ACCESS SERVICES

5. SPECIAL ACCESS SERVICE

5.1 General

Special Access Service provides a transmission path to connect customer designated premises, either directly or through a Company Hub where bridging or multiplexing functions are performed. Special Access Service includes all exchange access not utilizing 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.

Certain Special Access Services listed in this section of the tariff may not be currently offered in all Company locations, but may be provided upon customer request, on an individual cases basis, if facilities can be made available with reasonable effort. The Company will work cooperatively with the customer to provide the service on a timely basis.

5.1.1 Circuit Types

There are three types of circuits used to provide Special Access Services in this Tariff. 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 circuit and select from a list of available transmission parameters and channel interfaces that they desire to meet specific communications requirements.

For purposes of ordering circuits, 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 circuit nor to imply that the circuit is limited to a particular use.

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.1 Circuit Types (Continued)

Following is a brief description of each type of channel:

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

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

- Digital Data - a circuit for the transmission of digital data at bit rates of 2.4, 4.8, 9.6, 19.2, 56, and 64 kbps.

5.1.2 Rate Categories

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

- Channel Terminations
- Channel Mileage
- Optional Features and Functions

(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 circuit is terminated. The charge will apply even if the customer designated premises and the service wire center are co-located in a Company building.

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.2 Rate Categories (Continued)

(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. Channel Transport for FGA-FX within the serving area of an issuing carrier of this tariff shall be computed as a rate per mile between wire centers using the miles shown in Section 12, or the V&H method, if miles are not shown. A minimum of one (1) mile is charged for all Special Access Transport.

The Channel Transport Fixed rate recovers the cost for end office equipment associated with terminating the facility (i.e., basic circuit equipment and terminations at serving wire center(s) for each customer-designated premises and Company hub where the channel is terminated. If the Channel Mileage is between Company bridging hubs, the Channel Mileage Termination rate will apply per Company-designated hub. If the Channel Mileage is between the serving wire center for a customer-designated premises and a WATS Serving Office, the Channel Mileage Termination rate will apply at both the serving wire center associated with the customer-designated premises and the WATS Serving Office. When the Channel Mileage Facility is zero (i.e., collocated serving wire centers), neither the Channel Mileage Facility rate nor the Channel Mileage Termination rate will apply.

(C) Optional Features and Functions

Optional Features and Functions rate category provides for optional features and functions which may be added to a basic circuit 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.

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.2 Rate Categories (Continued)

(C) Optional Features and Functions (Continued)

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

- Bridging
- Gain Conditioning
- Multiplexing
- Transfer Arrangements

A hub is a 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 multi-point arrangement. The multiplexing functions are to channelize analog or digital facilities to individual services requiring a lower capacity or bandwidth.

(D) WATS Switched Access

WATS Switched access provides the facilities between the Customer Designated Premises (CDP), or end user and the serving wire center or WATS screening office. The serving wire center or WATS screening office provides the switching functions to interconnect with the customer.

In addition to a channel termination charge in 5.3 following, Transport and End Office Switched Access charges in Section 4.8 preceding apply when the screening or switching of WATS services is performed by the Telephone Company switching equipment.

Channel Transport charges apply for transmission services provided by the Telephone Company between the end office and the switching/serving office.

(E) FGA FX-Type

The Closed End (customer premise end) of a FGA FX-type service is considered a Special Access Line and is charged Channel Termination, Channel Transport, and Installation Charges as appropriate.

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.3 Service Configurations

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

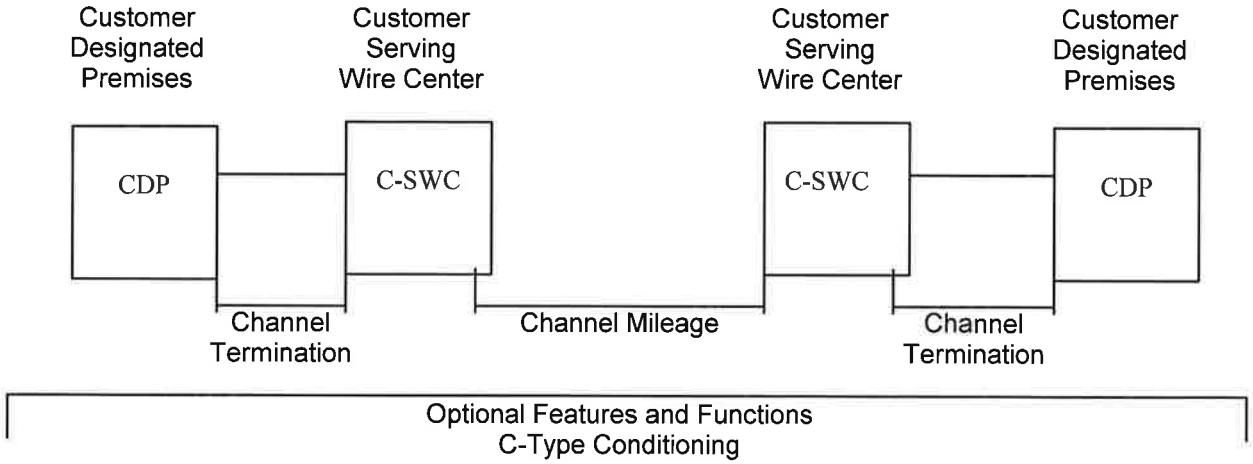
(A) Two-Point Service

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

Applicable rate elements are:

- Channel Termination
- Channel Mileage
- Optional Features and Functions

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.



ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.3 Service Configurations (Continued)

(A) Two-Point Service (Continued)

Applicable rate elements are:

- Channel Terminations (2 applicable)
- Channel Mileage (15 miles in this example)
- C-Type Conditioning Optional Feature

(B) Multi-Point Service

Multi-Point Service connects three or more customer premises through a Company Hub. Only certain types of Special Access Service are provided as Multi-Point Service.

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

If the Company determines that the requested characteristics for Multi-Point 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 Termination (one per customer designated premises)
- Channel Mileage (as applicable between each serving wire center and the hub and between hubs)
- Bridging
- Optional Features (when applicable)

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.4 Design Layout Report

At the request of the customer, the 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.

5.1.5 Acceptance Testing

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

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

(B) For other services (i.e., Metallic, Program Audio, and Video) and for digital services (i.e., Digital Data and High Capacity) acceptance tests will include tests for the parameters applicable to the service as specified by the customer in the order for service.

5.1.6 Ordering Options and Conditions

Special Access Service is ordered under the Access Order provision set forth in Section 3.

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.7 Service Descriptions

For the purposes of ordering, the Special Access Service categories are as follows:

Voice Grade (VG)
Digital Data (DA)
High Capacity (HC)

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

If the Company determined that the requested parameter specifications are not compatible, the customer will be advised and given the opportunity to change the order.

When a customized circuit 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 circuit description specifies the characteristics of the basic circuit and indicates whether the circuit is provided between customer designated premises or between a customer-designated premises and a Telephone Company hub where bridging or multiplexing functions are performed.

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

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.7 Service Descriptions (Continued)

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, i.e., VGC. The first two letters of the code indicate the category of Special Access Service to which the parameters are applicable. These two letter codes are shown above in parentheses following the category of Special Access Service. The letter "C" following the two letter code indicates the technical specifications package for a customized service. A numeric or alpha-numeric designation following the two letter code indicates the specific predefined package. For a customized service, the customer may select any parameters available with that category of service as long as the parameters are compatible. When appropriate, the Technical Reference which contains detailed specifications for the parameters is shown following the matrix.

Channel interfaces at each POT on a two-point service may be symmetrical or asymmetrical. On a multi-point service they may also be symmetrical or asymmetrical, but communications can only be provided between compatible channel interfaces. Only certain channel interfaces are compatible.

The optional features and functions available with each type of basic circuit 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.

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

Voice Grade	PUB 62501 and associated Addendum PUB 41004, Table 4
Digital Data	PUB 62507 PUB 62310
High Capacity	PUB 64508 PUB 62411

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.7 Service Descriptions (Continued)

(A) Voice Grade Service

(1) Basic Circuit Description

A Voice Grade Circuit is a circuit 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 circuits are provided between customer designated premises or between a customer designated premises and a Telephone Company hub.

(2) Technical Specifications Packages

	Package VG -												
Parameter	C*	1	2	3	4	5	6	7	8	9	10	11	12
Attenuation Distortion	X	X	X	X	X	X	X	X	X	X	X	X	X
C-Message Noise	X	X	X	X	X	X	X	X	X	X	X	X	X
Echo Control	X	X	X	X		X		X	X			X	X
Envelope Delay Distortion	X						X	X	X	X	X	X	X
Frequency Shift	X						X	X	X	X	X	X	X
Impulse Noise	X					X	X	X	X	X	X	X	X

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

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.7 Service Descriptions (Continued)

(A) Voice Grade Service (Continued)

(2) Technical Specifications Packages (Continued)

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

The technical specifications for these parameters (except for dropouts, gain hits, and phase hits) are delineated in Technical Reference PUB 62501 and associated Addendum. The technical specifications for dropouts, phase hits, Reference PUB 41004, Table 4.

(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.

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.7 Service Descriptions (Continued)

(B) Digital Data Service

(1) Basic Circuit Description

A digital data circuit is a circuit 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 circuit 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 circuits are only available via Company designated hubs and are provided between customer-designated premises or between a customer designated premises and a Company hub.

The customer may provide the channel service unit-type equipment or other network channel terminating equipment associated with the digital data circuit at the customer premises.

(2) Technical Specifications Packages

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

The Company will provide a circuit capable of meeting a monthly average performance equal to or greater than 99.875% error-free seconds while the circuit 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 Digit Data Service are delineated in Technical Reference PUB 62507.

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.7 Service Descriptions (Continued)

(B) Digital Data Service (Continued)

(3) Channel Interfaces

The following channel interfaces (CIs) define the bit rates that are available for a digital data circuit.

CI	Bit Rate
DU-24	2.4 kbps
DU-48	4.8 kbps
DU-96	9.6 kbps
DU-56	56.0 kbps

(4) Optional Features and Functions

(a) Central Office Bridging Capability

Digital data bridging, per port, is available on an individual case basis only.

(b) Loop Transfer Arrangement

An arrangement that affords the customer an additional measure of protection and/or flexibility in the use of their access circuit(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 circuit that terminates in either the same or a different customer designated 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 circuit, if required, is not included as a part of the option.

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.7 Service Descriptions (Continued)

(B) Digital Data Service (Continued)

(4) Optional Features and Functions (Continued)

(c) Public Packet Switching Network 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 Company premises. The interface is compatible with X.25 and X.75 packet switching protocols as defined by the CCITT.

(C) High Capacity Service

(1) Basic Circuit Description

A high capacity circuit is a circuit 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 circuits are provided between a customer designated premises or between a customer designated premises and a Company hub.

The customer may provide the network channel terminating equipment associated with the high capacity circuit at the customer's premises. The interim program for interconnection of such equipment is set forth in Technical Reference PUB AS No. 1.

(2) Technical Specifications Packages

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

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

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.7 Service Descriptions (Continued)

(C) High Capacity Service (Continued)

(3) Channel Interfaces

The following channel interfaces (CIs) define the bit rates that are available for a high capacity circuit:

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

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

Compatible channel interfaces are set forth in Section 8.

(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 circuit line when a working line fails. The spare circuit is not included as a part of the option. These options require compatible equipment at both the serving wire center and the customer premises. The customer is responsible for providing the equipment at its premises.

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.7 Service Descriptions (Continued)

(C) High Capacity Service (Continued)

(4) Optional Features and Functions (Continued)

(b) Central Office Multiplexing

(i) DS4 to DS1

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

(ii) DS3 to DS1

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

(iii) DS2 to DS1

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

(iv) DS1C to DS1

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

(v) DS1 to Voice

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

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.7 Service Descriptions (Continued)

(C) High Capacity Service (Continued)

(4) Optional Features and Functions (Continued)

(b) Central Office Multiplexing (Continued)

(vi) DS1 to DS0

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

(vii) DS0 to Subrate

An arrangement that converts a 64.0 kbps circuit to subspeeds of up to twenty 2.4 kbps, ten 4.8 kbps, or five 9.6 kbps circuits 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 Agreement		X				

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

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.1 General (Continued)

5.1.7 Service Descriptions (Continued)

(C) High Capacity Service (Continued)

(4) Optional Features and Functions (Continued)

(c) Transfer Arrangement

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

5.2 Rate Regulations

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

5.2.1 Application of Rates and Charges

(A) 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, moves and changes, and service rearrangements. Changes to existing services other than administrative changes described in Section 4.7.1 (B)(2) will be treated as a discontinuance of the existing service and an installation of a new service.

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

Nonrecurring charges apply for each Channel Termination installed and are set forth in 5.3 following.

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.2 Rate Regulations (Continued)

5.2.1 Application of Rates and Charges (Continued)

(B) Recurring Charges

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

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

5.2.2 Minimum Periods

Special Access Service is provided for a minimum period of one month.

5.2.3 Mileage Measurement

The mileage to be used to determine the monthly rate for the Channel Transport is calculated on the airline distance between the serving wire center and the point of connection with another exchange or interexchange carrier. For FGA-FX within the serving area of an issuing carrier of this tariff, the Channel Transport Mileage shall be computed between serving wire centers (i.e., the dial tone office and the wire center serving the customer-designated premises). 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. The point of connection is the point at which an exchange carrier physically or electronically connects facilities with another exchange or interexchange carrier. Unless the customer has requested special facilities routing, the Company will compute mileage to the nearest point of connection with another Exchange or Interexchange Carrier.

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.2 Rate Regulations (Continued)

5.2.3 Mileage Measurement (Continued)

When hubs are involved, mileage is computed and rates applied separately for each of the Circuit 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 (i.e., 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.

For Special Access Services where the Exchange Carrier is an intermediate point between one or more other Exchange Carrier(s), Interexchange Carrier(s) and/or End User(s), and the Intermediate Exchange Carrier provides facilities to connect services between other Exchange Carrier(s), Interexchange Carrier(s), and/or End User(s), transport charges will be assessed on a per mile basis. The transport charges will be computed on the basis of the airline miles of transport facilities provided by the Intermediate Exchange Carrier between point(s) of connection with other Exchange Carrier(s), Interexchange Carrier(s) and/or End User(s). In addition to recurring mileage charges, non-recurring charges shall also apply as set forth in Section 5.3 following.

5.2.4 Facility Hubs

(A) A customer has the option of ordering voice grade facilities, analog, or digital high capacity facilities to a facility hub for channelizing to individual services requiring lower capacity facilities (i.e., Voice, program Audio, etc.).

(B) Different locations may be designated as hubs for different facility capacities, i.e., multiplexing from digital to digital may occur at one location, which multiplexing from digital to analog may occur at a different location. When placing an Access Order the customer will specify the desired hub.

(C) 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 circuits

ACCESS SERVICES

5. **SPECIAL ACCESS SERVICE** (Continued)

5.2 Rate Regulations (Continued)

5.2.4 Facility Hubs (Continued)

(D) End to end services may be provided on circuits of these facilities to a hub. The transmission performance for the end to end service provided between the 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 circuits, the transmission performance of the channelized services will be Voice Grade, not High Capacity.

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

(F) Cascading multiplexing occurs when a high capacity analog or digital circuit is de-multiplexed to provide circuits with a lesser capacity and one of the lesser capacity circuits is further de-multiplexed.

(G) 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, Circuit Mileage charges also apply between the hubs.

ACCESS SERVICES

6. **RESERVED FOR FUTURE USE**

ACCESS SERVICES

6. **RESERVED FOR FUTURE USE** (Continued)

ACCESS SERVICES

6. **RESERVED FOR FUTURE USE** (Continued)

ACCESS SERVICES

6. **RESERVED FOR FUTURE USE** (Continued)

ACCESS SERVICES

6. **RESERVED FOR FUTURE USE** (Continued)

ACCESS SERVICES

6. **RESERVED FOR FUTURE USE** (Continued)

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6. **RESERVED FOR FUTURE USE** (Continued)

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6. **RESERVED FOR FUTURE USE** (Continued)

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6. **RESERVED FOR FUTURE USE** (Continued)

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6. **RESERVED FOR FUTURE USE** (Continued)

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6. **RESERVED FOR FUTURE USE** (Continued)

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6. **RESERVED FOR FUTURE USE** (Continued)

ACCESS SERVICES

6. **RESERVED FOR FUTURE USE** (Continued)

ACCESS SERVICES

6. **RESERVED FOR FUTURE USE** (Continued)

ACCESS SERVICES

6. **RESERVED FOR FUTURE USE** (Continued)

ACCESS SERVICES

6. **RESERVED FOR FUTURE USE** (Continued)

ACCESS SERVICES

6. **RESERVED FOR FUTURE USE** (Continued)

ACCESS SERVICES

7. ADDITIONAL ENGINEERING, ADDITIONAL LABOR AND MISCELLANEOUS SERVICES

In this section, normally scheduled working hours are an employee's scheduled work period on any given business day, which totals eight (8) hours.

7.1 Additional Engineering

Additional Engineering, including engineering review, will be undertaken only after the Company has notified the customer that additional engineering charges apply and the customer agrees to such charges.

Additional Engineering will be provided by the Company at the request of the customer only when:

(A) A customer requests additional technical information after the Company has already provided the technical information normally included on the Design Layout Report.

(B) Additional Engineering time is incurred by the Company to engineer a customer's request for a customized service.

ACCESS SERVICES

7. ADDITIONAL ENGINEERING, ADDITIONAL LABOR AND MISCELLANEOUS SERVICES

7.2 Additional Labor

Additional Labor is that labor requested by the customer on a given service and agreed to by the Company. The Company will notify the customer that Additional Labor charges will apply before any additional labor is undertaken. A call-out of a Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

7.2.1 Overtime Installation

Overtime installation is that Company installation effort outside of normally scheduled working hours.

7.2.2 Overtime Repair

Overtime repair is that Company maintenance effort performed outside of normally scheduled working hours.

7.2.3 Standby

Standby includes all time in excess of one-half (1/2) hour during which Company personnel standby to make installation acceptance tests or cooperative tests with a customer to verify facility repair on a given service.

7.2.4 Testing and Maintenance with Other Telephone Companies

Additional testing, maintenance, or repair of facilities which connect other telephone companies is that which is in addition to the normal effort required to test, maintain or repair facilities provided solely by the Company.

7.2.5 Testing Services

Testing Services other than those described in other parts of this tariff will be provided at the hourly rates described if requested by the customer. Testing will be provided subject to the availability of equipment and qualified personnel.

7.2.6 Other Labor

Other labor is that additional labor not included in 7.1.1 through 7.1.5, preceding, and labor incurred to accommodate a specific customer request that involves only labor which is not covered by any other section of this tariff.

ACCESS SERVICES

7. ADDITIONAL ENGINEERING, ADDITIONAL LABOR AND MISCELLANEOUS SERVICES

7.3 Miscellaneous Services

7.3.1 Maintenance of Access Service

(A) When a customer reports a trouble to the Company for clearance and the trouble is not found in the Company's facilities, the customer shall be responsible for payment of a Maintenance of Service Charge set forth below for the period of time from when Company personnel are dispatched, at the request of the customer, to the customer designated premises to when the work is completed.

(B) A call out of a company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours.

ACCESS SERVICES

7. ADDITIONAL ENGINEERING, ADDITIONAL LABOR AND MISCELLANEOUS SERVICES

7.3 Miscellaneous Services

7.3.2 Telecommunications Service Priority (TSP)

(A) Priority installation and/or restoration of National Security Emergency Preparedness (NSEP) telecommunications services shall be provided in accordance with Part 64.401, Appendix A, of the Federal Communications Commission's (FCC's) Rules and Regulations.

In addition, TSP System service shall be provided in accordance with the guidelines set forth in "Telecommunications Service Priority (TSP) System for National Security Emergency Preparedness (NSEP) Service Vendor Handbook" (NCSH 3-1-2) dated July 9, 1990, and "Telecommunications Service Priority System for National Security Emergency Preparedness Service User Manual" (NCSM 3-1-1).

The TSP System is a service, developed to meet the requirements of the Federal Government, as specified in the Service Vendor's Handbook and Service User's Manual which provides the regulatory, administrative and operational framework for the priority installation and/or restoration of NSEP telecommunications services. These include both Switched and Special Access Services. The TSP System applies only to NSEP telecommunications services, and requires and authorizes priority action by the Telephone Company providing such services.

For Switched Access Service, the TSP System's applicability is limited to those services which the Telephone Company can discreetly identify for priority provisioning and/or restoration.

(B) A Telecommunications Service Priority charge applies as set forth in 7.3.3 (A) when a request to provide a Telecommunications Service Priority is received.

A Miscellaneous Service Order Charge as set forth in 7.3.3 (B) will apply to Telecommunications Service Priority change requests that are ordered subsequent to the initial installation of the associated access service.

ACCESS SERVICES

7. **ADDITIONAL ENGINEERING, ADDITIONAL LABOR AND MISCELLANEOUS SERVICES** (Continued)

7.3 Miscellaneous Services (Continued)

7.3.2. Telecommunications Service Priority (TSP) (Continued)

(B) (Continued)

A Telecommunications Service Priority charge does not apply when a Telecommunications Service Priority is discontinued or when ordered coincident with an Access Order to install or change service.

In addition, Additional Labor rates, as set forth in Section 10, may be applicable when provisioning or restoring Switched or Special Access Services with Telecommunications Service Priority.

When the customer requests an audit or a reconciliation of the Telephone Company's Telecommunications Service Priority records, a Miscellaneous Service Order Charge and Additional Labor rates as are applicable.

ACCESS SERVICES

7. **ADDITIONAL ENGINEERING, ADDITIONAL LABOR AND MISCELLANEOUS SERVICES** (Continued)

7.3 Miscellaneous Services (Continued)

7.3.3. Presubscription

(A) IntraLATA Dialing Parity

(1) IntraLATA Dialing Parity is available with FGD, Operator or Traditional signaling. When intraLATA Dialing Parity is made available in an end office at some time after he end office has converted to interLATA equal access, the balloting and allocation process for the intraLATA Dialing Parity will not apply.

A single line end user or agent must select only one Interexchange Carrier (IC) as an intraLATA primary interexchange carrier (IPIC). Multiline end users or agents and multiline hunt group end users or agents have two options in selecting an IPIC. Under option one, an end user or agent may select one IC for all its lines. Under option two, an end user or agent may indicate a desire to designate specific lines to different ICs.

An IC obtaining service commitments from end users and agents directly must provide an IC End User and Agent List to the Telephone Company accompanied by a document certifying that the IC does have end user and agent signed statements. The Telephone Company will process all IC End User and Agent Lists that are received 20 days prior to conversion of an end office to equal access.

(2) End User/Agent Choice Discrepancy

When a discrepancy is determined regarding an end user's or agent's designation of an (IPIC), the IC whose letter of agency bears the latest authorization date shall become the end user's or agent's IPIC.

ACCESS SERVICES

7. **ADDITIONAL ENGINEERING, ADDITIONAL LABOR AND MISCELLANEOUS SERVICES** (Continued)

7.3 Miscellaneous Services (Continued)

7.3.3. Presubscription (Continued)

(A) IntraLATA Dialing Parity (Continued)

(3) IntraLATA Presubscription Change Charge Application

(a) End users and agents making their initial IPIC selections during the four months following the applicable end office conversion date, are not subject to a presubscription charge.

Within the four months after the applicable end office conversion to equal access, an end user or agent may elect to change to another IPIC at no charge, one during that period. After the four month period has elapsed, a nonrecurring charge will apply.

(b) New end users and agents, who will be served by end offices equipped with equal access, will be asked to select an IPIC at the time they place an order with the Telephone Company for Telephone Exchange Service. New end users and agents will be offered a list of participating carriers to aid in their selection of an IPIC. There will be no charge for this initial selection.

After the end user's or agent's initial IPIC selection, the end user or agent may elect to change to another IPIC at no charge, once during the four month period. After the four month period has elapsed, a charge as set forth in (4) (a) following, applies.

(c) New end users who do not select an IPIC must dial an access code to route their intraLATA toll calls until they make a selection.

ACCESS SERVICES

7. **ADDITIONAL ENGINEERING, ADDITIONAL LABOR AND MISCELLANEOUS SERVICES** (Continued)

7.3. Miscellaneous Services (Continued)

7.3.3. Presubscription (Continued)

(A) IntraLATA Dialing Parity (Continued)

(3) IntraLATA Presubscription Change Charge Application (Continued)

(d) The Telephone Company will make post conversion changes in the end user's or agent's IPIC assignment pursuant to an IC provided list of customers, accepted by the Telephone Company under the conditions set forth in (1) and (2) preceding. Should an end user or agent dispute authorization of the change in IPIC assignment, the Telephone Company may, in order to resolve the dispute, require that the IC requesting the change submit a signed letter of agency. If the IC cannot produce a customer signed letter of agency or confirmation from the end user or agent, and the Telephone Company resolves the dispute in favor of the end user or agent, the IC will be billed two nonrecurring charges: an intraLATA presubscription change charge for the change to the disputed IC, and an unauthorized intraLATA presubscription change charge for restoring the end user's or agent's proper IC assignment. If the IC produces the required letter of agency within 30 days of the Telephone Company's request, the end user or agent will be billed two presubscription change charges in lieu of the IC. Charges are only applicable if a change in an end user's or agent's IC selection has actually been implemented in the switch.

ACCESS SERVICES

8. SPECIAL CONSTRUCTION

8.1 General

This section addresses special construction of Telephone Company facilities which are used to provide services offered under this tariff.

When special construction is required as described in 8.2 following, the provisions of this section apply in addition to regulations, rates, and charges set forth in other sections of this tariff.

Charges will be computed for each specific application of Special Construction. The customer will provide written authorization to the Telephone Company prior to the commencement of any Special Construction. The computed charges for Special Construction will be based upon time and materials. The Telephone Company will notify the customer when Special Construction is required.

8.2 Conditions Requiring Special Construction

Special construction is required when suitable facilities are not available to meet a customer's order for service and one or more of the following conditions exist:

- The Telephone Company has no other requirement for the facilities constructed at the customer's request;
- The customer requests that service be furnished using a type of facility, or via a route, other than that which the Telephone Company would otherwise utilize in furnishing the requested service;
- The customer requests the construction of more facilities than are required to satisfy its order for service;
- The customer requests construction to be expedited resulting in added cost to the Telephone Company;
- The customer requests that temporary facilities be constructed until permanent facilities are available.

ACCESS SERVICES

9. INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES

9.1 Local Transport Interface Groups

Ten Interface Groups are provided for terminating the Local Transport at the customer's premises. Each Interface Group provides a specified premises interface (i.e., two-wire, four-wire, DS1, etc).

As a result of the customer's access order and the type of Company transport facilities serving the customer's premises, the need for signaling conversions or two-wire to four-wire conversions, or the need to terminate digital or high frequency facilities in channel bank equipment may require that Company equipment be placed at the customer's premises. For example, if a voice frequency interface is ordered by the customer and the Company facilities serving the customer's premises are digital, then Company channel bank equipment must be placed at the customer's premises in order to provide the voice frequency interface ordered by the customer.

Interface Group 1 is provided with Type C Transmission Specifications, and Interface Groups 2 through 10 are provided with Type A or B Transmission Specifications, depending on the Feature Group and whether the Access Service is routed directly or through an access tandem. All Interface Groups are provided with Data Transmission Parameters. Interface Groups 3 through 10 are provided on an individual cases basis and Special Construction charges may apply.

Only certain premises interfaces are available at the customer's premises. The premises interfaces associated with the Interface Groups may vary among Feature Groups. The various premises interfaces which are available with the Interface Groups, and the Feature Groups with which they may be used as follows:

9.1.1 Interface Group 1

(A) Interface Group 1, except as set forth in the following, provides two-wire voice frequency transmission at the point of termination at the customer's premises. The interface is capable of transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

(B) Interface Group 1 is not provided in association with FGC and FGD when the first point of switching is an access tandem. In addition, Interface Group 1 is not provided in association with FGB, FGC, or FGD when the first point of switching provides only four-wire terminations.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.1 Local Transport Interface Groups (Continued)

9.1.1 Interface Group 1 (Continued)

(C) The transmission path between the point of termination at the customer's premises and the first point of switching may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of 300 to 3000 Hz.

(D) The interface is provided with loop supervisory signaling. When the interface is associated with FGA, such signaling will be loop start or ground start signaling. When the interface is associated with FGB, FGC, or FGD, such signaling, except for two-way calling, which is E&M signaling, will be reverse battery signaling.

9.1.2 Interface Group 2

(A) Interface Group 2 provides four-wire voice frequency transmission at the point of termination at the customer's premises. The interface is capable of transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

(B) The transmission path between the point of termination at the customer's premises and the first point of switching may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

(C) The interface is provided with loop supervisory signaling. When the interface is associated with FGA, such signaling will be loop start or ground start signaling. When the interface is associated with FGB, FGC, or FGD, such signaling, except for two-way calling, which is E&M signaling, will be reverse battery signaling.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.1 Local Transport Interface Groups (Continued)

9.1.3 Interface Group 3

Interface Group 3 provides group level analog transmission at the point of termination at the customer's premises. The interface is capable of transmission electrical signals between the frequencies of 60 to 180 kHz, with the capability to channelize up to 12 voice frequency transmission paths. Certain frequencies within the bandwidth of the Interface Group are reserved for Company use, i.e., pilot and carrier group alarm tones. Before the first point of switching, the Company will provide multiplex equipment to derive 12 transmission paths of frequency bandwidth of approximately 300 to 3000 Hz. The interface is provided with individual transmission path SF supervisory signaling.

9.1.4 Interface Group 4

Interface Group 4 provides supergroup level analog transmission at the point of termination at the customer's premises. The interface is capable of transmitting electrical signals between the frequencies of 312 to 552 kHz, with the capability to channelize up to 60 voice frequency transmission paths. Certain frequencies within the bandwidth of the Interface Group are reserved for Company use, i.e. pilot and carrier group alarm tones. Before the first point of switching, the Company will provide multiplex and channel bank equipment to derive 60 transmission paths of frequency bandwidth of approximately 300 to 3000 Hz. The interface is provided with individual transmission path SF supervisory signaling.

9.1.5 Interface Group 5

Interface Group 5 provides mastergroup level analog transmission at the point of termination at the customer's premises. The interface is capable of transmitting electrical signals between the frequencies of 564 to 3084 kHz, with the capability to channelize up to 600 voice frequency transmission paths. Certain frequencies within the bandwidth of the Interface Group are reserved for Company use, i.e. pilot and carrier group alarm tones. Before the first point of switching, the Company will provide multiplex and channel bank equipment to derive 600 transmission paths of frequency bandwidth of approximately 300 to 3000 Hz. The interface is provided with individual transmission path SF supervisory signaling.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.1 Local Transport Interface Groups (Continued)

9.1.6 Interface Group 6

Interface Group 6 provides DS1 level digital transmission at the point of termination at the customer's premises. The interface is capable of transmitting electrical signals at a nominal 1.544 Mbps, with the capability to channelize up to 24 voice frequency transmission paths. Before the first point of switching, when analog switching utilizing analog terminations is provided, the Company will provide multiplex and channel bank equipment to derive 24 transmission paths of a frequency bandwidth of approximately 300 to 3000 Hz. When digital switching or analog switching with digital carrier terminations is provided, the Company will provide, at the first point of switching, a DS1 signal in D3/D4 format. The interface is provided with individual transmission path bit stream supervisory signaling.

9.1.7 Interface Group 7

Interface Group 7 provides DS1C level digital transmission at the point of termination at the customer's premises. The interface is capable of transmitting electrical signals at a nominal 3.152 Mbps, with the capability to channelize up to 48 voice frequency transmission paths. Before the first point of switching, when analog switching utilizing analog terminations is provided, the Company will provide multiplex and channel bank equipment to derive up to 48 voice frequency transmission paths of a frequency bandwidth of approximately 300 to 3000 Hz. When digital switching or analog switching with digital carrier terminations is provided, the Company will provide, at the first point of switching, DS1 signals in D3/D4 format. The interface is provided with individual transmission path bit stream supervisory signaling.

9.1.8 Interface Group 8

Interface Group 8 provides DS2 level digital transmission at the point of termination at the customer's premises. The interface is capable of transmitting electrical signals at a nominal 6.312 Mbps, with the capability to channelize up to 96 transmission paths. Before the first point switching, when analog switching utilizing analog terminations is provided, the Company will provide multiplex and channel bank equipment in its office to derive up to 96 transmission paths of a frequency bandwidth of approximately 300 to 3000 Hz. When digital switching, or analog switching with digital carrier terminations is provided, the Company will provide, at the first point of switching, DS1 signals in D3/D4 format. The interface is provided with individual transmission path bit stream supervisory signaling.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.1 Local Transport Interface Groups (Continued)

9.1.9 Interface Group 9

Interface Group 9 provides DS3 level digital transmission at the point of termination at the customer's premises. The interface is capable of transmitting electrical signals at a nominal 44.736 Mbps, with the capability to channelize up to 672 voice frequency transmission paths. Before the first point of switching, when analog switching utilizing analog terminations is provided, the Company will provide multiplex and channel bank equipment to derive up to 672 transmission paths of a frequency bandwidth of approximately 300 to 3000 Hz. When digital switching, or analog switching with digital carrier terminations is provided, the Company will provide, at the first point of switching, DS1 signals in D3/D4 format. The interface is provided with individual transmission path bit stream supervisory signaling.

9.1.10 Interface Group 10

Interface Group 10 provides DS4 level digital transmission at the point of termination at the customer's premises. The interface is capable of transmitting electrical signals at a nominal 274.176 Mbps, with the capability to channelize up to 4032 voice frequency transmission paths. Before the first point of switching, When analog switching utilizing analog terminations is provided, the Company will provide multiplex and channel bank equipment to derive up to 4032 transmission paths of a frequency bandwidth of approximately 300 to 3000 Hz. When digital switching or analog switching with digital carrier terminations is provided, the Company will provide, at the first point of switching, DS1 signals in D3/D4 format. The interface is provided with individual transmission path bit stream supervisory signaling.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.1 Local Transport Interface Groups (Continued)

9.1.11 Available Premises Interface Codes

Following is a matrix showing, for each Interface Group, which premises interface codes are available as a function of the Company switch supervisory signaling and Feature Group.

Telephone Company Interface Group	Premises Switch Supervisory Signaling	Interface Code	Feature Group A	B	C	D
1	LO	2LS2	X			
	LO	2LS3	X			
	GO	2GS2	X			
	GO	2GS3	X			
	LO, GO	2DX3	X			
	LO, GO	4EA3-E	X			
	LO, GO	4EA3-M	X			
	LO, GO	6EB3-E	X			
	LO, GO	6EB3-M	X			
	RV, EA, EB, EC	2DX3		X	X	X
	RV, EA, EB, EC	4EA3-E		X	X	X
	RV, EA, EB, EC	4EA3-M		X	X	X
	RV, EA, EB, EC	6EB3-E		X	X	X
	RV, EA, EB, EC	6EB3-M		X	X	X
	EA, EB, EC	6EC3			X	X
	RV	2RV3-0		X	X	X
	RV	2RV3-T		X	X	X

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.1 Local Transport Interface Groups (Continued)

9.1.11 Available Premises Interface Codes (Continued)

Telephone Company Interface Group	Premises Switch Supervisory Signaling	Interface Code	Feature Group A	B	C	D
2	LO, GO	4SF2	X			
	LO, GO	4SF3	X			
	LO	4LS2	X			
	LO	4LS3	X			
	LO	6LS2	X			
	GO	4GS2	X			
	GO	4GS3	X			
	GO	6GS2	X			
	LO, GO	4DX2	X			
	LO, GO	4DX3	X			
	LO, GO	6EA2-E	X			
	LO, GO	6EA2-M	X			
	LO, GO	8EB2-E	X			
	LO, GO	8EB2-M	X			
	LO, GO	6EX2-B	X			
	RV, EA, EB, EC	4SF2		X	X	X
	RV, EA, EB, EC	4SF3		X		
	RV, EA, EB, EC	4DX2		X	X	X
	RV, EA, EB, EC	4DX3		X	X	X
	RV, EA, EB, EC	6DX2			X	
	RV, EA, EB, EC	6EA2-E		X	X	X
	RV, EA, EB, EC	6EA2-M		X	X	X
	RV, EA, EB, EC	8EB2-E		X	X	X
	RV, EA, EB, EC	8EB2-M		X	X	X
	EA, EB, EC	8EC2-M			X	X
	RV	4RV2-0		X	X	X
	RV	4RV2-T		X	X	X
	RV	4RV3-O		X	X	
	RV	4RV3-T		X	X	

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.1 Local Transport Interface Groups (Continued)

9.1.11 Available Premises Interface Codes (Continued)

Telephone Company Interface Group	Premises Switch Supervisory Signaling	Interface Code	Feature Group A	B	C	D
3	LO, GO	4AH5-B	X			
	RV, EA, EB, EC	4AH5-B		X	X	X
4	LO, GO	4AH6-C	X			
	RV, EA, EB, EC	4AH6-C		X	X	X
5	LO, GO	4AH6-D	X			
	RV, EA, EB, EC	4AH6-D		X	X	X
6	LO, GO	4DS9-15	X			
	LO, GO	4DS9-15L	X			
	RV, EA, EB, EC	4DS9-15		X	X	X
	RV, EA, EB, EC	4DS9-15L		X	X	X
7	LO, GO	4DS9-31	X			
	RV, EA, EB, EC	4DS9-32		X	X	X
	LO, GO	4DS9-31L	X			
	RV, EA, EB, EC	4DS9-31L		X	X	X
8	LO, GO	4DS0-63	X			
	LO, GO	4DS0-63L	X			
	RV, EA, EB, EC	4DS0-63		X	X	X
	RV, EA, EB, EC	4DS0-63L		X	X	X
9	LO, GO	4DS6-44	X			
	LO, GO	4DS6-44L	X			
	RV, EA, EB, EC	4DS6-44		X	X	X
	RV, EA, EB, EC	4DS6-44L		X	X	X
10	LO, GO	4DS6-27	X			
	LO, GO	4DS6-27L	X			
	RV, EA, EB, EC	4DS6-27		X	X	X
	RV, EA, EB, EC	4DS6-27L		X	X	X

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.1 Local Transport Interface Groups (Continued)

9.1.12 Supervisory Signaling

Where the transmission parameters permit, and where signaling conversion is required by the customer to meet its signaling capability, the customer may order an optional supervisory signaling arrangement for each transmission path provided as follows:

(A) For Interface Groups 1 and 2

DX Supervisory Signaling,
E&M Type I Supervisory Signaling,
E&M Type II Supervisory Signaling, or
E&M Type III Supervisory Signaling.

(B) For Interface Group 2

SF Supervisory Signaling, or
Tandem Supervisory Signaling.

(C) For Interface Groups 6 through 10

These Interface Groups may, at the option of the customer, be provided with individual transmission path SF supervisory signaling where such signaling is available in Company central offices. Generally such signaling is available only where the entry switch provides an analog; i.e., nondigital, interface to the transport termination.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.2 Transmission Specifications Switched Access Service

Each Switched Access Service transmission path is provided with standard transmission specifications. There are three different standard specifications (Types A, B, and C). The standard for a particular transmission path is dependent on the Feature Group, the Interface Group, and whether the service is directly routed or via an access tandem. Data Transmission parameters are also provided with each Switched Access Service transmission path. The Company will, upon notification by the customer that the data parameters are not being met, conduct tests independently or in cooperation with the customer, and take any necessary action to ensure that the data parameters are met.

The Company will maintain existing transmission specifications on functioning service configurations installed prior to the effective date of this tariff except that service configurations having performance specifications exceeding the standards listed in this provision will be maintained at performance levels specified in this tariff.

9.2.1 Standard Transmission Specifications

Following are descriptions of the three Standard Transmission Specifications available with Switched Access Service Feature Groups. The specific applications in terms of the Feature Groups and Interface Groups with which the Feature Group Standard Transmission Specifications are provided as follows:

(A) Type A Transmission Specifications

Type A Transmission Specifications are provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is 2.0 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to the loss 1004 Hz is -1.0 dB to +3.0 dB.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.2 Transmission Specifications Switched Access Service (Continued)

9.2.1 Standard Transmission Specifications (Continued)

(A) Type A Transmission Specifications (Continued)

(3) C-Message Noise

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

Route Miles	C-Message Noise* Type B2	Type B1
less than 50	35 dBrnCO	32 dBrnCO
51 to 100	37 dBrnCO	33 dBrnCO
101 to 200	40 dBrnCO	35 dBrnCO
201 to 400	43 dBrnCO	37 dBrnCO
401 to 1000	45 dBrnCO	39 dBrnCO

* For Feature Group C and D only Type B2 will be provided. For Feature Groups A and B, Type B1 or B2 will be provided as set forth in Technical Reference PUB 62500.

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBmO holding tone, is less than or equal to 45 dBrnCO.

(5) Echo Control

Echo Control, identified as Equal Level Echo Path Loss, and expressed as Echo Return Loss and Singing Return Loss, is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. It is equal to or greater than the following:

	Echo Return Loss	Singing Return Loss
POT to Access Tandem	21 dB	14 dB
POT to End Office		
- Direct	N/A	N/A
- Via Access Tandem	16 dB	11 dB

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.2 Transmission Specifications Switched Access Service (Continued)

9.2.1 Standard Transmission Specifications (Continued)

(A) Type A Transmission Specifications (Continued)

(6) Standard Return Loss

Standard Return Loss expressed as Echo Return Loss and Singing Return Loss on two-wire ports of a four-wire point of termination shall be equal to or greater than:

Echo Return Loss	Singing Return Loss
5 dB	2.5 dB

(B) Type B Transmission Specifications

Type B Transmission Specification is provided with the following parameters.

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is ± 2.5 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion is the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +4.0 dB.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.2 Transmission Specifications Switched Access Service (Continued)

9.2.1 Standard Transmission Specifications (Continued)

(B) Type B Transmission Specifications (Continued)

(3) C-Message Noise

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

Route Miles	C-Message Noise* Type C2	Type C1
less than 50	38 dBrnCO	32 dBrnCO
51 to 100	39 dBrnCO	33 dBrnCO
101 to 200	41 dBrnCO	35 dBrnCO
201 to 400	43 dBrnCO	37 dBrnCO
401 to 1000	45 dBrnCO	39 dBrnCO

* For Feature Groups C and D only Type C2 will be provided. For Feature Groups A and B, Type C1 or C2 will be provided as set forth in Technical Reference PUB 62500.

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBmO holding tone is less than or equal to 47 dBrnCO.

(5) Echo Control

Echo Control, identified as Impedance Balance for FGA and FGB and Equal Level Echo Path Loss for FGC and FGD, and expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), is dependent on the routing; i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. The ERL and SRL also differ by Feature Group, type of termination, and type of transmission path. They are greater than or equal to the following:

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.2 Transmission Specifications Switched Access Service (Continued)

9.2.1 Standard Transmission Specifications (Continued)

(B) Type B Transmission Specifications (Continued)

(5) Echo Control (Continued)

	Echo Return Loss	Singing Return Loss
POT to Access Tandem - Terminated in 4-Wire trunk	21 dB	14 dB
POT to End Office - Terminated in 2-Wire trunk	16 dB	11 dB
POT to End Office - Direct	16 dB	11 dB
- Via Access Tandem • For FGB access	8 dB	4 dB
• For FGC access (Effective 4-Wire transmission path at end office)	16 dB	11 dB
• For FGC access (Effective 2-Wire transmission path at end office)	13 dB	6 dB

(6) Standard Return Loss

Standard Return Loss, expressed as Echo Return Loss and Singing Return Loss, on two-wire ports of a four-wire point of termination shall be equal to or greater than:

Echo Return Loss	Singing Return Loss
5 dB	2.5 dB

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.2 Transmission Specifications Switched Access Service (Continued)

9.2.1 Standard Transmission Specifications (Continued)

(C) Type C Transmission Specifications

Type C Transmission Specifications are provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss is 3.0 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +5.5 dB.

(3) C-Message Noise

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

	C-Message Noise*	
Route Miles	Type C2	Type C1
less than 50	38 dBrnCO	32 dBrnCO
51 to 100	39 dBrnCO	33 dBrnCO
101 to 200	41 dBrnCO	35 dBrnCO
201 to 400	43 dBrnCO	37 dBrnCO
401 to 1000	45 dBrnCO	39 dBrnCO

* For Feature Group C and D only Type C2 will be provided. For Feature Groups A and B, Type C1 or C2 will be provided as set forth in Technical Reference PUB 62500.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.2 Transmission Specifications Switched Access Service (Continued)

9.2.1 Standard Transmission Specifications (Continued)

(C) Type C Transmission Specifications (Continued)

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBrnCO.

(5) Echo Control

Echo Control, identified as Return Loss and expressed as Echo Return Loss and Singing Return Loss, is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. It is equal to or greater than the following:

	Echo Return Loss	Singing Return Loss
POT to Access Tandem	13 dB	6 dB
POT to End Office		
- Direct	13 dB	6 dB
- Via Access Tandem (for FGB only)	8 dB	4 dB

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.2 Transmission Specifications Switched Access Service (Continued)

9.2.1 Standard Transmission Specifications (Continued)

(D) WATS Access Line Standard Transmission Specifications

(1) Standard Two-Wire Voice Transmission Specifications

(a) Loss Deviation

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

(b) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to the loss at 1004 Hz in -3.0 dB to + 9.0 dB.

(c) C-Message Noise

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

Route Miles	C-Message Noise
Less than 50	35 dBrnCO
51 to 100	37 dBrnCO
101 to 200	40 dBrnCO
201 to 400	43 dBrnCO
401 to 1000	45 dBrnCO

(d) Echo Control

Return Loss for both Echo Return Loss (ERL) and Singing Return Loss (SRL), is equal to or greater than:

ERL	6.0 dB
SRL	3.0 dB

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.2 Transmission Specifications Switched Access Service (Continued)

9.2.1 Standard Transmission Specifications (Continued)

(D) WATS Access Line Standard Transmission Specifications

(2) Standard Four-Wire Voice Transmission Specifications

(a) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is -3.0 dB to +3.0 dB.

(b) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -1.0 dB to +4.5 dB.

(c) C-Message Noise

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

Route Miles	C-Message Noise
Less than 50	35 dBrnCO
51 to 100	37 dBrnCO
101 to 200	40 dBrnCO
201 to 400	43 dBrnCO
401 to 1000	45 dBrnCO

(d) Echo Control

The Equal Level Echo Path Loss for both Echo Return Loss (ERL) and Singing Return Loss (SRL), is equal to or greater than:

ERL	15.0 dB
SRL	9.0 dB

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.2 Transmission Specifications Switched Access Service (Continued)

9.2.2 Data Transmission Parameters

Two types of Data Transmission Parameters, i.e., Type DA and Type DB, are provided for the Feature Group arrangements. In addition, the WATS Access Line is provided with Data Transmission Parameters. These are described as follows:

(A) Data Transmission Parameters Type DA

(1) Signal to C-Notched Noise Ratio

The Signal to C-Notched Noise Ratio is equal to or greater than 33 dB.

(2) Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

604 to 2804 Hz

less than 50 route miles	500 microseconds
equal to or greater than 50 route miles	900 microseconds

1004 to 2404 Hz

less than 50 route miles	200 microseconds
equal to or greater than 50 route miles	400 microseconds

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 65 dBrnCO threshold in 15 minutes is no more than 15 counts.

(4) Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

Second Order (R2)	33 dB
Third Order (R3)	37 dB

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.2 Transmission Specifications Switched Access Service (Continued)

9.2.2 Data Transmission Parameters (Continued)

(A) Data Transmission Parameters Type DA (Continued)

(5) Phase Jitter

The Phase Jitter over the 4-300 Hz frequency band is less than or equal to 5° peak-to-peak.

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

(B) Data Transmission Parameters Type DB

(1) Signal to C-Notched Noise Ratio

The signal to C-Notched Noise Ratio is equal to or greater than 30 dB.

(2) Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

604 to 2804 Hz

less than 50 route miles	800 microseconds
equal to or greater than 50 route miles	1000 microseconds

1004 to 2404 Hz

less than 50 route miles	320 microseconds
equal to or greater than 50 route miles	500 microseconds

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 67 dBrnCO threshold in 15 minutes is no more than 15 counts.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.2 Transmission Specifications Switched Access Service (Continued)

9.2.2 Data Transmission Parameters (Continued)

(B) Data Transmission Parameters Type DB (Continued)

(4) Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

Second Order (R2)	31 dB
Third Order (R3)	34 dB

(5) Phase Jitter

The Phase Jitter over the 4-300 Hz frequency band is less than or equal to 7° peak-to-peak.

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

(C) WATS Access Line Data Transmission Parameters

(1) Signal to C-Notched Noise Ratio

The maximum Signal-to-C-Notched Noise Ratio is 30 dB.

(2) Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

1000 microseconds	604 to 2804 Hz
500 microseconds	1000 to 2404 Hz

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 67 dBrnCO threshold in 15 minutes is no more than 15 counts.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.2 Transmission Specifications Switched Access Service (Continued)

9.2.2 Data Transmission Parameters (Continued)

(C) WATS Access Line Data Transmission Parameters (Continued)

(4) Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

Second Order (R2)	31 dB
Third Order (R3)	34 dB

(5) Phase Jitter

The Phase Jitter over the 4-300 Hz frequency band is less than or equal to 7° peak-to-peak.

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

9.2.3 WATS Access Line

(A) Improved Two-Wire Voice Transmission Specifications

(1) Loss Deviation

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

(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.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.2 Transmission Specifications Switched Access Service (Continued)

9.2.3 WATS Access Line (Continued)

(A) Improved Two-Wire Voice Transmission Specifications (Continued)

(3) C-Message Noise

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

Route Miles	C-Message Noise
Less than 50	35 dBrnCO
51 to 100	37 dBrnCO
101 to 200	40 dBrnCO
201 to 400	43 dBrnCO
401 to 1000	45 dBrnCO

(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

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes

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

Example: If the customer specifies a NT Network Channel Code and a 2DC8-3 Channel Interface at the customer's premises, the following is being requested:

NT	=	Metallic Channel with a Predefined Technical Specification Package (1)
2	=	Number of physical wires at customer premises
DC	=	Facility interface for direct current or voltage
8	=	Variable impedance level
3	=	Metallic facilities (DC continuity) for direct current/low frequency control signals or slow speed data (30 baud)

9.3.1 Glossary of Channel Interface Codes and Options

Code	Option	Definition
AB -		accepts 20 Hz ringing signal at customer's point of termination
AC -		accepts 20 Hz ringing signal at customer's end user's point of termination
CT -		Centrex Tie Trunk Termination
DA -		data stream in VF frequency band at customer's end user's point of termination
DB -		data stream in VF frequency band at customer's point of termination
	- 10	VF for TG1 and TG2
	- 43	VF for 43 Telegraph Carrier type signals, TG1 and TG2
DC -		direct current or voltage
-	1	monitoring interface with services RC combination (McCulloh format)
-	2	Telephone 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 customer's point of termination

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.1 Glossary of Channel Interface Codes and Options (Continued)

Code	Option	Definition
DE		DATAPHONE Select-A-Station (and TABS) interface at the customer's end user's point of termination
DS		digital hierarchy interface
	15	1.544 Mbps (DS1) format per PUB 62411 plus D4
	15E	8-bit PCM encoded in one 64 kbps of the DS1 signal
	15F	8-bit PCM encoded in two 64 kbps of the DS1 signal
	15G	8-bit PCM encoded in three 64 kbps of the DS1 signal
	15H	14/11-bit PCM encoded in six 64 kbps of the DS1 signal
	15J	1.544 Mbps format for PUB 62411
	15K	1.544 Mbps format for PUB 62411 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
	48	4.8 kbps
	56	56.0 kbps
	96	9.6 kbps
	A	1.544 Mbps format for PUB 62411
	B	1.544 Mbps format per PUB 62411 plus D4
	C	1.544 Mbps format per PUB 62411 plus extended framing format
DX		duplex signaling interface at customer's point of termination
DY		duplex signaling interface at customer's end user's point of termination
EA	E	Type I E&M Lead Signaling. Customer at POT or customer's end user at POT originates on E lead.
EA	M	Type I E&M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.1 Glossary of Channel Interface Codes and Options (Continued)

Code	Option	Definition
EB -	E	Type II E&M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead.
EB -	M	Type II E&M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead.
EC -		Type III E&M Signaling at customer POT.
EX -	A	tandem channel unit signaling for loop start or ground start and customer supplies open end (dial tone, etc.) functions.
EX -	B	tandem channel unit signaling for loop start or ground start and customer supplies closed end (dial pulsing, etc.) functions.
GO -		ground start loop signaling - open end function by customer or customer's end user.
GS -		Ground start loop signaling - closed end function by customer or customer's end user.
IA -		E.I.A. (25 pin RS-232).
LA -		end user loop start loop signaling - Type A OPS registered port open end.
LB -		end user loop start loop signaling - Type B OPS registered port open end.
LC -		end user loop start loop signaling - Type C OPS registered port open end.
LO -		loop start loop signaling - open end function by customer or customer's end user.
LR -		20 Hz automatic ringdown interface at customer with Telephone Company provided PLAR.
LS -		loop start loop signaling - closed end function by customer or customer's end user.
NO -		no signaling interface, transmission only.
PG -		program transmission - no dc signaling.
-	1	nominal frequency from 50 to 15000 Hz.
-	3	nominal frequency from 200 to 3500 Hz.
-	5	nominal frequency from 100 to 5000 Hz.
-	8	nominal frequency from 50 to 8000 Hz.
PR -		protective relaying*.

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

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.1 Glossary of Channel Interface Codes and Options (Continued)

Code		Option	Definition
RV	-	0	reverse battery signaling, one way operation, originated by customer.
	-	T	reverse battery signaling, one way operation, terminate function by customer or customer's end user.
SF	-		single frequency signaling with VF band at either customer POT or customer's end user POT.
TF	-		telephotograph interface.
TT	-		telegraph/teletypewriter interface at either customer POT or customer's end user POT.
	-	2	20.0 milliamperes.
	-	3	3.0 milliamperes.
	-	6	62.5 milliamperes.
TV	-		television interface.
	-	1	combined (diplexed) video and one audio signal.
	-	2	combined (diplexed) video and two audio signals.
	-	5	video plus one (or two) audio 5 kHz signal(s) or one (or two) two-wire.
	-	15	video plays one (or two) audio 15 kHz signal(s).

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.2 Impedance

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

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

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

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.3 Digital Hierarchy Channel Interface Codes (4DS)

Customers selecting the multiplexed four-wire DSX-1 or higher facility interface option at the customer designated premises will be requested to provide subsequent system and channel assignment data. The various digital bit rates in the digital hierarchy employ the channel interface code 4DS8, 4DS0, or 4DS6 plus the speed options indicated below:

Interface Code and Speed Option	Nominal Bit Rate (Mbps)	Digital Hierarchy Level
4DS8-15	1.544	DS1
4DS8-31	3.152	DS1C
4DS0-63	6.312	DS2
4DS6-44	44.736	DS3
4DS6-27	274.176	DS4

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.4 Service Designator/Network Channel Code Conversion Table

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

Service Designator Code	Network Channel Code
MTC	MQ
MT1	NT
MT2	NU
MT3	NV
TGC	NQ
TG1	NW
TG2	NY
VGC	LQ
VGW	SE
VG1	LB
VG2	LC
VG3	LD
VG4	LE
VG5	LF
VG6	LG
VG7	LH
VG8	LJ
VG9	LK
VG10	LN
VG11	LP
VG12	LR
APC	PQ
AP1	PE
AP2	PF
AP3	PJ
AP4	PK
TVC	TQ
TV1	TV
TV2	TW
DA1	XA
DA2	XB
DA3	XG
DA4	XH

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.4 Service Designator/Network Channel Code Conversion Table (Continued)

Service Designator Code	Network Channel Code
HCO	HS
HC1	HC
HC1C	HD
HC2	HE
HC3	HF
HC4	HG

9.3.5 Compatible Channel Interfaces

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

(A) Metallic

Compatible CIs

2DC8-1	2DC8-2
2DC8-3	2DC8-3
4DS8-*	2DC8-1
4DS8-*	2DC8-2

* See 9.3.3, preceding, for explanation.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.5 Compatible Channel Interfaces (Continued)

(B) Voice Grade

Compatible CIs		Compatible CIs		Compatible CIs	
2AB2	2AC2	2DB2	2DA2	2LR2	2LR2
2AB3	2AC2	2DB3	2DA2	2LR3	2LR2
2CT3	2DY2	2DX3	2LA2	2LS2	2LA2
	4DS8*		2LB2		2LB2
	4DX2		2LC2		2LC2
	4DX3		2LO3		
	4DY2		2LS2	2LS3	2LA2
	4EA2-E		2LS3		2LB2
	4EA2-M				2LC2
	4SF2	2GO2	2GS2		
	4SF3		2GS3	2NO2	2DA2
	6DX2				2NO2
	6DY2	2GO3	2GS2		
	6DY3		2GS3	2NO3	2NO2
	6EA2-E				2PR2
	6EA2-M	2LO2	2LS2		
	6EB2-E		2LS3	2TF3	2TF2
	6EB2-M				
	6EB3-E	2LO3	2LS2		
	8EB2-E		2LS3		
	8EB2-M				

* See 9.3.3, preceding for explanation.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.5 Compatible Channel Interfaces (Continued)

(B) Voice Grade (Continued)

Compatible CIs

	8EC2
	9DY2
	9DY3
	9EA2
	9EA3
4AB2	2AC2
	4AB2
	4AC2
	4SF2
4AB3	2AC2
	4AC2
	4SF2
4AC2	2AC2
	4AC2

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.5 Compatible Channel Interfaces (Continued)

(B) Voice Grade (Continued)

Compatible CIs		Compatible CIs		Compatible CIs	
		4DS8-*	2AC2	4DS8-*	4DG2
			2DA2		4LR2
			2DY2		4LS2
			2GO2		4NO2
4DA2	4DA2		2GO3		4PR2
			2GS2		4RV2-T
4DB2	2DA2		2GS3		4SF2
	2NO2		2LA2		4SF3
	2PR2		2LB2		4TF2
	4DA2		2LC2		6DA2
	4DB2		2LO2		6DY2
	4NO2		2LO3		6DY3
	4PR2		2LR2		6EA2-E
	6DA2		2LS2		6EA2-M
			2LS3		6EB2-E
4DD3	2DE2		2NO2		6EB2-M
	4DE2		2PR2		6GS2
			2RV2-T		6LS2
			2TF2		8EB2-E
			4AC2		8EB2-M
			4DA2		9DY2
			4DE2		9DY3
			4DX2		9EA2
			4DX3		9EA3
			4DY2		
			4EA2-E		
			4EA2-M		

* See 9.3.3, preceding for explanation.

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.5 Compatible Channel Interfaces (Continued)

(B) Voice Grade (Continued)

Compatible CIs		Compatible CIs		Compatible CIs	
4DX2	2DY2	4DX2	8EB2-E	4DX3	6DY2
	2LA2		8EB2-M		6DY3
	2LB2		9DY2		6EA2-E
	2LC2		9DY3		6EA2-M
	2LO3		9EA2		6EB2-E
	2LS2		9EA3		6EB2-M
	2LS3				6LS2
	2RV2-T	4DX3	2DY2		8EB2-E
	4DX2		2LA2		8EB2-M
	4DY2		2LB2		9DY2
	4EA2-E		2LC2		9DY3
	4EA2-M		2LO3		9EA2
	4LS2		2LS2		9EA3
	4RV2-T		2LS3		
	4SF2		2RV2-T	4DY2	2DY2
	4SF3		4DX2		4DY2
	6DY2		4DX3		
	6DY3		4DY2		
	6EA2-E		4EA2-E		
	6EA2-M		4EA2-M		
	6EB2-E		4LS2		
	6EB2-M		4RV2-T		
	6LS2		4SF2		
			4SF3		
4EA2-E	2DY2	4EA3-E	2DY2	4GO2	2GO2
	4DY2		4DY2		2GO3
	4EA2-E		4EA2-E		2GS2
	4EA2-M		4EA2-M		2GS3
	4SF2		4SF2		4GS2
	6DY2		6DY2		4SF2
	6DY3		6DY3		6GS2
	6EB2-E		6EA2-E		
	6EB2-M		6EA2-M	4GO3	2GO2
	8EB2-E		6EB2-E		2GS2
	8EB2-M		6EB2-M		2GS3

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.5 Compatible Channel Interfaces (Continued)

(B) Voice Grade (Continued)

Compatible CIs		Compatible CIs		Compatible CIs	
	9DY2		8EB2-E		4GS2
	9DY3		9EB2-M		4SF2
			9DY2		6GS2
4EA2-M	2DY2		9DY3		
	4DY2		9EA2		
	4EA2-M		9EA3	4GS	2GS
	4SF2				2LS
					4GS
					4LS
	6DY2				
	6DY3				
	6EB2-E				
	6EB2-M				
	8EB2-E				
	8EB2-M				
	9DY2				
	9DY3				
4LO2	2LS2	4LS3	2LA2	4SF2	2LO3
	2LS3		2LB2		2LR2
	4LS2		2LC2		2LS2
	4SF2		2LO2		2LS3
	6LS2		2LO3		2RV2-T
			4SF2		4AC2
4LO3	2LS2				4DY2
	2LS3	4NO2	2DA2		4LS2
	4LS2		2DE2		4RV2-T
	4SF2		2NO2		4SF2
	6LS2		4DA2		6DY2
			4DE2		6DY3

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.5 Compatible Channel Interfaces (Continued)

(B) Voice Grade (Continued)

Compatible CIs		Compatible CIs		Compatible CIs	
4LR2	2LR2		4NO2		6GS2
	4LR2		6DA2		9DY2
	4SF2				9DY3
		4RV2-0	2RV2-T		
4LR3	2LR2		4RV2-T	4SF3	2DY2
	4LR2		4SF2		2GO3
	4SF2				2GS2
		4SF2	2AC2		2GS3
4LS2	2LA2		2DY2		2LA2
	2LB2		2GS2		2LB2
	2LC2		2GS3		2LC2
	2LO2		2LA2		2LO3
	2LO3		2LB2		2LR2
			2LC2		
4SF3	2LS2	6DA	4DA2	6DY3	2DY2
	2LS3		6DA2		4DY2
	2RV2-T				6DY2
	4DY2	6DX2	2DY2		6DY3
	4EA2-E		4DY2		
	4EA2-M		4EA2-E	6EA2-E	2AC2
	4GS2				
	4LR2		4EA2-M		2DY2
	4LS2		4SF2		2LA2
	4RV2-T		6DY2		2LB2
	4SF2		6DY3		2LC2
	4SF3		6EA2-E		2LO3
	6DY2		6EA2-M		2LS2
	6DY3		6EB2-E		2LS3
	6EB2-E		6EB2-M		2RV2-T
	6EB2-M		8EB2-E		4AC2
	6GS2		8EB2-M		4DY2
	6LS2		9DY2		4EA2-E

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.5 Compatible Channel Interfaces (Continued)

(B) Voice Grade (Continued)

Compatible CIs		Compatible CIs		Compatible CIs	
9DY2		9DY3		4EA2-M	
	9DY3		9EA2		4LS2
	9EA2		9EA3		4RV2-T
	9EA3				4SF2
		6DY2	2DY2		4SF3
4TF2	2TF2		4DY2		6DY2
	4TF2		6DY2		6DY3
					6EA2-E
					6EA2-M
6EA2-E	6EB2-E	6EA2-M	6DY2	6EB3-E	2DY2
	6EB2-M		6DY3		4DY2
	6LS2		6EA2-M		4EA2-E
	8EB2-E		6EB2-E		4EA2-M
	8EB2-M		6EB2-M		4SF2
	9DY2		6LS2		6DY2
	9DY3		8EB2-E		6DY3
			8EB2-M		6EA2-E
6EA2-M	2AC2		9DY2		6EA2-M
	2DY2		9DY3		8EB2-E
	2LA2				8EB2-M
	2LB2	6EB2-E	2DY2		9DY2
	2LC2		4DY2		9DY3
	2LO3		4SF2		9EA2
	2LS2		6DY2		9EA3
	2LS3		6DY3		
	2RV2-T		6EB2-E	6EX2-A	2GS2
	4AC2		6EB2-M		2GS3
	4DY2		9DY2		2LS2
	4EA2-E		9DY3		2LS3
	4EA2-M				4GS2
	4LS2	6EB2-M	2DY2		4LS2
	4RV2-T		4DY2		4SF2
	4SF2		4SF2		6GS2

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.5 Compatible Channel Interfaces (Continued)

(B) Voice Grade (Continued)

Compatible CIs		Compatible CIs		Compatible CIs	
	4SF3		6DY2		6LS2
			6DY3		
			6EB2-M		
			9DY2		
			9DY3		
6EX2-B	2GO3	8EB2-E	2AC2	8EB2-M	2AC2
	2LA2		2DY2		2DY2
	2LB2		2LA2		2LA2
	2LC2		2LB2		2LB2
	2LO2		2LC2		2LC2
	2LO3		2LO3		2LO3
	2LR2		2LS2		2LS2
	4LR2		2LS3		2LS3
	4SF2		2RV2-T		2RV2-T
			4AC2		4AC2
6GO2	2GO2		4DY2		4DY2
	2GS2		4LS2		4LS2
	2GS3		4RV2-T		4RV2-T
	4GS2		4SF2		4SF2
	4SF2		4SF3		4SF3
	6GS2		6DY2		6DY2
			6DY3		6DY3
6LO2	2LS2		6EB2-E		6EB2-E
	2LS3		6EB2-M		6EB2-M
	4LS2		6LS2		6LS2
	4SF2		8EB2-E		8EB2-M
	6LS2		8EB2-M		9DY2
			9DY2		9DY3
6LS2	2LA2		9DY3		
	2LB2				
	2LC2				
	2LO2				
	2LO3				
	4SF2				

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.5 Compatible Channel Interfaces (Continued)

(B) Voice Grade (Continued)

Compatible CIs		Compatible CIs		Compatible CIs	
8EC2	2DY2	9DY2	2DY2	9EA3	2DY2
	4DY2		4DY2		4DY2
	4EA2-E		6DY2		4EA2-E
	4EA2-M		6DY3		4EA2-M
	4SF2		9DY2		6DY2
	6DY2				6DY3
	6DY3	9DY3	2DY2		6EA2-E
	6EA2-E		4DY2		6EA2-M
	6EA2-M		6DY2		6EB2-E
	6EB2-E		6DY3		6EB2-M
	6EB2-M		9DY2		8EB2-E
	8EB2-E		9DY3		8EB2-M
	8EB2-M				9DY2
	9DY2	9EA2	2DY2		9DY3
	9DY3		4DY2		9EA3
	9EA2		4EA2-E		
	9EA3		4EA2-M		
			6DY2		
			6DY3		
			6EA2-E		
			6EA2-M		
			6EB2-E		
			6EB2-M		
			8EB2-E		
			8EB2-M		
			9DY2		
			9DY3		
			9EA2		
			9EA3		

ACCESS SERVICES

9. **INTERFACE GROUPS, TRANSMISSION SPECIFICATIONS AND CHANNEL INTERFACES** (Continued)

9.3 Special Access Channel Interface and Network Channel Codes (Continued)

9.3.5 Compatible Channel Interfaces (Continued)

(C) Digital Data

Compatible CIs	Compatible CIs	Compatible CIs	Compatible CIs
4DS8-15	4DS8-15* 4DU5-24	4DU5-24	4DU5-24 6DU5-24 6DU5-24
	4DU5-48 4DU5-56	4DU5-48	4DU5-48 6DU5-48 6DU5-48
	4DU5-96 6DU5-24	4DU5-96	4DU5-96 6DU5-56 6DU5-56
	6DU5-48 6DU5-96	4DU8-56	4DU5-56 6DU5-96 6DU5-96

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

(D) High Capacity

Compatible CIs		Compatible CIs	
4DS0-63	4DS0-63 4DU8-A, B, or C 6DU8-A, B, or C	4DS8-15J	4DU8-A 6DU8-A
4DS6-27	4DS6-27 4DU8-A, B, or C 6DU8-A, B, or C	4DS8-15K	4DU8-B 4DU8-C 6DU8-B 6DU8-C
4DS6-44	4DS6-44 4DU8-A, B, or C 6DU8-A, B, or C	4DS8-31	4DS8-31 4DU8-A, B, or C 6DU8-A, B, or C
4DS8-15	4DS8-15* 4DU8-B 6DU8-8	4DU8-A, B, or C	4DU8-A, B, or C

* Available only as a cross connect of two individual channels of 1.544 Mbps facilities at a Telephone Company hub.

ACCESS SERVICES

10. Rates and Charges (Cont'd)

10.1 Switched Access Service

	Nonrecurring Charges	Monthly Rate	
(A) Nonrecurring Charges			
Per Line Connected	$290.13		
(B) Local Transport, Premium Rates			
(1) Entrance Facility Per Termination			
Voice Grade (2-Wire)	$ *	$ *	(C) (C)
Voice Grade (4-Wire)	$ *	$ *	| |
High Capacity DS1	$ *	$ *	| |
High Capacity DS3	$ *	$ *	(C) (C)
(2) Direct Trunked Transport			
(a) Direct Trunked Facility, Per Mile			
Voice Grade (2 & 4 Wire)		$ *	(C)
High Capacity DS1		$ *	(C)
High Capacity DS3		$ *	(C)

* The rates, charges and conditions for the provision of intrastate terminating Carrier Access Service as are specified in the John Staurulakis, Inc. (JSI) Tariff FCC No. 1 as it now exists and as it may be revised, added to, or supplemented. https://tdstelecom.com/tariffs.html (C) | (C)

ACCESS SERVICES

10. Rates and Charges (Cont'd)

10.1 Switched Access Service (Cont'd)

	Monthly Rate	
(B) Local Transport, Premium Rates (Cont'd)		
(2) Direct Trunked Transport (Cont'd)		
(b) Direct Trunked Termination, Per Termination		
Voice Grade (2 & 4 Wire)	$ *	
High Capacity DS1	$ *	
High Capacity DS3	$ *	
(c) Multiplexing, Per Arrangement		
DS3 to DS1	$ *	
DS1 to Voice	$ *	
(3) Tandem Switched Transport		
(a) Tandem Switched Facility, Per Access Minute, Per Mile- **Non 8YY**		(T)
- Originating	$0.000188	
- Terminating	$ *	
Per Access Minute, Per Mile- **8YY**		(N)
- Originating	$ *	
- Terminating	$ *	(N)
		(N)

* The rates, charges and conditions for the provision of intrastate Carrier Access Service as are specified in the John Staurulakis, Inc. (JSI) Tariff FCC No. 1 as it now exists and as it may be revised, added to, or supplemented. https://tdstelecom.com/tariffs.html (T)

ACCESS SERVICES

10. Rates and Charges (Cont'd)

10.1 Switched Access Service (Cont'd)

	Monthly Rate	
(B) Local Transport, Premium Rates (Cont'd)		
(3) Tandem Switched Transport (Cont'd)		
(b) Tandem Switched Termination, Per Access Minute, Per Termination – **Non 8YY**		
- Originating	$ 0.000979	
- Terminating	$ *	
Per Access Minute, Per Termination –**8YY**		
- Originating	$ *	
- Terminating	$ *	
(c) Tandem Switching, Per Access Minute, Per Tandem- **Non 8YY**		
- Originating	$ 0.002468	
- Terminating	$ *	
Per Access Minute, Per Tandem- **8YY**		
- Originating	$ *	
- Terminating	$ *	
(d) Joint Tandem Switched Transport Per Originating Toll Free Only Access Minute per Tandem	$0.001000	
(4) Network Blocking, Per Blocked Call		
- Applied to FGD Only	$ 0.0064	(R)

* The rates, charges and conditions for the provision of intrastate Carrier Access Service as are specified in the John Staurulakis, Inc. (JSI) Tariff FCC No. 1 as it now exists and as it may be revised, added to, or supplemented. https://tdstelecom.com/tariffs.html

ACCESS SERVICES

10. Rates and Charges (Cont'd)

10.1 Switched Access Service (Cont'd)

	Monthly Rate	
(C) End Office, Premium Rates		
(1) Local Switching, Per Access Minute – **Non 8YY**		(T)
- Originating	$ 0.068413	
- Terminating[1]		
- Effective 7-1-2015	$ *	
Per Access Minute –**8YY**		
- Originating	$ *	
- Terminating[1]	$ *	

[1]The composite Terminating Local Switching rate shown above include the Terminating Information Surcharge rate element.

* The rates, charges and conditions for the provision of intrastate Carrier Access Service as are specified in the John Staurulakis, Inc. (JSI) Tariff FCC No. 1 as it now exists and as it may be revised, added to, or supplemented. https://tdstelecom.com/tariffs.html (T)

ACCESS SERVICES

10. Rates and Charges (Cont'd)

10.1 Switched Access Service (Cont'd)

	Monthly Rate
(C) End Office, Premium Rates	
(2) Information Surcharge Terminating, Combined in rates 10.12(C)(1)	$0.000000

ACCESS SERVICES

10. Rates and Charges (Cont'd)

10.1 Switched Access Service (Cont'd)

		Per Access Minute	
(D)	800 Data Base Access Service		
	(1) Basic Rate, per query	*	(C)
	(2) Vertical Features Rate, per query (replaces basic rate)	*	(C)

* The rates, charges and conditions for the provision of intrastate Carrier Access Service as are specified in the John Staurulakis, Inc. (JSI) Tariff FCC No. 1 as it now exists and as it may be revised, added to, or supplemented. https://tdstelecom.com/tariffs.html (C) | (C)

ACCESS SERVICES

10. Rates and Charges (Cont'd)

10.2 Special Access Service

	Nonrecurring Charges	Monthly Rates*
(A) Channel Termination		
(1) Voice Grade Channel Per Termination		
(a) Two-Wire	$223.24	$31.15
(b) Four-Wire	223.24	46.67
(2) Metallic Channel Per Termination		
Two-Wire	223.24	31.15

	Nonrecurring Charges	Monthly Rates*	Daily Rates
(3) Program Audio Per Termination	$121.00	$33.77	$3.38

* The Channel Termination rate includes non-chargeable Channel Interfaces as set forth in 5.1.7.

ACCESS SERVICES

10. Rates and Charges (Cont'd)

10.2 Special Access Service (Cont'd)

	Nonrecurring Charges	Monthly Rates*	Daily Rates
(A) Channel Termination (Cont'd)			
(3) Program Audio Per Termination (Cont'd)			
(a) Optional Features and Functions			
(i) Bridging, Distribution Amplifier Per Port	$.00	$21.71	$2.18
(ii) Gain Conditioning Per Service	.00	11.07	0.11
(iii) Stereo Per Service	.00	11.07	0.11
(4) Video Service Per Termination	223.24	425.40	233.97

* The Channel Termination rate includes non-chargeable Channel Interfaces as set forth in 5.1.7.

ACCESS SERVICES

10. Rates and Charges (Cont'd)

10.2 Special Access Service (Cont'd)

	Nonrecurring Charges	Monthly Rates*	Daily Rates
(A) Channel Termination (Cont'd)			
(5) Digital Data Service Per Termination	$223.24	ICB	$.00
(a) Optional Features and Functions			
(i) Central Office Bridging Per Port	.00	$3.37	.00
(ii) Loop Transfer Arrangement Per Four Port Arrangement	.00	6.75	.00
(iii) Public Packet Switching Network Interface Arrangement	.00	18.21	.00
(b) Channel Service Unit Per Termination	.00	18.60	.00

* The Channel Termination rate includes non-chargeable Channel Interfaces as set forth in 5.1.7.

ACCESS SERVICES

10. Rates and Charges (Cont'd)

10.2 Special Access Service (Cont'd)

	Nonrecurring Charges	Monthly Rates*
(A) Channel Termination (Cont'd)		
(6) High Capacity (DS1) Service Per Termination	$223.24	ICB
(a) Optional Features and Functions		
(i) Central Office Multiplexing, Per Arrangement	.00	$182.44
(ii) Automatic Loop Transfer, Per Arrangement	.00	440.13
(iii) Transfer Arrangement Per Four Port Arrangement, Including Control Channel Termination	.00	187.03
(7) High Capacity (DS3) Service Per Termination	223.24	ICB

* The Channel Termination rate includes non-chargeable Channel Interfaces as set forth in 5.1.7.

ACCESS SERVICES

10. Rates and Charges (Cont'd)

10.2 Special Access Service (Cont'd)

	Nonrecurring Charges	Monthly Rates	Daily Rates
(B) Channel Mileage, Per Mile			
(1) Applies to Voice Grade, Metallic Channel, Program Audio, and Video Service	$.00	$41.42	$4.14*
(2) Digital Data Service**	.00	ICB	.00
(3) High Capacity Service			
(a) DS1	.00	ICB	.00
(b) DS3	.00	ICB	.00

	Nonrecurring Charges	Monthly Rates
(C) Bridging		
Per Port	$.00	$6.50

* Applies only to Program Audio and Video Services.

** Digital Data is provided at the same rate for the following speeds: 2.4, 4.8, 9.6, 19.2, 56.0, and 64.0 Kbps. Speeds are limited by technological capacity of end office switches. All speeds are not available in all end offices.

ACCESS SERVICES

10. Rates and Charges (Cont'd)

10.3 Miscellaneous Services

		Basic Time, Scheduled Working Hours	Overtime, Outside Scheduled Working Hours
(A)	Additional Engineering Periods		
	Per Engineering, 1/2 hour or fraction thereof	$17.50	$24.50
(B)	Additional Labor		
	Per Technician, 1/2 hour or fraction thereof	17.50	24.50
(C)	Maintenance of Service		
	Per Technician, 1/2 hour or fraction thereof	17.50	24.50
(D)	Programming Service		
	Per Programmer, 1/2 hour or fraction thereof	30.00	45.00

ACCESS SERVICES

10. Rates and Charges (Cont'd)

10.12.3 Miscellaneous Services (Cont'd)

		Non-Recurring Charges
(E)	Intrastate IntraLATA Primary Interexchange Carrier (LPIC) Change Charge:	
	Per Occurrence, Per Line:	
	(1) Manually Processed	$5.50
	(2) Electronically Processed	1.25
	(3) PIC & LPIC for same carrier, same transaction:	
	(a) Manually Processed	2.75
	(b) Electronically Processed	.62
(F)	SS7 Signaling Conversion	
	Per DS1	N/C
(G)	Access Order Charge	See Section 3
(H)	Service Date Change Charge	See Section 3.5(A)
(I)	Late Payment Charge	See Section 2.4.1 (B)(4)