

SECTION NO. 7

7. Special Access Service

7.1 General

This tariff incorporates the concept of direct assignment of Out WATS and Terminating 800. Special access rates shall apply to the closed end. 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 or to connect a customer designated premises and a WATS Serving Office. 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 seven types of channels used to provide Special Access Services. Each type has its own characteristics. All are subdivided by one or more of the following:

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

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

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

* Telephone Company Centrex CO and CO-like switches and packet switches included in Public Packet Switching Network (PPSN) Service are considered to be a customer designated premises for purposes of this tariff.

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.1 Channel Types (Cont'd)

Following is a brief description of each type of channel:

Metallic - a channel for the transmission of low speed varying signals at rates up to 30 baud.

Telegraph Grade - a channel for the transmission of binary signals at rates of 0 to 75 baud or 0 to 150 baud.

Voice Grade - a channel for the transmission of analog signals within an approximate bandwidth of 300 to 3000Hz.

Video - a channel for the transmission of standard 525 line 60 field monochrome or National Television Systems Committee color video signal and one or two associated 5 or 15 kHz audio signals. The bandwidth is either 30 Hz to 4.5 MHz or 30 Hz to 6.6 MHz.

Digital Data - a channel for the digital transmission of synchronous serial data at rates of 2.4, 4.8, 9.6 or 56 kbps.

High Capacity - a channel for the transmission of isochronous serial digital data at rates of 1.544, 3.152, 6.312, 44.736 or 274.176 Mbps.

Detailed descriptions of each of the channel types are provided in 7.5 through 7.12 following.

The customer also has the option of ordering Voice Grade and High Capacity facilities (i.e., 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 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 7.7 and 7.12 following.

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.1 Channel Types (Cont'd)

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 set forth in 7.2.1 following.

For example, a customer may order a 3.152 Mbps High Capacity channel 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 Service Descriptions

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

Metallic (MT)
Telegraph Grade (TG)
Video (TV)
Voice (VG)
Digital Data (DA)
High Capacity (HC)

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.2 Service Descriptions (Cont'd)

Each service consists of a basic channel to which a technical specifications package (customized or predefined), channel interface(s) and, when desired, optional features and functions are added to construct the service desired by the customer. Technical specifications packages and optional features and functions are described in this section. Channel interfaces are described in 15.3.

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

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

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

(A) 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

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.2 Service Descriptions (Cont'd)

(A) (Cont'd)

technical specifications package for a customized service. The letter "w" following the two letter code indicates the technical specifications package for a voice grade Special Access Service used in the provision of WATS or WATS-type service using a Telephone Company designated WATS Serving Office. 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.

(B) Channel interfaces at each Point of Termination on a two-point service may be symmetrical or asymmetrical. On a multipoint service they may also be symmetrical or asymmetrical, but communications can only be provided between compatible channel interfaces. Only certain channel interfaces are compatible. These are set forth in 15.3 following, in a combination format.

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

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

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.2 Service Descriptions (Cont'd)

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

7.1.3 Service Configurations

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

(A) Two-Point Service

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

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

(A) Two-Point Service (Cont'd)

The following diagram depicts a two-point Voice Grade service connecting two Customer Designated Premises (CDP). The service is provided with C-Type conditioning.

Applicable rate elements are:

- Channel Terminations (applicable one (1) per CDP)
- Channel Mileage
 - . 2 Channel Mileage Terminations plus
 - . 1 section, Channel Mileage Facility per mile
- C-Type Conditioning Optional Feature

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

(B) Multipoint Service

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

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

Multipoint service utilizing a customized technical specifications package, as set forth in 7.1.2 preceding, will be provided when technically possible. If the Telephone Company determines that the requested characteristics for a multipoint service are not compatible, the customer will be advised and given the opportunity to change the order.

When ordering, the customer will specify the desired bridging hub(s).

Applicable Rate Elements are:

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

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

(B) Multipoint Service (Cont'd)

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

CT - Channel Termination
CMT - Channel Mileage Termination
CMF - Channel Mileage Facility
o Bridging Port

Applicable rate elements are:

- Channel Terminations (4 applicable)
- Channel Mileage
 - o 2 Channel Mileage Terminations per Channel Mileage Facility section for a total of 8 plus
 - o 4 sections, Channel Mileage Facility per mile
- Bridging Optional Feature (6 applicable, i.e., each bridge port)

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.4 Alternate Use

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

The arrangement required to transfer the service from one operation to the other (i.e., the transfer relay and control leads) will be rated and provided on an individual case basis 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 and Functions, if any).

7.1.5 Special Facilities Routing

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

7.1.6 Design Layout Report

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

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7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.7 Acceptance Testing (Cont'd)

- (A) For Voice Grade analog services, acceptance test will include tests for loss, 3-tone slope, DC continuity, operational signaling, C-notched noise, and Gmessage 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 (i.e., Metallic, Telegraph and video) 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 by the customer in the order for service.

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

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 Rate Regulations

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

7.2.1 Rate Categories

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

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7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

- Channel Terminations (described in 7.2.1(A) following)
- Channel Mileage (described in 7.2.1(B) following)
- Optional Features and Functions (described in 7.2.1(C) 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 (C) 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 collocated in a Telephone Company building.

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7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(B) Channel Mileage

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

(1) Channel Mileage Facility

The Channel Mileage Facility rate recovers the cost for the transmission path which extends between the Telephone Company serving wire centers and/or hub(s).

(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 Channel Mileage Termination rate will apply at the serving wire center(s) for each customer designated premises and Telephone Company hub where the channel is terminated. If the Channel Mileage is between Telephone Company bridging hubs, the Channel Mileage Termination rate will apply per Telephone Company designated hub. When the Channel Mileage is zero (i.e., collocated serving wire centers), neither the Channel Mileage Facility nor the Channel Mileage Termination rate will apply.

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7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(C) Optional Features and Functions

The Optional Features and Functions rate category provides for optional features and functions which may be added to a Special Access Service to improve its quality or utility to meet specific communications requirements. These are not necessarily identifiable with specific equipment, but rather represent the end result in terms of performance characteristics which may be obtained. These characteristics may be obtained by using various combinations of equipment. Although the equipment necessary to perform a specified function may be installed at various locations along the path of the service, they will be charged for as a single rate element.

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

- Signaling Capability
- Hubbing Functions
- Conditioning
- Transfer Arrangements

A hub is a Telephone Company designated serving wire center at which bridging or multiplexing functions are performed. The bridging functions performed are to connect three or more customer designated premises in a multipoint arrangement. The multiplexing functions are to channelize analog or digital facilities to individual services requiring a lower capacity or bandwidth.

Descriptions for each of the available Optional Features and Functions are set forth in 7.5 through 7.12 following.

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7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.1 Rate Categories (Cont'd)

(D) Reserved for Future Use

7.2.2 Reserved for Future Use.

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7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.3 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 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. When installation, repair or rearrangement of inside wire is requested, the appropriate non-recurring charges from the local tariff will apply in addition to the non-recurring charges detailed in the sections above. This applies also to intrastate WATS and to the closed end of FGA -FX services.

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7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.3 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 each channel type as a nonrecurring charge for the Channel Termination.

(2) Installation of Optional Features and Functions

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

The optional features for which nonrecurring charges apply are:

- Voice Grade Data Capability
- Voice Grade Telephoto Capability

SECTION NO. 7

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.3 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements

Service rearrangements are changes to existing (installed) services which may be administrative only in nature, as set forth following, or that involve actual physical change to the service. Changes to pending orders are set forth in 5.2.2 preceding.

Changes in the physical location of the point of termination or customer designated premises are moves as set forth in 7.2.4 following.

Changes in the type of Service or Channel Termination which result in a change of the minimum period requirement will be treated as a discontinuance of the service and an installation of a new service.

Changes in ownership or transfer of responsibility from one customer to another will be treated as a discontinuance of the service and an installation of a new service.

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

- Change of customer name when the change of name is not the result of a transfer or change of ownership or responsibility,
- 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,

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7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.3 Types of Rates and Charges (Cont'd)

(C) Nonrecurring Charges (Cont'd)

(3) Service Rearrangements (Cont'd)

- 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 other customer designated premises to an existing multipoint service, the nonrecurring charge for the channel termination rate element will apply. The charge(s) will apply only for the location(s) that is being added.
- If the change involves the addition of an optional feature or function which has a separate nonrecurring charge, that nonrecurring charge will apply.
- If the change involves changing the type of signaling on a Voice Grade service, a charge equal to the Voice Grade channel termination rate element nonrecurring charge will apply. The charge will apply per service termination affected.
- For all other changes, including the addition of optional feature or function without a separate nonrecurring charge, a charge equal to a channel termination rate element nonrecurring charge will apply. Only one such charge will apply per service, per change.

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7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.4 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 service 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 discontinued service.

7.2.5 Minimum Periods

The minimum service period for all services is one month.

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7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.6 Mileage Measurement

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

Mileage charges are shown with each channel type. To determine the rate to be billed, first compute the mileage using the V&H coordinates method, then multiply the resulting number of miles times the Channel Mileage Facility per mile rate, and add the Channel Mileage Termination Rate for each termination. When the calculation results in a fraction of a mile, always round up to the next whole mile before determining the mileage and applying the rates.

When hubs are involved, mileage is computed and rates applied separately for each section of the Channel Mileage, i.e., customer designated premises serving wire center to hub, hub to hub and/or hub to customer designated premises serving wire center. However, when any service is routed through a hub for purposes other than customer specified bridging or multiplexing (e.g., the Telephone Company chooses to so route for test access purposes), rates will be applied only to the distance calculated between the serving wire centers associated with the customer designated premises.

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7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.7 Facility Hubs

A customer has the option of ordering Voice Grade service or High Capacity services (i.e., DS1, DS1C, DS2, DS3 or DS4) to a facility hub for channelizing to individual services requiring lower capacity facilities (e.g., Telegraph, Voice, etc.).

Different locations may be designated as hubs for different facility capacities, e.g., multiplexing from digital to digital may occur at one location while multiplexing from digital to analog may occur at a different location. When placing an Access Order the customer will specify the desired hub. The NATIONAL EXCHANGE CARRIER ASSOCIATION TARIFF F.C.C. NO. 4 identifies serving wire centers, hub locations and the type of multiplexing functions available.

Some of the types of multiplexing available include the following:

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

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

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7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.7 Facility Hubs (Cont'd)

The Telephone Company will commence billing the monthly rate for the service to the hub on the date specified by the customer on the Access Order. Individual channels utilizing these services may be installed coincident with the installation of the service 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 or a High Capacity Channel Termination, Channel Mileage (when applicable), and the multiplexer at the time the service 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 service is de-multiplexed to provide channels with a lesser capacity and one of the lesser capacity channels is further de-multiplexed. For example, a 6.312 Mbps High Capacity service is de-multiplexed to four DS1 channels and then one of the DS1 channels is further de-multiplexed to 24 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.

The Telephone Company will designate hubs for Video and Program Audio Services. Full-time service may be provided between customer designated premises or between a customer designated premises and a hub and billed accordingly at the monthly rates set forth in 17.3 following for a Channel Termination, Channel Mileage and Optional Features and Functions, as applicable. When the service is ordered to a hub, the customer may order a full-time Video services as needed between that hub and additional customer designated premises.

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7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Shared Use Analog and Digital High Capacity Services

Shared use refers to a rate application applicable only when the customer orders High Capacity facilities between a customer designated premises and a Telephone Company hub where the Telephone Company performs multiplexing/demultiplexing functions and the same customer then orders the derived channels as a Special and Switched Access Service.

The High Capacity facility will be ordered, provided and rated as Special Access Service (i.e., Channel Termination, Channel Mileage, as appropriate, and Multiplexing Arrangement.) The nonrecurring charge that applies when the shared use facility is installed will be the nonrecurring charge associated with the appropriate Special Access High Capacity Channel Termination. Rating as Special Access will continue until such time as the customer chooses to use a portion of the available capacity for Switched Access Service. Individual service (i.e., Switched or Special Access) nonrecurring charges will not apply to the individual channels of the shared use facility.

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

As each individual channel is activated for Switched Access Service, the High Capacity Special Access Channel Termination and Channel Mileage rates will be reduced accordingly (e.g., 1/24th for a DS1 service, etc.). Switched Access Service rates and charges, as set forth in 17.2 following, will apply for each channel of the shared use facility that is used to provide a Switched Access Service.

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7. Special Access Service (Cont'd)

7.2. Rate Regulations (Cont'd)

7.2.8 Shared Use Analog and Digital High Capacity Services (Cont'd)

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

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7. Special Access Service (Cont'd)

7.3. Reserved for Future Use

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7. Special Access Service (Cont'd)

7.5 Metallic Service

7.5.1 Basic Channel Description

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

Rates and charges for Special Access Metallic Service are as set forth in 17.3.2 following.

7.5.2 Technical Specifications Packages

<u>Parameter</u>	<u>Package MT-</u>			
	C*	1	2	3
DC Resistance Between Conductors	X	X	X	
Loop Resistance	X			X
Shunt Capacitance	X			X

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

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7. Special Access Service (Cont'd)

7.5 Metallic Service (Cont'd)

7.5.3 Channel Interfaces

Compatible channel interfaces are set forth in 15.3 following.

7.5.4 Optional Features and Functions

(A) Central Office Bridging Capability

- (1) Three Premises Bridging - Provision of tip-to-tip and ring-to-ring connection in a central office of a metallic pair to a third customer designated premises.
- (2) Series Bridging of up to 26 customer designated premises.

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

	Available with Technical Specifications Package MT-			
	C	1	2	3
Three Premises Bridging	X	X		X
Series Bridging	X		X	

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7. Special Access Service (Cont'd)

7.5 Metallic Service (Cont'd)

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7. Special Access Service (Cont'd)

7.6 Telegraph Grade Service

7.6.1 Basic Channel Description

A Telegraph Grade channel is an unconditioned channel capable of transmitting binary signals at rates of 0-75 baud or 0-150 baud. This channel is furnished for half-duplex or duplex operation. Telegraph Grade channels are provided between customer designated premises or between a customer designated premises and a Telephone Company hub.

Rates and charges for Special Access Telegraph Grade Service are set forth in 17.3.3 following.

7.6.2 Technical Specifications Packages

<u>Parameter</u>	<u>Package TG-</u>		
	C*	1	2
Telegraph Distortion	X	X	X

7.6.3 Channel Interfaces

Compatible channel interfaces are set forth in 15.3 following.

7.6.4 Optional Features and Functions

- (A) Telegraph Bridging (two-wire and four-wire)

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

	<u>Available with Technical Specifications Package TG-</u>		
	C	1	2
Telegraph Bridging	X	X	X

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

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- 7. Special Access Service (Cont'd)
 - 7.5 Telegraph Grade Service (Cont'd)
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7. Special Access Service (Cont'd)

7.7 Voice Grade Service

7.7.1 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, between a customer designated premises and a Telephone Company hub, or between a customer designated premises and a WATS Serving Office (WSO).

Rates and charges for Special Access Voice Grade Service are set forth in 17.3.4 following.

7.7.2 Technical Specifications Packages

<u>Parameter</u>	C*	<u>Package VG-</u>											
		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	
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.

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7. Special Access Service (Cont'd)

7.7 Voice Grade Service (Cont'd)

7.7.3 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 15.3 following.

7.7.4 Optional Features and Functions

- (A) Central Office Bridging Capability
- (1) Voice Bridging (two-wire and four-wire)
 - (2) Data Bridging (two-wire and four-wire)
 - (3) Telephoto Bridging (two-wire and four-wire)
 - (4) DATAPHONE Select-A-Station Bridging with sequential arrangement ports or addressable arrangement ports

SECTION NO. 7

7. Special Access Service (Cont'd)

7.7 Voice Grade Service (Cont'd)

7.7.4 Optional Features and Functions (Cont'd)

(A) Central Office Bridging Capability (Cont'd)

(5) Telemetry and Alarm Bridging

Split Band, Active Bridging

Passive Bridging

Summation, Active Bridging

The rates for these options are set forth in 7.3.4(C)(1)(e) following.

(B) Central Office Multiplexing

Voice to Telegraph Grade. An arrangement that converts a Voice Grade channel to Telegraph Grade channels using frequency division multiplexing.

The rate for Central Office Multiplexing is set forth in 7.3.4(C)(5) following.

(C) Conditioning

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

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

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7. Special Access Service (Cont'd)

7.7 Voice Grade Service (Cont'd)

7.7.4 Optional Features and Functions (Cont'd)

(C) Conditioning (Cont'd)

(1) C-Type Conditioning

C-Type Conditioning is provided for the additional control of attenuation distortion and envelope delay distortion on data services. The rate for C-Type Conditioning is set forth in 17.3.4(C)(2) following.

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

Attenuation Distortion (Frequency Response) <u>Relative to 1004 Hz</u>		Envelope Delay Distortion	
<u>Frequency Range (Hz)</u>	<u>Variation (dB)</u>	<u>Frequency Range (Hz)</u>	<u>Variation (micro- seconds)</u>
400-2800	-1.0 to +2.0	1000-2600	100
300-3000	-1.0 to +3.0	800-2600	200
3000-3200	-2.0 to +6.0	600-2600	300
		500-2800	600
		500-3000	3000

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7. Special Access Service (Cont'd)

7.7 Voice Grade Service (Cont'd)

7.7.4 Optional Features and Functions (Cont'd)

(C) Conditioning (Cont'd)

(2) Sealing Current Conditioning

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

(D) Customer Specified Premises Receive Level

This option allows the customer to specify the receive level at the Point of Termination. The level must be within a specific range on effective four-wire transmission.

(E) Improved Return Loss

(1) 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.

(2) 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 rates for these options are set forth in 17.3.4(C)(3) following.

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7. Special Access Service (Cont'd)

7.7 Voice Grade Service (Cont'd)

7.7.4 Optional Features and Functions (Cont'd)

(F) Data Capability (D Conditioning)

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

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

- 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 42 dB

The rate for this option is set forth in 17.3.4(C)(2) following.

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

(G) 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:

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7. Special Access Service (Cont'd)

7.7 Voice Grade Service (Cont'd)

7.7.4 Optional Features and Functions (Cont'd)

(G) Telephoto Capability (Cont'd)

Attenuation Distortion (1004Hz Reference)		Envelope Delay Distortion	
Frequency Range (Hz)	Variation (dB)	Frequency Range (Hz)	Variation (mcs)
500-3000	-0.5 to +1.5	1000-2600	110
300-3200	-1.0 to +2.5	800-2800	180

The rate for this option is set forth in 17.3.4(C)(2) following.

(H) Signaling Capability

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

The rate for this option is set forth in 17.3.4(C)(6) following.

(I) Selective Signaling Arrangement

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

The rate for this option is set forth in 17.3.4(C)(7) following.

(J) Transfer Arrangement

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

The rate for this option is set forth in 17.3.4(C)(8) following.

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7. Special Access Service (Cont'd)

7.7 Voice Grade Service (Cont'd)

7.7.4 Optional Features and Functions (Cont'd)

(K) Public Packet Switching Network (PPSN) Interface Arrangement

An arrangement that provides the interface requirements that permit a Voice Grade service to interface with a Public Packet Switching Network packet switch located in a Telephone Company premises. The interface is compatible with X.25 and X.75 packet switching protocols.

(L) 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 customer will be charged the four-wire Channel Termination rate as set forth in 17.3.4(A) following when an effective four-wire is specified in the order for service. The rate for the conversion is included as part of the basic four-wire Channel Termination rate.

(M) Improved Two-Wire Voice Transmission

(1) Loss Deviation

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

The rate for this option is set forth in 17.3.4(C)(3) following.

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7. Special Access Service (Cont'd)

7.7 Voice Grade Service (Cont'd)

7.7.4 Optional Features and Functions (Cont'd)

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

(2) Attenuation Distortion

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

(3) C-Message Noise

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

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

(4) Return Loss

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

ERL	13.0 dB
SRL	6.0 dB

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

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7. Special Access Service (Cont'd)

7.7 Voice Grade Service (Cont'd)

7.7.4 Optional Features and Functions (Cont'd)

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

	C	Available with Technical Specifications Package VG-											W			
		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							
Improved Two-Wire Voice Transmission																X
PPSN Interface Arrangement		X									X					
Sealing Current Conditioning		X						X								
Selective Signaling Arrangement		X		X			X	X				X	X	X		
Signaling Capability		X	X	X	X				X	X	X					
Telephoto Capability		X												X		
Transfer Arrangement		X	X	X	X	X	X	X	X	X	X	X	X	X		

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7.7 Voice Grade Service (Cont'd)

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7. Special Access Service (Cont'd)

7.9 Video Service

7.9.1 Basic Channel Description

A Video channel is a channel with one-way transmission capability for a standard 525 line/60 field monochrome, or National Television Systems Committee color, video signal and one or two associated 5 or 15 kHz audio signal(s). The associated audio signal(s) may be either diplexed or provided as one or two separate channels. The provision and the bandwidth of the associated audio signal(s) is a function of the channel interface selected by the customer. Video channels are provided between customer designated premises or between a customer designated premises and a Telephone Company hub or hubs.

The rate for the Video Service is set forth in 17.3.6 following.

7.9.2 Technical Specifications Packages

<u>Parameter</u>	<u>Package TV-</u>		
	C*	1	2
Amplitude vs. Frequency Response	X		
Chrominance/Luminance Inequalities			
Gain	X	X	X
Delay	X	X	X
Chrominance/Luminance Intermodulation	X		
Chrominance Nonlinear Gain	X		
Chrominance Nonlinear Phase	X		
Crosstalk	X	X	
Differential Gain	X	X	X
Differential Phase	X	X	X
Dynamic Gain (picture and sync signal)	X		
Field-Time Distortion	X	X	X
Gain/Frequency Distortion	X	X	
Gain Stability	X	X	
Insertion Gain	X	X	X
Line-Time Distortion	X	X	X
Long-Time Distortion	X	X	X

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

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7. Special Access Service (Cont'd)

7.9 Video Service (Cont'd)

7.9.2 Technical Specifications Packages (Cont'd)

<u>Parameter</u>	<u>Package TV-</u>		
	<u>C*</u>	<u>1</u>	<u>2</u>
Luminance Nonlinearity	X		
Luminance Signal/CCIR			
Weighted Noise	X	X	X
Short-Time Distortion			
2 T Pulse	X	X	X
T - Bar Ringing	X	X	
Signal/15 kHz Flat			
Weighted Noise	X	X	X
Signal/Low Frequency			
Noise	X		
Stereo Gain Difference	X	X	
Stereo Phase Difference	X	X	
Total Harmonic Distortion	X	X	X
Transient Sync Signal			
Non-Linearity	X		
Video/Audio Delay			
Difference	X		

7.9.3 Channel Interfaces

The following channel interfaces (CIs) define the bandwidth and the provision of the audio signal(s) associated with a Video channel:

<u>CI</u>	<u>Audio Bandwidth</u>	<u>Provision</u>
2TV6-1	15kHz	1 Channel, diplexed
2TV6-2	15kHz	2 Channels, diplexed
2TV7-1	15kHz	1 Channel, diplexed

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

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7. Special Access Service (Cont'd)

7.9 Video Service (Cont'd)

7.9.3 Channel Interfaces (Cont'd)

<u>CI</u>	<u>Bandwidth</u>	<u>Provision</u>
2TV7-2	15kHz2 Channels, diplexed	
4TV6-5	5kHz1 Channel, separate	
4TV6-15	15kHz	1 Channel, separate
4TV7-5	5kHz1 Channel, separate	
4TV7-15	15kHz	1 Channel, separate
6TV6-5	5kHz2 Channels, separate	
6TV6-15	15kHz	2 Channels, separate
6TV7-5	5kHz2 Channels, separate	
6TV7-15	15kHz	2 Channels, separate

Compatible channel interfaces are set forth in 15.3 following.

7.9.4 Reserved for Future Use

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7.10 Reserved for future use.

7.11 Digital Data Service

7.11.1 Basic Channel Description

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

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

The rates for this service are set forth in 17.3.7(D) following.

7.11.2 Technical Specifications Packages

	<u>Package D-</u>			
<u>Parameter</u>	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 (if provided through a Digital Data hub) while the channel is in service, if it is measured through a CSU equivalent.

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7. Special Access Service (Cont'd)

7.11 Digital Data Service (Cont'd)

7.11.3 Channel Interfaces

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

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

Compatible channel interfaces are set forth in 15.3 following.

7.11.4 Optional Features and Functions

(A) Central Office Bridging Capability

The rate for this option is set forth in 17.3.7(C)(1) following.

(B) Transfer Arrangement

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

The rate for this option is set forth in 17.3.7(C)(2) following.

(C) Public Packet Switching network (PPSN) Interface Arrangement

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

The rate for this option is set forth in 17.3.7(C)(3) following.

SECTION NO. 7

7. Special Access Service (Cont'd)

7.11 Digital Data Service (Cont'd)

7.11.4 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 D-			
	1	2	3	4
Central Office Bridging Capability	X	X	X	X
PPSN Interface Transfer Arrangement	X	X	X	X
Transfer Arrangement	X	X	X	X

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7. Special Access Service (Cont'd)

7.11 Digital Data Service

7.11.5 Reserved for Future Use

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7. Special Access Service (Cont'd)

7.11 Digital Data Service (Cont'd)

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7. Special Access Service (Cont'd)

7.12 High Capacity Service

7.12.1 Basic Channel Description

A High Capacity channel is a channel for the transmission of nominal 64.0 kbps* or 1.544, 3.152, 6.312, 44.736, or 274.176 Mbps isochronous serial data. The actual bit rate is a function of the channel interface selected by the customer. High Capacity channels are provided between customer designated premises or between a customer designated premises and a Telephone Company hub.

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

7.12.2 Technical Specifications Packages

<u>Parameters</u>	<u>Package HC-</u>					
	O	1	1C	2	3	4
Error-Free Seconds		X				

A channel with technical specifications package HC1 will be capable of an error-free second performance of 98.75% over a continuous 24 hour period as measured at the 1.544 Mbps rate through a CSU equivalent.

* Available only as a channel of a 1.544 Mbps facility to a Telephone Company Digital Data hub or as a cross connect of two 2.4, 4.8, 9.6, 56.0 or 64.0 kbps channels of two 1.544 Mbps facilities to a Digital Data hub(s). The customer must provide system and channel assignment data.

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7. Special Access Service (Cont'd)

7.12 High Capacity Service (Cont'd)

7.12.3 Channel Interfaces

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

CI	Bit Rate
DS-15*	1.544 Mbps (DS1)
DS-27	274.176 Mbps (DS4)
DS-31	3.152 Mbps (DS1C)
DS-44	44.736 Mbps (DS3)
DS-63	6.312 Mbps (DS2)

Compatible channel interfaces are set forth in 15.3 following.

7.12.4 Optional Features and Functions

(A) Automatic Loop Transfer

The Automatic Loop Transfer provides protection on a 1xN basis against failure of the facilities between a customer designated premises and the wire center serving that premises. Protection is furnished through the use of a switching arrangement that automatically switches to a spare channel line when a working line fails. The spare channel is not included as a part of the option. This option requires compatible equipment at both the serving wire center and the customer premises. The customer is responsible for providing the equipment at its premises. Equipment at the customer premises will be provided under tariff only if it existed in the Telephone Company inventory as of November 18, 1983.

(B) Transfer Arrangement

An arrangement that affords the customer an additional measure of flexibility in the use of their access channel(s). The arrangement can be utilized to transfer a leg of a Special Access Service to either a spare or working channel that terminates in either the same or a different customer premises. A key activated or dial-up control service is

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

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7. Special Access Service (Cont'd)

7.12 High Capacity Service (Cont'd)

7.12.4 Optional Features and Functions (Cont'd)

(B) Transfer Arrangement (Cont'd)

required to operate the transfer arrangement. A spare channel, if required, is not included as part of the option.

(C) Central Office Multiplexing

(1) DS4 to DS1

An arrangement that converts a 274.176 Mbps channel to 168 DS1 channels using digital time division multiplexing.

(2) DS3 to DS1

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

(3) DS2 to DS1

An arrangement that converts a 6.312 Mbps channel to four DS1 channels using digital time division multiplexing.

(4) DS1C to DS1

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

(5) DS1 to Voice

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

(6) DS1 to DS0

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

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7. Special Access Service (Cont'd)

7.12 High Capacity Service (Cont'd)

7.12.4 Optional Features and Functions (Cont'd)

(C) Central Office Multiplexing (Cont'd)

(7) DSO to Subrate

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

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

	Available with Technical Specifications Package HC-					
	0	1	1C	2	3	4
Automatic Loop Transfer	X					
Central Office Multiplexing:						
DS4 to DS1					X	
DS3 to DS1					X	
DS2 to DS1			X			
DS1C to DS1		X				
DS1 to Voice	X					
DS1 to DS0	X					
DS0 to Subrate*	X					
Transfer Arrangement		X				

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

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7. Special Access Service (Cont'd)

7.12 High Capacity Service

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7. Special Access Service (Cont'd)

7.12 High Capacity Service (Cont'd)

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7. Special Access Service (Cont'd)

7.13 Individual Case Filings

Rates and charges for Special Access Service provided on an individual case basis.

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