

SPECIAL ACCESS SERVICE

6.1 GENERAL

Special Access Service provides a transmission path to directly connect an IC terminal location and an end user premises†. Special Access Service includes all exchange access not utilizing Company end office switches. This type of Access Service is used, for example, by ICs for the provision of private line service.

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. The specific types of services (e.g., Narrowband, Voice Grade, Wideband Digital) provided under Special Access Service are described in 6.2 following.

6.1.1 RATE CATEGORIES

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

- Channel Terminations (described in 6.1.1(A) following)
- Channel Mileage (described in 6.1.1(B) following)
- Optional Features and Functions (described in 6.1.1(C) following)

Unless specifically stated otherwise, each of the rate categories will apply for each Special Access Service provided to an IC.

† Company Centrex CO-like switches, Company Answering Service concentrators, Packet Switches, and Access Concentrators are considered to be end user premises for purposes of this Product Guide.

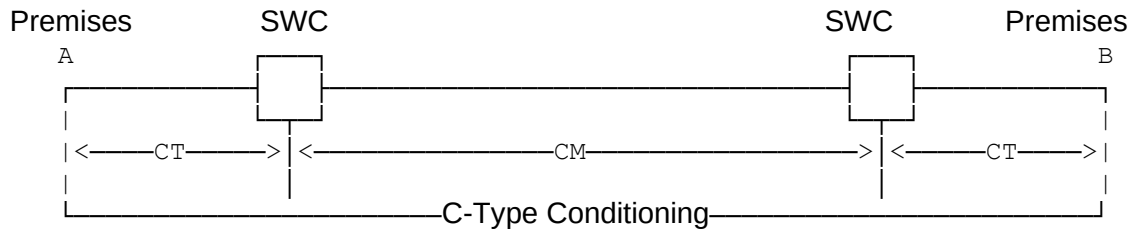
SPECIAL ACCESS SERVICE

6.1 GENERAL (Cont'd)

6.1.1 RATE CATEGORIES (Cont'd)

Two-Point Service

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.



CT - Channel Termination
CM - Channel Mileage
SW - Serving Wire Center
C

Applicable rate elements are:

- Channel Termination (2 applicable)
- Channel Mileage (fixed rate + rate per mile)
- C-Type Conditioning Optional Feature (2 applicable)

SPECIAL ACCESS SERVICE

6.1 GENERAL (Cont'd)

6.1.1 RATE CATEGORIES (Cont'd)

(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 Company building.

The Channel Termination rate category may also be employed to provide for connections to other voice grade network service offerings.

(B) Channel Mileage

The Channel Mileage rate category provides for the transmission facilities between the serving wire centers associated with two customer-designated premises, between a serving wire center associated with a customer-designated premises and a Company Hub or between two Company Hubs. A serving wire center associated with a customer's designated premises is the wire center from which the customer normally obtains dial tone. Channel Mileage rates are comprised of a fixed-rate element and a per-mile rate element.

SPECIAL ACCESS SERVICE

6.1 GENERAL (Cont'd)

6.1.1 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 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 Company-designated serving wire center which may perform bridging and multiplexing reconfiguration functions. 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 6.2 following.

6.1.2 SERVICE CONFIGURATIONS

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

SPECIAL ACCESS SERVICE

6.1 GENERAL (Cont'd)

6.1.2 SERVICE CONFIGURATIONS (Cont'd)

(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 is performed.

Applicable rate elements are:

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

All Special Access services may be provided as two-point service.

(B) Multipoint Service

Multipoint service connects three or more customer-designated premises through a 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 6.2 following.

Multipoint service utilizing a customized technical specifications package, as set forth in 6.2 following, will be provided when technically possible. If the 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 National Exchange Carrier Association Tariff F.C.C. No. 4. This Tariff identifies type(s) of bridging functions which are available and the serving wire centers at which they are available.

SPECIAL ACCESS SERVICE

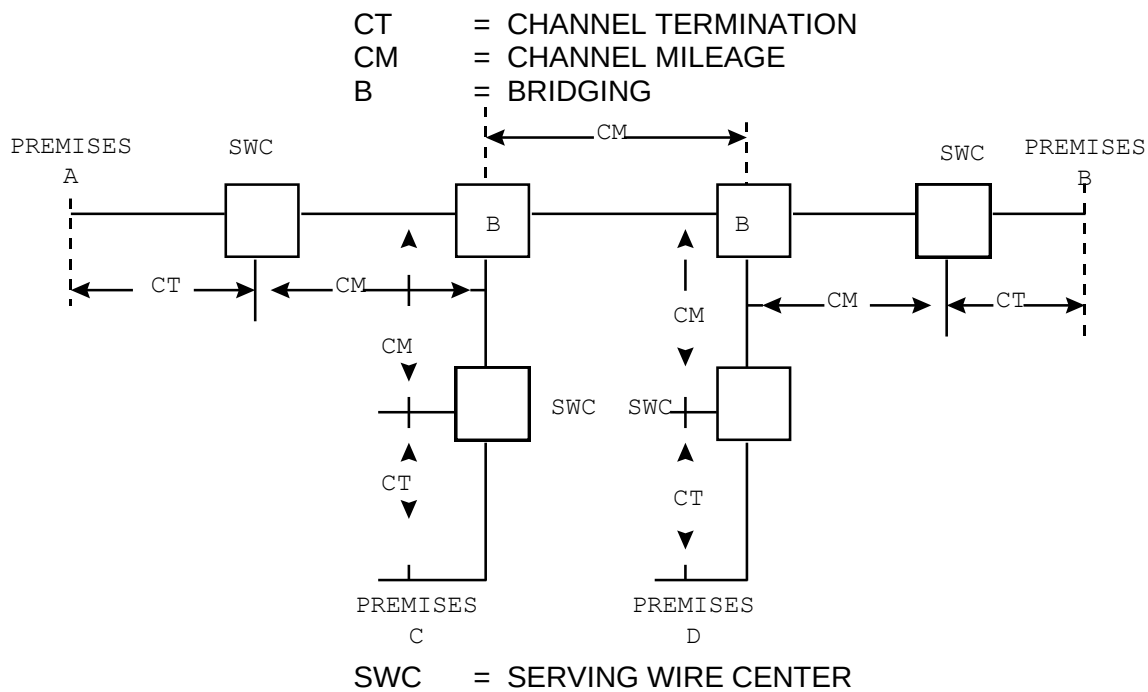
6.1 GENERAL (Cont'd)

6.1.2 SERVICE CONFIGURATIONS (Cont'd)

(B) Multipoint Service (Cont'd)

MULTIPOINT SERVICE CONFIGURATION

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



Applicable rate elements are:

- Channel Terminations (4 applicable)
- Channel Mileage (5 sections)
- Bridging (6 applicable, i.e., each bridge port)

SPECIAL ACCESS SERVICE

6.1 GENERAL (Cont'd)

6.1.3 ALTERNATE USE

Alternate Use occurs when a service is arranged by the 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 Company will make such special arrangements available on an individual case basis.

The arrangement required to transfer the service from one operation to the other (i.e., the transfer relay and control leads) will be rated and provided on an individual case basis as specified in Section 9. following. The customer will pay the stated rates for the Access Service rate elements for the service ordered (i.e., Channel Terminations, Channel Mileage [as applicable] and Optional Features [if any]).

6.1.4 DESIGN LAYOUT REPORT

The Company will provide to the IC the make-up of the facilities and services provided under this Product Guide as Special Access to aid the IC 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 IC at no charge.

6.1.5 ACCEPTANCE TESTING

- (A) For Voice Grade analog services, acceptance tests will include test 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 digital services (i.e., Digital Data High-Capacity), acceptance tests will include tests for the parameters applicable to the service, as specified in the order for service.

SPECIAL ACCESS SERVICE

6.1 GENERAL (Cont'd)

6.1.5 ACCEPTANCE TESTING (Cont'd)

In addition to the above tests, Additional Cooperative Acceptance Testing for Voice Grade Service to test other parameters, as described in Section 10 following, is available at the customer's request. All test results will be made available to the customer, upon request.

If acceptance tests are not started within 30 minutes after the scheduled appointment time for such tests, as negotiated between the Company and the IC, additional charges will apply, as set forth in Section 10. following.

6.1.6 ORDERING OPTIONS AND CONDITIONS

There is one ordering option available to an IC in the provision of Special Access Service. That is:

- Access Order

This option is set forth in detail in Section 4. preceding, as are the conditions under which the option may be elected. Cancellation charges associated with this option are also included in Section 4. preceding.

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS

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

Voice Grade (VG)
Digital Data (DA)
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 services is described in this section.

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

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

The channel description specifies the characteristics of the basic channel and indicates whether the channel is provided between customer-designated premises or between a customer-designated premises and a 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, 3.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.

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

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 6.3 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 following. When a customized channel is requested, all channel interface combinations available with the specified type of service are available with the customized channel.

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

The Company will maintain existing transmission specifications on services installed prior to the effective date of this Product Guide 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 Product Guide. All services installed after the effective date of this Product Guide will conform to the transmission specifications standards contained in this Product Guide or in the following Technical References for each category of service:

Voice Grade	TR-TSY-000335, Issued 2 PUB 41004, Table 4
Digital Data Secondary Channel	PUB 62507 and associated Addendum TR-NPL-000157 PU 62310 B
High-Capacity	PU 62508 B PU 62411 B PU 62411A B TR-NPL-000054 TR-TSY-000342 TR-TSY-000194

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

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:

- 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 Product Guide, there is no restriction against doing so.

Following is a brief description of each type of channel:

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

Digital Data* - a channel for the digital transmission of data at rates of 2.4, 4.8, 9.6 or 56 kbps. (C)

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

Detailed descriptions of each of the channel types are provided following: The customer also has the option of ordering Voice Grade and analog and digital high-capacity facilities (i.e., Group, Supergroup, Mastergroup and 1.544 Mbps) to a 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 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 following.

- * Voice Grade and Digital Data Channels are no longer available to new customers in certain exchanges and are only available to existing customers as outlined in Part D. (Please refer to Part D. Section 1 for the listing of exchanges, term availability and effective date.) 1 (C)
J

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.1 VOICE GRADE SERVICE

Effective February 13, 2026, this service is no longer available to new customers. Moves, changes or modifications to this service will no longer be supported. Service modifications for customers with existing contracts are subject to the terms of their contracts. For wire centers specific service withdrawal information, please refer to Part D, of this Product Guide.

(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 as analog two-wire or four-wire, or, where facilities permit, as a four-wire in a digital format when used in conjunction with another Voice Grade Channel Termination at the other end. Voice Grade channels are provided between customer-designated premises or between a customer-designated premises and a Company Hub.

(B) Technical Specifications Packages

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

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

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.1 VOICE GRADE SERVICE (Cont'd)

Effective February 13, 2026, this service is no longer available to new customers. Moves, changes or modifications to this service will no longer be supported. Service modifications for customers with existing contracts are subject to the terms of their contracts. For wire centers specific service withdrawal information, please refer to Part D, of this Product Guide.] (C)

(B) Technical Specifications Packages (Cont'd)

The technical specifications for these parameters (except for dropouts, gain hits, and phase hits) are delineated in TR-TSY-000335, Issue 2. The technical specifications for dropouts, phase hits, and gain hits are delineated in Technical Reference PUB 41004, Table 4.

(C) Channel Interfaces

The following channel interfaces for Voice Grade service do not require signaling capability: 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 6.3 following.

(D) Optional Features and Functions

(1) Central Office Bridging Capability

- (a) Voice Bridging (two-wire and four-wire)
- (b) Data Bridging (two-wire and four-wire)
- (c) Telephoto Bridging (two-wire and four-wire)
- (d) DATAPHONE Select-A-Station Bridging with sequential

* arrangement ports or addressable arrangement ports

(e) Telemetry and Alarm Bridging

Split Band, Active Bridging
Passive Bridging
Summation, Active Bridging

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.1 VOICE GRADE SERVICE (Cont'd)

Effective February 13, 2026, this service is no longer available to new customers. Moves, changes or modifications to this service will no longer be supported. Service modifications for customers with existing contracts are subject to the terms of their contracts. For wire centers specific service withdrawal information, please refer to Part D, of this Product Guide.] (C)]

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

(2) Central Office Multiplexing

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

(3) 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.

In addition, a customer may require that either the attenuation distortion or the envelope delay distortion, or both, be improved to more stringent specifications than those provided for C-Type conditioning. In these cases the customer has the option of ordering either Improved Attenuation Distortion or Improved Envelope Delay Distortion, or both, as needed.

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.

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.1 VOICE GRADE SERVICE (Cont'd)

Effective February 13, 2026, this service is no longer available to new customers. Moves, changes or modifications to this service will no longer be supported. Service modifications for customers with existing contracts are subject to the terms of their contracts. For wire centers specific service withdrawal information, please refer to Part D, of this Product Guide.] (C)]

(D) OPTIONAL FEATURES AND FUNCTIONS (Cont'd)

(3) Conditioning (Cont'd)

(a) C-Type Conditioning

C-Type Conditioning is provided for the additional control of attenuation distortion and envelope delay distortion on data services. The attenuation distortion and envelope delay distortion specifications for C-Type Conditioning are:

Attenuation Distortion
(Frequency Response)
Relative to 1004 Hz

<u>Frequency Range (Hz)</u>	<u>Variation (dB)</u>
504-2804	-1.0 to +3.0
304-3004	-2.0 to +6.0

<u>Envelope Delay Distortion</u>	
<u>Frequency Range (Hz)</u>	<u>Variation (micro- seconds)</u>
1004-2604	≤ 500
604-2604	≤ 1500
504-2804	≤ 3000

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.1 VOICE GRADE SERVICE (Cont'd)

Effective February 13, 2026, this service is no longer available to new customers. Moves, changes or modifications to this service will no longer be supported. Service modifications for customers with existing contracts are subject to the terms of their contracts. For wire centers specific service withdrawal information, please refer to Part D, of this Product Guide.] (C)]

(D) OPTIONAL FEATURES AND FUNCTIONS (Cont'd)

(3) Conditioning (Cont'd)

(b) Improved Attenuation Distortion

Improved attenuation distortion is provided for additional control of attenuation distortion. The improved attenuation distortion specifications are:

Attenuation Distortion
(Frequency Response)
Relative to 1004 Hz

Frequency Range (Hz)	Variation (dB)
404-2804	-1.0 to +2.0
304-3004	-1.0 to +3.0
304-3204	-2.0 to +6.0

(c) Improved Envelope Delay Distortion

Improved envelope delay distortion is provided for additional control of envelope delay distortion. The improved envelope delay distortion specifications are:

Envelope Delay Distortion	
Frequency Range (Hz)	Variation (micro- seconds)
1004-2604	≤ 100
804-2604	≤ 200
604-2604	≤ 300
504-2804	≤ 600
504-3004	≤ 3000

(d) 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.

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.1 VOICE GRADE SERVICE (Cont'd)

Effective February 13, 2026, this service is no longer available to new customers. Moves, changes or modifications to this service will no longer be supported. Service modifications for customers with existing contracts are subject to the terms of their contracts. For wire centers specific service withdrawal information, please refer to Part D, of this Product Guide.] (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. The level must be within a specific range on effective four-wire transmission. The ranges are delineated in Technical Reference TR-TSY-000335, Issue 2.

(5) Improved Termination and Improved Return Loss

- (a) Improved Termination - 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. Company equipment is required at the customer's premises where this option is ordered. The Improved Termination parameters are delineated in Technical Reference TR-NPL-000335 and associated Revision.
- (b) Improved Return Loss - 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 Company equipment may be required at the customer's premises with the two-wire POT. The Improved Return Loss parameters are delineated in Technical Reference TR-NPL-000335 and associated Revision.

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.1 VOICE GRADE SERVICE (Cont'd)

Effective February 13, 2026, this service is no longer available to new customers. Moves, changes or modifications to this service will no longer be supported. Service modifications for customers with existing contracts are subject to the terms of their contracts. For wire centers specific service withdrawal information, please refer to Part D, of this Product Guide.] (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 intermodulation 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.

(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)		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

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.1 VOICE GRADE SERVICE (Cont'd)

Effective February 13, 2026, this service is no longer available to new customers. Moves, changes or modifications to this service will no longer be supported. Service modifications for customers with existing contracts are subject to the terms of their contracts. For wire centers specific service withdrawal information, please refer to Part D, of this Product Guide.] (C)]

(D) OPTIONAL FEATURES AND FUNCTIONS (Cont'd)

(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) Selective Signaling Arrangement

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

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

	Available with Technical Specifications Package VG-												
	<u>C</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>
C-Type Conditioning Central Office Bridging Capability	X					X	X	X	X	X	X		
Central Office Multiplexing	X		X			X	X				X	X	X

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.1 VOICE GRADE SERVICE (Cont'd)

Effective February 13, 2026, this service is no longer available to new customers. Moves, changes or modifications to this service will no longer be supported. Service modifications for customers with existing contracts are subject to the terms of their contracts. For wire centers specific service withdrawal information, please refer to Part D, of this Product Guide.

(D) OPTIONAL FEATURES AND FUNCTIONS (Cont'd)

(10) Transfer Arrangement (Cont'd)

	Available with Technical Specifications Package VG-												
	C	1	2	3	4	5	6	7	8	9	10	11	12
Data Capability	X						X	X			X		
Improved Termination For Effective Four-Wire Transmission	X	X	X	X	X	X	X	X	X	X	X	X	X
Improved Return Loss For Effective Two-Wire Transmission	X		X	X			X	X			X		
Sealing Current Conditioning For Effective Four-Wire Transmission	X					X	X				X		
Selective Signaling Arrangement	X		X										
Signaling Capability	X	X	X	X				X	X	X			
Telephoto Capability													
Transfer Arrangement	X	X	X	X	X	X	X	X	X	X	X	X	

(11) Effective Four-Wire Transmission with Two-Wire Interface

When a customer requests that an effective Four-Wire channel be terminated with a Two-Wire interface at the customer-designated premises, then this optional feature applies. Placement of Company Equipment (Hybrid) is required at the customer's premises to convert the Four-Wire channel to the Two-Wire POT. When this option is ordered, a Four-Wire channel termination charge applies. Per the voice grade technical references, certain voice grade services are always provisioned as Four-Wire services and will be billed as a Four-Wire Channel Termination.

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.2 DIGITAL DATA SERVICE

Effective February 13, 2026, this service is no longer available to new customers. Moves, changes or modifications to this service will no longer be supported. Service modifications for customers with existing contracts are subject to the terms of their contracts. For wire centers specific service withdrawal information, please refer to Part D, of this Product Guide.] (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 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 Company through the Company's facilities to the customer in the received bit stream. Digital Data channels are only available via Company-designated hubs and are provided between customer-designated premises or between a customer-designated premises and a Company Hub.

(B) Technical Specifications Packages

<u>Parameter</u>	<u>Package DA</u>					
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
Error-Free Seconds	X	X	X	X	X	X

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

Voltages which are compatible with Digital Data Service are delineated in Technical Reference PUB 62505.

Channel Interface requirements necessary for Secondary Channel

*

Capability are contained in Technical Reference TR-NPL-000155.

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.2 DIGITAL DATA SERVICE (Cont'd)

Effective February 13, 2026, this service is no longer available to new customers. Moves, changes or modifications to this service will no longer be supported. Service modifications for customers with existing contracts are subject to the terms of their contracts. For wire centers specific service withdrawal information, please refer to Part D, of this Product Guide.] (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-56	56.0 kbps

(D) Optional Features and Functions

(1) Central Office Bridging Capability

(2) Transfer Arrangement

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

(3) Secondary Channel

Secondary Channel (SC) is an optional arrangement which provides a derived lower speed Digital Data companion channel which is independent of the primary Digital Data Service channel. SC allows customers to perform Network Management, diagnostic and maintenance applications on

*

their Digital Data Networks.

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.2 DIGITAL DATA SERVICE (Cont'd)

Effective February 13, 2026, this service is no longer available to new customers. Moves, changes or modifications to this service will no longer be supported. Service modifications for customers with existing contracts are subject to the terms of their contracts. For wire centers specific service withdrawal information, please refer to Part D, of this Product Guide.

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

(3) Secondary Channel (Cont'd)

A Secondary Channel is provided only at the 2.4, 4.8, 9.6 and 56 kbps DDS speeds and is available as a point-to-point or multipoint service except for multipoint service at 56 Kbps. Due to transmission equipment restrictions, SC cannot be provided on 56 Kbps circuits that require the installation of Loop Repeater equipment.

The Secondary Channel option is only available on new orders for service. The addition of SC to an existing Digital Data Service will be treated as a disconnect of the existing service and a new connect for the service with SC.

The Technical specifications for this feature are as described in Technical Reference TR-NPL-000155. The bit rates of the SC are as shown in the following table:

Digital Data Channel Transmission Speed	Secondary Channel Transmission Speed
2.4 Kbps	133 bps
4.8 Kbps	266 bps
9.6 Kbps	533 bps
56.0 Kbps	2.666 Kbps

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
Transfer Arrangement	X	X	X	X
Secondary Channel	X	X	X	X

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.3 DIGITAL SERVICES

(A) High Capacity Services

(1) High Capacity 1 (HC1) Special Access Service

(a) Description

Special Access Service HC1 provides a channel for the transmission of nominal 1.544 Mbps isochronous serial data between an IC terminal location and an end user premises, between IC terminal locations or between an IC terminal location and this Company's designated Hub where multiplexing is offered.

(b) Illustrative Applications

Special Access Service HC1 is suitable for use as part of the facilities required to provide intrastate telecommunications services such as:

- 1.544 Mbps Access Line
- Digital Service
- 3.0 Mbps Access Line
- Hub to Earth Station Trunk

(c) Optional Features

- Automatic Protection Switching.
- Central office multiplexing.
- Clear Channel Capability (CCC)

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.3 DIGITAL SERVICES (Cont'd)

(A) High Capacity Services (Cont'd)

(1) High Capacity 1 (HC1) Special Access Service (Cont'd)

(c) Optional Features (Cont'd)

- Clear Channel Capability

CCC is an arrangement that allows a customer to transport 1.536 Mbps information rate signals over a 1.544 Mbps High Capacity channel.

CCC is provided on 1.544 Mbps High Capacity channels between two customer designated premises and on multiplexed 44.736 High Capacity channels or multiplexed 1.544 High Capacity channels between a Company Hub office and a customer designated premises, and is subject to the availability of facilities.

The optional feature may be ordered at the same time High the Capacity service is ordered or it may be ordered as an addition to an existing High Capacity service. Customers must agree to out-of-service periods required to add this feature to an existing High Capacity feature to an existing High Capacity service.

- Extended Superframe Format

Extended Superframe Format is an optional feature that passes a customer provided framing format for 1.544 Mbps High Capacity service. Extended Superframe Format extends the customer's 1.544 Mbps framing structure from 12 to 24 frames and divides the 8 Kbps 193rd bit position pattern into three distance functionalities: 2 Kbps for frame synchronization, 2 Kbps for cyclic redundancy checking, and 4 Kbps used for performance monitoring information.

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.3 DIGITAL SERVICES (Cont'd)

(A) High Capacity Services (Cont'd)

(1) High Capacity 1 (HC1) Special Access Service (Cont'd)

(c) Optional Features (Cont'd)

- Extended Superframe Format (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
Automatic Loop Transfer	X	
Central Office Multiplexing:		
DS1 to Voice		X
DS1 to DS0		X
DS0 to Subrate	X	
Transfer Arrangement		X
Clear Channel Capability		X
Extended Super Frame Format		X

(d) Transmission Performance

- Error-Free Seconds

While in service, 98.75% of the one-second intervals will be error-free measured over a continuous 24 hour period.

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.4 HIGH-CAPACITY SERVICE

(A) Optional Features and Functions

(1) Automatic Loop Transfer

The Automatic Loop Transfer provides protection on a 1xN basis against failure of the facilities between a customer-designated premises and the wire center serving that premises. Protection is furnished through the use of a switching arrangement that automatically switches to a spare channel when a working channel fails. The spare channel is not included as a part of the option. This option requires compatible equipment at both the serving wire center and the customer premises. The customer is responsible for providing the equipment at its premises. Equipment at the customer premises will be provided under only if it existed in the Company inventory as of November 18, 1983. This feature is not available with channels utilizing the clear channel capability (B8ZS) Line Code.

(2) Transfer Arrangement

An arrangement that affords the customer an additional measure of flexibility in the use of their access channel(s). The arrangement can be utilized to transfer a leg of a Special Access Service to either a spare or working channel that terminates in either the same or a different customer 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.

(3) Central Office Multiplexing

(a) DS1 to Voice or Digital Data†

An arrangement that converts a 1.544 Mbps channel to 24 channels for use with Voice Grade or Digital Data Services.

† Only available at designated Digital Data Hub wire centers.

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.4 HIGH-CAPACITY SERVICE (Cont'd)

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

(3) Central Office Multiplexing (Cont'd)

(b) DS1 to DSO

An arrangement that converts a 1.544 Mbps channel to 23 56 kbps channels utilizing digital time division multiplexing. Where an existing arrangement is modified for use with DSO to Sub-rate equipped with Secondary Channel, a conversion charge shall apply.

(c) DSO to Sub-rate

An arrangement that converts a 56 kbps channel to sub-speeds of up to twenty 2.4 kbps, ten 4.8 kbps, or five 9.6 kbps channels using digital time division multiplexing. This arrangement is only available in conjunction with item (e) preceding.

The Secondary Channel (SC) option as described in Section 6(D)(3) preceding is only available on new orders for service. The addition of SC to an existing DSO to Sub-rate arrangement will be treated as a disconnect and new connection.

(4) Clear Channel Capability (CCC)

(a) CCC is an arrangement that allows a customer to transport 1.536 Mbps information rate signals over a 1.544 Mbps High-Capacity channel with no constraint on the quantity or sequence of ones (mark) and zero (space) bits. This arrangement requires the customer signal at the channel interface to conform to Bipolar with Eight Zero Substitution (B8ZS) line code, as described in Technical Reference TR-NPL-000054 and Technical Reference PUB 62508.

(b) CCC is provided on 1.544 Mbps High-Capacity channels between two customer-designated premises and is subject to the availability of facilities.

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.4 HIGH-CAPACITY SERVICE (Cont'd)

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

(4) Clear Channel Capability (CCC) (Cont'd)

- (c) The optional feature may be ordered at the same time the High-Capacity service is ordered or it may be ordered as an addition to an existing High-Capacity service. Customers must agree to out-of-service periods required to add this feature to an existing High-Capacity service.

(5) Extended Superframe Format

Extended Superframe Format is an optional feature that passes a customer provided framing format for 1.544 Mbps High-Capacity service. Extended Superframe Format extends the customer's 1.544 Mbps framing structure from 12 to 24 frames and divides the 8 Kbps 193rd bit position pattern into three distinct functionalities: 2 kbps for frame synchronization, 2 kbps for cyclic redundancy checking, and 4 kbps used for performance monitoring information.

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
Automatic Loop		
Transfer		X
Central Office		
Multiplexing:		
DS1 to Voice		X
DS1 to Digital		X
DS1 to DS0		X
DS0 to Subrate†	X	
Transfer Arrangement		X
Clear Channel Capability		X
Extended Super Frame Format		X

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

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.5 SERVICE DESIGNATOR/NETWORK CHANNEL CODE CONVERSION
TABLE

The purpose of this table is to show the relationship between the service designator codes (e.g., VG1, MT2, etc.) and the network channel codes that are used for various administrative purposes.

Service Designator Code	Network Channel Code
MTC	MQ
MT1	NT
MT2	NU
MT3	NV
TGC	NQ
TG1	NW
TG2	NY
VG1	LB
VG2	LC
VG3	LD
VG4	LE
VG5	LF
VG6	LG
VG7	LH
VG8	LJ
VG9	LK
VG10	LN
VG11	LP
VG12	LR
AP1	PE
AP2	PF
AP3	PJ
AP4	PK
DA1	XA
DA2	XB
DA3	XG
DA4	XH
SR1	RB
SR2	RC
SR3	RD
HC1	HC

SPECIAL ACCESS SERVICE

6.2 SERVICE DESCRIPTIONS (Cont'd)

6.2.6 CUSTOMIZED DESIGN CONTRACTS FOR HIGH-CAPACITY 1 (HC1)

(A) Description

The Customized Design Contract (CDC) permits the Company to develop customer-specific offerings for service arrangements.

High-Capacity 1 (HC1) service and any associated optional components may be offered at rates, charges, terms and conditions on a contract basis.

Rates, charges, terms and conditions for High-Capacity 1 (HC1) service under CDC will be set forth in a contract between the Company and the customer. Such a contract, except as otherwise expressly specified, will be subject to all applicable terms and conditions set forth in this Product Guide.

Under no circumstances will the rates exceed rates and charges established in this Product Guide, and rates and charges shall exceed the costs of furnishing the service.

Rate treatment will be based on each customer's service characteristics and requirements.

SPECIAL ACCESS SERVICE

6.3 CHANNEL INTERFACE CODES

This section explains the channel interface codes set forth in 6.2.1 preceding that the IC may specify when ordering Special Access Service.

6.3.1 Glossary of Channel Interface Codes and Options

<u>Code</u>	<u>Option</u>	<u>Definition</u>
AB -		accepts 20 Hz ringing signal at IC point of interface
AC -		accepts 20 Hz ringing signal at end user network interface
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 end user network interface
DB -		data stream in VF frequency band at IC point of interface location
-	10	VF for NB4 and NB5
-	43	VF for 43 Telegraph Carrier type signals, NB4 and NB5
DC -		direct current or voltage
-	1	monitoring interface with series RC combination (McCulloh format)
-	2	Company energized alarm channel
-	3	Metallic facilities (DC continuity) for direct current/low frequency control signals or slow speed data(30 baud)
DD -		DATAPHONE Select-A-Station (and TABS) interface at IC point of interface
DE -		DATAPHONE Select-A-Station (and TABS) interface at the end user NI
DO -		digital interface at IC terminal location at the digital signal level zero A (DS-OA)

SPECIAL ACCESS SERVICE

6.3 CHANNEL INTERFACE CODES (Cont'd)

6.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
DS -		digital hierarchy interface
-	15	1.544 Mbps (DS1) format per PUB 41451 plus D4
-	15E	8-bit PCM encoded in one 64 Kbps of the DS1 signal
-	15F	8-bit PCM encoded in two 64 Kbps of the DS1 signal
-	15G	8-bit PCM encoded in three 64 Kbps of the DS1 signal
-	15H	14/11-bit PCM encoded in six 64 Kbps of the DS1 signal
-	15J	1.544 Mbps format per PUB 41451
-	15K	1.544 Mbps format per PUB 41451 plus extended framing format
-	15L	1.544 Mbps (DS1) with SF signaling
-	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
-	63	6.312 Mbps (DS2)
-	63L	6.312 Mbps (DS2) with SF signaling
DU -		digital access interface
-	24	2.4 Kbps
-	24S	2.4 Kbps with secondary channel
-	48	4.8 Kbps
-	48S	4.8 Kbps with secondary channel
-	56	56.0 Kbps
-	56S	56.0 Kbps with secondary channel
-	96	9.6 Kbps
-	96S	9.6 Kbps with secondary channel
-	A	1.544 Mbps format per PUB 41451
-	B	1.544 Mbps format per PUB 41451 plus D4
-	C	1.544 Mbps format per PUB 41451 plus extended framing format
-	D	1.544 Mbps Format per PUB 62411 and supplement A plus D4with B8ZS clear channel capability
-	S	1.544 Mbps with B8ZS clear channel capability plus extended Framing per TR-NPL-00054
DX -		duplex signaling interface at IC POI
DY -		duplex signaling interface at end user NI

SPECIAL ACCESS SERVICE

6.3 CHANNEL INTERFACE CODES_(Cont'd)

6.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>	
EA -	E	Type I E&M Lead Signaling. IC at POI or end user at NI originates on E Lead.	
EA -	M	Type I E&M Lead Signaling. IC at POI or end user at NI originates on M Lead.	
EB -	E	Type II E&M Lead Signaling. IC at POI or end user at NI originates on E Lead.	
EB -	M	Type II E&M Lead Signaling. IC at POI or end user at NI originates on M Lead.	
EC -		Type III E&M signaling at IC terminal POI	
EX -	A	tandem channel unit signaling for loop start or ground start and IC supplies open end (dial tone, etc.) functions.	
EX -	B	tandem channel unit signaling for loop start or ground start and IC supplies closed end (dial pulsing, etc.) functions.	
GO -		ground start* loop signaling - open end function by IC or end user	(C)
GS -		ground start* loop signaling - closed end function by IC or end user	(C)
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 - Type C OPS registered port open end	
LO -		loop start loop signaling - open end function by IC or end user	
LR -		20 Hz automatic ringdown interface at IC with Telephone Company provided PLAR	
LS -		loop start loop signaling - closed end function by IC or 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	

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

(N)
(N)

SPECIAL ACCESS SERVICE

6.3 CHANNEL INTERFACE CODES_(Cont'd)

6.3.1 Glossary of Channel Interface Codes and Options (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>	
RV -	0	reverse battery* signaling, one way operation, originate by IC	(C)
-	T	reverse battery* signaling, one way operation, terminate function by IC or end user	(C)
SF -		single frequency signaling with VF band at either IC POI or end user NI	
TF -		telephotograph interface	
TT -		telegraph/teletypewriter interface at either IC POI or end user NI	
-	2	20.0 milliamperes	
-	3	3.0 milliamperes	
-	6	62.5 milliamperes	
WC -		wideband data interface at end user NI	
-	18	18.75 Kbps, synchronous	
-	19	for 12-wire interface: 19.2 Kbps, synchronous for 10-wire interface: up to 19.2 Kbps, asynchronous	
-	23	up to 230.4 Kbps, asynchronous	
-	23S	230.4 Kbps, synchronous	
-	40	40.8 Kbps, synchronous	
-	50	for 12-wire interface: 50.0 Kbps, synchronous for 10-wire interface: up to 50.0 Kbps, asynchronous	
WD -		wideband bandwidth interface at IC POI	
-	1	nominal passband from 300 to 18000 Hz	
-	2	nominal passband from 28000 to 44000 Hz	
-	3	nominal passband from 29000 to 44000 Hz	

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

(N)
(N)

S SPECIAL ACCESS SERVICE

6.3 CHANNEL INTERFACE CODES_(Cont'd)

6.3.2 IMPEDANCE

The nominal reference impedance with which the IC or end user will terminate the channel for the purpose of evaluating transmission performance:

<u>Value (ohms)</u>	<u>Code(s)</u>
110	0
150	1
600	2
900	3+
1200	4
135	5
75	6
124	7
Variable	8
100	9

6.3.3 DIGITAL HIERARCHY FACILITY INTERFACE CODES (4DS9)

This facility interface is available only to ICs that select the multiplexed four-wire DSX-1 or higher facility interface option at the IC terminal location and provide subsequent system and channel assignment data. The various digital bit rates in the digital hierarchy employ the facility interface code 4DS9 plus the speed options indicated below:

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

- + For those interface codes with a 4-wire transmission path at the POI at the IC's terminal location, rather than a standard 900 ohm impedance the code (3) denotes an IC provided transmission equipment termination. Such terminations were provided to ICs in accordance with the F.C.C. Docket No. 20099 Settlement Agreement.

SPECIAL ACCESS SERVICE

6.4 RATE TERMS AND CONDITIONS

This section contains the specific terms and conditions governing the rates and charges that apply for Special Access Service.

6.4.1 TYPES OF RATES AND CHARGES

There are three types of rates and charges. These are monthly rates, daily rates and non-recurring charges. In addition, there are three types of non-recurring 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) Daily

The application of daily rates for Video service during a consecutive 30-day period is as follows. Daily rates will be topped at an amount equal to the monthly rate (i.e., the charge to the customer for usage billed at daily rates will not exceed the monthly rate). For each day, or part day, of usage after the daily rates have been topped, a charge equal to 1/30th of the monthly rate will apply.

(C) Non-recurring Charges

Non-recurring charges are one-time charges that apply for specific work activity (i.e., installation, change, or rearrangement to an existing service or a Customer-Designated Circuit Identification Record Change). The types of non-recurring charges that apply for Special Access Service are: installation of service, installation of optional features and functions, service changes, service rearrangements and Customer-Designated Circuit Identification Record changes.

The non-recurring charge rate structure applicable to the installation of access service consists of "first" and "additional" charges. For each circuit ordered, the "first" charges apply to the first circuit specified on the service order. The "additional" charges will apply to each additional same-type circuit specified on the same service order, with the same date due, and between (A) the same end points, or (B) between or within the same-type multiplexed high-capacity systems located in the same wire center and between the same end points.

SPECIAL ACCESS SERVICE

6.4 RATE TERMS AND CONDITIONS (Cont'd)

6.4.1 TYPES OF RATES AND CHARGES (Cont'd)

(C) Non-recurring Charges (Cont'd)

(1) Installation of Service

The non-recurring charges apply to each service installed. The non-recurring charges for the installation of service are set forth in 6.5 as non-recurring charges for the Channel Termination.

(2) Installation of Features and Functions

Non-recurring charges apply for the installation of the various features and functions available with Special Access Service. For some features and functions, there is a charge if installed coincident with the service, and a charge if installed subsequent to the installation of the service.

(3) Service Charges

Service changes are changes to existing (installed) services which do not result in either a change in the minimum period requirements, as set forth in 6.2.2 preceding (i.e., change from one type of Special Access Service to another or a change from one type of channel termination to another) or a change in the physical location of the point of termination at a customer-designated premises. Changes in the type of service, Channel Termination, or in the type of High-Capacity multiplexer (i.e., DS1 to Voice to DS1 to Digital) are treated as disconnects and starts. Changes in the physical location of the point of the termination at the customer premises are treated as moves and are described and charged for as set forth in 6.4.5 following. Certain changes in the physical location of the point of termination in a wire center are treated as rearrangements and are described and charged for as set forth in (C)(4) following.

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

SPECIAL ACCESS SERVICE

6.4 RATE TERMS AND CONDITIONS (Cont'd)

6.4.1 TYPES OF RATES AND CHARGES (Cont'd)

(C) Non-recurring Charges (Cont'd)

(3) Service Charges (Cont'd)

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 customer (i.e., same customer remains responsible for all outstanding indebtedness for the 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 billing account number,
- Change of customer test line number,
- Change of customer or customer's end user contact name or telephone number,
- Change of jurisdiction, and
- Change of customer-designated circuit identification at customer's request.

All other service changes will be charged for as follows:

- If the change involves the addition of another leg to an existing multipoint service, the non-recurring change 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 non-recurring charge, that non-recurring charge will apply.

SPECIAL ACCESS SERVICE

6.4 RATE TERMS AND CONDITIONS (Cont'd)

6.4.1 TYPES OF RATES AND CHARGES (Cont'd)

(C) Non-recurring Charges (Cont'd)

(3) Service Charges (Cont'd)

- 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.
- If the change involves the addition of B8ZS and/or ESF options to an existing high-capacity DS1 service, a charge equal to the channel termination first non-recurring change charge will apply for each channel termination converted. This rate application does not apply when either of these options are initially ordered with the service.
- A change from a two-point Special Access Service without bridging to multipoint service, or from a multipoint to two-point Special Access Service without bridging, will be treated as discontinuance and installation of service.
- 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.

SPECIAL ACCESS SERVICE

6.4 RATE TERMS AND CONDITIONS (Cont'd)

6.4.1 TYPES OF RATES AND CHARGES (Cont'd)

(C) Non-recurring Charges (Cont'd)

(4) Service Rearrangements

Rearrangement charges apply, as specified in 6.5, on a per-termination basis and on a per-service arrangement basis for the following service rearrangements:

- (a) rearranging an existing subtending service from one port to another in the same multiplexer;
- (b) rearranging an existing subtending service from one multiplexer to another like multiplexer in the same wire center;
- (c) rearranging an existing service into a high-capacity service multiplexer in the same wire center;
- (d) rearranging an existing service into **IntelliMuxSM** Service, in the same wire center;

When services are rearranged, as described above, the "Additional" level of price for the Rearrangement may apply to all such rearranged services beyond the first, without regard to their end-point locations, so long as they are all of the same service type, have the same date due, and are all being rearranged to the same multiplexer service as the service which is incurring the associated "First" Rearrangement Charge.

When a service is rearranged, existing multiplexed services, if any, subtending the rearranged service will be treated as administrative changes, unless the customer changes service type. If the service type changes, a charge equal to the non-recurring (i.e., installation) charge for the new type of service channel termination rate element will apply.

SPECIAL ACCESS SERVICE

6.4 RATE TERMS AND CONDITIONS (Cont'd)

6.4.2 Minimum Periods

The minimum service period for all services except Digital Data Service, and DS1 High-Capacity is one month. The minimum service period for Digital Data Service and DS1 High-Capacity services is two months.

6.4.3 Moves

A move involves a change in the physical location of the customer's premises which also involves a connection to a different rate demarcation point.

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, i.e., the IC terminal location or the end user premises. There will be no change in the minimum period requirements. If a move is made at the same time a service rearrangement is made, the total charge will never exceed a full non-recurring charge for the basic service.

(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 IC will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

SPECIAL ACCESS SERVICE

6.4 RATE TERMS AND CONDITIONS (Cont'd)

6.4.4 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 Company Hub or two 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.

Mileage is shown in 6.5 following in terms of a per mile structure. 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 Tariff F.C.C. No. 4, and apply the rates. When the calculation results in a fraction of a mile, always round up to the next whole mile before applying the rates.

When Hubs are involved, mileage is computed and rates applied separately for each section of the Channel Mileage, i.e., customer-designated premises serving wire center to Hub, Hub to Hub and/or Hub to customer-designated premises serving wire center. However, when any service is routed through a Hub for purposes other than customer-specified bridging or multiplexing Service (e.g., the 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.

SPECIAL ACCESS SERVICE

6.4 RATE TERMS AND CONDITIONS (Cont'd)

6.4.5 Facility Hubs

The Company will designate certain Hubs for Public Data Network Access Concentrators, Packet Switches and the provision of Other Network Services such as Software Network Access (SNA) Switches. Access Concentrators collect customer data information messages (packets) from many access lines, multiplexes them on to trunks and delivers the packets to the Packet Switch. The Packet Switch performs the routing function to deliver the packets to the identified customer. The SNA switch performs call routing and processing function and forwards SNA calls over dedicated SNA lines to the customer premises.

A customer has the option of ordering Voice Grade facilities or analog or digital high-capacity facilities (i.e., DS1 to a facility Hub for distributing or channelizing to individual services requiring lower capacity facilities (e.g., Voice, etc.), although they do not require multiplexing.

When analog or digital high-capacity facilities are provided between a customer premises and a facility Hub, the facility will not be considered an end-to-end service until an associated channelized service is installed. The facility Hub will not be considered as a customer premises.

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 ordering, the customer will specify the desired multiplexing Hub(s) selected from the National Exchange Carrier Association Tariff F.C.C. No. 4. This Tariff identifies the type(s) of multiplexing functions which are available and the serving wire centers at which they are available.

Some of the types of multiplexing available include the following:

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

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

SPECIAL ACCESS SERVICE

6.4 RATE TERMS AND CONDITIONS (Cont'd)
6.4.5 Facility Hubs (Cont'd)

The Company will commence billing the monthly rate for the facility to the Hub on the date specified by the customer on the service order. Additional 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 who orders the High-Capacity Service must order all associated individual Access Channelized Services. The customer will be billed for a Voice Grade or a high-capacity analog or digital Channel Termination, Channel Mileage (when applicable), and the multiplexer at the time the facility is installed. Additional individual service rates (by service type) will apply for a Channel Termination and for additional Channel Mileage (as required) for each subsequent 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.

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.

In the cascading multiplexing arrangements described above, specific NCI codes may be used in conjunction with the individual multiplexed services at the Hub, in order to identify the technology hierarchy employed in the total service arrangement.

6.4.6 Shared Use Analog and Digital High-Capacity Services

Shared use occurs when Switched Access Service is provided over a High-Capacity Special Access facility through a common interface. The Shared Use facility will be ordered, provisioned and rated only as Special Access Service (i.e., Channel Termination, Channel Mileage as appropriate, and Multiplexer and a terminating channelized individual service by Channel Type, and Channel Mileage, as appropriate), including in cases where any individual channels of the Shared Use 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. Individual services utilizing shared use facilities must be ordered either as Switched Access Service or Special Access Service depending on the intended use. When placing the order for the individual services, the customer must specify a channel facility assignment for each service ordered.

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Shared use of Switched Access facilities (i.e., Special Access Services provided over Switched Access facilities) is not allowed.

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Certain material on this page formerly appeared on Page 15 of Part B, Section 4.

SPECIAL ACCESS SERVICE

6.5 RATES AND CHARGES

6.5.1 VOICE GRADE SERVICE

Voice Grade Service is no longer available to new customers in certain serving wire centers and is only available to existing customers as outlined in Part D. (Please refer to Part D. Section 1 for the listing of serving wire centers, term availability and effective date.)

(A) Channel Termination -Per point of termination		<u>USOC</u>	<u>Monthly Rates</u>	
Two-Wire		T6E2X	\$30.00	
Four-Wire		T6E4X	60.00	
			<u>Non-recurring Charges</u>	
			<u>First</u>	<u>Additional</u>
Two-Wire Installation/Change			\$725.00	\$350.00
Four-Wire Installation/Change			725.00	350.00
(B) Channel Mileage			<u>Monthly Rate</u>	
			<u>Fixed</u>	<u>Per Mile</u>
		1L5LS	\$20.00	\$ 4.00
(C) Optional Features and Functions			<u>Monthly Rate</u>	<u>Non-recurring Charges</u>
(1) Bridging				
(a) Voice Bridging - Per port				
Two-Wire		BCNV2	\$30.00	None
Four-Wire		BCNV4	20.00	None
(b) Data Bridging				
Two-Wire/Four- Wire - Per port				
- Two-Wire		BCND2	14.00	None
- Four-Wire		BCND4	16.00	None

SPECIAL ACCESS SERVICE

6.5 RATES AND CHARGES (Cont'd)

6.5.1 VOICE GRADE SERVICE (Cont'd)

Voice Grade Service is no longer available to new customers in certain serving wire centers and is only available to existing customers as outlined in Part D. (Please refer to Part D. Section 1 for the listing of serving wire centers, term availability and effective date.)

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Non-recurring Charges</u>
(C) Optional Features and Functions (Cont'd)			
(1) Bridging (Cont'd)			
(c) Telephoto Bridging			
Two-Wire/Four-Wire			
- Per port			
- Two-Wire	BCNF2	\$14.00	None
- Four-Wire	BCNF4	14.00	None
(d) DATAPHONE Select-A-Station Bridging			
Sequential Arrangement			
- Common Equipment			
- Ports			
- Per 2-wire channel connected	DQ2	15.00	None
- Per 4-wire channel connected	DQ4	40.00	None
Addressable Arrangement			
- Common Equipment	KCN	None	None
- Ports			
- Per 2-wire channel connected	KQ2	15.00	None
- Per 4-wire channel connected	KQ4	40.00	None

SPECIAL ACCESS SERVICE

6.5 RATES AND CHARGES (Cont'd)

6.5.1 VOICE GRADE SERVICE (Cont'd)

Voice Grade Service is no longer available to new customers in certain serving wire centers and is only available to existing customers as outlined in Part D. (Please refer to Part D. Section 1 for the listing of serving wire centers, term availability and effective date.)

	<u>USOC</u>	<u>Monthly Non-recurring Rate</u>	<u>Charges</u>
(C) Optional Features and Functions (Cont'd)			
(1) Bridging (Cont'd)			
(e) Telemetry and Alarm Bridging			
Active Bridging Channel Connections			
Split Band			
- Per channel connected	CNLRX	\$20.00	None
Summation			
- Per channel connected	BCNSA	13.62	None
Passive Bridging Channel Connections			
- Per channel connected	BCNTP	20.00	None

SPECIAL ACCESS SERVICE

6.5 RATES AND CHARGES (Cont'd)

6.5.1 VOICE GRADE SERVICE (Cont'd)

Voice Grade Service is no longer available to new customers in certain serving wire centers and is only available to existing customers as outlined in Part D. (Please refer to Part D. Section 1 for the listing of serving wire centers, term availability and effective date.)

		<u>USOC</u>	<u>Monthly Rate</u>	<u>Non-recurring Charges</u>
(C)	Optional Features and Functions (Cont'd)			
(2)	Conditioning			
	- Per point of termination			
	C - Type	X1CPT	\$3.00	None
	Improved Attenuation Distortion	UHW		None
	Improved Envelope Delay Distortion	UHY		None
	Sealing Current	1HBPT	None	None
(3)	Improved Return Loss for Effective Two-Wire Transmission or Improved Termination for Four-Wire Transmission			
	Improved Return Loss - Per point of termination - Two-Wire	1RL2W	5.00	None
	Improved Termination - Per point of termination - Four-Wire	1RL4W	9.00	None
(4)	Data Capability - Per point of termination	XDCPT	3.00	\$225.00
(5)	Telephoto Capability - Per point of termination	XTCPT	70.00	225.00

SPECIAL ACCESS SERVICE

6.5 RATES AND CHARGES (Cont'd)

6.5.1 VOICE GRADE SERVICE (Cont'd)

Voice Grade Service is no longer available to new customers in certain serving wire centers and is only available to existing customers as outlined in Part D. (Please refer to Part D. Section 1 for the listing of serving wire centers, term availability and effective date.)

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	<u>USOC</u>	<u>Monthly Rate</u>	<u>Non-recurring Charges</u>
(C) Optional Features and Functions (Cont'd)			
(6) Signaling Capability			
- Per point of termination	XSS++	\$10.13	None
- In lieu of ++, substitute appropriate two-digit code from following list to specify type of signaling.			
AB			
AC			
CT			
DX			
DY			
EA			
EB			
EC			
EX			
GO			
GS			
LA			
LB			
LC			
LO			
LR			
LS			
RV			
SF			

SPECIAL ACCESS SERVICE

6.5 RATES AND CHARGES (Cont'd)

6.5.1 VOICE GRADE SERVICE (Cont'd)

Voice Grade Service is no longer available to new customers in certain serving wire centers and is only available to existing customers as outlined in Part D. (Please refer to Part D. Section 1 for the listing of serving wire centers, term availability and effective date.)

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	<u>USOC</u>	<u>Monthly Rate</u>	<u>Non-recurring Charges</u>
(C) Optional Features and Functions (Cont'd)			
(7) Selective Signaling Arrangement			
- Per arrangement	USZ	\$25.50	None
(8) Transfer Arrangement (key-activated† or dial-up)			
- Per four-port arrangement, including control channel termination††	USY	20.00	None
- Per five-port arrangement, including control channel termination††	US5	20.00	None

† The key-activated control channel is rated as a Metallic Channel Termination using standard Metallic rates (use USOC T6EME in lieu of T6ECS) and Channel Mileage, if applicable (use USOC 1L5MS in lieu of 1L5LS).

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

SPECIAL ACCESS SERVICE

6.5 RATES AND CHARGES (Cont'd)

6.5.2 DIGITAL DATA SERVICE

Digital Data Service is no longer available to new customers in certain serving wire centers and is only available to existing customers as outlined in Part D. (Please refer to Part D. Section 1 for the listing of serving wire centers, term availability and effective date.)

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(A) Channel Termination
- Per point of termination

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Non-recurring Charges</u>	
			<u>First</u>	<u>Additional</u>
2.4 kbps	T6ECS	\$ 75.00	-	-
4.8 kbps	T6ECS	85.00	-	-
9.6 kbps	T6ECS	95.00	-	-
56.0 kbps	T6ECS	105.00	-	-
Installation/ Rearrangement	T6ECS		\$600.00	\$300.00

(B) Channel Mileage

		<u>Monthly Rates</u>	
		<u>Fixed</u>	<u>Per Mile</u>
(1) 2.4 kbps	1L5LS	\$ 50.00	\$ 5.00
(2) 4.8 kbps	1L5LS	60.00	6.00
(3) 9.6 kbps	1L5LS	70.00	9.00
(4) 56 kbps	1L5LS	95.00	11.00

SPECIAL ACCESS SERVICE

6.5 RATES AND CHARGES (Cont'd)

6.5.2 DIGITAL DATA SERVICE (Cont'd)

Digital Data Service is no longer available to new customers in certain serving wire centers and is only available to existing customers as outlined in Part D. (Please refer to Part D. Section 1 for the listing of serving wire centers, term availability and effective date.)

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Non-recurring Charges</u>
(C) Optional Features and Functions			
(1) Bridging - Per port	BCNDA	\$20.00	None
(2) Loop Transfer Arrangement (Key activated† or Dial-up) - Per four-port arrangement††	XTD	30.00	None
(3) Secondary Channel Capability - Per Channel Termination			
- 2.4 kbps	SSE24	00.00	None
- 4.8 kbps	SSE48	00.00	None
- 9.6 kbps	SSE96	00.00	None
- 56.0 kbps	SSE56	00.00	None

† The key-activated control channel is rated as a Metallic Channel Termination using standard Metallic rates (use USOC T6EME in lieu of T6ECS) and Channel Mileage, if applicable (use USOC 1L5MS in lieu of 1L5LS).

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

SPECIAL ACCESS SERVICE

6.5 RATES AND CHARGES (Cont'd)

6.5.3 HIGH-CAPACITY SERVICE

(A) Channel Termination
- Per point of termination

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Non-recurring Charges</u>	
			<u>First</u>	<u>Additional</u>
1.544 Mbps/DS1 Installation/Change	TMECS	\$280.00	\$700.00	\$350.00

(B) Channel Mileage

(1) Basic Service and Monthly Rates		<u>Monthly Rate</u>	
		<u>Fixed</u>	<u>Per Mile</u>
(a) 1.544 Mbps	1L5LS	\$60.00	\$25.00

SPECIAL ACCESS SERVICE

6.5 RATES AND CHARGES (Cont'd)

6.5.3 HIGH-CAPACITY SERVICE (Cont'd)

		<u>USOC</u>	<u>Monthly Rate</u>	<u>Non-recurring Charges</u>
(C)	Optional Features and Functions			
(1)	Multiplexing			
	DS1 to Voice - per arrangement	MQ1	\$220.00	None
	DS1 to Digital - per arrangement	MQK	220.00	None
	DS1 TO DS0 - per arrangement	QMU	240.00	None
	- Conversion to Secondary Channel Capability, per arrangement con- verted	SFS	None	\$225.00
	DSO to Subrates† - per arrangement			
	- Up to 20 2.4 kbps services	QSU24	120.00	None
	- Up to 10 4.8 kbps services	QSU48	121.00	None
	- Up to 5 9.6 kbps services	QSU96	122.00	None

† Secondary Channel capability is available on these systems at no additional charge, provided that the option is specified at the time of ordering.

SPECIAL ACCESS SERVICE

6.5 RATES AND CHARGES (Cont'd)

6.5.6 HIGH-CAPACITY SERVICE (Cont'd)

	<u>USOC</u>	<u>Monthly Rate</u>	<u>Non-recurring Charges</u>
(C) Optional Features and Functions (Cont'd)			
(2) Automatic Loop Transfer			
- Per arrangement†	T59	\$150.00	None
(3) Transfer Arrangement (key activated†† or dial up)			
- Per four-port arrangement including control channel termination†††	USV	60.00	None

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

†† The key-activated control channel is rated as a Metallic Channel Termination using standard Metallic rates (use USOC T6EME in lieu of T6ECS) and Channel Mileage, if applicable (use USOC 1L5MS in lieu of 1L5LS).

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