6. Switched Access Service (Cont'd)

6.8 Rates and Charges (Cont'd)

6.8.3 Local Switching (Cont'd)

(D) Carrier Selection Parameter Charge (Note 1)
A nonrecurring charge will apply when a customer requests the Carrier Selection Parameter optional feature described in 6.3(GG) preceding. This charge does not apply if the feature is installed coincident with the initial installation of a service.

Nonrecurring Charge Per End Office Equipped	$7.80

	Rate Per Access Minute		
	Originating Toll-Free	Originating Non-Toll Free	Terminating
(E) Common/Shared Trunk Port	**$0.000000(R)**	$0.000498	$0.000000

6.8.4 TFC Access Service

(A)	TFC Access Service Data Base Query	Rate
	- per query	**$0.0002** (R)
(B)	TFC Data Base Optional Service Features*	
	- per query	$0.000000

6.8.5 900 Access Service

	Nonrecurring Charge
Assembly of Router Pattern	
- Per end office switch (including end office Collocated with access tandem)	$32.80
900 NXX Code Activation or Deactivation	
- Per NXX Code added or deleted per end office	$10.90

6.8.6 Reserved For Future Use

Note 1: This flat rated charge was calculated based upon a 50/50 split between originating and terminating. The FCC in their FCC 11-161 ICC Transformation Order in Section 51.907(d)(1) allowed Price Cap Carriers to use an equal split to divide the charge between originating and terminating elements. When the terminating portion of the rate is reduced and then combined with the originating portion of the rate, a single flat rate is generated for billing purposes.

* When a combination of one or more TFC Data Base Optional Service Features is used, only one charge will apply.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.8 Rates and Charges (Cont'd)

6.8.7 Interim 500 Access Service

Assembly of Route Pattern - 1 + Dialing

- Per end office switch
  (including end office collocated with access tandem)

	Nonrecurring Charge
(1+ dialing)	$32.80

500 NXX Code Activation or Deactivation - 1 + Dialing

- Per NXX code added or deleted per end office

	Nonrecurring Charge
(1+ dialing)	$10.90

Assembly of Route Pattern - 0 + Dialing

- Per end office switch
  (including end office collocated with access tandem)

	Nonrecurring Charge
(0+ dialing)	$32.80

500 NXX Code Activation or Deactivation - 0 + Dialing

- Per NXX code added or deleted per end office

	Nonrecurring Charge
(0+ dialing)	$10.90

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.8 Rates and Charges (Cont'd)

6.8.7 Interim 500 Access Service (Cont'd)

	Rate Per Query
Pass-Through Charge	
- Per Query Translation	$0.007386

ACCESS SERVICE

7. Special Access Service

7.1 General

Special Access Service provides a transmission path to connect customer designated premises*, 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 three 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: (T)

- 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.

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

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:

Voice Grade [1] - A channel for the transmission of analog signals within an approximate bandwidth of 300-3000 Hz. (C)

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.1 Channel Types (Cont'd)

Digital Data [1] - A channel for the digital transmission of synchronous serial data at rates of 2.4, 4.8, 9.6, 19.2, 56 or 64 kbps provided where facilities are available as determined by the Telephone Company. (C)

High capacity - A channel for the digital transmission of isochronous serial digital data at a rate of 1.544, 3.152, 6.312, 44.736 or 274.176 Mbps provided where facilities are available as determined by the Telephone Company.

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

The customer also has the option of ordering Voice Grade and analog and digital high capacity facilities (i.e., Group, Supergroup, Mastergroup, 1.544 Mbps, 3.152 Mbps, 6.312 Mbps, 44.736 Mbps and 274.176 Mbps) to a Telephone Company Hub for multiplexing to individual channels of a lower capacity or bandwidth. Descriptions of the types of multiplexing are 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.

[1] **Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.1 Channel Types (Cont'd)

For example, a customer may order a 3.152 Mbps facility from a customer designated premises to a Telephone Company Hub for multiplexing to two 1.544 Mbps channels. The 1.544 Mbps channels may be further multiplexed at the same or a different Hub to Voice Grade channels or may be extended to other customer designated premises. Optional features may be added to either the 1.544 Mbps or the Voice Grade Channels.

7.1.2 Rate Categories

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

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

(A) Channel Termination

The Channel Termination rate category provides for the communications path between a customer designated premises and the serving wire center of that premises. Included as part of the Channel Termination 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 (E) following. One Channel Termination charge applies per customer designated premises at which the channel is terminated. This charge will apply even if the customer designated premises and the serving wire center are co-located in a Telephone Company building.

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.2 Rate Categories (Cont'd)

(B) Reserved for Future Use

(C) Channel Mileage

The Channel Mileage rate category provides for the end office equipment and the transmission channel between the serving wire centers associated with two customer designated premises, between a serving wire center associated with a customer designated premises and a Telephone Company Hub or between two Telephone Company Hubs or between a WATS Serving Office and a Customer serving wire center when the two are not co-located. Channel Mileage rates are made up of the Channel Mileage Facility rate and the Channel Mileage Termination rate. Channel Mileage charges are set forth in Section 7.5.

(1) Channel Mileage Facility

The Channel Mileage Facility rate recovers the cost for the transmission path which extends between the Telephone Company serving wire centers and/or hub(s) and includes primarily outside plant used to provide the facility.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.2 Rate Categories (Cont'd)

(C) Channel Mileage (Cont'd)

(2) Channel Mileage Termination

The Channel Mileage Termination rate recovers the cost for end office equipment associated with terminating the facility (i.e., basic circuit equipment and terminations at serving wire centers and hubs). The Telephone Company applies a 50% billing percentage to the channel mileage fixed rate on jointly owned circuits, and applies 100% on wholly owned circuits. When the Channel Mileage Facility is zero (i.e., collocated serving wire centers), neither the Channel Mileage Facility rate nor the Channel Mileage Termination rate will apply.

(D) Reserved for Future Use

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.2 Rate Categories (Cont'd)

(E) 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.

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

- Signaling Capability
- Hubbing Functions
- Conditioning

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.2 Rate Categories (Cont'd)

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

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 digital facilities to individual services requiring a lower capacity or bandwidth.

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

7.1.3 Service Configurations

There are three types of service configurations over which Special Access Services are provided: two-point service, multipoint service and a WATS Access Line.

(A) Two-Point Service

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

Applicable rate elements are:

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

7. Special Access Service (Cont'd)

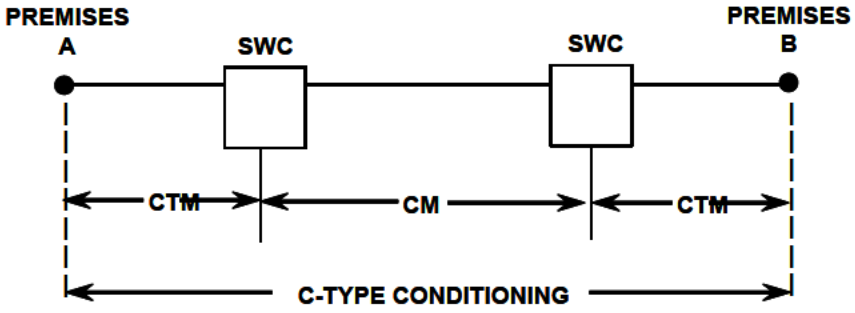
7.1 General (Cont'd)

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 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.



CTM - 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

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) selected from the Exchange Carrier Association Tariff. This tariff identifies the type(s) of bridging functions which are available and the serving wire centers at which they are available.

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

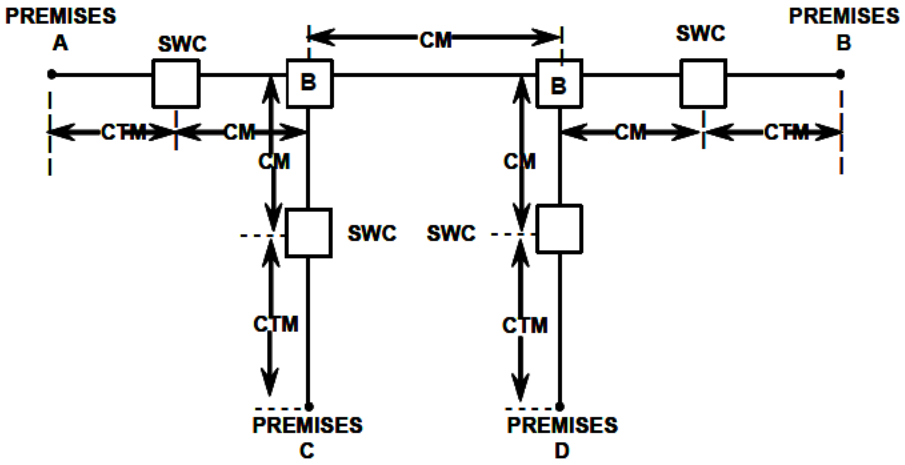
(B) Multipoint Service (Cont'd)

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
- Additional Optional Features (when applicable)

In addition, the Special Access Surcharge as set forth in 7.4.2 following may be applicable.

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



CTM - Channel Termination
CM - Channel Mileage
B - Bridging
SWC - Serving Wire Center

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

(B) Multipoint Service (Cont'd)

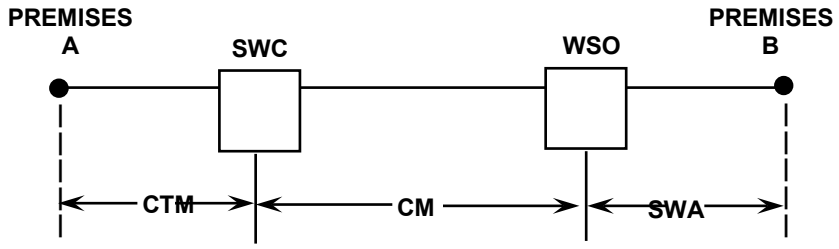
Applicable Rate Elements are:

- Channel Terminations (4 applicable)
- Channel Mileage (5 sections, each from appropriate mileage band)
- Bridging (0.6 applicable, i.e., each bridge port)

(C) **WATS Access Line Service** [1] (C)

WATS Access Line (WAL) provides a Voice Grade Channel Termination and Channel Mileage, where appropriate, between the End User premises and the WATS serving office and is used in conjunction with Switched Access Service as set forth in Paragraph 6.2.5, preceding.

The following diagram depicts a WATS Access Line service connecting a customer designated premises to the WATS serving office. The customer's serving wire center and the WATS serving office are located 10 miles apart.



CTM - Channel Termination
CM - Channel Mileage
SWC - Serving Wire Center
WSO - WATS Serving Office
SWA - Switched Access

[1] **Effective November 1, 2021 WATS Access Line Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

(C) **WATS Access Line Service** [1] (Cont'd) (C)

Applicable rate elements for the WATS Access Line are:

- Channel Termination (1 Applicable)
- Channel Mileage (mileage band over 8 to 25 miles)
- Optional Features and Functions (when applicable)

In addition, a Special Access Surcharge, as set forth in 7.4.2, following may be applicable.

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 and filed in Section 12. Specialized Service 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 [if any]).

7.1.5 Special Facilities Routing

A customer may request that the facilities used to pro-vide Special Access Service be specially routed. The regulations, Rates and Charges for Special Facilities Routing (i.e., Avoidance, Diversity and Cable-Only) are set forth in 11. following.

[1] **Effective November 1, 2021 WATS Access Line Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

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 be reissued or updated whenever these facilities are materially changed.

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, 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, for Voice Grade services, a balance (improved loss) test will be made if the customer has ordered the improved loss optional feature.

(B) For other analog services and for digital services (i.e., Digital Data and High Capacity Service), acceptance tests will include tests for the parameters applicable to the service as specified in the order for service.

In addition to the above tests, Additional Cooperative Acceptance Testing for Voice Grade Service to test other parameters, as described in 13.3.5(B) following, is available at the customer's request. All test will be made available to the customer upon request.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.1 General (Cont'd)

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.).

7.2 Service Descriptions

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

Voice Grade [1] (VG) (C)
Digital Data [1] (DA) (C)
High Capacity (HC)

Each service consists of a basic channel to which a technical specifications package (customized or predefined), channel interface(s) and, when desired, optional features and functions are added to construct the service desired by the customer. 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.

[1] **Effective November 1, 2021 Voice Grade and Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

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

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. However, communications can only be provided between points of termination with compatible channel interfaces. Only certain channel interfaces are compatible. These are set forth in 7.3.5 following in a combination format.

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 the 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.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

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.

The Telephone Company will maintain existing transmission specifications on services installed prior to the effective date of this tariff, except that the existing services with performance specifications exceeding the standard listed in this provision will be maintained at the performance levels specified in this tariff. All services installed after the effective date of this tariff will conform to the transmission specification standards contained in this tariff or in the following Technical Reference for each category of service:

Voice Grade [1]	GR-3334 TR-NWT-000335 MDP-326-584	(C)
Digital Data [1]	TR-NWT-000341 and MDP-326-726	(C)
High Capacity	GR-342 GR-54	

7.2.1 Reserved for Future Use

[1] **Effective November 1, 2021 Voice Grade and Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.1 Reserved for Future Use (Cont'd)

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.1 Reserved for Future Use (Cont'd)

7.2.2 Reserved for Future Use

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.2 Reserved for Future Use (Cont'd)

7.2.3 **Voice Grade Service** [1] (C)

(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 Hub.

[1] **Effective November 1, 2021 Voice Grade and Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.2 **Voice Grade Service** [1] (Cont'd) (C)

(B) Technical Specifications Packages (Cont'd)

	Package VG-												
Parameter	C*	1	2	3	4	5	6	7	8	9	10	11	12
Attenuation Distortion	X	X	X	X	X	X	X	X	X	X	X	X	X
C-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.

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 **Voice Grade Service** [1] (Cont'd) (C)

(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 Publication TR-NWT-000335. The technical specifications for dropouts, phase hits, and gain hits are delineated in Technical Reference Publication MDP-326-584.

(C) Channel Interfaces

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

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

Compatible channel interfaces are set forth in 7.3.5(C) following.

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 **Voice Grade Service** [1] (Cont'd) (C)

(D) Optional Features and Functions

(1) Central Office Bridging Capability

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

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

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

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

(e) Telemetry and Alarm Bridging

Split Band, Active Bridging
Passive Bridging
Summation, active Bridging

(2) Reserved for Future Use

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 **Voice Grade Service** [1] (Cont'd) (C)

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

(3) Conditioning

Conditioning provides more specific transmission characteristics for Voice Grade services.

More stringent specifications than those provided with C-Type conditioning are available separately for attenuation distortion and envelope delay distortion. The customer has the option of ordering Improved Attenuation Distortion and/or Improved Envelope Delay Distortion in lieu of C-Type conditioning.

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.

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 **Voice Grade Service** [1] (Cont'd) (C)

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

(3) Conditioning (Cont'd)

(500) 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

Frequency Range (Hz)	Variation (db)
400-2800	-1.0 to +2.0
300-3000	-1.0 to +3.0
3000-3200	-2.0 to +6.0

Envelope Delay Distortion

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

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 **Voice Grade Service** [1] (Cont'd) (C)

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

(3) Conditioning (Cont'd)

(b) Reserved for Future Use

© Sealing Current Conditioning

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

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 **Voice Grade Service** [1] (Cont'd) (C)

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

(4) Customer Specified Premises Receive Level

This option allows the customer to specify the receive level at the Point of Termination. This level must be within a specific range on effective four-wire transmission. The ranges are delineated in Technical Reference Publication TR-NWT-000335.

(5) 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 Publication TR-NWT-000335.

(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 Publication TR-NWT-000335.

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 **Voice Grade Service** [1] (Cont'd) (C)

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

(6) Data Capability

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

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

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

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 **Voice Grade Service** [1] (Cont'd) (C)

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

(7) 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
(1004 Hz Reference)

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

Envelope Delay Distortion

Frequency Range (Hz)	Variation (mcs)
1000-2600	110
800-2800	180

(8) 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.

(9) Reserved for Future Use

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 Voice Grade Service (Cont'd)

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

(10) Reserved for Future Use

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 **Voice Grade Service** [1] (Cont'd) (C)

(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-												
	C	1	2	3	4	5	6	7	8	9	10	11	12
C-Type Conditioning	X					X	X	X	X	X	X		
Central Office Bridging Capability	X		X			X	X				X	X	X
Central Office Multiplexing	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	X
For Effective Two-Wire Transmission		X		X	X				X				
Sealing Current Conditioning	X						X						
Signaling Capability	X	X	X	X				X	X	X			
Telephoto Capability	X											X	

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.3 **Voice Grade Service** [1] (Cont'd) (C)

(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.

7.2.4 Reserved for Future Use

[1] **Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.4 Reserved for Future Use

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.4 Reserved for Future Use

7.2.5 Reserved for Future Use

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.5 Reserved for Future Use (Cont'd)

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.5 Reserved for Future Use (Cont'd)

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.5 Reserved for Future Use (Cont'd)

7.2.6 Reserved for Future Use

7.2.7 Reserved for Future Use

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 **Digital Data Service** [1] (C)

(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, 19.2, 56 or 64 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 provided between customer designated premises or between a customer designated premises and a Telephone Company Hub where appropriate digital facilities are available as determined by the Telephone Company.

A Digital Service Unit/Channel Service Unit (DSU/CSU) or appropriate digital terminating equipment provided by the customer is required at the customer's premise to provide the proper interface between the Telephone Company network and the customer's equipment. The interim program for interconnection of such equipment is set forth in Technical Reference Publication PUB AS No. 1.

(B) Technical Specifications Packages

	Package DA-			
Parameter	1	2	3	4
Error-Free Seconds	X	X	X	X

The Telephone Company will provide a channel capable of meeting a monthly average performance equal to or greater than 99.875% error-free seconds 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 Publication MDP-326-726.

[1] **Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 **Digital Data Service** [1] (Cont'd) (C)

(C) Channel Interfaces

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

CI	Bit Rate
DU-24	2.4 Kbps
DU-48	4.8 Kbps
DU-96	9.6 Kbps
DU-19	19.2 Kbps
DU-56	56.0 Kbps
DU-64	64.0 Kbps

Compatible channel interfaces are set forth in 7.3.5(H) following.

(D) Optional Features and Functions

(1) Central Office Bridging Capability

Provides for the parallel connection of one virtual circuit to another virtual circuit without interrupting the integrity or continuity of the first. This service is only available from a company-designated digital hub.

[1] **Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 **Digital Data Service** [1] (Cont'd) (C)

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

(2) Data Amplification

Provides for data transmission when the customer is located beyond the normal range of 42 decibel (dB) loss for digital data service (56.0 kbps and 64.0 kbps). The dB loss is determined by the route and length of the cable in addition to the gauge of the cable from the last signaling point (usually, but not always the switching office) to the customer's premise. When the dB loss is greater than 42, a repeater and associated equipment must be installed to regenerate the digital signal for accurate and acceptable data transmission to occur.

[1] **Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.8 **Digital Data Service** [1] (Cont'd) (C)

(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 DA-			
	1	2	3	4
Central Office Bridging Capability	X	X	X	X
Data Amplification				X

7.2.9 High Capacity Service

(A) Basic Channel Description

A High Capacity channel is a channel for the transmission of nominal 1.544, 3.152, 6.312, 44.736, and 274.176 Mbps isochronous serial data. The actual bit rate and 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 Hub, where appropriate digital facilities are available as determined by the Telephone Company.

The customer must furnish the Digital Network Channel Terminating Equipment associated with the High Capacity channel at the customer's premises. The interim program for interconnection of such equipment is set forth in Technical Reference Publication PUB AS No. 1.

[1] **Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 High Capacity Service (Cont'd)

(A) Basic Channel Description (Cont'd)

Fractional DS1 channels [1] provide simultaneous, two-way transmission at contiguous bit rates of 128.0, 256.0 and 384.0 kbps. Fractional DS1 channels operate over the combined bandwidth of adjacent channels to create a contiguous bit rate. Due to technical limitations associated with the provision of Fractional DS1, this service will be offered only in end offices where a compatible channel bank exists and the distance between the central office and the customer designated premises is less than or equal to 12,000 feet. (C)

(B) Technical Specifications Packages

	Package HC-					
Parameter	0	1	IC	2	3	4
Error-Free Seconds	X	X				

A channel with technical specifications package HC1 will be capable of 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 Publication GR-54.

(C) Channel Interfaces

The following channel interface (CIs) defined the bit rates that are available for a High Capacity channel:

CI	Bit Rate
DS-15	1.544 Mbps (DS1)
DS-31	3.152 Mbps (DS1C)
DS-44	44.736 Mbps (DS3)

Compatible channel interfaces are set forth in 7.3.5(I) following.

[1] **Effective November 1, 2021 Fractional DS1 Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 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. Spare channel priority is given to the lowest numbered slot based upon slot position. Slot position number one is given highest priority. 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. This feature is not available with 1.544 Mbps channels having the B8ZS line code.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 High Capacity Service (Cont'd)

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

(2) Central Office Multiplexing

(a) DS3 to DS1

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

(b) DS1C to DS1

An arrangement that converts a 3.152 Mbps channel to two DS1 channels using digital time division multiplexing.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 High Capacity Service (Cont'd)

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

(2) Central Office Multiplexing (Cont'd)

(c) **DS1 to Voice** [1] (C)

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

(d) **DS1 to DS0** [1] (C)

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

[1] **Effective November 1, 2021 Voice Grade and Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.9 High Capacity Service (Cont'd)

(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 HC-					
	0	1	1C	2	3	4
Automatic Loop Transfer		X				
Central Office Multiplexing:						
DS1 to Voice		X				
DS1 to DS0		X				
DS3 to DS1					X	
DS1C to DS1			X			
Clear Channel Capability		X			X	

7.2.10 Clear Channel Capability

Clear Channel Capability (CCC) is an arrangement that alters a DS1/1.544 Mbps signal with unconstrained information bits to meet pulse density requirements outlined in Technical Reference Publications GR-54 and GR-342. This will allow a customer to transport an all zero octet over a DS1/1.544 Mbps High Capacity channel providing an available combined maximum 1.536 Mbps data rate. This arrangement requires the customer signal at the channel interface to conform to Bipolar with 8 Zero Substitution (B8ZS) line code as described in Technical Reference Publications GR-54 and GR-342.

CCC is provided on DS1/1.544 Mbps High Capacity channels between two customer designated premises and is subject to the availability of facilities. This optional feature may be ordered at the same time the DS1/1.544 Mbps High Capacity channel is ordered, or it may be ordered as an additional feature of an existing channel.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.10 Reserved for Future Use (Cont'd)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.10 Reserved for Future Use (Cont'd)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.11 **WATS Access Line (WAL) Service** [1] (C)

(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 TFC Service, WATS or similar service. It is provided only for use with Feature Group C or D Switched Access Service as set forth in Section 6 preceding.

WAL Service is arranged for either originating calling only or terminating calling only. It is provided with either rotary dial or dual tone multifrequency address signaling and either loop start, ground start, E&M, or reverse battery supervisory signaling. The choice of the type of signaling is at the option of the customer

[1] **Effective November 1, 2021 WATS Access Line Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.11 **WATS Access Line (WAL) Service** [1] (Cont'd) (C)

(A) Basic Channel Description (Cont'd)

Subject to the technical limitations identified in the Technical Publication GR-3334. WATS Access Line Service is provided as an effective two-wire, an effective four-wire or a DS1 (i.e., 1.544 Mbps) transmission path.

(B) Technical Specification Packages

	Packages WAL		
Parameters	1	2	3
Attenuation Distortion	X	X	
Bit error rate			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	

(C) Channel Interfaces

The following interfaces are available with WAL Service:

LO, LS, DS, GO, GS RV, EA, EB, SF

Compatible channel interfaces are set forth in 7.3.5.(J)

[1] **Effective November 1, 2021 WATS Access Line Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.11 **WATS Access Line (WAL) Service** [1] (Cont'd) (C)

(D) Optional Features and Functions

(1) Two-wire and four wire Central office bridging capability.

(2) Improved two-wire and four-wire voice transmission specifications.

(3) Signaling Capability

(4) Certain other options associated with WAL services are available as Local Switching optional features as defined in Section 6 preceding.

7.2.12 Special Access Service Utilized for Connection with Switched Access Service

(A) Basic Service Description

A special access service utilized for connection with a switched access service implemented as a voice grade dedicated communications path between the customer's end user and a WATS Serving Office (WSO) equipped with Feature Groups A, B, C or D service, together, form the functional parts that are the major building blocks of the WATS* service. Switched access optional arrangements are available as set forth in Section 6.3. Both of these functional elements are necessary to provide service from the customer's end user to the customer's designated premises.

* Use of the Terms "WATS" and/or "WATS like" is descriptive only and is not intended to restrict provision of a WSAC to a specific type of service.

[1] **Effective November 1, 2021 WATS Access Line Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.** (N) (N)

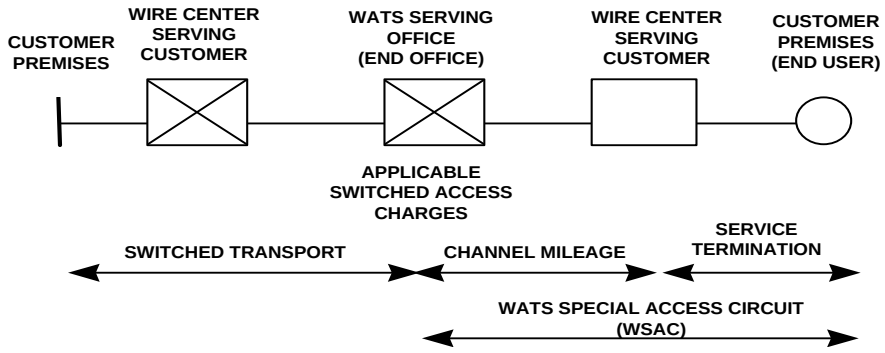
7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.12 Special Access Service Utilized for Connection with Switched Access Service (Cont'd)

(A) Basic Service Description (Cont'd)

A WATS special access circuit (WSAC) may be provided as an originating only, terminating only, or two way (originating and terminating) service, at the option of the customer. If a WSO is not capable of implementing a state-mandated restriction, the WSAC will be extended free of charge to the nearest WSO capable of performing the necessary function.



(N)

ACCESS SERVICE (N)

7. Special Access Service (Cont'd)

7.2 Service Descriptions (Cont'd)

7.2.12 Special Access Service Utilized for Connection with Switched Access Service (Cont'd)

(B) WATS Special Access Circuit (WSAC)

A WATS Special Access Circuit (WSAC) is comprised of a Channel Termination between the customer's end user serving wire center and the customer's end user premises as specified in Section 7.1.2(A). If the WSO and the end user's serving wire center are not the same, Channel Mileage as specified in Section 7.1.2(B) preceding is applicable from the end user's serving wire center to the WSO.

The transmission path is offered as either effective two-wire, effective four-wire, or a high capacity access connection. This service is provided with rotary dial or dual tone multi-frequency address signaling, and with either loop start or ground start signaling. Additionally, other optional features such as improved return loss can be provided.

(C) Voice Grade Service Restrictions

When a WSAC, as described in (B) preceding, is used for multi-jurisdictional access, and when the Telephone Company's intrastate tariff provides for customer billing for these facilities, the Telephone Company will exempt the customer from the intrastate charges related to the WSAC and channel mileage where applicable. All calls carried over a special access line used in conjunction with common switching optional features for multi-jurisdictional access will be passed to the customer for completion except when state restrictions apply or when the end user voluntarily uses a multiple carrier access code (assuming 101XXXX dialing has not been restricted by the customer).

When the WSAC is provisioned with Feature Group A, it can only be used for service in the terminating direction. (N)

7.2.13 Reserved for Future Use (M)

(M) This material previously appeared on Page 329.

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes

Network Channel Codes are comprised of four characters. The first and second characters describe the technical specifications package within the service type. The third and fourth characters describe and specify options associated with the service. The Telephone Company abides by nationally accepted standards in its use of Network Channel Codes and are available from the Telephone Company upon request.

Channel Interface Codes describe the electrical characteristics of the interface at the customer's premises. Compatible Channel Interface codes for the requested service must be specified by the customer when ordering the services. Channel Interface codes for each category of Special Access Service can be found in the Technical Reference Publications set forth in 7.2 preceding.

7.3.1 Glossary of Channel Interface Codes and Options

Code	Option		Definition
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
AH	-		analog high capacity interface
	-	B	60 kHz to 108 kHz (12 channels)
	-	C	312 kHz to 552 kHz (60 channels)
	-	D	564 kHz to 3084 kHz (600 channels)
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

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)

Code		Option	Definition
DC	-		direct current or voltage
	-	1	monitoring interface with series RC combination (McCulloh format)
	-	2	Telephone Company energized alarm channel
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 plus D4
	-	15B	1.544 Mbps (DS1) format plus D4 with B8ZS clear channel capability
	-	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
	-	15K	1.544 Mbps format plus extended framing format
	-	15L	1.544 Mbps (DS1) with SF signaling
	-	15S	1.544 Mbps using B8ZS line code and extended framing format
	-	27	274.176 Mbps (DS4)
	-	27L	274.176 Mbps (DS4) with SF signaling
	-	31	3.152 Mbps (DS1C)
	-	31L	3.152 Mbps (DS1C) with SF signaling
	-	44	44.736 Mbps (DS3)
	-	44L	44.736 Mbps (DS3) with SF signaling

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)

Code		Option	Definition
DU	-		digital access interface
	-	24	2.4 kbps
	-	48	4.8 kbps
	-	56	56.0 kbps
	-	64	64.0 kbps
	-	96	9.6 kbps
	-	A	1.544 Mbps format
	-	B	1.544 Mbps format plus D4
	-	C	1.544 Mbps format plus extended framing format
	-	D	1.544 Mbps format plus D4 with B8ZS clear channel capability
	-	S	1.544 Mbps using B8ZS line code and extended framing format
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

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)

Code		Option	Definition
GO	-		ground start loop signaling - open end function by customer or customer's end user
GS	-		ground start loop signaling - closed end function by customer or customer's end user
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
LS	-		loop start loop signaling - closed end function by customer or customer's end user
NO	-		no signaling interface, transmission only
PG	-		program transmission - no dc signaling
	-	1	nominal frequency from 50 to 15000 Hz
	-	3	nominal frequency from 200 to 3500 Hz
	-	5	nominal frequency from 100 to 5000 Hz
	-	8	nominal frequency from 50 to 8000 Hz
PR	-		protective relaying*
RV	-	0	reverse battery signaling, one way operation, originate by customer
	-	T	reverse battery signaling, one way operation, terminate function by customer or customer's end user
SF	-		single frequency signaling with VF band at either customer POT or customer's end user POT
TF	-		telephotograph interface
TT	-		teletypewriter interface at either customer POT or customer's end user POT

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

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)

Code		Option	Definition
TT	-	2	20.0 milliamperes
	-	3	3.0 milliamperes
	-	6	62.5 milliamperes

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:

Value (ohms)	Code(s)
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 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 Hierarchy Channel Interface Codes (4DS)

Customers selecting the multiplexed four-wire DS1 or higher 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 the channel interface code 4DS9, 4DSO or 4DS6, plus the speed option is indicated below:

Interface Code and Speed Option	Nominal Bit Rate (Mbps)	Digital Hierarchy Level
4DS9-15	1.544	DS1
4DS9-31	3.152	DS1C
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, DA1, etc.) and the network channel codes that are used for various administrative purposes:

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)

Service Designator Code	Network Channel Code
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
APC	PQ
AP1	PE
AP2	PF
AP3	PJ
AP4	PK
TVC	TQ
TV1	TV
TV2	TW

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)

Service Designator Code	Network Channel Code
DA1	XA
DA2	XB
DA3	XG
DA4	XH
HCO	HS
HC1	HC
HC1C	HD
HC2	HE
HC3	HF
HC4	HG
WAL	SE

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces

The following tables show the channel interface codes (CIs) which are compatible:

(A) Reserved for Future Use

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(B) Reserved for Future Use

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(C) Voice Grade

Compatible CIs		Compatible CIs		Compatible CIs	
4AB2	4AB2				
4AB2	4AC2	4AH5-B	6DA2	4AH6-D	2DY2
4AB3	4AC2	4AH5-B	4DA2	4AH6-C	9DY2
4AB2	2AC2	4AH5-B	2DA2	4AH6-C	9DY3
4AB3	2AC2			4AH6-C	6DY2
2AB2	2AC2	4AH6-D	4DE2	4AH6-C	6DY3
2AB3	2AC2	4AH6-C	4DE2	4AH6-C	4DY2
		4AH5-B	4DE2	4AH6-C	2DY2
4AB2	4SF2	4AH6-D	2DE2	4AH5-B	9DY2
4AB3	4SF2	4AH6-C	2DE2	4AH5-B	9DY3
		4AH5-B	2DE2	4AH5-B	6DY2
4AH6-D	4AC2			4AH5-B	6DY3
4AH6-D	2AC2	4AH6-D	4DX3	4AH5-B	4DY2
4AH6-C	4AC2	4AH6-C	4DX3	4AH5-B	2DY2
4AH6-C	2AC2	4AH5-B	4DX3		
4AH5-B	4AC2	4AH6-D	4DX2	4AH6-D	9EA2
4AH5-B	2AC2	4AH6-C	4DX2	4AH6-D	9EA3
		4AH5-B	4DX2	4AH6-D	6EA2-E
4AH6-D	2CT3			4AH6-D	6EA2-M
4AH6-C	2CT3	4AH6-D	9DY2	4AH6-D	4EA2-E
4AH5-B	2CT3	4AH6-D	9DY3	4AH6-D	4EA2-M
4AH6-D	6DA2	4AH6-D	6DY2	4AH6-C	9EA2
4AH6-D	4DA2	4AH6-D	6DY3	4AH6-C	9EA3
4AH6-D	2DA2	4AH6-D	4DY2	4AH6-C	6EA2-E
4AH6-C	6DA2				
4AH6-C	4DA2				
4AH6-C	2DA2				

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(C) Voice Grade (Cont'd)

Compatible CIs		Compatible CIs		Compatible CIs	
4AH6-C	6EA2-M	4AH6-D	6GS2	4AH6-D	2LO2
4AH6-C	4EA2-E	4AH6-D	4GS2	4AH6-C	2LO3
4AH6-C	4EA2-M	4AH6-D	2GS3	4AH6-C	2LO2
4AH5-B	9EA2	4AH6-D	2GS2	4AH5-B	2LO3
4AH5-B	9EA3	4AH6-C	6GS2	4AH5-B	2LO2
4AH5-B	6EA2-E	4AH6-C	4GS2		
4AH5-B	6EA2-M	4AH6-C	2GS3	4AH6-D	4LR2
4AH5-B	4EA2-E	4AH6-C	2GS2	4AH6-D	2LR2
4AH5-B	4EA2-M	4AH5-B	6GS2	4AH6-C	4LR2
		4AH5-B	4GS2	4AH6-C	2LR2
4AH6-D	8EB2-E	4AH5-B	2GS3	4AH5-B	4LR2
4AH6-D	8EB2-M	4AH5-B	2GS2	4AH5-B	2LR2
4AH6-D	6EB2-E				
4AH6-D	6EB2-M	4AH6-D	2LA2	4AH6-D	6LS2
4AH6-C	8EB2-E	4AH6-C	2LA2	4AH6-D	4LS2
4AH6-C	8EB2-M	4AH5-B	2LA2	4AH6-D	2LS2
4AH6-C	6EB2-E			4AH6-D	2LS3
4AH6-C	6EB2-M	4AH6-D	2LB2	4AH6-C	6LS2
4AH5-B	8EB2-E	4AH6-C	2LB2	4AH6-C	4LS2
4AH5-B	8EB2-M	4AH5-B	2LB2	4AH6-C	2LS2
4AH5-B	6EB2-E			4AH6-C	2LS3
4AH5-B	6EB2-M	4AH6-D	2LC2	4AH5-B	6LS2
		4AH6-C	2LC2	4AH5-B	4LS2
4AH6-D	2GO2	4AH5-B	2LC2	4AH5-B	2LS2
4AH6-D	2GO3			4AH5-B	2LS3
4AH6-C	2GO2	4AH6-D	2LO3		
4AH6-C	2GO3				
4AH5-B	2GO2				
4AH5-B	2G03				

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(C) Voice Grade (Cont'd)

Compatible CIs		Compatible CIs		Compatible CIs	
4AH6-D	4NO2	4AH6-D	4TF2	2CT3	6EB2-E
4AH6-D	2NO2	4AH6-D	2TF2	2CT3	6EB2-M
4AH6-C	4NO2	4AH6-C	4TF2	2CT3	6EB3-E
4AH6-C	2NO2	4AH6-C	2TF2		
4AH5-B	4NO2	4AH5-B	4TF2	2CT3	8EB2-E
4AH5-B	2NO2	4AH5-B	2TF2	2CT3	8EB2-M
		2CT3	2CT3		
4AH6-D	4PR2	2CT3	4DS9-*	2CT3	8EC2
4AH6-D	2PR2				
4AH6-C	4PR2	2CT3	6DX2	2CT3	4SF2
4AH6-C	2PR2	2CT3	4DX2	2CT3	4SF3
4AH5-B	4PR2	2CT3	4DX3		
4AH5-B	2PR2				
4AH6-D	4RV2-T	2CT3	9DY3		
4AH6-D	2RV2-T	2CT3	6DY3		
4AH6-C	4RV2-T	2CT3	9DY2		
4AH6-C	2RV2-T	2CT3	6DY2		
4AH5-B	4RV2-T	2CT3	4DY2		
4AH5-B	2RV2-T	2CT3	2DY2		
4AH6-D	4SF2	2CT3	9EA3		
4AH6-C	4SF2	2CT3	9EA2		
4AH5-B	4SF2	2CT3	6EA2-E		
4AH6-D	4SF3	2CT3	6EA2-M		
4AH6-C	4SF3	2CT3	4EA2-E		
4AH5-B	4SF3	2CT3	4EA2-M		

* See 7.3.3 preceding for explanation.

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(C) Voice Grade (Cont'd)

Compatible CIs		Compatible CIs	
		4DS9-*	4AC2
		4DS9-*	2AC2
		4DS9-*	6DA2
		4DS9-*	4DA2
		4DS9-*	2DA2
6DA2	6DA2	4DS9-*	4DE2
6DA2	4DA2	4DS9-*	2DE2
6DA2	2DA2		
4DA2	4DA2		
4DA2	2DA2		
2DA2	2DA2		
		4DS9-*	4DX3
4DB2	6DA2	4DS9-*	4DX2
4DB2	4DA2		
4DB2	2DA2	4DS9-*	9DY3
2DB3	2DA2	4DS9-*	9DY2
2DB2	2DA2	4DS9-*	6DY3
4DB2	4DB2	4DS9-*	6DY2
4DB2	4NO2	4DS9-*	4DY2
4DB2	2NO2	4DS9-*	2DY2
2DB2	2NO2		
		4DS9-*	9EA2
4DB2	4PR2	4DS9-*	9EA3
4DB2	2PR2	4DS9-*	6EA2-E
2DB2	2PR2	4DS9-*	6EA2-M
		4DS9-*	4EA2-E
4DD3	4DE2	4DS9-*	4EA2-M
4DD3	2DE2		

* See 7.3.3 preceding for explanation.

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(C) Voice Grade (Cont'd)

Compatible CIs		Compatible CIs		Compatible CIs	
4DS9-*	8EB2-E	4DS9-*	4NO2	4DX3	9DY2
4DS9-*	8EB2-M	4DS9-*	2NO2	4DX2	6DY3
4DS9-*	6EB2-E			4DX3	6DY3
4DS9-*	6EB2-M	4DS9-*	4PR2	4DX2	6DY2
		4DS9-*	2PR2	4DX3	6DY2
4DS9-*	2GO2			4DX2	4DY2
4DS9-*	2G03	4DS9-*	4RV2-T	4DX3	4DY2
4DS9-*	6GS2	4DS9-*	2RV2-T	4DX2	2DY2
4DS9-*	4GS2			4DX3	2DY2
4DS9-*	2GS2	4DS9-*	4SF2		
4DS9-*	2GS3	4DS9-*	4SF3	6DX2	9EA3
				6DX2	9EA2
4DS9-*	2LA2	4DS9-*	4TF2	6DX2	6EA2-E
		4DS9-*	2TF2	6DX2	6EA2-M
4DS9-*	2LB2			6DX2	4EA2-E
		4DX2	4DX2	6DX2	4EA2-M
4DS9-*	2LC2	4DX3	4DX2	4DX2	9EA2
		4DX3	4DX3	4DX3	9EA2
4DS9-*	2LO2			4DX2	9EA3
4DS9-*	2LO3	6DX2	9DY3	4DX3	9EA3
		6DX2	9DY2	4DX2	6EA2-E
4DS9-*	4LR2	6DX2	6DY3	4DX3	6EA2-E
4DS9-*	2LR2	6DX2	6DY2	4DX2	6EA2-M
		6DX2	4DY2	4DX3	6EA2-M
4DS9-*	6LS2	6DX2	2DY2	4DX2	4EA2-E
4DS9-*	4LS2	4DX2	9DY3	4DX3	4EA2-E
4DS9-*	2LS2	4DX3	9DY3	4DX2	4EA2-M
4DS9-*	2LS3	4DX2	9DY2	4DX3	4EA2-M

* See 7.3.3 precedng for explanation.

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(C) Voice Grade (Cont'd)

Compatible CIs		Compatible CIs		Compatible CIs	
6DX2	8EB2-E	4DX2	6LS2	9DY2	6DY3
6DX2	8EB2-M	4DX3	6LS2	9DY3	4DY2
6DX2	6EB2-E	4DX3	4LS2	9DY2	4DY2
6DX2	6EB2-M	4DX2	4LS2	9DY2	2DY2
4DX2	8EB2-E	4DX3	2LS3	9DY3	2DY2
4DX2	8EB2-M	4DX2	2LS3	6DY3	6DY3
4DX3	8EB2-E	4DX3	2LS2	6DY3	6DY2
4DX3	8EB2-M	4DX2	2LS2	6DY2	6DY2
4DX2	6EB2-E	2DX3	2LS2	6DY3	4DY2
4DX2	6EB2-M	2DX3	2LS3	6DY3	2DY2
4DX3	6EB2-E			6DY2	4DY2
4DX3	6EB2-M	4DX3	4RV2-T	6DY2	2DY2
		4DX2	4RV2-T	4DY2	2DY2
4DX2	2LA2	4DX3	2RV2-T	4DY2	4DY2
4DX3	2LA2	4DX2	2RV2-T	2DY2	2DY2
2DX3	2LA2			6EA2-E	4AC2
		6DX2	4SF2	6EA2-M	4AC2
4DX2	2LB2	4DX2	4SF2	6EA2-E	2AC2
4DX3	2LB2	4DX3	4SF2	6EA2-M	2AC2
2DX3	2LB2	4DX2	4SF3		
		4DX3	4SF3	9EA2	9DY3
4DX2	2LC2			9EA2	9DY2
4DX3	2LC2	9DY3	9DY3	9EA2	6DY3
2DX3	2LC2	9DY3	9DY2	9EA2	6DY2
		9DY2	9DY2	9EA2	4DY2
4DX2	2LO3	9DY3	6DY3	9EA2	2DY2
4DX3	2LO3	9DY3	6DY2	9EA3	9DY3
2DX3	2LO3	9DY2	6DY2		

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7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(C) Voice Grade (Cont'd)

Compatible CIs		Compatible CIs		Compatible CIs	
9EA3	9DY2	4EA2-M	9DY2	4EA3-E	9EA2
9EA3	6DY3	4EA2-M	6DY3	4EA3-E	9EA3
9EA3	6DY2	4EA2-M	6DY2	4EA2-M	4EA2-M
9EA3	4DY2	4EA2-M	4DY2		
9EA3	2DY2	4EA2-M	2DY2	9EA2	8EB2-E
6EA2-E	9DY3			9EA2	8EB2-M
6EA2-E	9DY2	9EA2	9EA2	9EA2	6EB2-E
6EA2-E	6DY3	9EA2	9EA3	9EA2	6EB2-M
6EA2-E	6DY2	9EA2	6EA2-E	9EA3	9EB2-E
6EA2-E	4DY2	9EA2	6EA2-M	9EA3	8EB2-M
6EA2-E	2DY2	9EA2	4EA2-E	9EA3	6EB2-E
6EA2-M	9DY3	9EA2	4EA2-M	9EA3	6EB2-M
6EA2-M	9DY2	9EA3	9EA3	6EA2-E	8EB2-E
6EA2-M	6DY3	9EA3	6EA2-E	6EA2-E	8EB2-M
6EA2-M	6DY2	9EA3	6EA2-M	6EA2-E	6EB2-E
6EA2-M	4DY2	9EA3	4EA2-E	6EA2-E	6EB2-M
6EA2-M	2DY2	9EA3	4EA2-M	6EA2-M	8EB2-E
4EA2-E	9DY3	6EA2-E	6EA2-E	6EA2-M	8EB2-M
4EA2-E	9DY2	6EA2-E	6EA2-M	6EA2-M	6EB2-E
4EA3-E	9DY3	6EA2-M	6EA2-M	6EA2-M	6EB2-M
4EA3-E	9DY2	6EA2-E	4EA2-E	4EA2-E	8EB2-E
4EA3-E	6DY3	6EA2-E	4EA2-M	4EA2-E	8EB2-M
4EA3-E	6DY2	6EA2-M	4EA2-E	4EA3-E	9EB2-E
4EA3-E	4DY2	6EA2-M	4EA2-M	4EA3-E	8EB2-M
4EA3-E	2DY2	4EA2-E	4EA2-E	4EA2-E	6EB2-E
4EA2-E	6DY3	4EA3-E	6EA2-E	4EA2-E	6EB2-M
4EA2-E	6DY2	4EA3-E	6EA2-M	4EA3-E	6EB2-E
4EA2-E	4DY2	4EA3-E	4EA2-E	4EA3-E	6EB2-M
4EA2-E	2DY2	4EA3-E	4EA2-M	4EA2-M	8EB2-E
4EA2-M	9DY3	4EA2-E	4EA2-M		

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(C) Voice Grade (Cont'd)

Compatible CIs		Compatible CIs		Compatible CIs	
4EA2-M	8EB2-M	9EA3	4SF2	6EB3-E	9DY2
4EA2-M	6EB2-E	9EA2	4SF2	6EB3-E	9DY3
4EA2-M	6EB2-M	6EA2-E	4SF3	6EB2-E	6DY2
		6EA2-M	4SF3	6EB3-E	6DY2
6EA2-E	2LA2	6EA2-E	4SF2	6EB2-E	6DY3
6EA2-M	2LA2	6EA2-M	4SF2	6EB3-E	6DY3
		4EA3-E	4SF2	6EB2-E	4DY2
6EA2-E	2LB2	4EA2-E	4SF2	6EB3-E	2DY2
6EA2-M	2LB2	4EA2-M	4SF2	6EB3-E	4DY2
				6EB2-M	9DY2
6EA2-E	2LC2	8EB2-E	4AC2	6EB2-M	9DY3
6EA2-M	2LC2	8EB2-M	4AC2	6EB2-M	6DY2
		8EB2-E	2AC2	6EB2-M	6DY3
6EA2-E	2LO3	8EB2-M	2AC2	6EB2-M	4DY2
6EA2-M	2LO3			6EB2-E	2DY2
		8EB2-E	9DY3	6EB2-M	2DY2
6EA2-E	6LS2	8EB2-E	9DY2		
6EA2-M	6LS2	8EB2-E	6DY3	6EB3-E	9EA2
6EA2-E	4LS2	8EB2-E	6DY2	6EB3-E	9EA3
6EA2-M	4LS2	8EB2-E	4DY2	6EB3-E	6EA2-E
6EA2-E	2LS2	8EB2-E	2DY2	6EB3-E	6EA2-M
6EA2-M	2LS2	8EB2-M	9DY3	6EB3-E	4EA2-E
6EA2-E	2LS3	8EB2-M	9DY2	6EB3-E	4EA2-M
6EA2-M	2LS3	8EB2-M	6DY3		
		8EB2-M	6DY2	8EB2-E	8EB2-E
6EA2-E	4RV2-T	8EB2-M	4DY2	8EB2-E	8EB2-M
6EA2-M	4RV2-T	8EB2-M	2DY2	8EB2-M	8EB2-M
6EA2-E	2RV2-T	6EB2-E	9DY2	8EB2-E	6EB2-E
6EA2-M	2RV2-T	6EB2-E	9DY3	8EB2-E	6EB2-M

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(C) Voice Grade (Cont'd)

Compatible CIs		Compatible CIs		Compatible CIs	
8EB2-M	6EB2-E	8EB2-E	4RV2-T	8EC2	8EB2-M
8EB2-M	6EB2-M	8EB2-M	4RV2-T	8EC2	6EB2-E
6EB2-E	6EB2-E	8EB2-E	2RV2-T	8EC2	6EB2-M
6EB2-E	6EB2-M	8EB2-M	2RV2-T		
6EB3-E	8EB2-E			8EC2	4SF2
6EB3-E	8EB2-M	8EB2-E	4SF2	6EX2-B	2GO3
6EB2-M	6EB2-M	8EB2-M	4SF2	6EX2-A	6GS2
		8EB2-E	4SF3	6EX2-A	4GS2
8EB2-E	2LA2	8EB2-M	4SF3	6EX2-A	2GS2
8EB2-M	2LA2	6EB3-E	4SF2	6EX2-A	2GS3
		6EB2-E	4SF2		
8EB2-E	2LB2	6EB2-M	4SF2	6EX2-B	2LA2
8EB2-M	2LB2				
		8EC2	9DY2	6EX2-B	2LB2
8EB2-E	2LC2	8EC2	9DY3		
8EB2-M	2LC2	8EC2	6DY2	6EX2-B	2LC2
		8EC2	6DY3		
8EB2-E	2LO3	8EC2	4DY2	6EX2-B	2LO2
8EB2-M	2LO3	8EC2	2DY2	6EX2-B	2LO3
8EB2-E	6LS2	8EC2	9EA2	6EX2-B	4LR2
8EB2-M	6LS2	8EC2	9EA3	6EX2-B	2LR2
8EB2-E	4LS2	8EC2	6EA2-E		
8EB2-M	4LS2	8EC2	6EA2-M	6EX2-A	6LS2
8EB2-E	2LS2	8EC2	4EA2-E	6EX2-A	4LS2
8EB2-M	2LS2	8EC2	4EA2-M	6EX2-A	2LS2
8EB2-E	2LS3			6EX2-A	2LS3
8EB2-M	2LS3	8EC2	8EB2-E		

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(C) Voice Grade (Cont'd)

Compatible CIs		Compatible CIs		Compatible CIs	
6EX2-A	4SF2	6LO2	6LS2	4LR2	4SF2
6EX2-B	4SF2	6LO2	4LS2	4LR3	4SF2
		6LO2	2LS2		
6GO2	6GS2	6LO2	2LS3	6LS2	2LA2
6GO2	4GS2	4LO2	6LS2	4LS2	2LA2
6GO2	2GS2	4LO2	4LS2	4LS3	2LA2
6GO2	2GS3	4LO3	6LS2	2LS2	2LA2
4GO2	6GS2	4LO3	4LS2	2LS3	2LA2
4GO3	6GS2	4LO3	2LS3		
4GO2	4GS2	4LO3	2LS2	6LS2	2LB2
4GO3	4GS2	4LO2	2LS2	4LS2	2LB2
4GO2	2GS2	4LO2	2LS3	4LS3	2LB2
4GO2	2GS3	2LO3	2LS3	2LS2	2LB2
4GO3	2GS2	2LO3	2LS2	2LS3	2LB2
4GO3	2GS3	2LO2	2LS2		
2GO2	2GS2	2LO2	2LS3	6LS2	2LC2
2GO3	2GS2			4LS2	2LC2
2GO2	2GS3	6LO2	4SF2	4LS3	2LC2
2GO3	2GS3	4LO2	4SF2	2LS2	2LC2
		4LO3	4SF2	2LS3	2LC2
6GO2	4SF2				
4GO2	4SF2	4LR3	4LR2	6LS2	2LO3
4GO3	4SF2	4LR3	2LR2	6LS2	2LO2
		4LR2	4LR2	4LS2	2LO2
6GS2	2GO2	4LR2	2LR2	4LS2	2LO3
4GS2	4GO2	2LR2	2LR2	4LS3	2LO2
4GS3	2GO2	2LR3	2LR2	4LS3	2LO3
4GS2	2GO3				

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(C) Voice Grade (Cont'd)

Compatible CIs		Compatible CIs		Compatible CIs	
6LS2	4SF2	4SF3	9DY2	4SF3	2LA2
4LS3	4SF2	4SF2	9DY3		
		4SF3	6DY3	4SF2	2LB2
4NO2	6DA2	4SF2	6DY2	4SF3	2LB2
4NO2	4DA2	4SF2	6DY3		
4NO2	2DA2	4SF3	6DY2	4SF2	2LC2
2NO2	6DA2	4SF2	4DY2	4SF3	2LC2
2NO2	4DA2	4SF3	4DY2		
2NO2	4DE2	4SF3	2DY2	4SF2	2LO3
4NO2	2DE2	4SF2	2DY2	4SF3	2LO3
4NO2					
4NO2	4NO2	4SF3	9EA2	4SF2	2LR2
4NO2	2NO2	4SF3	9EA3	4SF3	4LR2
2NO2	2NO2	4SF3	4EA2-E	4SF3	2LR2
2NO3	2NO2	4SF3	4EA2-M		
				4SF3	6LS2
2NO3	2PR2	4SF3	6EB2-E	4SF2	4LS2
		4SF3	6EB2-M	4SF3	4LS2
4RV2-0	4RV2-T	4SF2	2GO3	4SF2	2LS2
4RV2-0	2RV2-T	4SF3	6GS2	4SF2	2LS3
2RV2-0	2RV2-T	4SF2	6GS2	4SF3	2LS2
		4SF2	4GS2	4SF3	2LS3
4RV2-0	4SF2	4SF3	4GS2		
		4SF2	2GS2	4SF3	4RV2-T
4SF2	4AC2	4SF2	2GS3	4SF2	4RV2-T
4SF2	2AC2	4SF3	2GS2	4SF2	2RV2-T
		4SF3	2GS3	4SF3	2RV2-T
4SF3	9DY3				
4SF2	9DY2	4SF2	2LA2	4SF3	4SF3

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(C) Voice Grade (Cont'd)

Compatible CIs	
4SF3	4SF2
4SF2	4SF2
4TF2	4TF2
4TF2	2TF2
2TF3	2TF2

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(D) Reserved For Future Use (T)

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(E) Reserved For Future Use (T)

(D)

(D)

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(F) Reserved for Future Use

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(G) Reserved for Future Use

(H) Digital Data

Compatible CIs		Compatible CIs		Compatible CIs	
4DS9-15	4DS9-15+	4DS8-15	6DU5-48		
4DS9-15	4DU5-24	4DS8-15	6DU5-56	4DU5-96	4DU5-96
4DS9-15	4DU5-48	4DS8-15	6DU5-96	6DU5-24	6DU5-24
4DS9-15	4DU5-56	4DU5-24	4DU5-24	6DU5-48	6DU5-48
4DS9-15	4DU5-96	4DU5-48	4DU5-48	6DU5-56	6DU5-56
4DS9-15	6DU5-24	4DU5-56	4DU5-56	6DU5-96	6DU5-96

+ Available only as a cross connect of two digital channels at appropriate digital speeds at a Telephone Company Hub.

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7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(I) High Capacity Service

Compatible CIs		Compatible CIs	
4DSO-63	4DSO-63	4DS9-15	4DU8-B
4DSO-63	6DU8-A,B or C	4DS9-15J	6DU8-A
4DSO-63	4DU8-A,B or C	4DS9-15J	4DU8-A
4DS6-27	4DS6-27	4DS9-15K	6DU8-B
4DS6-27	6DU8-A,B or C	4DS9-15K	4DU8-B
4DS6-27	4DU8-A,B or C	4DS9-15K	6DU8-C
4DS6-44	4DS6-44	4DS9-15K	4DU8-C
4DS6-44	6DU8-A,B or C	4DS9-31	4DS9-31
4DS6-44	4DU8-A,B or C	4DS9-31	6DU8-A,B OR C
4DS9-15	4DS9-15+	4DS9-31	4DU8-A,B or C
4DS9-15J	4DS9-15J	4DU8-A,B or C	4DU8-A,B or C
4DS9-15K	4DS9-15K		
4DS9-5	6DU9-B		

+ Available only as a cross connect of two digital channels at appropriate digital speeds at a Telephone Company Hub.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Channel Interface and Network Channel Codes (Cont'd)

7.3.5 Compatible Channel Interfaces (Cont'd)

(J) WATS Access Line (WAL)

Compatible CIs		Compatible CIs		Compatible CIs	
4DS9*	4DS9*	2GO3	4DS9*	2RV3-0	4DS9*
4EA3	2CT3	2GO3	2GS2	2RV3-0	6EA2
4EA3	4CT2	2GO3	2GS3	2RV3-0	8EB2
4EA3	4DS9*	2GO3	4GS2	2RV3-0	2RV2-T
4EA3	4EA2			2RV3-0	2RV3-T
4EA3	6EA2	4GO2	4DS9*	2RV3-0	4RV2-T
4EA3	8EB2	4GO2	2GS3		
		4GO2	2GS3	4RV2-0	4DS9*
6EA2	2CT3	4GO2	4GS2	4RV2-0	6EA2
6EA2	4CT2			4RV2-0	8EB2
6EA2	4DS9*	2LO3	4DS9*	4RV2-0	2RV2-T
6EA2	4EA2	2LO3	2LS2	4RV2-0	2RV3-T
6EA2	6EA2	2LO3	4LS2	4RV2-0	4RV2-T
6EA2	8EB2				
		4LO2	4DS9*		
		4L02	2LS2		
		4LO2	4LS2		

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 three types of rates and charges. These are monthly rates, daily 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) Reserved for Future Use

(C) 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.

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.1 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges (Cont'd)

(1) Installation of Service

Nonrecurring charges apply to each service installed. 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.

(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 and functions for which nonrecurring charges apply are:

- Voice Grade Data Capability
- Voice Grade Telephoto Capability

(D)
(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 as set forth in 5.2.5(E) preceding 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 disconnects and starts. Changes in the physical location of the point of the termination are treated as moves and are described and charged for as set forth in 7.4.5 following.

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.1 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements (Cont'd)

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 will be made without charge(s) to the customer. Such changes require the continued provision and billing of the Access Service to the same entity (i.e., customer remains responsible for all outstanding indebtedness for Access Service). Administrative changes are as follows:

- Change of customer name (i.e., the customer of record does not change but rather the customer of record changes its name--e.g., AT&T-Long Lines to AT&T Communications),
- 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.

All other service rearrangements will be charged for as follows:

- If the change involves the addition of another leg to an existing multipoint service, the nonrecurring

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.1 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements (Cont'd)

- charge for the channel termination rate element will apply. The charge will apply only for the leg that is being added.

- If the change involves the addition of an optional feature or function which has a separate nonrecurring charge, that non-recurring 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. The charge will apply per channel termination affected.

- For all other changes, including the addition of optional features without separate nonrecurring charges, a charge equal to a channel termination rate element nonrecurring charge will apply. Only one such charge will apply per service, per change.

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

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.2 Surcharge for Special Access Service (Cont'd)

(A) General (Cont'd)

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 Channel Termination is one of the following:

(1) an open-end termination in a Telephone Company switch of an FX line, including CCSA and CCSA-equivalent ONALs; or

(2) Reserved for Future Use

(3) a termination used for TELEX service; or

(4) a termination that by the nature of its operating characteristics could not make use of Telephone Company common lines; or

(5) a termination that interconnects either directly or indirectly to the local exchange network where the usage is subject to Carrier Common Line 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 or Special Access Service connecting CCSA or CCSA-type equipment (inter-machine trunks); or

(6) 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.

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 re-terminated 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 re-terminated such that the exemption is no longer applicable.

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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 is received that the Special Access Service has become exempt from the surcharge, as set forth in (B) preceding. If the status of the Special Access Service was changed prior to receipt of the exemption certification, the Telephone Company will credit the customer's account, not to exceed ninety (90) days, based on the effective date of the change specified by the customer in the letter of certification.

(E) Application of Rates

(1) The monthly Special Access Surcharge applies to Special Access Services arranged, as set forth in (A) preceding, on a per voice equivalent basis as shown in the following example.

Special Access Service	Voice Grade Equivalent		Surcharge		Monthly Charge
Voice Grade	1	X	$25	=	$ 25.00
Group Level	12	X	$25	=	$300.00
DS1	24	X	$25	=	$600.00

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7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.2 Surcharge for Special Access Service (Cont'd)

(E) Application of Rates (Cont'd)

(2) In the case of multipoint Special Access Service, one Special Access Surcharge will apply for each termination at a customer designated premises.

(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.

7.4.3 Reserved for Future Use

7.4.4 Minimum Periods

The minimum service period for all services is one month.

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's premises
- The customer's 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 Channel Termination affected. There will be no change in the minimum period requirements.

(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 will be established for the new services. The customer will also remain responsible for satisfying all outstanding minimum period charges for the disconnected service.

7.4.6 Mileage Measurement

The mileage to be used to determine the monthly rate for the Channel Mileage is calculated on the airline distance between the locations involved, i.e., the serving wire centers associated with two customer designated premises, a serving wire center associated with a customer designated premises and a Telephone Company Hub, 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.

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7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.6 Mileage Measurement (Cont'd)

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, 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.

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.

7.4.7 Facility Hubs

A customer has the option of ordering Voice Grade facilities or digital high capacity facilities (i.e., Group, Supergroup, Mastergroup, DS1, DS1C, or DS3) to a facility Hub for channelizing to individual services requiring lower capacity facilities.

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 voice analog may occur at a different location. When ordering, the customer will specify the desired multiplexing Hub(s) selected from the National Exchange Carrier Association, Inc. Tariff. This tariff identifies the type(s) of multiplexing functions which are available and the wire centers at which they are available.

(1) For IntraLATA Local Exchange Carrier to Local Exchange Carrier traffic, percentages of ownership will be determined by the V&H coordinates located in the Missouri Intrastate IntraLATA Compensation Plan Database.

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.7 Facility Hubs (Cont'd)

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 service.

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 Voice Grade, High Capacity, Analog or

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.7 Facility Hubs (Cont'd)

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 analog or 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 Supergroup facility is de-multiplexed to five Group facilities, and then one of the Group facilities 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 Shared Use of Digital High Capacity Service (D)

(D)
(N)

Shared **use occurs when Special Access Service and Switched Access Service are provided over the same Special Access facility through a common interface. The Special Access monthly rate for the Channel Termination, Channel Mileage, if applicable, and multiplexer will apply, regardless of whether any individual channels of the Shared Special Access facility are used for Special Access Service, Switched Access Service, or any other type of service. The practice known as "ratcheting" (to apply non-Special Access rates on a proportional basis) shall not apply in any circumstance.**

(N)

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7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.8 Shared Use of Digital High Capacity Service (Cont'd) (D)

7.4.9 Reserved for Future Use (D)

7.4.10 Reserved for Future Use

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.11 **Special Access Term Discount Plan** [1] (C)

(A) General

The Special Access Term Discount Plan (TDP) applies to Special Access Digital Data Service (56.0 and 64.0 kbps), High Capacity DS1(1.544 Mbps) Service and DS1 to DS0 Multiplexing. The TDP provides the customer with discounted rates for the services listed. The customer agrees to a minimum service commitment per service when the TDP is established.

In order for a circuit to be eligible for TDP pricing, the customer must commit a channel termination and/or multiplexer associated with that circuit to a TDP. The commitment level for a circuit will be based on channel terminations and/or multiplexers. Customers may disconnect or move channel terminations and/or multiplexers within the state and not be subject to termination liability charges as long as the commitment levels are maintained.

(B) Commitment Level

All eligible special access rate elements for a given circuit (channel termination, channel mileage termination (fixed), channel mileage facility (per mile), or multiplexing) must be ordered for the same commitment period with the same service date for the same customer. A customer establishes a TDP by committing all or a portion of their in-service channel terminations and/or multiplexers to a minimum term of 3 years, up to a maximum term of 5 years. During the term of the selected TDP, the customer must maintain an in-service commitment threshold of not less than 90% nor more than 130% of the committed channel terminations and/or multiplexers.

[1] **Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations. Customers will not be able to renew the Digital Data Circuits upon expiration of the term.** (N) | (N)

7. Special Access Service (Cont'd)

7.4 Rate Regulations (Cont'd)

7.4.11 Special Access Term Discount Plan (Cont'd)

(B) Commitment Level (Cont'd)

As long as a customer's actual in-service level of channel terminations and/or multiplexers remains within the commitment threshold, the customer will be billed the TDP rate for all eligible rate elements. Additionally, if a customer's in-service level exceeds the initial in-service level by no more than 30%, the customer will be billed the TDP rates for all eligible rate elements. For example, the customer has 200 DS1 channel terminations and/or multiplexers and elects to commit 150 channel terminations and multiplexers to a 3 year TDP. The customer will be billed TDP rates as long as the in service level of the channel terminations and/or multiplexers is equal to or greater than 135 (90% minimum threshold) but not more than 195 (130% maximum threshold).

If the customer's in-service request exceeds the initial service level by more than 30%, the customer will be billed the month-to-month rate for all facilities above the upper limit of the commitment threshold. If the customer's in-service level falls below the minimum commitment threshold, the customer will be billed liability charges for the number of Channel Terminations and/or multiplexers below the minimum commitment threshold and the customer's commitment level will be decreased to 110 percent of the customer's current in-service level. For example, a customer whose minimum commitment threshold is 135 Channel Terminations and/or multiplexers (90% of 150), but only has 125 in-service, will be billed termination liability charges for 10 Channel Terminations and/or multiplexers and the customer's commitment level will be decreased to 138 (110% of 125). The TDP rates billed will be based on the most recently disconnected facilities.

Although the commitment level is based upon channel terminations and/or multiplexers, the following rate elements will receive TDP rates:

Channel Mileage Facility (per mile)
Channel Mileage Termination (fixed)
Multiplexing
Channel Termination