associated with the portion of the service that will be billed to the Service User prior to the establishment of a Shared Billing Arrangement.

When requesting a Service Discount Plan, the customer must specify which services are to be included in the Service Discount Plan. When requesting any activity set forth in (C)(2) through (6) following, the customer must specify by circuit identification which services are affected.

ACCESS SERVICE

7. Special Access Service (Cont'd)
 7.4 Rate Regulations (Cont'd)
 7.4.9 Service Discount Plans (Cont'd)

(B) Description

A Service Discount Plan applies to Special Access Service Channel Terminations (Including Fiber Based Channel Terminations), Channel Mileage and Optional Features and Functions monthly rates. The monthly rates for such services are reduced by a fixed percentage. The amount of the discount percentage differs based on the length of the commitment period selected by the customer as follows:

<u>Commitment Period</u>	<u>Discount Percentage</u> (All Other Svcs.*)	<u>Discount Percentage</u> (for 1.544 Mbps Svc.*)	<u>Discount Percentage</u> (for 44.736 Mbps Svc.)
2 years	5%	5%	
3 years	10%	15%	10%
4 years			
5 years	20%	25%	35%
7 years	30%	30%	40%
10 years	35%		40%

The discount percentage is applied to the currently effective monthly rates. Such rates may change during the commitment period, thereby causing an increase or decrease in the rates applicable to the customer.

The discount percentage will not be subject to Telephone Company initiated decreases during that period. However, if the Telephone Company initiates an increase in the discount percentage during that period, that increased discount will be used to determine the rates applicable to the customer.

* Except for 44.736 Mbps Service and 1.544 Mbps Service.

ACCESS SERVICE

7. Special Access Service (Cont'd)
7.4 Rate Regulations (Cont'd)
7.4.9 Service Discount Plans (Cont'd)
(B) Description (Cont'd)

With the exception of the DS0 to Subrate Multiplexer, Optional Feature and Functions associated with the service will have the same service commitment period as the corresponding service.

<u>Service</u>	<u>2 Years</u>	<u>3 Years</u>	<u>4 Years</u>	<u>5 Years</u>	<u>7 Years</u>	<u>10 Years</u>
Voice Grade		X		X		
Digital Data		X		X		
1.544 Mbps	X	X		X	X	
44.736 Mbps		X		X	X	X
DS0 to Subrate Multiplexer		X		X		

ACCESS SERVICE

- 7. Special Access Service (Cont'd)
- 7.4 Rate Regulations (Cont'd)
- 7.4.9 Service Discount Plans (Cont'd)

- (C) Termination Liability

- (1) General

A termination liability applies during the selected commitment period. Except as set forth in (2) through (6) following, if service is disconnected in full or in part prior to the end of the selected commitment period, the customer is liable for a termination liability charge. In addition, should a customer, prior to the end of the selected commitment period, request that all channels of a High Capacity facility be used for Switched Access Service, such request will be treated as a disconnect of the High Capacity facility for purposes of applying termination liability charges. Further, except as provided in (D) and (E) following, when a customer cancels a Service Discount Plan prior to the end of the selected commitment period, the customer is liable for a termination liability charge.

The termination liability charge applies to each service, Optional Feature or Function disconnected or, in the case of cancellation of a Service Discount Plan, to each service, Optional Feature or Function which had been included in the cancelled Service Discount Plan.

When the jurisdiction of a Special Access Service (line) furnished under a Service Discount Plan is changed to intrastate, no termination liability charge applies provided the service (line) is furnished under an intrastate service discount plan.

ACCESS SERVICE

7. Special Access Service (Cont'd)
7.4 Rate Regulations (Cont'd)
7.4.9 Service Discount Plans (Cont'd)
(C) Termination Liability (Cont'd)
(1) General (Cont'd)

For services other than 1.544 Mbps and 44.736 Mbps High Capacity Service, the termination liability charge is calculated for the applicable Channel Termination, Channel Mileage, or Optional Feature or Function monthly rates as set forth in (a) following.

For 1.544 Mbps and 44.736 Mbps High Capacity Service, the termination liability charge is calculated for the applicable Channel Termination, Channel Mileage, or Optional Feature or Function monthly rates as set forth in (a) or (b) following. When calculating termination liability charges, the Telephone Company will apply the option which provides the customer with the lowest termination liability charge.

(a) Option 1

- For disconnects on or prior to the end of the minimum period and prior to the end of the selected commitment period, the termination liability charge is 50% of the applicable monthly rates for each month and fraction thereof remaining between the end of the minimum period and the end of the selected commitment period.
- For disconnects after the end of the minimum period but prior to the end of the selected commitment period and for cancellations prior to the end of the selected commitment period, the termination liability charge is 50% of the applicable monthly rates for each month and fraction thereof in the balance of the selected commitment period.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.9 Service Discount Plans (Cont'd)(C) Termination Liability (Cont'd)(1) General (Cont'd)(b) Option 2

- For disconnects on or prior to the end of the minimum period and prior to the end of the selected commitment period, the termination liability charge will be the difference between the full monthly rates and the discounted monthly rates for the period the service has been in effect.
- For disconnects after the minimum period but prior to the end of the selected commitment period and for cancellations of the Service Discount Plan prior to the end of the selected commitment period the following applies.
 - Where there is no Service Discount Plan period less than the actual time the services have been in effect, the termination liability charge will be the difference between the full monthly rates and the discounted monthly rates for the period the service has been in effect.
 - Where there is a Service Discount Plan period less than the actual time the services have been in effect, the termination liability charge will be the difference between the monthly rates for the highest Service Discount Plan period that could have been satisfied prior to disconnection of the service or cancellation of the plan and the monthly rates for the selected commitment period multiplied by the actual number of months the service has been in effect. For example, if a customer has a 5-year plan and disconnects a DS-1 service after forty months, the highest Service Discount Plan period that could have been satisfied is three years. To determine the termination liability charge, the monthly rate for the 5-year plan is subtracted from the monthly rate for the 3-year plan and the difference is multiplied by the forty months that the service had been in effect.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.9 Service Discount Plans (Cont'd)

(C) Termination Liability (Cont'd)

(1) General (Cont'd)

For disconnects of some, but not all, 44.736 Mbps Services, where appropriate, the monthly rates used to calculate termination liability charges are applied in ascending order beginning with the lowest applicable rates.

The termination liability charge applies in addition to applicable minimum period charges.

] (D)]

ACCESS SERVICE

7. Special Access Service (Cont'd)
7.4 Rate Regulations (Cont'd)
7.4.9 Service Discount Plans (Cont'd)
(C) Termination Liability (Cont'd)

(2) Upgrades

Upgrades include the following types of customer requests:

- A request to disconnect some or all of its discounted digital services in order to replace them with Telephone Company provided digital Special Access Services with a bit rate higher than that of the services being disconnected, or:
- A request to disconnect some or all of its discounted two-point or multipoint services in order to have these services provided over a multiplexed Telephone Company provided 1.544 Mbps High Capacity facility or,
- A request to disconnect some or all of its discounted Voice Grade Services in order to replace them with Telephone Company provided digital Special Access Service.

Termination liability charges do not apply to above requests provided that:

- The orders for the disconnect of the existing services and the connect of the new services are placed with the Telephone Company at the same time,
- The new services are provided between the same locations as the existing services were provided and
- The replacing Special Access Services have a total channel capacity equal to or greater than the total channel capacity of the services being disconnected or
- The number of replacing channelized services provided over a multiplexed High Capacity facility is equal to or greater than the number of services being disconnected.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.9 Service Discount Plans (Cont'd)(C) Termination Liability (Cont'd)(2) Upgrades (Cont'd)

- In the case of Digital Data Service, the bit rate capacity of the replacing Digital Data Service is equal to or greater than the bit rate capacity of the service being disconnected. For example, one 4.8 kbps service replaces two 2.4 kbps services.
- In the case of Voice Grade Service, the number of, or the voice grade equivalence of, the replacing Special Access Services is equal to or greater than the number of services being disconnected.
- The replacing Special Access Services are provided under a Service Discount Plan for a commitment period equal to or longer than that of the service being disconnected.

(3) Changes

For video Service, no termination liability charge applies to the following changes:

- Change in channel interface (i.e., audio bandwidth or number of channels).

(4) Cancellation

A customer may cancel a 10 year Service Discount Plan for 44.736 Mbps Service provided with an optical fiber interface option, without the application of termination charges to such cancellation, if the ratio of sum of 1/3 (for 135 Mbps capacity), 1/9 (for 405 Mbps capacity) or 1/12 (for 560 Mbps capacity) of the applicable discounted optical fiber interface Channel Termination monthly rates and one DS3 to DS1 Multiplexing monthly rate divided by the non-discounted monthly rate of a 1.544 Mbps High Capacity Channel Termination exceeds 10.

ACCESS SERVICE

7. Special Access Service (Cont'd)
7.4 Rate Regulations (Cont'd)
7.4.9 Service Discount Plans (Cont'd)
(C) Termination Liability (Cont'd)

(5) Moves

Except for 1.544 Mbps and 44.736 Mbps Service, when a customer requests that some or all of its services under a Service Discount Plan be moved to a different building, no termination liability charge applies provided the services remain on the same billing account. When a customer requests that some or all of its 1.544 Mbps or 44.736 Mbps Service under a Service Discount Plan be moved to a different building, no termination liability charge applies provided the services remain within the same Telephone Company operating territory.

(6) Replacements

- (a) When a customer with existing services under a Service Discount Plan wishes to replace one or more of the service(s) included in that Service Discount Plan with other new or existing service(s) of the same speed or type, as appropriate, for the balance of the commitment period for that Service Discount Plan, no termination liability charge will apply provided that:
- (i) The orders to accomplish the replacement are placed with the Telephone Company at the same time to be completed at the same time, or

For 1.544 Mbps and 44.736 Mbps High Capacity Services and their applicable Optional Features and Functions (except as specified in (b) following) which are included in the Service Discount Plan, the orders to accomplish the replacement are (1) placed with the Telephone Company within sixty (60) days of each other and (2) the replacing services are provided within the same Telephone Company operating territory as the services that are replaced in the Service Discount Plan, and

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.9 Service Discount Plans (Cont'd)(C) Termination Liability (Cont'd)(6) Replacements (Cont'd)

(a) (Cont'd)

(ii) The number of services included in the Service Discount Plan remains the same. The replacing services may not be equipped with the same Optional Features and Functions as the services they replace. In this case, the appropriate termination liability charges apply to the Optional Features and Functions no longer provided.

(b) When a customer with existing multiplexers under a Service Discount Plan wishes to replace one or more of the multiplexers included in that Service Discount Plan with other new or existing multiplexer(s) of the same type for the balance of the commitment period for that Service Discount Plan, no termination liability charge will apply provided that:

(i) The orders to accomplish the replacement are placed with the Telephone Company at the same time to be completed at the same time, or

For DS3 to DS1, DS1 to DS0 and DS1 to Voice multiplexers, the orders to accomplish the replacement are (1) placed with the Telephone Company within sixty (60) days of each other and (2) the replacing multiplexer is provided in the same Telephone Company operating territory as the multiplexer being replaced in the Service Discount Plan, and

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.9 Service Discount Plans (Cont'd)(C) Termination Liability (Cont'd)(6) Replacements (Cont'd)

(b) (Cont'd)

(ii) The number of multiplexers included in the Service Discount Plan remains the same, and

(iii) For multiplexers other than DS3 to DS1, DS1 to DS0 and DS1 to Voice, the replacing multiplexers must be located in the same Telephone Company Hub as the multiplexers being replaced.

(D) Additions of Service

When a customer with an existing Service Discount Plan wishes to increase the number of services of the same type between the same two locations, it has the following options:

- Subscribe to the additional services under non-discounted rates.
- Subscribe to the additional services under a separate Service Discount Plan at the then effective discount percentage, rates and charges.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.9 Service Discount Plans (Cont'd)(D) Additions of Service (Cont'd)

- Cancel the existing Service Discount Plan and include both the existing and the additional services under a new Service Discount Plan for a commitment period equal to or longer than the original period. No termination charges apply to such cancellation.

(E) Extension of Commitment Period

A customer may, at any time prior to the expiration of the selected commitment period for an existing Service Discount Plan, change to a Service Discount Plan with a longer commitment period at the then effective discount percentage. No termination liability charges will apply for any service extended under the longer commitment period. The monthly rates applicable for the longer commitment period will apply effective with the next bill day following the request for the change.

(F) Rate Regulations

Where the Service Discount Plan is requested to be provided coincident with the connection of new service, it will be effective with the establishment of service.

Where the Service Discount Plan is requested to be provided on existing service, the plan will be effective on the date the Telephone Company receives the Access Order requesting the discount.

At the end of its selected commitment period, the customer will have the option of subscribing to any then effective Service Discount Plan. If the customer does not notify the Telephone Company of its choice prior to the expiration of the commitment period, the customer's current Service Discount Plan will be continued upon expiration of the commitment period with no termination liability.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Rate Regulations (Cont'd)7.4.10 Shared Billing Arrangement

Each Host Customer and Service User entering into a Shared Billing Arrangement is solely responsible to the Telephone Company for charges associated with that customer's portion of the shared multiplexed service. Disconnection of service by the Host Customer does not relieve the Service User of the shared multiplexed service of any obligation to pay access charges associated with the portion of the shared multiplexed service to which that Service User subscribes. Billing for services and facilities will continue until a disconnect request from the Host Customer or Service User has been received by the Telephone Company. The Host Customer of a Shared Billing Arrangement is solely responsible for notifying the connecting Service User(s) participating in the Shared Billing Arrangement in the event of disconnection of the Host Customer's service.

ACCESS SERVICE

7. Special Access Service (Cont'd)
7.4 Rate Regulations (Cont'd)
7.4.10 Shared Billing Arrangement (Cont'd)

For administrative purposes, one "Arrangement" under the High Capacity Shared Billing Arrangement option shall be limited to one Host Customer permitting one Service User to connect a specified number of services to one specified multiplexer on the Host Customer's service. A subsequent request by the Service User to increase the number of services connected to the same multiplexer shall not constitute a new or separate "Agreement".

A Shared Billing Arrangement shall be established between a Host Customer and a Service User upon the completion of the service order for the first circuit(s) in the arrangement. A Shared Billing Arrangement shall be deemed cancelled when the last circuit in the arrangement belonging to the Service User has been disconnected.

A Processing Charge will apply for each Service User order processed for a Shared Billing Arrangement. The High Capacity Billing Arrangement Processing Charge is contained in 7.5.4(C)(4) following. The order processing charge applies in addition to all other applicable rates and charges for the Service User's service(s).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges

(T)

7.5.1 Voice Grade Service

(A) Channel Termination

	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>		<u>USOC</u>
		<u>First</u>	<u>Add'l</u>	
- Two-Wire	\$37.50	\$286.80	\$195.50	T6E2X
- Four-Wire	62.11	408.36	272.96	T6E4X

(B) Channel Mileage

	<u>Monthly Rates</u>		<u>USOC</u>
<u>Mileage Bands</u>	<u>Fixed</u>	<u>Per Mile</u>	
0	None	None	1L5XX
Over 0	\$36.44	\$4.24	1L5XX

(C) Optional Features and Functions

(1) Bridging

(a) Voice Bridging

	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	<u>USOC</u>
- Per port			
- Two-Wire	\$ 7.14	None	BCNV2
- Four-Wire	12.31	None	BCNV4

(b) Data Bridging

- Per port			
- Two-Wire	\$ 7.14	None	BCND2
- Four-Wire	15.78	None	BCND4

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.1 Voice Grade Service (Cont'd)

	Monthly <u>Rates</u>	Nonrecurring <u>Charges</u>	<u>USOC</u>
(C) Optional Features and Functions (Cont'd)			
(1) Bridging (Cont'd)			
(c) <u>Telephoto Bridging</u>			
Two-Wire/Four			
- Per port			
- Two-Wire	\$ 7.14	None	BCNF2
- Four-Wire	15.78	None	BCNF4
(d) <u>DATAPHONE Selected-A-Station Bridging</u>			
Sequential Arrangement Ports			
- Per 2-wire channel connected	19.01	None	DQ2
- Per 4-wire channel connected	101.09	None	DQ4
Addressable Arrangement Ports			
- Per 2-wire channel connected	20.39	None	KQ2
- Per 4-wire channel connected	103.85	None	KQ4
(e) <u>Telemetry and Alarm Bridging</u>			
Active Bridging Channel Connections			
Split Band			
- Per channel connected	6.62	None	CNLRX
Summation			
- Per channel connected	1.24	None	BCNSA

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.1 Voice Grade Service (Cont'd)

	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	<u>USOC</u>
(C) Optional Features and Functions (Cont'd)			
(1) Bridging (Cont'd)			
(e) <u>Telemetry and Alarm Bridging</u> (Cont'd)			
Passive Bridging Channel Connections			
- Per channel connected	\$ 0.18	None	BCNTP
(2) Conditioning			
- Per point of termination			
C - Type	4.36	None	X1CPT
Sealing Current	None	None	1HBPT

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.1 Voice Grade Service (Cont'd)

		<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	<u>USOC</u>
(C)	Optional Features and Functions (Cont'd)			
(3)	Improved Return Loss for Effective Two-Wire or Four-Wire Transmission			
	- Per point of termination			
	- Two-Wire	\$1.44	None	1RL2W
	- Four-Wire	1.52	None	1RL4W
(4)	Customer Specified Receive Level			
	- Per two-wire point of termination	None	None	RLS
(5)	Data Capability			
	- Per point of termination	1.11	22.15	XDCPT
(6)	Telephoto Capability			
	- Per point of termination	2.46	17.79	XTCPT

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.1 Voice Grade Service (Cont'd)

		<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	<u>USOC</u>
(C)	Optional Features and Functions (Cont'd)			
(7)	Signaling Capability			
	- Per point of termination	\$11.80	None	XSS++
	- In lieu of ++, substitute appropriate two digit code from following list to specify type of signaling.			
	AB			
	AC			
	CT			
	DX			
	DY			
	EA			
	EB			
	EC			
	EX			
	GO			
	GS			
	LA			
	LB			
	LC			
	LO			
	LR			
	LS			
	RV			
	SF			

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.1 Voice Grade Service (Cont'd)(C) Optional Features and Functions (Cont'd)

		<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	<u>USOC</u>
(8)	Selective Signaling Arrangement - Per arrangement	\$15.13	None	USZ
(9)	Transfer Arrangement* - Per four port arrangement including control channel termination**	3.25	None	USY
	- Per five port arrangement including control channel termination**	8.15	None	US5
(10)	Service Rearrangement			
	(A) Voice Grade to DS1			
	- Per lower bit rate service rearranged			
	- Two wire	None	\$182.49	NRBOH
	- Four wire	None	182.49	NRBOJ

* This feature requires the customer to purchase the Controller Arrangement (USOC XTDDU) from 9.3.7 following.

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

ACCESS SERVICE

7. Special Access Service (Cont'd)
7.5 Rates and Charges (Cont'd)

7.5.2 Reserved for future use¹

(C)

7

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¹ Wideband Data Service has been withdrawn from the tariff effective December 19, 2013.

(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.5 Rates and Charges (Cont'd)

7.5.2 Reserved for future use¹ (Cont'd)

(C)

7

(D)

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¹ Wideband Data Service has been withdrawn from the tariff effective December 19, 2013.

(N)

ACCESS SERVICE

7. Special Access Service (Cont'd)
7.5 Rates and Charges (Cont'd)7.5.3 Digital Data Service

(A) Channel Termination

- Per point of termination

	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	<u>USOC</u>
- 2.4 kbps	\$148.48	\$389.88	T6ECS
- 4.8 kbps	148.48	389.88	T6ECS
- 9.6 kbps	168.88	389.88	T6ECS
- 56.0 kbps	302.29	389.88	T6ECS

ACCESS SERVICE

7. Special Access Service (Cont'd)
7.5 Rates and Charges (Cont'd)7.5.3 Digital Data Service (Cont'd)

		<u>Monthly Rates</u>		
		<u>Fixed</u>	<u>Per Mile</u>	<u>USOC</u>
(B)	Channel Mileage			
(1)	2.4 kbps			
	<u>Mileage Bands</u>			
	0	None	None	1L5XX
	Over 0 to 4	\$31.40	\$.94	1L5XX
(2)	4.8 kbps			
	<u>Mileage Bands</u>			
	0	None	None	1L5XX
	Over 0 to 4	\$35.15	\$1.07	1L5XX
(3)	9.6 kbps			
	<u>Mileage Bands</u>			
	0	None	None	1L5XX
	Over 0 to 4	\$59.64	\$1.38	1L5XX

ACCESS SERVICE

7. Special Access Service (Cont'd)
 7.5 Rates and Charges (Cont'd)
 7.5.3 Digital Data Service (Cont'd)

		<u>Monthly Rates</u>		
		<u>Fixed</u>	<u>Per Mile</u>	<u>USOC</u>
(B)	Channel Mileage (Cont'd)			
(4)	56.0 kbps			
	<u>Mileage Bands</u>			
	0	None	None	1L5XX
	Over 0 to 4	\$92.91	\$2.07	1L5XX
(C)	Optional Features and Functions			
		<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	<u>USOC</u>
(1)	Bridging			
	- Per port	\$23.91	None	BCNDA
(2)	Loop Transfer Arrangement*			
	- Per four port arrangement**	12.95	None	XTD
(3)	Secondary Channel Capability (SCC)			
	- Per 56 kbps channel termination	39.07	None	SCA56

* This feature requires the customer to order the Controller Arrangement (USOC XTDDU) from 9.3.7 following.

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.4 High Capacity Service

- (B) Standard Channel Termination
- Per point of termination
Nonrecurring

Monthly Rate	Charges First	Add'l	USOC	TMECS
(1) 1.544 Mbps	281.16	275.00	165.00	
(2) 44.736 Mbps				

# DS3 CTs Counted	USOC	Monthly Rate, Per DS3	Nonrecurring Charge
1	TYFLX	\$2,538.46	\$1.00
2	TYFLX	2,115.39	1.00
3	TYFLX	1,692.31	1.00
4	TYFLX	1,599.23	1.00
5	TYFLX	1,548.46	1.00
6	TYFLX	1,506.15	1.00
7	TYFLX	1,455.38	1.00
8	TYFLX	1,413.08	1.00
9	TYFLX	1,362.31	1.00
10	TYFLX	1,311.54	1.00
11	TYFLX	1,269.23	1.00
12	TYFLX	1,100.00	1.00
13	TYFLX	1,277.69	1.00
14	TYFLX	1,260.77	1.00
15	TYFLX	1,243.85	1.00
16	TYFLX	1,226.92	1.00
17	TYFLX	1,210.00	1.00
18	TYFLX	1,193.08	1.00
19	TYFLX	1,176.15	1.00
20	TYFLX	1,159.24	1.00
21	TYFLX	1,142.31	1.00
22	TYFLX	1,125.39	1.00
23	TYFLX	1,108.46	1.00
24	TYFLX	1,100.00	1.00
25 and Over	TYFLX	1,353.85	1.00
Per DS3 at each Secondary Premises	TYFLS	2,115.39	1.00

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.4 High Capacity Service (Cont'd)(B) Office Channel Termination
- per point of termination

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>	<u>USOC</u>
(1) Office Channel Termination (OCT) Cross Connect, per termination			
- 1.544 Mbps	\$ 2.10	\$270.66	TJ4DX
- 44.736 Mbps	25.38	393.44	TJ4EX
(2) Office Channel Termination (OCT) Termination Charge			
- per OCT Cross Connect to a Telephone Company-provided POT Bay			
- 1.544 Mbps	\$ 2.22	None	TJ4DY
- 44.736 Mbps	26.26	None	TJ4EY
- per OCT Cross Connect to a Customer-provided, Telephone Company maintained POT Bay			
- 1.544 Mbps	\$.66	None	TJ4DZ
- 44.736 Mbps	7.77	None	TJ4EZ
(3) Virtual Office Channel Termination (VOCT), per Termination			
- 1.544 Mbps	\$ 1.34	\$270.66	C2X9A
- 44.736 Mbps (Without Optical Fiber Interface Option)	\$ 27.78	393.44	C2X8A

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.4 High Capacity Service (Cont'd)(B) Office Channel Termination (Cont'd)
- per point of termination (Cont'd)

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>	<u>USOC</u>
(4) Enhanced Ordering Option (EEO) per OCT Cross Connect or VOCT			
- 1.544 Mbps	\$ 0.87	\$107.88	TQ2KM
- 44.736 Mbps	16.53	176.25	TQ2LM
(5) EEO Processing Charge, per service order	None	26.00	CF3SA

	<u>Monthly Rates</u>		<u>USOC</u>
	<u>Fixed</u>	<u>Per Mile</u>	
(C) Channel Mileage			
(1) 64 kbps			
Mileage Bands			
0*	\$12.06	None	1L5TC
Over 0	15.47	\$2.79	1L5XX
(2) 1.544 Mbps			
<u>Mileage Bands</u>			
0	None	None	1L5XX
Over 0	\$73.29	\$21.98	1L5XX
(3) 44.736 Mbps			
0 Miles	None	None	1L5XX
Over 0 Miles	\$992.31	\$146.15	1L5XX

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.4 High Capacity Service (Cont'd)

		<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	<u>USOC</u>
(D)	Optional Features and Functions			
(1)	Multiplexing			
	DS3 to DS1			
	- Per arrangement	\$719.24	\$1.00	MQ3
	DS1 to Voice*			
	- Per arrangement	223.30	None	MQ1
	DS1 to DS0			
	- Per arrangement	223.30	None	QMU
	DS0 to Subrates			
	- Per arrangement			
	- Up to 20 2.4 kbps services	613.23	None	QSU24
	- Up to 10 4.8 kbps services	316.06	None	QSU48
	- Up to 5 9.6 kbps services	215.71	None	QSU96
(2)	Automatic Loop Transfer			
	- Per 1st Channel Protected**	550.00	None	T59
	- Per each additional Channel protected	275.00	None	T59AX
(3)	Battery Backup			
	- Per arrangement	ICB	ICB	
	BBG++			
(4)	Shared Billing Arrangement			
	Processing Charge			
	per service order	None	\$26.00	T59AX

* A channel(s) of this DS1 to the Hub can be used for Digital Data Services.

** An additional Channel Termination charge will apply whenever the spare channel is provided as a channel to the customer premises.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.4 High Capacity Service (Cont'd)

(E) Service Rearrangement

	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	<u>USOC</u>
(1) Digital to Digital 1.544 Mbps High Capacity Service - Per service rearranged	None	\$0.00	NRBOT
(2) Digital to Digital 44.736 Mbps High Capacity Service - Per service rearranged	None	0.00	NRB03

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.5 WATS Access Line (WAL) Service (Cont'd)

	<u>Monthly Rates</u>	<u>Nonrecurring Charges First Add'l</u>	<u>USOC</u>
(A) Channel Termination			
- Per point of termination*			
- Two wire	Rates and Charges are set forth in 7.5.1(A) preceding.		X2W
- Four-wire			X4W

(B) Channel Mileage

	<u>Monthly Rates</u>		
<u>Mileage Bands</u>	<u>Fixed</u>	<u>Per Mile</u>	<u>USOC</u>
0			
Over 0 to 4	Rates are set forth in 7.5.1(B) preceding. 1L5XX		1L5XX
Over 4 to 8			
Over 8 to 25			1L5XX
Over 25 to 50			1L5XX
Over 50			1L5XX

* Only one applies per WAL.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Rates and Charges (Cont'd)7.5.5 WATS Access Line (WAL) Service (Cont'd)(C) Optional Features and Functions

	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	<u>USOC</u>
(1) Improved Two-Wire Voice Transmission Specification - Per point of termination	None	None	X2T
(2) Extension Service			
(a) Channel Termination - Per Point of Termination			
- Two-Wire	Rates and Charges are as set forth in 7.5.1(A)		XEE2X
- Four-Wire			XEE4X
(b) Channel Mileage			
	<u>Monthly Rates</u>		
<u>Mileage Bands</u>	<u>Fixed</u>	<u>Per Mile</u>	
0			
Over 0 to 4	Rates are as set forth in 7.5.1(B)		1L5XX
Over 4 to 8			1L5XX
Over 8 to 25			1L5XX
Over 25 to 50			1L5XX
Over 50			1L5XX

ACCESS SERVICE

7. Special Access Service (Cont'd)
7.5 Rates and Charges (Cont'd)7.5.5 Message Station Equipment recovery Charge

	<u>Monthly Rate</u>	<u>USOC</u>
Message Station Equipment Recovery Charge - Per Special Access Surcharge Assessed	None	UTM

7.5.6 Special Access Surcharge

Special Access Surcharge - Per Surcharge Assessed	\$25.00	S25
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