

ACCESS SERVICE

6. Switched Access Service6.1 General

Switched Access Service, which is available to customers for their use in furnishing their services to end users, provides a two-point communications path between a customer designated premises and an end user's premises, or when used in conjunction with Internet Protocol Gateway Access Service (IPG) as described in Section 16.4, following, between an IPG SWC and an end user's premises. It provides for the use of common terminating, switching, and trunking facilities and for the use of common subscriber plant of the Telephone Company. Except as specified in Section 6.8.1, following, for terminating Feature Group D Switched Access Service used in conjunction with IPG, Switched Access Service provides for the ability to originate calls from an end user's premises to a customer designated premises, and to terminate calls from a customer designated premises to an end user's premises in the LATA where it is provided. Specific references to material describing the elements of Switched Access Service are provided in Sections 6.1.3 and 6.5 through 6.9, following.

Rates and charges for Switched Access Service depend generally on the specific Feature Group ordered by the customer, e.g., for MTS or WATS services or MTS/WATS equivalent services, and whether it is provided in a Telephone Company end office that is equipped to provide equal or non-equal access. Rates and charges for Switched Access Service are set forth in 17.2 following. The application of rates for Switched Access Service is described in 6.4 following. Rates and charges for services other than Switched Access Service, e.g., a customer's interLATA toll message service, may also be applicable when Switched Access Service is used in conjunction with these other services. Descriptions of such applicability are provided in 6.4.5, 6.4.9, 6.5.1(H), 6.5.3, 6.6.1(G), 6.6.2(D), 6.7.1(F) and 6.8.1(E) following. Finally, a credit is applied against line side Switched Access Service charges as described in 6.4.8 following.

Switched Access Service purchased from the provisions of this tariff may be commingled with unbundled network elements or unbundled network element combinations purchased pursuant to the Commission's Part 51 Interconnection Rules and in compliance with the Federal Communications Commission's Report and Order and Order on Remand and Further Notice of Proposed Rulemaking in CC Docket Nos. 01-338, 9698 and 98-147, adopted February 20, 2003 and released August 21, 2003 (FCC 03-36).

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)

The following provision applies to the treatment of VoIP-PSTN Access Traffic pursuant to the Federal Communications Commission's Part 51 Interconnection Rules and in compliance with the Federal Communications Commission's Report and Order and Further Notice of Proposed Rulemaking in CC Docket Nos. 96-45 and 01-92; GN Docket No. 09-51; WC Docket Nos. 03-109, 05-337, 07-135 and 10-90; and WT Docket No. 10-208, adopted October 27, 2011 and released November 18, 2011 (FCC 11-161). In the absence of an interconnection agreement between the Telephone Company and the customer specifying the treatment of VoIP-PSTN Access Traffic, the Telephone Company will bill the customer the applicable switched access rates and charges specified in Section 17.2, following.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Description and Provision of Switched Access Service Arrangements(A) Description

Switched Access Service is provided in four different Feature Group arrangements which are service categories of standard and optional features. These are differentiated by their technical characteristics, e.g., line side vs. trunk side connection at the Telephone Company first point of switching. They are also differentiated by optional feature availability and the manner in which the end user accesses them in originating calling, e.g., with or without access codes of various lengths and digits.

Except as provided for in Sections 6.1.3(A)(1) and 6.8.1(M), following, the provision of each Feature Group requires Local Transport facilities, including an Entrance Facility, and the appropriate End Office functions. In addition, Special Access Service may, at the option of the customer, be connected with Feature Groups A, B, C, or D at Telephone Company designated WATS Serving Offices. In addition, IPG may, at the option of the customer, be connected with terminating Feature Group D at Telephone Company designated IPG SWCs.

There are three specific transmission specifications (i.e., Types A, B and C) that have been identified for the provision of Feature Groups. The technical specifications for the Entrance Facility and Direct Trunked Transport are the same as those set forth in Section 7 following for Voice Grade and High Capacity services. The specifications provided are dependent on the Interface Group and the routing of the service, i.e., whether the service is routed directly to the end office or via an access tandem. The parameters for the transmission specifications are set forth in 15.1.2 following.

Feature Groups are arranged for either originating, terminating or two-way calling, based on the customer end office switching capacity ordered. Originating calling permits the delivery of calls from Telephone Exchange Service locations to the customer designated premises. Terminating calling permits the delivery of calls from the customer designated premises to Telephone Exchange Service locations or when used in conjunction with IPG as described in Section 6.8.1(M), following, from the IPG SWC to Telephone Exchange Service locations. Two-way calling permits the delivery of calls in both directions, but not simultaneously. The Telephone Company will determine the type of calling to be provided unless the customer requests that a different type of directional calling is to be provided. In such cases, the Telephone Company will work cooperatively with the customer to determine the directionality. Originating calling and two-way calling are not available for use with IPG.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Description and Provision of Switched Access Service Arrangements (Cont'd)(A) Description (Cont'd)

There are various optional features associated with Local Transport, Common Switching and Transport Termination available with the Feature Groups. In addition, the Interim NXX Translation and Operator Transfer Service optional features are available with Feature Group C and Feature Group D.

Operator Transfer Services will be provided over FGC or FGD switched access service trunks from the operator service location to the customer's premises. Where required by technical limitations, a separate FGC or FGD trunk group will be established for Operator Transfer Service. The operator service location will provide trunk answer and disconnect supervisory signaling to the customer.

Detailed descriptions of each of the available Feature Groups are set forth in 6.5 through 6.8 following. Each Feature Group is described in terms of its specific physical characteristics and calling capabilities, the optional features available for use with it and the standard testing capabilities.

The Common Switching and Transport Termination optional features, which are described in 6.9 following, unless specifically stated otherwise, are available at all Telephone Company end office switches.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.1 Description and Provision of Switched Access Service Arrangements (Cont'd)(B) Manner of Provision

Switched Access is furnished in either quantities of lines or trunks, or in busy hour minutes of capacity (BHMCs). FGA Access and FGB Access are furnished on a per-line or per-trunk basis respectively. FGC Access and FGD Access are furnished on a BHMC basis and on a per trunk basis as set forth in 5.2 preceding.

BHMCs are differentiated by type and directionality of traffic carried over a Switched Access Service arrangement. Differentiation of traffic among BHMC types is necessary for the Telephone Company to properly design Switched Access Service to meet the traffic carrying capacity requirement of the customer.

There are three major BHMC categories identified as: Originating, Terminating and Directory Assistance. Originating BHMCs represent access capacity within a LATA for carrying traffic from the end user to the customer; Terminating BHMCs represent access capacity within a LATA for carrying traffic from the customer to the end user or when used in conjunction with Internet Protocol Gateway Access Service terminating BHMCs represent capacity within the operating territory of the Telephone Company for carrying traffic from an IPG SWC to the end user; and, Directory Assistance BHMCs represent access capacity within a LATA for carrying Directory Assistance traffic from the customer to a Directory Assistance location. When ordering capacity for FGC Access or FGD Access in BHMCs, the customer must at a minimum specify such access capacity in terms of Originating BHMCs and/or Terminating BHMCs.

Because some customers will wish to further segregate their originating traffic into separate trunk groups, or because segregation may be required by network considerations originating BHMCs are further categorized into Domestic, 700, 800 series, 900, Operator, IDDD and Operator Transfer Services. Domestic BHMCs represent access capacity for carrying only domestic traffic other than 700, 800 series, 900, Operator and Operator Transfer Services traffic; IDDD BHMCs represent access capacity for carrying only international traffic; and, 700, 800 series, 900, Operator and Operator Transfer Services BHMCs represent access capacity for carrying, respectively, only 700, 800 series, 900, Operator or Operator Transfer Services traffic. When ordering such types of access capacity, the customer must specify Domestic, 700, 800 series, 900, Operator, IDDD or Operator Transfer Services BHMCs.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.2 Ordering Options and Conditions

Switched Access Service is ordered under the Access Order provisions set forth in 5.2 preceding. Also, included in that section are regulations concerning miscellaneous service order charges which may be associated with Switched Access Service ordering (e.g., Service Date Changes, Cancellations, etc.).

6.1.3 Rate Categories

There are three rate categories which apply to Switched Access Service:

- Local Transport (described in 6.1.3(A) following)
- End Office (described in 6.1.3(B) following)
- Chargeable Optional Features (described in 6.1.3(C) following)

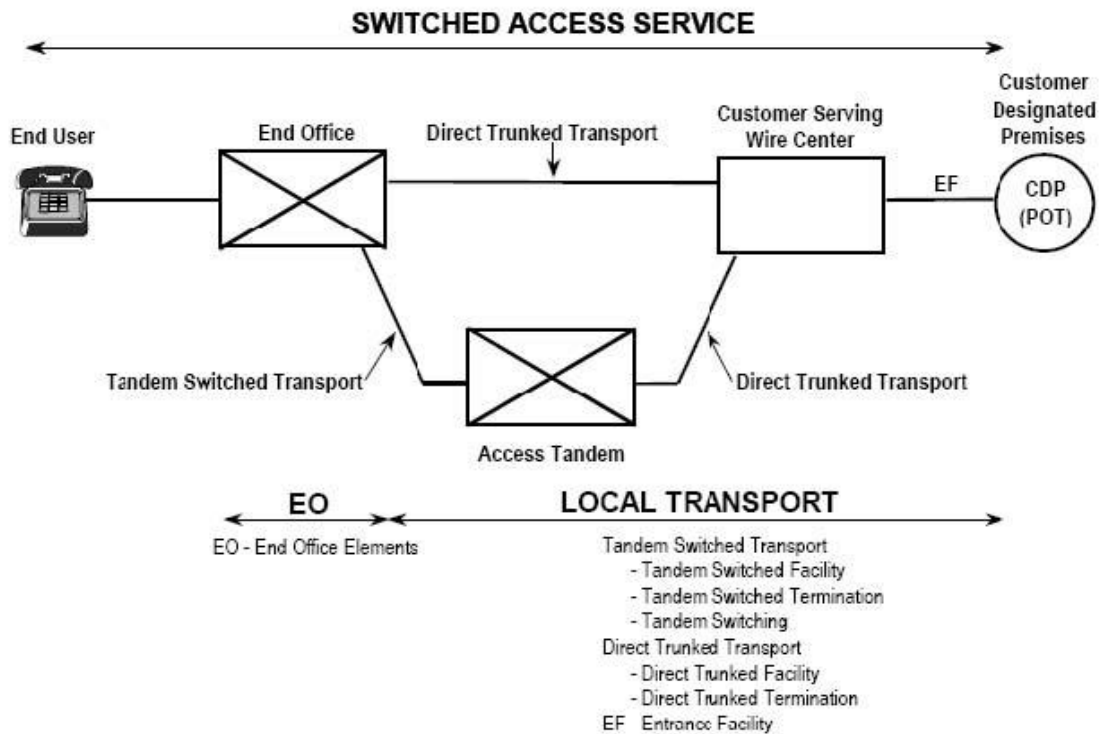
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6. Switched Access Service (Cont'd)

6.1 General (Cont'd)

6.1.3 Rate Categories (Cont'd)

The following diagram depicts a generic view of the components of Switched Access Service and the manner in which the components are combined to provide a complete Access Service.



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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport

The Local Transport rate category establishes the charges related to the transmission and tandem switching facilities between the customer designated premises and the end office switch(es), which may be a Remote Switching Module(s) or WATS Serving Office, where the customer's traffic is switched to originate or terminate the customer's communications. When used in conjunction with IPG as specified in Section 16.4, following, the Local Transport rate category establishes the charges related to the transmission and tandem switching facilities between the IPG SWC and the end office switch(es) to terminate the customer's communications. Mileage measurement rules are set forth in Section 6.4.6, following and in this section.

Local Transport is a two-way voice frequency transmission path composed of facilities determined by the Telephone Company. The two-way voice frequency transmission path permits the transport of calls in the originating direction (from the end user end office switch to the customer designated premises) and in the terminating direction (from the customer designated premises to the end office switch), but not simultaneously. The voice frequency transmission path 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. The customer must specify the choice of facilities (i.e., Voice Grade 2 or 4 wire or High Capacity DS1 or DS3 or Synchronous Optical Channel OC3 or OC12) to be used in the provision of the Direct Trunked Transport or Entrance Facility.

Except when ordering Local Transport associated with IPG, the customer must specify when ordering (1) whether the service is to be directly routed to an end office switch or through an access tandem switch, and (2) the type of Direct Trunked Transport and whether it will overflow to Tandem Switched Transport when service is directly routed to an end office, (3) the type of Entrance Facility, (4) the directionality of the service, and (5) when multiplexing is required, the hub(s) at which the multiplexing will be provided. When ordering Local Transport associated with IPG, the customer must specify when ordering (1) the IPG SWC and (2) the end office switch(es) to which it wants to terminate its interexchange voice traffic.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)

When the customer has both Tandem Switched Transport and Direct Trunked Transport at the same end office that is not collocated with a tandem, the customer will be provided Alternate Traffic Routing as set forth in 6.4.6 following.

Direct Trunked Transport is available at all tandems and at all end offices except those end offices identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, as not having the capability to provide Direct Trunked Transport. Direct Trunked Transport is not available: (1) from end offices that provide equal access through a centralized equal access arrangement, (2) from end offices that lack recording or measurement capability.

Normally, Direct Trunked Transport of originating 800 series type calls from an end office is available only from Service Switching Point (SSP) equipped end offices. However, certain SSP equipped end offices cannot accommodate the direct trunking of the 800 series (other than the 800 service access code) service access code. These end offices are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. NO. 4. Additionally, certain non-SSP equipped end offices can accommodate direct trunking of originating 800 series type calls. These end offices are also identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. No. 4.

Unless otherwise ordered by the F.C.C., where the Telephone Company elects to provide equal access through a centralized equal access arrangement, the Telephone Company will designate the serving wire center. The designated SWC will normally be that wire center which provides dial tone to the telephone company centralized Equal Access tandem office identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4. When service is provided in cooperation with a non telephone company provider of Centralized Equal Access, the SWC will be that wire center which would normally provide dial tone to the telephone company point of interconnection with the non telephone company provider of Centralized Equal Access specified in the tariff of the Centralized Equal Access provider. Those Telephone Company offices providing equal access through centralized arrangements are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)

Local Transport is provided at the rates and charges set forth in 17.2.2 following. The application of these rates with respect to individual Feature Groups is as set forth in 6.4.1(C) following. When more than one Telephone Company is involved in providing the Switched Access Service, the Local Transport rates are applied as set forth in 2.4.7 preceding.

The Local Transport Rate Category includes four classes of rate elements: (1) Entrance Facility, (2) Direct Trunked Transport, (3) Tandem Switched Transport, and (4) Multiplexing.

(1) Entrance Facility

The Entrance Facility recovers a portion of the costs associated with a communications path between a customer designated premises and the serving wire center of that premises. Included as part of the Entrance Facility 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 customer designated premises and the type of signaling capability, if any.

Five types of Entrance Facility are available:

- Voice Grade 2 or 4 wire - an analog channel with an approximate bandwidth of 300 to 3000 Hz;
- High Capacity DS1 - an isochronous serial digital channel with a rate of 1.544 Mbps;
- High Capacity DS3 - an isochronous serial digital channel with a rate of 44.736 Mbps;
- Synchronous Optical Channel OC3 - a synchronous optical channel with a rate of 155.52 Mbps;
- Synchronous Optical Channel OC12 - a synchronous optical channel with a rate of 622.08 Mbps.

The minimum period for which a High Capacity DS3 or Synchronous Optical Channel Entrance Facility is provided is twelve months.

One charge applies for each Entrance Facility that is terminated at a customer designated premises. This charge specified in Section 17.2.2, following, will apply even if the customer designated premises and the serving wire center are collocated in a Telephone Company building, except as provided for below.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(1) Entrance Facility (Cont'd)

The Entrance Facility charge specified in Section 17.2.2, following, will not apply when: 1) the customer designated premises and serving wire center are physically (including caged, cageless, shared and adjacent arrangements) or virtually collocated as those terms are used in 47 C.F.R. § 51.323 and (2) the customer obtains such collocation for the purpose of interconnection with the Telephone Company's network for the transmission and routing of telephone exchange service, exchange access or both, and for the purpose of providing local exchange or exchange access services to its customers.

A customer's Local Transport may be connected to the Entrance Facility of another customer, providing the other customer submits a Letter of Authorization for this connection and assumes full responsibility for the cost of the Entrance Facility.

(2) Direct Trunked Transport

The Direct Trunked Transport rate elements recover a portion of the cost associated with a communications path or circuits dedicated to the use of a single customer between:

- the serving wire center and an end office,
- the serving wire center and a tandem,
- the serving wire center and a hub,
- a hub and an end office,
- the serving wire center and an ADM equipped wire center where add/drop multiplexing functions are performed,
- an ADM equipped wire center and an end office.

Direct Trunked Transport is available to all tandems and to all end offices except those end offices identified in NATIONALEXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION as not having the capability to provide Direct Trunked Transport.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(2) Direct Trunked Transport (Cont'd)

Direct Trunked Transport is not available: (1) from end offices that provide equal access through a centralized equal access arrangement, (2) from end offices that lack recording or measurement capability.

Normally, Direct Trunked Transport of originating 800 series type calls from an end office is available only from Service Switching Point (SSP) equipped end offices. However, certain SSP equipped end offices cannot accommodate the direct trunking of the 800 series (other than the 800 service access code) service access code. These end offices are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. NO. 4. Additionally, certain non-SSP equipped end offices can accommodate direct trunking of originating 800 series type calls. These end offices are also identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. No. 4.

Five types of Direct Trunked Transport are available:

- Voice Grade 2 or 4 wire –
an analog channel with an approximate bandwidth of 300 to 3000 Hz;
- High Capacity DS1 –
an isochronous serial digital channel with a rate of 1.544 Mbps;
- High Capacity DS3 –
an isochronous serial digital channel with a rate of 44.736 Mbps;
- Synchronous Optical Channel OC3 –
a synchronous optical channel with a rate of 155.52 Mbps;
- Synchronous Optical Channel OC12 –
a synchronous optical channel with a rate of 622.08 Mbps;

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(2) Direct Trunked Transport (Cont'd)

High Capacity DS3 Direct Trunked Transport cannot be terminated at end offices that are not identified as hub offices that provide DS3 to DS1 multiplexing. S Synchronous Optical Channel Service OC3 or OC12 Direct Trunked Transport cannot be terminated at end offices that are not identified as ADM equipped wire centers that provide OC3 to DS1 or OC12 to OC3 Add/Drop Multiplexing.

Additionally, DS1 Direct Trunked Transport cannot be terminated at end offices that are not identified as hub offices that provide DS1 to Voice Grade multiplexing or are not electronic end offices.

Offices that provide multiplexing and add/drop multiplexing functions are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.

Direct Trunked Transport rates consist of a Direct Trunked Facility rate specified in Section 17.2.2 following which is applied on a per mile basis and a Direct Trunked Termination rate which is applied at each end of each measured segment of the Direct Trunked Facility (e.g., at the end office, hub, tandem, ADM equipped wire center and serving wire center). When the Direct Trunked Facility mileage is zero, neither the Direct Trunked Facility rate nor the Direct Trunked Termination rate will apply.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(2) Direct Trunked Transport (Cont'd)

The Direct Trunked Facility rate recovers a portion of the costs of transmission facilities, including intermediate transmission circuit equipment, between the end points of the interoffice circuits.

The Direct Trunked Termination rate specified in Section 17.2.2 following recovers a portion of the costs of the circuit equipment that is necessary for the termination of each end of the Direct Trunked Facility.

The minimum period for which High Capacity DS3 or Synchronous Optical Channel Direct Trunked Transport is provided is twelve months.

(3) Tandem Switched Transport

The Tandem Switched Transport rate elements recover tandem switching costs and a portion of the costs associated with the communications path between a tandem and an end office on circuits that are switched at a tandem switch, or between a host and a remote switch. For examples of tandem Switched Transport see Section 2.4.7 preceding.

Tandem Switched Transport rates consist of a Tandem Switching rate, a Tandem Switched Facility rate, a Tandem Switched Termination rate, and a Tandem-Switched Multiplexing rate. The Tandem Switching rate is applicable at the Tandem, when a customer orders Direct Trunk Transport to the tandem and Tandem Switched Transport from the tandem to the end office.

In those instances where an SSP equipped end office is capable of handling 800 traffic on a direct trunked basis but incapable of handling 800 series (other than the 800 service access code) traffic on a direct trunked basis, a full credit will be provided for tandem switched transport charges associated with FGC and FGD service for 888 traffic delivered at the tandem. This results in all 800 series traffic being rated as direct trunked transport regardless of whether the SSP equipped end office is capable of handling 800 series (other than the 800 service access code) traffic on a direct trunked basis.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(3) Tandem Switched Transport (Cont'd)

Those SSP equipped end offices that cannot accommodate direct trunking of originating 800 series (other than the 800 service access code) traffic are identified in NATIONAL EXCHANGECARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION.

- (a) The Tandem Switching rate recovers a portion of the costs of switching traffic through an access tandem. The Tandem Switching rate specified in 17.2.2 following is applied on a per access minute per tandem basis for all originating and all terminating minutes of use switched at the tandem. Tandem locations are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. No. 4, WIRE CENTER INFORMATION.
- (b) The Tandem Switched Facility rate recovers a portion of the costs of the transmission facilities, including intermediate transmission circuit equipment, between the end points of the interoffice circuits. The Tandem Switched Facility rate specified in Section 17.2.2 following is applied on a per access minute per mile basis for all originating and terminating minutes of use routed over the facility.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(3) Tandem Switched Transport (Cont'd)

(c) The Tandem Switched Termination rate recovers a portion of the costs of the circuit equipment that is necessary for the termination of each end of the Tandem Switched Facility. The Tandem Switched Termination rate specified in Section 17.2.2 following is applied on a per access minute basis (for all originating and terminating minutes of use routed over the facility) at each end of each measured segment of Tandem Switched Facility (e.g., at the end office, Feature Group A dial tone office, host office, tandem, and serving wire center). When the Tandem switched Facility mileage is zero, neither the Tandem Switched Facility rate nor the Tandem Switched Termination rate will apply.

(d) The Tandem-Switched Multiplexing charge recovers the cost of multiplexing equipment on the end office side of the tandem switch and the trunk side of the end office. The Tandem-Switched Multiplexing charge specified in 17.2.2 following is a per-minute charge assessed to the customer purchasing common transport on the end office-to-tandem link.

(4) Multiplexing

Multiplexing provides an arrangement for converting a single, higher capacity or bandwidth circuit to several lower capacity or bandwidth circuits.

When a derived channel is itself multiplexed to derive additional channels with a lesser capacity, this is referred to as cascade multiplexing. When cascade multiplexing occurs, a charge for the additional multiplexing function applies. When cascade multiplexing is performed at different hubbing locations, Direct Trunked Transport charges also apply between the hubs.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(4) Multiplexing (Cont'd)

Multiplexing is only available at wire centers identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF NO. 4, WIRE CENTER INFORMATION.

The following multiplexing arrangements are offered for use with Switched Access Service.

- (a) DS3 to DS1 Multiplexing charges specified in Section 17.2.2, following, apply when a High Capacity DS3 Entrance Facility or High Capacity DS3 Direct Trunked Transport is connected with High Capacity DS1 Direct Trunked Transport. The DS3 to DS1 multiplexer will convert a 44.736 Mbps channel to 28 DS1 channels using digital time division multiplexing.
- (b) DS1 to Voice Grade Multiplexing charges specified in Section 17.2.2, following, apply when a High Capacity DS1 Entrance Facility or High Capacity DS1 Direct Trunked Transport is connected with Voice Grade Direct Trunked Transport. However, a DS1 to Voice Grade Multiplexing Charge does not apply when a High Capacity DS1 Entrance Facility or High Capacity DS1 Direct Trunked Transport is terminated at an electronic end office and only Switched Access Service is provided over the DS1 facility (i.e., Voice Grade Special Access channels are not derived). The DS1 to Voice Grade multiplexer will convert a 1.544 Mbps channel to 24 Voice Grade channels.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(5) Add/Drop Multiplexing

Add/Drop Multiplexing provides a type of multiplexing function in connection with Synchronous Optical Channel Service that allows lower level signals to be added or dropped from a high speed optical carrier channel within a Telephone Company wire center.

The Add/Drop Multiplexing Central Office Port charge specified in Section 17.2.2, following, applies to the interface provided at a Telephone Company wire center for the purpose of adding or dropping lower capacity services from Synchronous Optical Channel Entrance Facilities or Direct Trunked Transport. Central Office Ports are available at the following speeds:

<u>Central Office Port</u>	<u>Speed</u>
OC3	155.52 Mbps
DS3	44.736 Mbps
DS1	1.544 Mbps

OC12 service may only be multiplexed to OC3 channels.

When an OC3 channel is derived from an OC12 service and is further multiplexed to obtain DS3 service, a DS3 port charge will apply in addition to the OC3 port charge.

When a DS3 channel is derived from an OC3 service and is further multiplexed to obtain DS1 service, a DS3 to DS1 Multiplexing charge will apply in addition to the DS3 port charge.

When a DS1 channel is directly derive from an OC3 service, a DS1 port charge will apply.

When a DS1 channel is further multiplexed to a lower level signal, a DS1 to Voice Grade Multiplexing charge will also apply.

Add/Drop Multiplexing is only available at wire centers identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF NO. 4 WIRE CENTER INFORMATION.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(6) Customer Node

A Customer Node charge specified in Section 17.2.2, following, applies when the Telephone Company provides terminal equipment at the customer designated premises for termination of a Synchronous Optical Channel Entrance Facility. Such equipment may be used to convert the signal from an optical to electrical format. The Customer Node charge is determined by the level of optical service (i.e., OC3 or OC12) delivered to the premises. Each Customer Node must be configured with one or more Customer Premises Ports.

Customer Premises Port charges specified in Section 17.2.2, following, apply in conjunction with the Customer Node charge. Each Customer Premises Port provides the interface to derive a lower capacity service at the customer premises. The type and quantity of ports is determined by the customer and is based on the type of Customer Node selected and the number of DS1, DS3, STS-1 and/or OC3 channels ordered. Customer Premises Ports are available at the following speeds:

<u>Customer Premises</u>	<u>Port Speed</u>
OC3	155.52 Mbps
STS-1	51.84 Mbps
DS3	44.736 Mbps
DS1	1.544 Mbps

(7) Interface Groups

Ten Interface Groups are provided for terminating the Entrance Facility at the customer's designated premises. Technical specifications concerning the available interface groups are set forth in Section 15.1, following.

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(8) Nonchargeable Optional Features

Where transmission facilities permit, the individual transmission path between the customer's designated premises and the first point of switching, may at the option of the customer, be provided with the following optional features as set forth and described in Section 15.1.1(E), following.

- Supervisory Signaling
- Customer Specified Entry Switch Receive Level
- Customer Specification of Local Transport Termination
- 64 Clear Channel Capability

In addition to the above, Shared SONET Interoffice Ring Transport (SSRIT) is available as a nonchargeable optional feature with High Capacity DS3 or Synchronous Optical Channel Local Transport service from wire centers identified in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, WIRE CENTER INFORMATION. The SSRIT feature is set forth and described in Sections 7.10.3 and 7.11.3(D), following.

When a customer subscribes to Common Channel Signaling (SS7) Network Connection Service (CCSNC Service), the following optional features are made available and are described in Section 6.10.1, following.

- Signaling System 7 (SS7) Signaling
- Calling Party Number
- Carrier Selection Parameter
- Charge Number Parameter
- Carrier Identification Parameter

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6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(A) Local Transport (Cont'd)(9) Chargeable Optional Features

Common Channel Signaling, Signaling System 7 (CCS/SS7) Network Connection (CCSNC) Service provides a signaling path between a customer's designated Signaling Point of Interface (SPOI) and a Telephone Company's Signaling Transfer Point (STP). CCSNC is provided as set forth in Section 6.10.3 following.

800 Data Base Access Service is provided to all customers in conjunction with FGC and FGD switched access service. A Basic or Vertical Feature Query charge, as set forth in Section 17.2.2 (B), following, is assessed for each completed query returned from the 800 data base whether or not the actual call is delivered to the customer. The query is considered completed when the appropriate call routing information is returned to the Service Switching Point (SSP) that launched the query. The Basic Query provides the identification of the customer to whom the call will be delivered and includes area of service routing which allows routing of 800 series calls by telephone companies to different interexchange carriers based on the Local Access Transport Area (LATA) in which the call originates. The Vertical Feature Query provides this same customer identification function in addition to vertical features which may include: (1) call validation (ensuring that calls originate from subscribed service areas); (2) POTS translation of 800 series numbers (which is generally necessary for the routing of 800 series calls); (3) alternate POTS translation (which allows subscribers to vary the routing of 800 series calls based on factors such as time of day, place of origination of the call, etc.); and (4) multiple carrier routing (which allows subscribers to route to different carriers based on factors similar to those in (3)).

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(B) End Office

The End Office rate category establishes the charges related to the local end office switching and end user termination functions necessary to complete the transmission of Switched Access communications to and from the end users served by the local end office. The End Office rate category includes the Local Switching and Information Surcharge rate elements. Directory Assistance Service is set forth in Section 9, following.

(1) Local Switching

The Local Switching rate element establishes the charges related to the use of end office switching equipment, the terminations in the end office of end user lines, the terminations of calls at Telephone Company Intercept Operators or recordings, the STP costs, and the SS7 signaling function between the end office and the Signaling Transfer Point.

Local Switching does not apply to Feature Groups B and D Switched Access Services associated with Wireless Switching Centers (WSCs) directly interconnected to a Telephone Company access tandem office.

Where end offices are appropriately equipped, international dialing may be provided as a capability associated with Local Switching which provides local dial switching for Feature Groups C and D. International dialing provides the capability of switching international calls with service prefix and address codes having more digits than are capable of being switched through a standard FGC or FGD equipped end office.

Rates for Local Switching are set forth in 17.2.3 following. The application of these rates with respect to individual Feature Groups is as set forth in 6.4.1(C) following.

There are four types of functions included in the Local Switching rate element: Common Switching, Transport Termination, Line Termination and Intercept. These are described in (a) through (d) following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(B) End Office (Cont'd)(1) Local Switching (Cont'd)(a) Common Switching

Common Switching provides the local end office switching functions associated with the various access (i.e., Feature Group) switching arrangements. The Common Switching arrangements provided for the various Feature Group arrangements are described in 6.5 through 6.9 following.

Included as part of Common Switching are various nonchargeable optional features which the customer can order to meet the customer's specific communications requirements. These optional features are described in 6.9.1 following.

(b) Transport Termination

Transport Termination functions provide for the line or trunk side arrangements which terminate the Local Transport facilities. Included as part of these functions are various nonchargeable optional termination arrangements. These optional terminating arrangements are described in 6.9.2 following.

The number of Transport Terminations provided will be determined by the Telephone Company as set forth in 6.2.5 following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(B) End Office (Cont'd)(1) Local Switching (Cont'd)(c) Line Termination

Line Termination provides for the terminations of end user lines in the local end office. There are two types of Line Terminations, i.e., Common Line Terminations and Special Access Service Terminations utilized in the provision of WATS or WATS-type services at Telephone Company designated WATS Serving Offices.

The above Special Access Service Terminations are differentiated by line side vs. trunk side terminations. In addition, there are various types of originating and terminating line side terminations depending on the type of signaling associated with the Special Access Service. Line side terminations are available with either dial pulse or dual tone multifrequency address signaling.

(d) Intercept

The Intercept function provides for the termination of a call at a Telephone Company Intercept operator or recording. The operator or recording tells a caller why a call, as dialed, could not be completed, and if possible, provides the correct number.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(B) End Office (Cont'd)(2) Information Surcharge

Information Surcharge rates are assessed to a customer based on the total number of access minutes. Information Surcharge rates are as set forth in 17.2.3(B) following. The application of these rates with respect to individual Feature Groups is as set forth in 6.4.1(C) following.

The Information Surcharge does not apply to Feature Groups B and D Switched Access Services associated with Wireless Switching Centers (WSCs) directly interconnected to a Telephone Company access tandem office.

The number of end office switching transmission paths will be determined as set forth in 6.2.5 following.

(3) End Office Direct Trunk Port

Charges for End Office Direct Trunk Ports, located on the trunk side of the end office, recover costs to terminate direct trunks. End Office Direct Trunk Ports are a flat-rate monthly charge as specified in 17.2.3 following assessed to the customer purchasing the dedicated trunk terminated at that port.

(4) End Office Common Trunk Port

Charges for DS-1 End Office Common Trunk Ports, located on the trunk side of the end office, recover costs to terminate common trunks. End Office Common Trunk Ports are per minute-of-use charge as specified in 17.2.3 following assessed to the customer of common transport trunks terminating at these ports.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(C) Chargeable Optional Features

Where facilities permit, the Telephone Company will, at the option of the customer, provide the following chargeable optional features.

(1) Interim NXX Translation

The Interim NXX Translation rate element provides for customer identification of non-data base services when calls are directed by end users in the 1+SAC+NXX-XXXX (e.g., 1+900+NXX-XXXX) format. The NXX codes are assigned to specific customers in conformance with the North American Numbering Plan (NANP). NXX code assignment(s) will be made by the Bellcore NANP Coordinator. The Telephone Company will use the NXX code to identify the customer to whose point of termination the traffic is to be delivered, (i.e., at appropriately equipped electronic end offices, access tandems or through contracted arrangements with other parties.) It is then the responsibility of the customer to do any further translation the customer deems necessary to route the call. Customer assigned NXX codes which have not been ordered will be blocked.

A nonrecurring charge, as set forth in 17.2.1 following, is associated with this optional feature. This nonrecurring charge is assessed by the Telephone Company on a per order, per LATA or Market Area basis and is applied in lieu of the Access Order Charge specified in 17.4.1(A) following. The nonrecurring charge is assessed only by the Telephone Company that provides the final translation function. A Telephone Company is said to have provided the final Interim NXX Translation when its translation identifies the customer's traffic and this traffic is then delivered to the customer's point of termination without any further translation. The description and application of this charge with respect to Feature Group C and Feature Group D is as set forth in 6.4.1(B)(2) and 6.4.1(C) following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(C) Chargeable Optional Features(2) Operator Transfer Services

Operator Transfer Service may be provided with Feature Group C or Feature Group D Switched Access Service at Telephone Company designated Operator Services location. Operator Transfer Service is an originating service. The rate is assessed per 0- call transferred to a customer's operator. An 0- call is considered transferred when the Telephone Company Operator activates the switch transferring the call to the designated customer and the customer acknowledges receipt.

In addition to the Operator Transfer Service charge described above and in 6.10.3 following, Feature Group C or Feature Group D Switched Access rates and charges as set forth in 6.4.1(B)(1) and 6.4.1(C) following will apply per minute of use for Operator Transfer Service.

Operator Transfer Service charges, provided for in this tariff, are applied only to those calls actually transferred by the Telephone Company to the customer's operator.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.3 Rate Categories (Cont'd)(C) Chargeable Optional Features(3) 800 Series Data Base Access Service

800 Series Data Base Access Service is provided to all customers in conjunction with FGC and FGD switched access service. When a 1+800+NXX-XXXX call is originated by an end user, the Telephone Company will utilize the Signaling System 7 (SS7) network to query an 800 series data base to identify the customer to whom the call will be delivered and provide vertical features based on the dialed ten digits. The call will then be routed to the identified customer over FGC or FGD switched access.

A Basic or Vertical Feature Query charge, as set forth in 17.2.2(B) following, is assessed for each query launched to the data base which identifies the customer to whom the call will be delivered. The Basic Query provides the identification of the customer to whom the call will be delivered and includes area of service routing which allows routing of 800 series type calls by telephone companies to different inter-exchange carriers based on the Local Access Transport Area (LATA) in which the call originates. The Vertical Feature Query provides the same customer identification as the basic query and vertical features which may include: (1) call validation, (ensuring that calls originate from subscribed service areas); (2) POTS translation of 800 series numbers; (3) alternate POTS translation (which allows subscribers to vary the routing of 800 series type calls based on factors such as time of day, place or origination of the call, etc.); and (4) multiple carrier routing (which allows subscribers to route to different carriers based on factors similar to those in (3).

The description and application of this charge with respect to Feature Group C or Feature Group D is as set forth in 6.4.1(C)(8) following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.1 General (Cont'd)6.1.4 Special Facilities Routing

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

6.1.5 Design Layout Report

At the request of the customer, the Telephone Company will provide to the customer the makeup of the facilities and services provided from the customer's premises to the first point of switching. 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.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company

In addition to the obligations of the Telephone Company set forth in Section 2 preceding, the Telephone Company has certain other obligations concerning only the provision of Switched Access Service. These obligations are as follows:

6.2.1 Network Management

The Telephone Company will administer its network to insure the provision of acceptable service levels to all telecommunications users of the Telephone Company's network services. Generally, service levels are considered acceptable only when both end users and customers are able to establish connections with little or no delay encountered within the Telephone Company network. The Telephone Company maintains the right to apply protective controls, i.e., those actions, such as call gapping, which selectively cancel the completion of traffic, over any traffic carried over its network, including that associated with a customer's Switched Access Service. Generally, such protective measures would only be taken as a result of occurrences such as failure or overload of Telephone Company or customer facilities, natural disasters, mass calling or national security demands. In the event that the protective controls applied by the Telephone Company result in the complete loss of service by the customer, the customer will be granted a Credit Allowance for Service Interruption as set forth in 2.4.4(B)(3) preceding.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)6.2.2 Transmission Specifications

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. The available transmission specifications are set forth in 15.1.2 following. Data Transmission Parameters are also provided with each Switched Access Service transmission path. The Telephone Company will, upon notification by the customer that the data parameters set forth in 15.1.3 following are not being met, conduct tests independently or in cooperation with the customer, and take any necessary action to insure that the data parameters are met.

The Telephone Company will maintain existing transmission specifications on functioning service configurations installed prior to May 25, 1984, except that service configurations having performance specifications exceeding the standards set forth in 15.1.2 following will be maintained at the performance levels specified.

The transmission specifications concerning Switched Access Service are limits which, when exceeded, may require the immediate corrective action of the Telephone Company. The transmission specifications are set forth in 15.1.2 following. Acceptance limits are set forth in Technical Reference GR-334CORE. This Technical Reference also provides the basis for determining Switched Access Service maintenance limits.

Feature Group C and Feature Group D trunks equipped for Operator Transfer Service are subject to Feature Group C and Feature Group D transmission specifications, respectively, unless otherwise specified.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)6.2.3 Provision of Service Performance Data

Subject to availability, end-to-end service performance data available to the Telephone Company through its own service evaluation routines, may also be made available to the customer based on previously arranged intervals and format. These data provide information on overall end-to-end call completion and non-completion performance, e.g., customer equipment blockage, failure results and transmission performance. These data do not include service performance data which are provided under other tariff sections, e.g., testing service results. If data are to be provided in other than paper format, the charges for such exchange will be determined on an individual case basis.

6.2.4 Testing(A) Acceptance Testing

At no additional charge the Telephone Company will, at the customer's request, cooperatively test at the time of installation, the following parameters: loss, C-notched noise, C-message noise, 3-tone slope, d.c. continuity and operational signaling. When the Local Transport is provided with Interface Groups 2 through 10, and the Transport Termination is two-wire (i.e., there is a four-wire to two-wire conversion in Local Transport), balance parameters (equal level echo path loss) may also be tested.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)6.2.4 Testing (Cont'd)(B) Routine Testing

At no additional charge, the Telephone Company will, at the customer's request, test after installation on an automatic or manual basis, 1004 Hz loss, C- message noise and Balance (Improved Return loss).

In the case of automatic testing, the customer shall provide remote office test lines and 105 test lines with associated responders or their functional equivalent.

The frequency of these tests will be that which is mutually agreed upon by the customer and the Telephone Company, but shall consist of not less than quarterly 1004 Hz Loss and C-message noise tests and an annual Balance test. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on an as-occurs basis.

Additional tests may be ordered as set forth in 13.3.1 following. Charges for these additional tests are set forth in 17.4.4 following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.2 Undertaking of the Telephone Company (Cont'd)6.2.5 Determination of Number of Transmission Paths

For Feature Groups A and B, which are ordered on a per line or per trunk basis respectively, and Feature Groups (C) C and D when ordered on a per trunk basis the customer specifies the type of transport facilities and the number of channels in the order for service.

For Tandem Switched Transport, the Telephone Company will determine the number of Switched Access Service transmission paths to be provided for the Switched Access Feature Group C and D busy hour minutes of capacity ordered. The number of transmission paths will be developed using the total busy hour minutes of capacity by type (as described in 6.1.1(B) preceding) for the end offices for each Feature Group ordered from a customer's designated premises or from an IPG SWC when the customer uses terminating Feature Group D in conjunction with IPG as described in Section 16.4, following. The total busy hour minutes of capacity by type (e.g., originating, terminating, IDDD, Operator) for the end office will be converted to transmission paths using standard Telephone Company traffic engineering methods. The number of transmission paths provided shall be the number required based on (1) the use of access tandem switches and end office switches, (2) the use of the end office switches only, or (3) the use of the tandem switches only.

6.2.6 Trunk Group Measurement Reports

Subject to availability, the Telephone Company will make available trunk group data in the form of usage in CCS, peg count and overflow, to the customer based on previously agreed to intervals.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.3 Obligations of the Customer

In addition to the obligations of the customer set forth in Section 2 preceding, the customer has certain specific obligations pertaining to the use of Switched Access Service. These obligations are as follows:

6.3.1 Report Requirements

Customers are responsible for providing the following reports to the Telephone Company, when applicable.

(A) Jurisdictional Reports

When a customer orders Switched Access Service for both interstate and intrastate use, the customer is responsible for providing reports as set forth in 2.3.11 preceding. Charges will be apportioned in accordance with those reports. The method to be used for determining the interstate charges is set forth in 2.3.12 preceding.

(B) Code Screening Reports

When a customer orders service class routing, trunk access limitation or call gapping arrangements, it must report the number of trunks and/or the appropriate codes to be instituted in each end office or access tandem switch, for each of the arrangements ordered.

6.3.2 Trunk Group Measurement Reports

With the agreement of the customer, trunk group data in the form of usage in CCS, peg count and overflow for its end of all access trunk groups, where technologically feasible, will be made available to the Telephone Company. These data will be used to monitor trunk group utilization and service performance and will be based on previously arranged intervals and format.

6.3.3 Supervisory Signaling

The customer's facilities shall provide the necessary on-hook, off-hook, answer and disconnect supervision.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.3 Obligations of the Customer (Cont'd)6.3.4 Short Duration Mass Calling Requirements

When a customer offers service for which a substantial call volume is expected during a short period of time (e.g., 900 service media stimulated events), the customer must notify the Telephone Company at least 48 hours in advance of each peak period. Notification should include the nature, time, duration, and frequency of the event, an estimated call volume, and the telephone number(s) to be used.

On the basis of the information provided, the telephone Company may invoke network management controls, (e.g., call gapping and code blocking) to reduce the probability of excessive network congestion. The Telephone Company will work cooperatively with the customer to determine the appropriate level of such control.

6.3.5 Call Signaling

Depending on the signaling system used by the customer in its network, the customer's facilities shall transmit the following call signaling information to the Telephone Company on traffic the customer's end users originate which is handed off for termination on the Telephone Company's network.

(A) Signaling System 7 (SS7) Signaling

When the customer uses SS7 signaling, it will transit the Calling Party Number (CPN) or, if different from the CPN, the Charge Number (CN) information in the SS7 signaling stream.

(B) Multi-Frequency (MF) Signaling

When the customer uses MF signaling, it will transmit the number of the calling party or, if different from the number of the calling party, the Charge Number (CN) information in the MF Automatic Number Identification (ANI) field.

(C) Internet Protocol (IP) Signaling

When the customer uses IP signaling, it will transmit the telephone number of the calling party or, if different from the telephone number, the billing number of the calling party.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations

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

6.4.1 Description and Application of Rates and Charges

There are two types of rates and charges that apply to Switched Access Service; recurring (usage and flat rates) and nonrecurring charges. These rates and charges are applied differently to the various rate elements as set forth in (C) following.

(A) Recurring Rates

- (1) Usage Rates for Switched Access Service are rates that apply on a per access minute or a per call basis. Access minute charges and per call charges are accumulated over a monthly period.
- (2) Flat Rates for Switched Access Service are rates that apply on a per month per rate element basis.

(B) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for a specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for Switched Access Service are: installation of service, Interim NXX Translation optional feature and service rearrangements. These charges, with the exception of the Interim NXX Translation optional feature, are in addition to the Access Order Charge as specified in 17.4.1(A) following.

(1) Installation of Service

For Entrance Facilities, a Local Transport nonrecurring installation charge, as set forth in 17.2.1(A) following, will be applied at the serving wire center for each Entrance Facility installed.

For Direct Trunked Transport ordered to the end office, a Local Transport nonrecurring trunk activation charge, as set forth in 17.2.1 (D) following, will be applied at the end office on a per order basis for each group of 24 Direct Trunked Transport trunks or fraction thereof that is activated at the end office.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(1) Installation of Service (Cont'd)

For Direct Trunked Transport ordered to the access tandem, a Local Transport nonrecurring trunk activation charge, as set forth in 17.2.1(D) following, will be applied at the access tandem on a per order basis for each group of 24 Direct Trunked Transport trunks or fraction thereof that is activated at the access tandem.

A maximum of 24 trunks can be activated on a DS1 facility and a maximum of 672 trunks can be activated on a DS3 facility.

For example, if a customer orders a DS1 Entrance Facility and requests activation of 18 of the available circuits, the customer will be charged one Local Transport High Capacity DS1 Installation nonrecurring charge at the serving wire center and one Direct Trunked Transport Activation nonrecurring charge at the end office. If at a later date the customer requests the activation of three more circuits, the customer will then be charged an additional Direct Trunked Transport Activation nonrecurring charge. These charges are in addition to the Access Order Charge as specified in 17.4.1(A) following.

(2) Interim NXX Translation Optional Feature

This nonrecurring charge applies to the initial order for the installation of the Interim NXX Translation optional feature with Feature Group C or Feature Group D Switched Access Service and for each subsequent order received to add or change NXX translation codes. This charge, if applicable, applies whether this optional feature is installed coincident with or at any time subsequent to the installation of Switched Access Services. This charge is applied by the Telephone Company per order, per LATA or Market Area. When it is necessary for multiple telephone companies to provide the translation function, the nonrecurring charge is assessed only by the Telephone Company that provides the final translation function which identifies the customer's traffic and this traffic is then delivered to the customer's point of termination without any further translation.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(3) Service Rearrangements

All changes to existing services other than changes involving administrative activities and the off-hook supervisory signaling of FGA Access Services, will be treated as a discontinuance of the existing service and an installation of a new service. The nonrecurring charge described in (1) preceding will apply for this work activity. Moves that change the physical location of the point of termination are described and charged for as set forth in 6.4.4 following.

For conversion of FGD trunks to SS7 Signaling reconfiguration, charges apply as set forth in Section 17.2.1(C).

- If, due to technical limitations of the Telephone Company, a customer could not combine its Interim NXX traffic with its other trunk side Switched Access Services, no charge shall apply to combine these trunk groups when it becomes technically possible.

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

- Change of customer name;
- Change of customer or customer's end user premises address when the change of address is not a result of a physical relocation of equipment;
- Change in billing data (name, address, or contact name or telephone number);
- Change of agency authorization;
- Change of customer circuit identification;
- Change of billing account number;
- Change of customer test line number;
- Change of customer or customer's end user contact name or telephone number; and
- Change of jurisdiction.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(3) Service Rearrangements (Cont'd)

Other changes made without charge to the customer are as follows:

- Changes and additions to existing Switched Access Services which are necessary due to Telephone Company initiated network reconfigurations, and required to provide the same grade of service to the customer that existed prior to the reconfiguration. Charges will apply to those changes and additions which are in excess of those required to provide the same grade of service and/or capacity. Grade of service will be as determined by industry standard engineering tables.

Changes to the point in time when the off-hook supervisory signal is provided in the originating call sequence i.e., when the off-hook supervisory signal is changed from being provided by the customer's equipment before the called party answers to being forwarded by the customer's equipment when the called party answers or vice versa, are subject to the Access Order Charge as set forth in 17.4.1(A) following.

For additions, changes or modifications to an optional feature which has a separate nonrecurring charge, that nonrecurring charge will apply.

For additions, changes, or modifications to optional features that do not have their own separate nonrecurring charges, an Access Order Charge as set forth in 17.4.1(A) following will apply (with the exception of the addition of 64 Clear Channel Capability to an existing service). When an optional feature is not required on each transmission path, but rather for an entire transmission path group, an end office or an access tandem switch, only one such charge will apply (i.e., it will not apply per transmission path).

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(B) Nonrecurring Charges (Cont'd)(3) Service Rearrangements (Cont'd)

When the 64 Clear Channel Capability optional feature is installed on an existing facility, the addition will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply.

For conversion of FGC and FGD trunks from multifrequency address signaling to SS7 signaling or from SS7 signaling to multifrequency address signaling, nonrecurring charges will apply as set forth in 17.2.1(C).

(C) Application of Rates

The application of these rates is dependent upon the Feature Group, type of Entrance Facility, type of transport (e.g., Direct Trunked Transport, Tandem Switched Transport, type of Multiplexing) and the availability of equal access capabilities in the end office to which the service is provided.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(C) Application of Rates (Cont'd)

The following rules provide the basis for applying the rates and charges:

(1) Premium Rates

Premium rates apply to all FGD access minutes when the service is provided to customers which furnish interstate MTS/WATS, and to all access minutes that originate or terminate at end offices equipped with equal access (i.e., FGD) capabilities. Premium rates also apply to FGB and FGD access minutes that originate or terminate at a Wireless Switching Center (WSC) that is directly connected to a Telephone Company access tandem office. In addition, premium rates apply to FGA and FGB access minutes when utilized in the provision of MTS/WATS service.

In addition, premium rates always apply to the following Local Transport rate elements:

- Entrance Facility
- Direct Trunked Facility
- Direct Trunked Termination
- Multiplexing
- Tandem Switched Facility
- Tandem Switched Termination
- Tandem Switching

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(C) Application of Rates (Cont'd)(2) Common Channel Signaling/Signaling System 7 (CCS/SS7) Network Connection Service

The CCS/SS7 Network Connection is comprised of a Signaling Mileage Facility charge, a Signaling Mileage Termination charge, a Signaling Entrance Facility charge, and a Signaling Transfer Point (STP) Port charge.

The Signaling Mileage Facility charge is assessed on a per facility per mile basis. The Signaling Mileage Termination charge is assessed on a per termination basis (i.e., at each end of the Signaling Mileage Facility). When the Signaling Mileage Facility mileage measurement is zero, Signaling Mileage Termination charges do not apply.

The Signaling Entrance Facility charge is assessed on a per facility basis for the connection between the customer's designated premises (Signaling Point of Interface) and the serving wire center of that premises.

The STP Port charge is assessed on a per port basis for each termination of a Signaling Mileage Facility at an STP.

(3) 800 Series Data Base Access Service

A Basic Query or Vertical Feature Query charge applies for each query that is launched to an 800 series data base and identifies the customer to whom the call will be delivered. Query charges, as set forth in 17.2.2(B), will only be applied by those companies whose wire centers are identified as assessing query charges in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.1 Description and Application of Rates and Charges (Cont'd)(C) Application of Rates (Cont'd)(3) 800 Series Data Base Access Service (Cont'd)

When Feature Group C or Feature Group D switched access service is used for the provision of 800 Series Data Base Access Service and the total minutes of use and/or count of queries can be determined for each customer at a tandem or SSP but cannot be determined by individual end office, an allocation method will be utilized to determine minutes of use and/or queries by end office and customer. For each end office a ratio will be developed and applied against the total minutes of use and/or count of queries for a given customer as determined by the tandem or SSP. These ratios will be developed by dividing the unidentified originating 800 series type minutes of use at an end office by the total unidentified originating minutes of use in all end offices subtending the tandem or SSP. For example, assume:

- Three end offices (EO-1, EO-2, and EO-3) subtend a tandem

EO-1 measures 2,000 min. of 800 series type use
EO-2 measures 3,000 min. of 800 series type use
EO-3 measures 5,000 min. of 800 series type use
TOTAL 10,000

- The tandem delivers 800 series type usage to two customers:

IC-A has 4,000 minutes of use
IC-B has 6,000 minutes of use

- The allocation ratio for EO-1 is 20%

2,000/10,000

- The minutes of use to be billed by EO-1 are

800 to IC-A (20% X 4,000)
1,200 to IC-B (20% X 6,000)
2,000 TOTAL

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.2 Minimum Monthly Charge

Switched Access Service is subject to a minimum monthly charge. The minimum charge applies for the total capacity provided. The minimum monthly charge is calculated as follows.

For usage rated Local Transport, Local Switching and Information Surcharge rate elements, the minimum monthly charge is the sum of the recurring charges set forth in 17.2.2 and 17.2.3 following for either the actual measured usage or the assumed usage prorated to the number of days or major fraction of days based on a 30 day month.

For flat rated Local Transport rate elements, the minimum monthly charge is the sum of the recurring charges set forth in 17.2.2- following prorated to the number of days or major fraction of days on a 30 day month.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.3 Change of Switched Access Service Arrangements

Changes from one type of Feature Group to another will be treated as a discontinuance of one type of service and a start of another. Nonrecurring charges will apply, with one exception. When a customer upgrades a Feature Group A or B service to a Feature Group D service and when Feature Group C is upgraded to Feature Group D coincident with the availability of Feature Group D in an end office, the nonrecurring charges associated with the equal access conversion will not apply. Non-recurring charges for other associated service requests, (e.g., a simultaneous change from multifrequency address signaling to SS7 signaling) will apply. Minimum period obligations will not change, i.e., the time elapsed in the existing minimum period obligation will be credited to the minimum period obligations for FGD service, subject to the following limitations.

In order to avoid the imposition of nonrecurring charges a customer which is a participant in the presubscription allocation process (i.e., is on the presubscription ballot) must:

- submit its order to disconnect Feature Group A and/or B within 30 days after the date the results of the final allocation of customers in an end office are actually received by the customer, and
- make the effective date for disconnection of the Feature Group A and/or B Access Services no later than 60 days after the final allocation results are received by the customer.

A customer which is not a participant in the allocation process (i.e., is not on the presubscription ballot) is subject to the same rules preceding. The time frames for the non-participating customer(s) are the same as those which apply to the last customer to receive the results of the final allocation of customers in an end office who is a participant in the allocation process. For all other changes from one type of Feature Group to another, new minimum period obligations will be established.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.4 Moves

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

- The point of termination at the customer designated premises
- The customer designated premises

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

(A) Moves Within the Same Building

When the move is to a new location within the same building, the charge for the move will be an amount equal to one half of the installation nonrecurring charge for the capacity affected. This charge is in addition to the Access Order Charge as specified in 17.4.1(A) following. There will be no change in the minimum period requirements.

(B) Moves to a Different Building

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

6.4.5 Local Information Delivery Services

Calls over Switched Access Service in the terminating direction to certain community information services will be rated under the applicable rates for Switched Access Service as set forth in 17.2 following. In addition, the charges per call as specified under the Telephone Company's local and/or general exchange service tariffs, e.g., 976 (DIAL-IT) Network Services, will also apply.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.6 Mileage Measurement

The mileage to be used to determine the monthly rate for Local Transport is calculated on airline distances between the end office switch, which may be a Remote Switching Module, (where the call carried by Local Transport originates or terminates) and the customer's serving wire center or between an end office switch, which may be a Remote Switching Module (where the call carried by Local Transport terminates) and an IPG SWC when the customer uses terminating Feature Group D in conjunction with IPG as described in Section 16.4, following. When Direct Trunked Transport is ordered between the serving wire center and the end office, mileage is normally measured in one segment from the serving wire center to the end office. When Direct Trunked Transport is ordered between a serving wire center and a tandem and Tandem Switched Transport is ordered between the tandem and the end office, mileage is calculated separately for each segment. Exceptions to these methods are as set forth in (A) through (H) following. For SS7 signaling, the mileage to be used to determine the monthly rate for the Signaling Mileage Facility is calculated on the airline distance between the serving wire center associated with the customer's designated premises (Signaling Point of Interface) and the Telephone Company wire center providing the STP Port.

Where applicable, the V&H coordinates method is used to determine mileage. This method is set forth in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4 for Wire Center Information (V&H coordinates).

Mileage rates are as set forth in 17.2.2 following. To determine the rate to be billed, first compute the airline mileage using the V&H coordinates method. If the calculation results in a fraction of a mile, always round up to the next whole mile before determining the mileage and applying the rates. Then multiply the mileage by the appropriate rate.

Exceptions to the mileage measurement rules are as follows:

(A) Feature Group A - Originating Usage

Direct Trunked Transport Mileage for premium and non-premium rated access minutes in the originating direction over Feature Group A Switched Access Service will be calculated on an airline basis, using the V&H coordinates method. The mileage measurement will be between the first point of switching (end office switch where the Feature Group A switching dial tone is provided) and the customer's serving wire center for the Switched Access Service provided.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.6 Mileage Measurement (Cont'd)(B) Feature Group A Terminating Usage

The Local Transport mileage for terminating Feature Group A Switched Access Service when the Telephone Company provides Direct Trunked Transport will be measured in two segments. Direct Trunked Transport mileage will be measured between the customer's serving wire center and the first point of switching (i.e., the end office switch where the Feature Group A switching dial tone is provided). Tandem Switched Transport mileage will be measured between the first point of switching and the terminating end office.

(C) Feature Groups B, C and D - Alternate Traffic Routing

When the Alternate Traffic Routing optional feature is provided with Feature Groups B, C and D, the Local Transport access minutes will be apportioned between the two trunk groups used to provide this feature. Such apportionment will be made using: (1) actual minutes of use if available, (2) standard Telephone Company traffic engineering methodology and will be based on the last trunk CCS desired for the high usage group, as described in 6.9.1(L) following (Alternate Traffic Routing), and the total busy hour minutes of capacity ordered to the end office, when the feature is provided at an end office switch, or (3) an apportionment mutually agreed to by the Telephone Company and the customer. This apportionment will serve as the basis for Local Transport calculation.

(D) Feature Group C - Multiple CDPs

When terminating Feature Group C Switched Access Service is provided from multiple customer designated premises to an end office not equipped with measurement capabilities, the total Local Transport access minutes for that end office will be apportioned among the trunk groups accessing the end office on the basis of the individual busy hour minutes of capacity ordered for each of those trunk groups. This apportionment will serve as the basis for Local Transport mileage calculation.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.6 Mileage Measurement (Cont'd)(E) Feature Groups A, B, C and D - WATS

The Local Transport Facility for Feature Groups A, B, C and D Switched Access Service connected with Special Access Service at a WATS Serving Office will be measured between the WATS Serving Office (when measured access minutes of use are used) or between the Feature Group A entry switch (when assumed minutes of use are used) and the serving wire center for the customer designated premises.

(F) Feature Groups B and D - WSCs Directly Interconnected to Access Tandems

The Local Transport mileage for Feature Groups B and D switched access service provided to Wireless Switching Centers (WSCs) directly interconnected to a Telephone Company access tandem office will be determined on an airline basis, using the V&H coordinate method. The mileage will be measured between the customer's serving wire center and the Telephone Company access tandem office to which the WSC is interconnected.

(G) Feature Groups B, C, and D - Remote Offices

The Local Transport mileage for Feature Groups B, C, and D Switched Access Service provided to a Remote Office will be measured in multiple segments. When the facility is directly trunked to the Host Office, Direct Trunked Facility mileage will be measured between the customer's serving wire center and the Host Office, and Tandem Switched Facility mileage will be measured between the Host Office in Direct Trunked arrangements the Tandem Switched Facility will use the Terminating Tandem 3rd Party rate when a CCOC ILEC does not own the tandem. The Tandem Switching charge will not apply.

When the facility is directly trunked to a tandem, Direct Trunked Facility will be measured from the serving wire center to the tandem, Tandem Switched Facility will be measured from the tandem to the host, and another segment of Tandem Switched Facility will be measured from the host to the remote. When the Tandem Switch is a Consolidated Communications (CCOC) owned tandem then the Tandem Switch rates will use the terminating-Tandem End Office rates. If the Tandem is owned by a non-CCOC company the Tandem Switch rates will use the Terminating - Tandem 3rd Party rates. A Tandem Switching charge would be applicable at the tandem.

When service to the remote is ordered as only Tandem Switched Facility, mileage will be separately measured between the serving wire center and the host and between the host and the end office. The Tandem Switching charge would be applicable at the tandem.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.6 Mileage Measurement (Cont'd)(H) Use of Telephone Company Hub

When multiplexing is performed at Telephone Company Hubs, mileage is computed and rates applied separately for each segment of the Local Transport Direct Trunked Facility (i.e., customer serving wire center to Hub, Hub to Hub, and/or Hub to end office).

(I) Terminating Feature Group D – Connected with Internet Protocol Gateway Access Service

When required, the Tandem Switched Facility mileage for terminating Feature Group D Switched Access Service connected with IPG will be measured as described below.

- When the IPG SWC is located at the Telephone Company's tandem office and traffic is to be terminated to the end office, the Tandem Switched Facility mileage will be measured between the IPG SWC and the end office.
- When the IPG SWC is located at the Telephone Company's tandem office and traffic is to be terminated to a host/remote complex, the Tandem Switched Facility mileage will be measured in multiple segments. The first segment will be measured between the IPG SWC and the host office and the second segment will be measured between the host office and subtending remote office.
- When the IPG SWC is located at the Telephone Company's host office and traffic is to be terminated to the remote office, the Tandem Switched Facility mileage will be measured between the IPG SWC and the subtending remote office.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.7 Mixed Use

Mixed use occurs when Switched Access Service and Special Access Service are provided over the same High Capacity or Synchronous Optical Channel facilities through a common interface. The regulations governing the provision of Mixed Use Facilities are set forth in 5.2.4 preceding and 7.2.7 following.

The Telephone Company will designate the first point(s) of switching and routing to be used where equal access traffic is provided through a centralized equal access arrangement. Those Telephone Company offices providing equal access through centralized arrangements are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

6.4.8 Message Unit Credit for Feature Group A

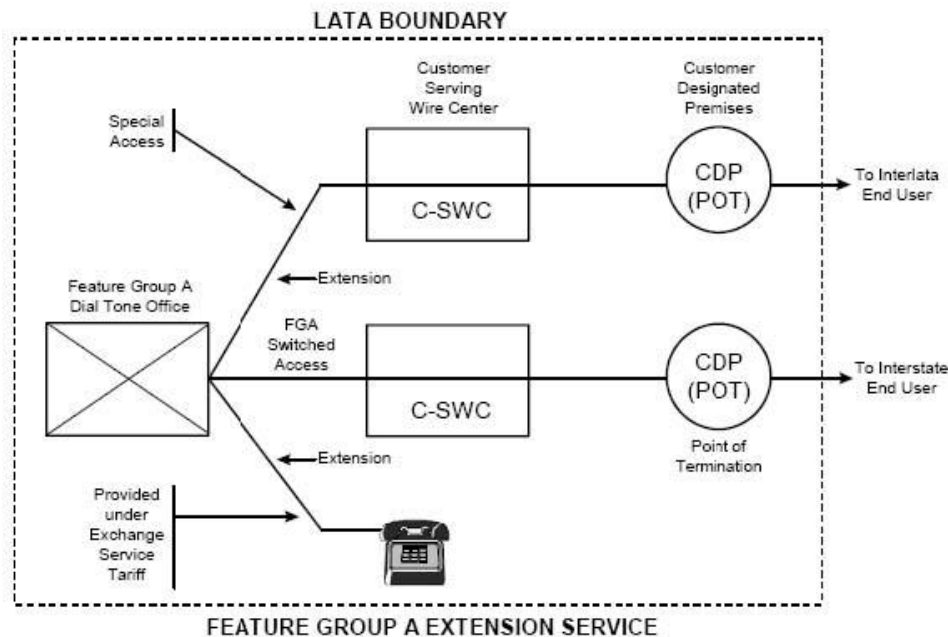
Calls from end users to the seven digit local telephone numbers associated with Feature Group A Switched Access Service are subject to Telephone Company local and/or general exchange service tariff charges (including message unit and toll charges as applicable). The monthly bills rendered to customers for their Feature Group A Switched Access Service will include a credit to reflect any message unit charges collected from their end users under the Telephone Company's local and/or general exchange service tariffs. When the customer is provided FGA service where measurement capability does not exist, the credit will apply to access minutes not to exceed the assumed originating access minutes. No credit will apply for any terminating FGA access minutes. The message unit credit for originating access minutes will be based on the generally applicable message unit charges of the Telephone Company.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.4 Rate Regulations (Cont'd)6.4.9 Application of Rates for Feature Group A Extension Service

Feature Group A Switched Access Service is available with extensions, i.e., additional terminations of the service at different customer designated premises in the same LATA as the FGA dial tone office or a LATA other than the LATA where the FGA dial tone office is located. Feature Group A extensions within the same LATA and same state as the dial tone office are provided and charged under the Telephone Company's local and/or general exchange service tariffs. Feature Group A extensions located in a LATA other than the LATA where the dial tone office is located or in a different state in the same LATA as the dial tone office are provided and charged as Special Access Service. The rate elements which apply are: A Voice Grade Channel Termination, Channel Mileage, if applicable, and Signaling Capability (optional features and functions), if applicable. All appropriate monthly rates and nonrecurring charges set forth in 17.3.4 following will apply.

In the above example, two CDPs are utilized to better illustrate the concept. From a practical standpoint, both the Switched Access and Special Access Services could be routed via the same CDP.



ACCESS SERVICE

6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA)6.5.1 Description

- (A) FGA Access, which is available to all customers, provides line side access to Telephone Company end office switches with an associated seven digit local telephone number for the customer's use in originating communications from and terminating communications to an Interexchange Carrier's Interstate Service or a customer - provided interstate communications capability. The customer must specify the Interexchange Carrier to which the FGA service is connected or, in the alternative, specify the means by which the FGA access communications is transported to another state. Special Access Services utilized for connection with FGA at Telephone Company designated WATS Serving Offices as set forth in Section 7. following may be ordered separately by a customer other than the customer which orders the FGA Switched Access Service for the provision of WATS-type services. Special Access Services are ordered as set forth in 5.2 preceding.
- (B) FGA Switching is provided at all end office switches. At the option of the customer, FGA is provided on a single or multiple line group basis and is arranged for originating calling only, terminating calling only, or two-way calling which are specified by the customer's order for service.
- (C) FGA provides a line side termination at the first point of switching (dial tone office). The line side termination will be provided with either ground start supervisory signaling or loop start supervisory signaling. The type of signaling is at the option of the customer.
- (D) The Telephone Company shall select the first point of switching, within the selected LATA, at which the line side termination is to be provided unless the customer requests a different first point of switching and Telephone Company facilities and measurement capabilities, where necessary, are available to accommodate such a request.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.1 Description (Cont'd)

- (E) A seven digit local telephone number assigned by the Telephone Company is provided for access to FGA switching in the originating direction. The seven digit local telephone number will be associated with the selected end office switch and is of the form NXX-XXXX. If the customer requests a specific seven digit telephone number that is not currently assigned, and the Telephone Company can, with reasonable effort, comply with that request, the requested number will be assigned to the customer.
- (F) FGA switching, when used in the terminating direction, is arranged with dial tone start-dial signaling. When used in the terminating direction FGA switching may, at the option of the customer, be arranged for dial pulse or dual tone multifrequency address signaling, subject to availability of equipment at the first point of switching. When FGA switching is provided in a hunt group or uniform call distribution arrangement, all FGA switching will be arranged for the same type of address signaling.
- (G) No address signaling is provided by the Telephone Company when FGA switching is used in the originating direction. Address signaling in such cases, if required by the customer, must be provided by the customer's end user using inband tone signaling techniques. Such inband tone address signals will not be regenerated by the Telephone Company and will be subject to the ordinary transmission capabilities of the Local Transport provided.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.1 Description (Cont'd)

- (H) FGA switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, local operator service (0- and 0+), Directory Assistance (411 where available and 555-1212), emergency reporting service (911 where available), exchange telephone repair (611 where available), community information services of an information service provider, and other customers' services (by dialing the appropriate digits).

Charges for FGA terminating calls requiring operator assistance or calls to 611 or 911 will only apply where sufficient call details are available. Additional non-access charges will also be billed on a separate account for (1) an operator surcharge, as set forth in the local exchange tariffs, for local operator assistance (0- and 0+) calls, (2) calls to certain community information services, for which rates are applicable under Telephone Company exchange service tariffs, e.g., 976 (DIAL IT) Network Services, and, (3) calls from a FGA line to another customer's service in accordance with that customer's applicable service rates when the Telephone Company performs the billing function for that customer. For calls to Directory Assistance (411 and 555- 1212, whichever is available), Local Transport rates for FGA Switched Access Service will apply. Additionally, calls to Directory Assistance are subject to the Directory Assistance Service Call rate set forth in 17.2.5(A) following.

- (I) When a FGA switching arrangement for an individual customer (a single line or entire hunt group) is discontinued at an end office, an intercept announcement is provided. This arrangement provides, for a limited period of time, an announcement that the service associated with the number dialed has been disconnected.
- (J) Except as provided for in Section 6.1.3 (A) (1), above, FGA will be provisioned over an Entrance Facility from the customer's premises to the customer's serving wire center.

FGA service, when used in the originating direction, will be provisioned as Direct Trunked Transport from the first point of switching (i.e., the end office switch where FGA switching dial tone is provided) to the customer's serving wire center.

FGA service, when used in the terminating direction, will be provisioned as Direct Trunked Transport from the customer's serving wire center to the first point of switching and provisioned as Tandem Switched Transport from the first point of switching to the terminating end office. The Tandem Switching charge will not apply.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.2 Optional Features

Following are the various nonchargeable optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group A. They are provided as Common Switching, Transport Termination or Local Transport options.

(A) Common Switching Options

Descriptions of the common switching optional features are set forth in 6.9 following.

- (1) Call Denial on Line or Hunt Group
- (2) Service Code Denial on Line or Hunt Group
- (3) Hunt Group Arrangement
- (4) Uniform Call Distribution Arrangement
- (5) Nonhunting Number for Use with Hunt Group or Uniform Call Distribution Arrangement
- (6) Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS-Type Services
- (7) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS-Type Services
- (8) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS-Type Services
- (9) Nonhunting Number Associated with a Hunt Group Arrangement or Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS-Type Services

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.2 Optional Features (Cont'd)(B) Transport Termination

- (1) Two-way operation with dial pulse address signaling and loop start supervisory signaling
- (2) Two-way operation with dial pulse address signaling and ground start supervisory signaling
- (3) Two-way operation with dial tone multifrequency address signaling and loop start supervisory signaling
- (4) Two-way operation with dial tone multifrequency address signaling and ground start supervisory signaling
- (5) Terminating operation with dial pulse address signaling and loop start supervisory signaling
- (6) Terminating operation with dial pulse address signaling and ground start supervisory signaling
- (7) Terminating operation with dual tone multifrequency address signaling and loop start supervisory signaling
- (8) Terminating operation with dual tone multifrequency address signaling and ground start supervisory signaling
- (9) Originating operation with loop start supervisory signaling
- (10) Originating operation with ground start supervisory signaling

(C) Local Transport Options

- (1) Supervisory Signaling (as set forth in 15.1.1(E) following)
- (2) Customer Specified Entry Switch Receive Level (as set forth in 15.1.1(E) following)

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.3 Optional Features Provided In Local Tariffs

Certain other features which may be available in connection with Feature Group A (e.g., Speed Calling, Remote Call Forwarding, Bill Number Screening, IntraLATA extensions) are provided under the Telephone Company's local and/or general exchange service tariffs.

6.5.4 Measuring Access Minutes

Customer Feature Group A traffic to end offices will be measured (i.e., recorded) or assumed by the Telephone Company at end office switches. Originating and terminating calls will be measured (i.e., recorded) or assumed by the Telephone Company to determine the basis for computing chargeable access minutes. In the event the customer message detail is not available because the Telephone Company lost or damaged tapes or incurred recording system outages, the Telephone Company will estimate the volume of lost customer access minutes of use based on previously known values.

For terminating calls over FGA and for originating calls over FGA (when the off-hook supervisory signal is provided by the customer's equipment before the called party answers), the measured minutes are the chargeable access minutes. For originating calls over FGA (when the off-hook supervisory signal is forwarded by the customer's equipment when the called party answers), chargeable originating access minutes are derived from recorded minutes using the same formula as set forth in 6.7.4 following for Feature Group C.

For originating calls over FGA, usage measurement begins when the originating FGA first point of switching receives an off-hook supervisory signal forwarded from the customer's point of termination. This off-hook signal may be provided by the customer's equipment before the called party answers, or forwarded by the customer's equipment when the called party answers.

The measurement of originating call usage over FGA ends when the originating FGA first point of switching receives an on-hook supervisory signal from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.4 Measuring Access Minutes (Cont'd)

For terminating calls over FGA, usage measurement begins when the terminating FGA first point of switching receives an off-hook supervisory signal from the terminating end user's end office, indicating the terminating end user has answered. The measurement of terminating call usage over FGA ends when the terminating FGA first point of switching receives an on-hook supervisory signal from either the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

FGA access minutes or fractions thereof, the exact value of the fraction being a function of the switch technology where the measurement is made, are accumulated over the billing period for each line or hunt group, and are then rounded up to the nearest access minute for each line or hunt group.

Assumed minutes are used for FGA services which originate or terminate in end offices not equipped with measurement capabilities and in such cases are the chargeable access minutes.

Where originating and terminating measurement capability does not exist for Feature Group A provided to the first point of switching, the number of access minutes will be assumed as set forth in 17.2.6 following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.4 Measuring Access Minutes (Cont'd)

Where measurement capability exists for either originating or terminating usage, but not both, on a line arranged for two way calling, the number of access minutes per line per month will be assumed usage, as set forth in 17.2.6 following, or the measured usage, whichever is greater. If the usage in the measured direction exceeds the assumed access minutes per line per month, no usage will be assigned in the unmeasured direction. If the measured usage is less than the assumed access minutes per line per month, the usage in the unmeasured direction will be the assumed usage, as set forth in 17.2.6 following, for that unmeasured direction except that the total of measured and assumed minutes in such instances will not exceed the total assumed usage designated for two way calling set forth in 17.2.6 following. If the total exceeds the assumed minutes set forth in 17.2.6 following, the assigned minutes shall be reduced so that the total of measured and unmeasured minutes equals the assumed minutes for two way calling set forth in 17.2.6 following.

Additionally, when the line is arranged for one way calling and there is no measurement capability for that direction, assumed originating access minutes, as set forth in 17.2.6(B) following, will be assigned for originating calling only lines and assumed terminating access minutes, as set forth in 17.2.6(C) following, will be assigned for terminating calling only lines.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.4 Measuring Access Minutes (Cont'd)

The following matrix illustrates the application of assumed access minutes for FGA as set forth in 17.2.6(A), (B) and (C) following.

<u>Service Ordered As</u>	<u>Can Measure Originating</u>	<u>Can't Measure Originating</u>	<u>Can Measure Terminating</u>	<u>Can't Measure Terminating</u>
Originating Only	Actual	1,510	N/A	N/A
Terminating Only	N/A	N/A	Actual	2,685
Both Originating and Terminating (originating measurement greater than 41950)	Actual	N/A	N/A	0
Both Originating and Terminating (originating measurement equal or less than 4195)	Actual	N/A	N/A	0 to 2685*
Both Originating and Terminating (terminating measurement greater than 4195)	N/A	0	Actual	N/A
Both Originating and Terminating (terminating measurement equal or less than 4195)	N/A	0 to 1510*	Actual	N/A

* Sum of actual and assumed cannot exceed 4195. Reduce assumed minutes of use if necessary.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.5 Description and Provision of Feature Group A (FGA) (Cont'd)6.5.4 Measuring Access Minutes (Cont'd)

Notwithstanding the preceding, when Feature Group A is used for the provision of WATS-type service where measurement capability exists at the WATS Serving Office but not at the Feature Group A first point of switching, the measured WATS-type originating and/or terminating minutes of use shall be separately summed and compared to their respective total assumed originating and/or terminating minutes of use. The number of access minutes per line per month will be the assumed or the measured usage, whichever is greater.

6.5.5 Testing Capabilities

FGA is provided, in the terminating direction where equipment is available, with seven digit access to balance (100 type) test line and milliwatt (102 type) test line. In addition to the tests described in 6.2.4 preceding which are included with the installation of service (Acceptance Testing) and as ongoing routine testing, Additional Cooperative Acceptance Testing and Additional Manual Testing are available as set forth in 13.3.1 following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B (FGB)6.6.1 Description

- (A) FGB Access, which is available to all customers, provides trunk side access to Telephone Company end office switches with an associated uniform 950-XXXX access code. FGB trunk side access is provided for the customer's use in originating communications from and terminating communications to an Interexchange Carrier's Interstate Service or a customer provided interstate communications capability. The customer must specify the Interexchange Carrier to which the FGB service is connected or, in the alternative, specify the means by which the FGB access communications is transported to another state. Special Access Services utilized for connection with FGB at Telephone Company designated WATS Serving Offices as set forth in Section 7 following may be ordered separately by a customer other than the customer which orders the FGB Switched Access Service for the provision of WATS or WATS-type services. Special Access Services are ordered as set forth in 5.2 preceding.
- (B) FGB, when directly routed to an end office (i.e., provided without the use of an access tandem switch), is provided at appropriately equipped Telephone Company electronic end office switches. When provided via Telephone Company designated electronic access tandem switches, FGB switching is provided at Telephone Company electronic and electromechanical end office switches.
- (C) FGB is provided as trunk side switching through the use of end office or access tandem switch trunk equipment. The switch trunk equipment is provided with wink start start-pulsing signals and answer and disconnect supervisory signaling.
- (D) FGB switching is provided with multifrequency address signaling in both the originating and terminating directions. Except for FGB switching provided with the automatic number identification (ANI) or rotary dial station signaling arrangements as set forth respectively in 6.9.1(F) and 6.9.2(A) following, any other address signaling in the originating direction, if required by the customer, must be provided by the customer's end user using inband tone signaling techniques. Such inband tone address signals will not be regenerated by the Telephone Company and will be subject to the ordinary transmission capabilities of the Local Transport provided.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B(FGB) (Cont'd)6.6.1 Description (Cont'd)

- (E) The access code for FGB switching is a uniform access code. The form of the uniform access code is 950-XXXX. A uniform access code(s) will be assigned to the customer for the customer's domestic communications and another will be assigned to the customer for its international communications, if required. These access codes will be the assigned access numbers of all FGB switched access service provided to the customer by the Telephone Company.
- (F) The Telephone Company will establish a trunk group or groups for the customer at end office switches or access tandem switches where FGB switching is ordered. When required by technical limitations, a separate trunk group will be established for each type of FGB switching arrangement provided. Different types of FGB or other switching arrangements may be combined in a single trunk group at the option of the Telephone Company.
- (G) FGB switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, community information services of an information service provider and other customers' services (by dialing the appropriate digits). When directly routed to an end office, only those valid NXX codes served by that end office may be accessed. When routed through an access tandem, only those valid NXX codes served by end offices subtending the access tandem may be accessed.

The customer will also be billed additional non- access charges for calls to certain community information services for which rates are applicable under Telephone Company exchange service tariffs, e.g., 976 (DIAL-IT) Network Service. Additionally, non-access charges will also be billed for calls from a FGB trunk to another customer's service in accordance with that customer's applicable service rates when the Telephone Company performs the billing function for that customer.

Calls in the terminating direction will not be completed to the 950-XXXX access code, local operator assistance (0- and 0+), Directory Assistance (411 and 555-1212), service codes 611 and 911 or 101XXXX access codes. Calls will be completed to Directory Assistance (NPA-555-1212 or 555-1212) when FGB switching is combined with Directory Assistance (DA) switching. FGB may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C and D.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B(FGB) (Cont'd)6.6.1 Description (Cont'd)

- (H) When all FGB switching arrangements are discontinued at an end office and/or in a LATA, an intercept announcement is provided. This arrangement provides, for a limited period of time, an announcement that the service associated with the number dialed has been disconnected.
- (I) In a designated end office where FGB with an Abbreviated Dialing Arrangement (ADA) is available, the FGB with an ADA will be provisioned in the same manner in which FGB is provisioned with the exceptions described in 6.9.1 following. When FGB with an ADA is made available in a non-equal end office, the Telephone Company will continue to make FGB with an associated 950-XXXX access code available to customers at non-premium rates.
- (J) For FGB switched access service to a Wireless Switching Center (WSC) directly interconnected to a Telephone Company access tandem office, the customer will be billed only the Local Transport premium rate element for the FGB usage. The mileage used to determine the monthly rate for the local transport rate element is as set forth in 6.4.6 preceding.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B(FGB) (Cont'd)6.6.2 Optional Features

Following are descriptions of the various nonchargeable optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group B. They are set forth in (A), (B) and (C) following and are provided as Common Switching, Transport Termination and Local Transport options. Additionally, other optional features provided in local tariffs are set forth in (D) following.

(A) Common Switching Options

Descriptions of the common switching optional features are set forth in 6.9 following.

- (1) Automatic Number Identification (ANI)
- (2) Up to 7 Digit Outpulsing of Access Digits to Customer
- (3) Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (4) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (5) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (6) Nonhunting Number Associated with Hunt Group Arrangement or Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services

(B) Transport Terminations Options

- (1) Rotary Dial Station Signaling

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B(FGB) (Cont'd)6.6.2 Optional Features (Cont'd)(C) Local Transport Options

- (1) Customer Specification of Local Transport Termination
- (2) Optional Supervisory Signaling
- (3) Customer Specified Entry Switch Receive Level

Inasmuch as these options concern transmission levels and signaling they are set forth in 15.1.1 following.

(D) Optional Features Provided In Local Tariffs

Another feature, Bill Number Screening, which may be available in connection with FGB, is provided under the Telephone Company's local and/or general exchange service tariffs.

6.6.3 Design and Traffic Routing

For Feature Group B, the trunk directionality and traffic routing of the Switched Access Service between the customer designated premises and the entry switch are determined by the customer's order for service; except the Telephone Company will designate the first point(s) of switching and routing to be used where equal access is provided through a centralized equal access arrangement. Those Telephone Company offices providing equal access through centralized arrangements are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4. Additionally, the customer may order the optional feature Customer Specification of Local Transport Termination as set forth in 15.1.1 following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B(FGB) (Cont'd)6.6.4 Measuring Access Minutes

Customer traffic to end offices will be measured (i.e., recorded) or assumed by the Telephone Company at end office switches or access tandem switches. Originating and terminating calls will be measured (i.e., recorded) or assumed by the Telephone Company to determine the basis for computing chargeable access minutes. In the event the customer message detail is not available because the Telephone Company lost or damaged tapes or incurred recording system outages, the Telephone Company will estimate the volume of lost customer access minutes of use based on previously known values.

For both originating and terminating calls over FGB the measured minutes are the chargeable access minutes.

For originating calls over FGB, usage measurement begins when the originating FGB first point of switching receives answer supervision forwarded from the customer's point of termination, indicating the customer's equipment has answered.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B(FGB) (Cont'd)6.6.4 Measuring Access Minutes (Cont'd)

The measurement of originating call usage over FGB ends when the originating FGB first point of switching receives disconnect supervision from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

For terminating calls over FGB, usage measurement begins when the terminating FGB first point of switching receives answer supervision from the terminating end user's end office, indicating the terminating end user has answered.

The measurement of terminating call usage over FGB ends when the terminating FGB first point of switching receives disconnect supervision from either the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

FGB access minutes or fractions thereof, the exact value of the fraction being a function of the switch technology where the measurement is made, are accumulated over the billing period for each end office, and are then rounded up to the nearest access minute for each end office.

Assumed minutes are used for FGB services which originate or terminate in end offices not equipped with measurement capabilities and in such cases are the chargeable access minutes.

Where originating and terminating measurement capability does not exist for Feature Group B provided to the first point of switching, the number of access minutes will be assumed, as set forth in 17.2.6(D) following, when the trunk is arranged for two way calling.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B(FGB) (Cont'd)6.6.4 Measuring Access Minutes (Cont'd)

Where measurement capability exists for either originating or terminating usage, but not both, on a trunk arranged for two way calling, the number of access minutes per trunk per month will be assumed usage, as set forth in 17.2.6(D) following, or the measured usage, whichever is greater. If the usage in the measured direction exceeds the assumed access minutes per trunk per month, no usage will be assigned in the unmeasured direction. If the measured usage is less than the assumed access minutes per trunk per month, the usage in the unmeasured direction will be the assumed usage, as set forth in 17.2.6 following, for that unmeasured direction except that the total of measured and assumed minutes in such instances will not exceed the total assumed usage designated for two way calling set forth in 17.2.6(D) following. If the total exceeds the assumed minutes set forth in 17.2.6 following, the assigned minutes shall be reduced so that the total of measured and unmeasured minutes equals the assumed minutes for two way calling set forth in 17.2.6(D) following.

Additionally, when the trunk is arranged for one way calling and there is no measurement capability for that direction, assumed originating access minutes, as set forth in 17.2.6(E) following, will be assigned for originating calling only lines and assumed terminating access minutes, as set forth in 17.2.6(F) following, will be assigned for terminating calling only lines.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B(FGB) (Cont'd)6.6.4 Measuring Access Minutes (Cont'd)

The following matrix illustrates the application of assumed access minutes for FGB as set forth in 17.2.6(D), (E) and (F) following.

<u>Service Ordered As</u>	<u>Can Measure Originating</u>	<u>Can't Measure Originating</u>	<u>Can Measure Terminating</u>	<u>Can't Measure Terminating</u>
Originating Only	Actual	3,132	N/A	N/A
Terminating Only	N/A	N/A	Actual	5,568
Both Originating and Terminating (originating measurement greater than 8700)	Actual	N/A	N/A	0
Both Originating and Terminating (originating measurement equal or less than 8700)	Actual	N/A	Actual	0 to 5568*
Both Originating and Terminating (terminating measurement greater than 8700)	N/A	0	Actual	N/A
Both Originating and Terminating (terminating measurement equal or less than 8700)	N/A	0 to 3132*	Actual	N/A

* Sum of actual and assumed cannot exceed 8700. Reduce assumed minutes of use if necessary.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B(FGB) (Cont'd)6.6.4 Measuring Access Minutes (Cont'd)

Notwithstanding the preceding, when Feature Group B is used for the provision of WATS or WATS-type service where measurement capability exists at the WATS Serving Office but not at the Feature Group B first point of switching, the measured WATS or WATS-type originating and/or terminating minutes of use shall be separately summed and compared to their respective total assumed originating and/or terminating minutes of use. The number of minutes per trunk per month will be the assumed or the measured usage, whichever is greater.

When Feature Group B is ordered at an access tandem and end office specific usage measurement is not available, the actual or assumed originating and/or terminating minutes of use as determined by the exchange carrier providing the access tandem will be apportioned among all subtending end offices. For each end office, such apportionment shall be based on the ratio of the total number of subscriber lines in each end office subtending the access tandem to the total number of subscriber lines associated with all end offices subtending the access tandem. For purposes of administering this regulation, subscriber lines are defined as exchange service lines, Centrex lines and Centrex-type lines provided by the telephone companies under local and/or general exchange service tariffs. The resulting ratio for each end office is then applied to the total access area originating and/or terminating minutes of use to determine originating and/or terminating minutes of use to be assigned for billing purposes to each subtending end office in the access area.

The ratio used to calculate the access minutes will be determined by the Telephone Company and provided to the customer upon his request within fifteen (15) days of the receipt of such request.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.6 Description and Provision of Feature Group B(FGB) (Cont'd)6.6.5 Testing Capabilities

FGB is provided, in the terminating direction where equipment is available, with seven digit access to balance (100 type) test line, milliwatt (102 type) test line, nonsynchronous or synchronous test line, automatic transmission measuring (105 type) test line, data transmission (107 type) test line, loop around test line, short circuit test line and open circuit test line. In addition to the tests described in 6.2.4 preceding which are included with the installation of service (Acceptance Testing) and as ongoing routine testing, Additional Cooperative Acceptance Testing, Additional Automatic Testing, and Additional Manual Testing are available as set forth in 13.3.1 following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC)6.7.1 Description

- (A) FGC Access provides trunk side access to Telephone Company end office switches for the customer's use in originating and terminating communications. Originating and terminating FGC Access is available to providers of MTS and WATS. Originating FGC Access is available to all customers when used to provide the Interim NXX Translation optional feature. Terminating FGC access is available to all customers other than providers of MTS and WATS when such access is used in conjunction with the provision of the Interim NXX Translation optional feature, but only for purposes of testing. Existing FGC Access will be converted to Feature Group D Access when Feature Group D Access becomes available in an end office. Special Access Services utilized for connection with FGC at Telephone Company designated WATS Serving Offices as set forth in Section 7 following may be ordered separately by a customer other than the customer which orders the FGC Switched Access Service (i.e., a provider of MTS and WATS) for the provision of WATS Services. Special Access Services are ordered as set forth in 5.2 preceding.
- (B) Feature Group C switching is provided at all end office switches unless Feature Group D end office switching is provided in the same office. When FGD switching is available, FGC switching will not be provided. FGC is provided at Telephone Company end office switches on a direct trunk basis or via Telephone Company designated access tandem switches. Feature Group C switching is furnished to providers of MTS and WATS. Additionally, originating Feature Group C switching is available to all customers when used to provide the Interim NXX Translation optional feature. Terminating Feature Group C switching is available to all customers who are not MTS and WATS providers only when such terminating access is for purposes of testing Feature Group C facilities provided in conjunction with the Interim NXX Translation optional feature.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.1 Description (Cont'd)

- (C) FGC is provided as trunk side switching through the use of end office or access tandem switch trunk equipment. The switch trunk equipment is provided with answer and disconnect supervisory signaling. Wink start start-pulsing signals are provided in all offices where available. In those offices where wink start start-pulsing signals are not available, delay dial start-pulsing signals will be provided, unless immediate dial pulse signaling is provided, in which case no start-pulsing signals are provided.
- (D) FGC is provided with multifrequency address signaling except in certain electromechanical end office switches where multifrequency signaling is not available. In such switches, the address signaling will be dial pulse or immediate dial pulse signaling, whichever is available. Up to 12 digits of the called party number dialed by the customer's end user using dual tone multifrequency or dial pulse address signals will be provided by Telephone Company equipment to the customer's premises where the Switched Access Service terminates. Such called party number signals will be subject to the ordinary transmission capabilities of the Local Transport provided.
- (E) No access code is required for FGC switching. The telephone number dialed by the customer's end user shall be a seven or ten digit number for calls in the North American Numbering Plan (NANP). For international calls outside the NANP, a seven to twelve digit number may be dialed. The form of the numbers dialed by the customer's end user is NXX-XXXX, 0 or 1 + NXX-XXXX, NPA + NXX-XXXX, 0 or 1 + NPA + NXX-XXXX, and, when the end office is equipped for International Direct Distance Dialing (IDDD), 01 + CC + NN or 011 + CC + NN.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.1 Description (Cont'd)

- (F) FGC switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, community information services of an information provider, and other customer's services (by dialing the appropriate codes) when the services can be reached using valid NXX codes. When directly routed to an end office, only those valid NXX codes served by that office may be accessed. When routed through an access tandem, only those valid NXX codes served by offices subtending the access tandem may be accessed. Where measurement capabilities exist, the customer will also be billed additional non-access charges for calls to certain community information services, for which rates are applicable under Telephone Company exchange service tariffs, e.g., 976 (DIAL IT) Network Services. Additionally, non-access charges will also be billed for calls from a FGC trunk to another customer's service in accordance with that customer's applicable service rates when the Telephone Company performs the billing function for that customer. Calls in the terminating direction will not be completed to 950-XXXX access codes, local operator assistance (0- and 0+), Directory Assistance (411 and 555-1212), service codes 611 and 911 and 101XXXX access codes. Calls will be completed to Directory Assistance (NPA-555-1212 or 555-1212) when FGC switching is combined with Directory Assistance switching. FGC may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C or D.
- (G) The Telephone Company will establish a trunk group or groups for the customer at end office switches or access tandem switches where FGC switching is provided. When required by technical limitations, a separate trunk group will be established for each type of FGC switching arrangement provided. Different types of FGC or other switching arrangements may be combined in a single trunk group at the option of the Telephone Company.
- (H) Unless prohibited by technical limitations the providers of MTS and WATS may, at their option, combine Interim NXX Translation traffic in the same trunk group arrangement with their non-Interim NXX Translation traffic. When required by technical considerations, or when provided to a customer other than the provider of MTS and WATS, or at the request of the customer (i.e., provider of MTS and WATS), a separate trunk group will be established for Interim NXX Translation traffic.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.1 Description (Cont'd)

- (I) Operator Transfer Service may be provided with FGC Switched Access Service at Telephone Company designated Operator Services locations.

The Telephone Company will provide Operator Transfer Service for calls originating from telephone numbers associated with exchange service lines in end offices subtending the Operator Services location. Operator Transfer Service is provided as set forth in 6.10.3(B) following.

- (J) FGC switching is provided with multifrequency address signaling or out of band SS7 signaling where technically feasible. With multifrequency address signaling and SS7 signaling, up to 12 digits of the called party number dialed by the customer's end user using dual tone multifrequency or dial pulse address signals will be provided by Telephone Company equipment to the customer's premises where the Switched Access Service terminates. Such address signals will be subject to the ordinary transmission capabilities of the Local Transport provided.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.2 Optional Features

Following are descriptions of the various nonchargeable and chargeable optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group C. Nonchargeable optional features are provided as Common Switching, Transport Termination and Local Transport options as set forth in (A) through (C) following. Chargeable optional features are set forth in (D) following.

(A) Common Switching Options

Descriptions of the common switching optional features are set forth in 6.9 following.

- (1) Automatic Number Identification (ANI)
- (2) Signaling Options
 - (a) Delay Dial Start-Pulsing Signaling
 - (b) Immediate Dial Pulse Address Signaling
 - (c) Dial Pulse Address Signaling
- (3) Service Class Routing
- (4) Alternate Traffic Routing
- (5) Trunk Access Limitation
- (6) Band Advance Arrangement Associated with Special Access Service Utilized in the Provision of WATS Service
- (7) End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS Service
- (8) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS Service

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.2 Optional Features (Cont'd)(A) Common Switching Options (Cont'd)

- (9) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS Services
- (10) Nonhunting Number Associated with a Hunt Group Arrangement or Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS Services
- (11) Digital Switched 56 Service

(B) Transport Termination Options

- (1) Operator Trunk - Coin, Non-Coin, or Combined Coin and Non-Coin

The Operator Trunk option is set forth in 6.10.2(B) following.

(C) Local Transport Options

- (1) Supervisory Signaling

The Supervisory Signaling optional feature, due to its technical nature, is set forth in 15.1.1 following.

- (2) Signaling System 7 (SS7)

The SS7 optional feature allows the customer to receive signals for out of band call set up and is available with Feature Group C. This option requires the establishment of a signaling connection between the customer's designated premises/SPOI and a Signaling Transfer Point (STP).

SS7 is provided in both the originating and terminating direction on FGC and each signaling connection is provisioned for two way SS7 signaling information.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.2 Optional Features (Cont'd)(C) Local Transport Options (Cont'd)

- (3) Multifrequency Address Signaling
- (4) Calling Party Number (CPN)
- (5) Charge Number Parameter (CNP)
- (6) 64 Clear Channel Capability

The 64 Clear Channel Capability optional feature, due to its technical nature, is set forth in 15.1.1 following.

(D) Chargeable Optional Features

- (1) Interim NXX Translation

The Interim NXX Translation Optional Feature is set forth in 6.10.3(A) following.

- (2) The Operator Transfer Service Optional Feature is provided as set forth in 6.10.3(B) following.

- (3) Common Channel Signaling/Signaling System 7 (CCS/SS7) Network Connection Service (CCSNC)

The CCSNC Optional Feature is provided as set forth in 6.10.3(C) following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.3 Design and Traffic Routing

For Feature Group C, the Telephone Company shall design and determine the routing of Switched Access Service. Additionally, for Tandem Switched Transport, the Telephone Company will design and determine the routing from the first point of switching to the end office. The Telephone Company shall also decide if capacity is to be provided by originating only, terminating only, or two-way trunk groups. Finally, the Telephone Company will decide whether trunk side access will be provided through the use of two-wire or four-wire trunk terminating equipment.

Selection of facilities and equipment and traffic routing of the service are based on standard engineering methods, available facilities and equipment, and actual traffic patterns.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.4 Measuring Access Minutes

Customer traffic to end offices will be measured (i.e., recorded) by the Telephone Company at end office switches or access tandem switches. Originating and terminating calls will be measured or imputed by the Telephone Company to determine the basis for computing chargeable access minutes. In the event the customer message detail is not available because the Telephone Company lost or damaged tapes or incurred recording system outages, the Telephone Company will estimate the volume of lost customer access minutes of use based on previously known values.

For terminating calls over FGC when measurement capability exists, the measured minutes are the chargeable access minutes. For originating calls over FGC, chargeable originating access minutes are derived from recorded minutes in the following manner:

Step 1: Obtain recorded originating minutes and messages from the appropriate recording data.

Step 2: Obtain the total attempts by dividing the originating measured messages by the completion ratio. Completion ratios (CR) are obtained separately for the major call categories such as DDD, operator, 800, 900, directory assistance and international from a sample study which analyzes the ultimate completion status of the total attempts which receive acknowledgement from the customer. That is, Measured Messages divided by Completion Ratio equals Total Attempts.

Step 3: Obtain the total non-conversation time additive (NCTA) by multiplying the total attempts (obtained in Step 2) by the NCTA per attempt ratio. The NCTA per attempt ratio is obtained from the sample study identified in Step 2 by measuring the non-conversation time associated with both completed and incompleting attempts. The total NCTA is the time on a completed attempt from customer acknowledgement of receipt of call to called party answer (set up and ringing) plus the time on an incompleting attempt from customer acknowledgement of call until the access tandem or end office receives a disconnect signal (ring - no answer, busy or network blockage). That is, Total Attempts times Non-Conversation Time per Attempt Ratio equals Total NCTA.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.4 Measuring Access Minutes (Cont'd)

Step 4: Obtain total chargeable originating access minutes by adding the total NCTA (obtained in Step 3) to the recorded originating measured minutes (obtained in Step 1). That is, Measured Minutes plus NCTA equals Chargeable Originating Access Minutes.

Following is an example which illustrates how the chargeable originating access minutes are derived from the measured originating minutes using this formula.

Where:	Measured Minutes (M. Min.)	= 7,000
	Measured Messages (M. Mes.)	= 1,000
	Completion Ratio (CR)	= .75
	NCTA per Attempt	= .4

$$(1) \quad \text{Total Attempts} = \frac{1,000(\text{M. Mes.})}{.75} = 1,333.3$$

$$(2) \quad \text{Total NCTA} = .4 (\text{NCTA per Attempt}) \times 1,333.33 = 533.33$$

$$(3) \quad \text{Total Chargeable Originating Access Minutes} = 7,000 (\text{M. Min.}) + 533.33 (\text{NCTA}) = 7,533.33$$

FGC access minutes or fractions thereof, the exact value of the fraction being a function of the switch technology where the measurement is made, are accumulated over the billing period for each end office, and are then rounded up to the nearest access minute for each end office.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.4 Measuring Access Minutes (Cont'd)Originating Usage

For originating calls over FGC, provided with Multi-Frequency Signaling, usage measurement begins when the originating FGC first point of switching receives answer supervision from the customer's point of termination, indicating the called party has answered.

For originating calls over FGC provided with Signaling System 7 (SS7) Signaling when the FGC end office is not routed through an access tandem for connection to the customer, usage measurement begins when the SS7 Initial Address Message is sent from the Service Switching Point (SSP) to the Signal Transfer Point (STP) .

For originating calls over FGC provided with Signaling System 7 (SS7) Signaling when the FGC end office is routed through a tandem for connection to the customer, usage measurement begins when the FGC end office receives the SS7 Exit Message from the tandem.

The measurement of originating call usage over FGC provided with Multi-Frequency Signaling ends when the originating FGC first point of switching receives disconnect supervision from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

The measurement of originating call usage over FGC provided with SS7 Signaling ends when the originating FGC end office receives an SS7 Release Message indicating either the originating or terminating end user has disconnected.

Terminating Usage

For terminating calls over FGC the chargeable access minutes are either measured or derived. For terminating calls over FGC where measurement capability does not exist, terminating FGC usage is derived from originating usage, excluding usage from calls to closed end services or Directory Assistance Services.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.4 Measuring Access Minutes (Cont'd)Terminating Usage (Cont'd)

For terminating calls over FGC provided with Multi-Frequency Signaling, where measurement capability exists, the measurement of chargeable access minutes begins when the terminating FGC first point of switching receives answer supervision from the terminating end user's end office, indicating the terminating end user has answered. This measurement ends when the terminating FGC first point of switching receives an on-hook supervisory signal from the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

For terminating calls over FGC with SS7 signaling, usage measurement begins when the terminating recording switch receives answer supervision from the terminating end user. The Telephone Company switch receives answer supervision and sends the indication to the customer in the form of an answer message. The measurement of terminating FGC call usage ends when the entry switch receives or sends a Release Message, whichever occurs first.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.5 Design Blocking Probability

The Telephone Company will design the facilities used in the provision of Switched Access Service FGC to meet the blocking probability criteria as set forth in (A) and (B) following.

- (A) For Feature Group C, the design blocking objective will be no greater than one percent (.01) between the point of termination at the customer's designated premises and the first point of switching when traffic is directly routed without an alternate route. Standard traffic engineering methods will be used by the Telephone Company to determine the number of transmission paths required to achieve this level of blocking.
- (B) The Telephone Company will perform routine measurement functions to assure that an adequate number of transmission paths are in service. The Telephone Company will recommend that additional capacity (i.e., busy hour minutes of capacity) be ordered by the customer when additional paths are required to reduce the measured blocking to the designed blocking level. For the capacity ordered, the design blocking objective is assumed to have been met if the routine measurements show that the measured blocking does not exceed the threshold listed in the following tables.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.5 Design Blocking Probability (Cont'd)

(B) (Cont'd)

- (1) For transmission paths carrying only first routed traffic direct between an end office and customer's designated premises without an alternate route, and for paths carrying only overflow traffic, the measured blocking thresholds are as follows:

Number of Transmission Paths Per Trunk Group	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and 11:00 p.m. Per Trunk Group			
	15-20 Measurements	11-14 Measurements	7-10 Measurements	3-6 Measurements
2	7%	8%	9%	14%
3	5%	6%	7%	9%
4	5%	6%	7%	8%
5-6	4%	5%	6%	7%
7 or more	3%	3.5%	4%	6%

- (2) For transmission paths carrying first routed traffic between an end office and customer's premises via an access tandem, the measured blocking thresholds are as follows:

Number of Transmission Paths Per Trunk Group	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and 11:00 p.m. Per Trunk Group			
	15-20 Measurements	11-14 Measurements	7-10 Measurements	3-6 Measurements
2	4.5%	5.5%	6.0%	9.5%
3	3.5%	4.0%	4.5%	6.0%
4	3.5%	4.0%	4.5%	5.5%
5-6	2.5%	3.5%	4.0%	4.5%
7 or more	2.0%	2.5%	3.0%	4.0%

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ACCESS SERVICE

6. Switched Access Service (Cont'd)6.7 Description and Provision of Feature Group C (FGC) (Cont'd)6.7.6 Testing Capabilities

FGC is provided, in the terminating direction where equipment is available, with seven digit access to balance (100 type) test line, milliwatt (102 type) test line, nonsynchronous or synchronous test line, automatic transmission measuring (105 type) test line, data transmission (107 type) test line, loop around test line, short circuit test line and open circuit test line. In addition to the tests described in 6.2.4 preceding which are included with the installation of service (Acceptance Testing) and as ongoing routine testing, Additional Cooperative Acceptance Testing, Additional Automatic Testing and Additional Manual Testing are available as set forth in 13.3.1 following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD)6.8.1 Description

- (A) FGD Access, which is available to all customers, provides trunk side access to Telephone Company end office switches. Special Access Services utilized for connection with FGD at Telephone Company designated WATS Serving offices as set forth in Section 7 following may be ordered separately by a customer other than the customer which orders the FGD Switched Access Service for the provision of WATS or WATS-type services. Special Access Services are ordered as set forth in 5.2 preceding. Internet Protocol Gateway Access Service (IPG) utilized for connection with terminating FGD at Telephone Company designated IPG SWCs as set forth in Section 16.4, following, is ordered as set forth in Section 5.2, preceding.
- (B) FGD is provided at Telephone Company designated end office switches whether routed directly or via Telephone Company designated electronic access tandem switches. The Telephone Company will designate the first point(s) of switching for FGD services where the Telephone Company elects to provide equal access through a centralized equal access arrangement. Those Telephone Company offices providing equal access through centralized arrangements are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.
- (C) FGD is provided as trunk side switching through the use of end office or access tandem switch trunk equipment. The switch trunk equipment is provided with wink start start-pulsing signals and answer and disconnect supervisory signaling.
- (D) FGD switching is provided with multifrequency address signaling or out of band SS7 signaling. With multifrequency address signaling and SS7 signaling, up to 12 digits of the called party number dialed by the customer's end user using dual tone multifrequency or dial pulse address signals will be provided by Telephone Company equipment to the customer's premises where the Switched Access Service terminates. Such address signals will be subject to the ordinary transmission capabilities of the Local Transport provided.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.1 Description (Cont'd)

- (E) FGD switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, community information services of an information service provider, and other customers' services (by dialing the appropriate codes) when such services can be reached using valid NXX codes. When directly routed to an end office, only those valid NXX codes served by that office may be accessed. When routed through an access tandem, only those valid NXX codes served by end offices subtending the access tandem may be accessed. The customer will also be billed additional non-access charges for calls to certain community information services, for which rates are applicable under Telephone Company exchange service tariffs, e.g., 976 (DIAL-IT) Network Service. Additionally, non-access charges will also be billed for calls from a FGD trunk to another customer's service in accordance with that customer's applicable service rates when the Telephone Company performs the billing function for that customer. Calls in the terminating direction will not be completed to 950-XXXX access codes, local operator assistance (0- and 0+), Directory Assistance (411 and 555-1212), service codes 611 and 911 and 101XXXX access codes. Calls will be completed to Directory Assistance (NPA-555-1212 or 555-1212) when FGD switching is combined with Directory Assistance switching. FGD may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C or D.
- (F) The Telephone Company will establish a trunk group or groups for the customer at end office switches or access tandem switches where FGD switching is provided. When required by technical limitations, a separate trunk group will be established for each type of FGD switching arrangement provided. Different types of FGD or other switching arrangements may be combined in a single trunk group at the option of the Telephone Company.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.1 Description (Cont'd)

- (G) The access code for FGD switching is a uniform access code of the form 101XXXX. A uniform access code(s) will be the assigned number of all FGD access provided to the customer by the Telephone Company. No access code is required for calls to a customer over FGD Switched Access Service if the end user's telephone exchange service is arranged for presubscription to that customer, as set forth in 13.4 following.

Where no access code is required, the number dialed by the customer's end user shall be a seven or ten digit number for calls in the North American Numbering Plan (NANP). For international calls outside the NANP, a seven to twelve digit number may be dialed. The form of the numbers dialed by the customer's end user is NXX-XXXX, 0 or 1 + NXX-XXXX, NPA + NXX-XXXX, 0 or 1 + NPA + NXX-XXXX, and, when the end office is equipped for International Direct Distance Dialing (IDDD), 01 + CC + NN or 011 + CC + NN.

When the 101XXXX access code is used, FGD switching also provides for dialing the digit 0 for access to the customer's operator, 911 for access to the Telephone Company's emergency reporting service, or the end-of-dialing digit (#) for cut-through access to the customer designated premises.

- (H) FGD switching will be arranged to accept calls from telephone exchange service locations without the need for dialing the 101XXXX uniform access code. Each telephone exchange service line may be marked with a code to identify which 101XXXX code its calls will be directed to for interLATA service.
- (I) Unless prohibited by technical limitations, the customer's Interim NXX Translation traffic may, at the option of the customer, be combined in the same trunk group arrangement with the customer's non- Interim NXX Translation traffic. When required by technical limitations, or at the request of the customer, a separate trunk group will be established for Interim NXX Translation traffic.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.1 Description (Cont'd)

(J) When a customer has had FGB access in an end office and subsequently replaces the FGB access with FGD access, at the mutual agreement of the customer and the Telephone Company, the Telephone Company will direct calls dialed by the customer's end users using the customer's previous FGB access code to the customer's FGD access service. The customer must be prepared to handle normally dialed FGD calls, as well as calls dialed with the FGB access code which requires the customer to receive additional address signaling from the end user. Such calls will be rated as FGD. The Telephone Company may, with 90 days' written notice to the customer, discontinue this arrangement.

(K) For FGD switched access service to a Wireless Switching Center (WSC) directly interconnected to a Telephone Company access tandem office, the customer will be billed only the Local Transport premium rate element for the FGD usage. The mileage used to determine the monthly rate for the local transport rate element is as set forth in 6.4.6(G) preceding.

(L) Operator Transfer Service (forwarding of 0- calls) may be provided with FGD Switched Access Service at Telephone Company designated Operator Services locations.

The Telephone Company will provide Operator Transfer Service for calls originating from telephone numbers associated with exchange service lines in end offices subtending the Operator Services location. Operator Transfer Service is provided as set forth in 6.10.3(B) following.

(M) For terminating FGD Switched Access Service from an IPG SWC, the customer will be billed the applicable Local Switching, Information Surcharge and Tandem Switched Transport premium rate elements for its FGD usage. The mileage used to determine the monthly rate for the Tandem Switched Facility, when required, is as set forth in Section 6.4.6(J), preceding.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.2 Optional Features

Following are the various nonchargeable and chargeable optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group D. Nonchargeable Optional Features are provided as Common Switching, Transport Termination and Local Transport options as set forth in (A) through (C) following. Chargeable optional features are set forth in (D) following.

(A) Common Switching Options

Descriptions of the common switching optional features are set forth in 6.9 following.

- (1) Automatic Number Identification (ANI)
- (2) Service Class Routing
- (3) Alternate Traffic Routing
- (4) Trunk Access Limitation
- (5) Call Gapping Arrangement
- (6) International Carrier Option
- (7) Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (8) End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (9) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (10) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (11) Nonhunting Number Associated with Hunt Group Arrangement or Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services
- (12) Digital Switched 56 Service

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.2 Optional Features (Cont'd)(B) Transport Termination Options(1) Operator Trunk – Full Feature

The Operator Trunk optional feature is set forth in 6.9.2(C) following.

(C) Local Transport Options(1) Supervisory Signaling

The Supervisory Signaling optional feature, due to its technical nature, is set forth in 15.1.1 following.

(2) Signaling System 7 (SS7)

The SS7 optional feature allows the customer to send and receive signals for out of band call set up and is available with Feature Group D. This option requires the establishment of a signaling connection between the customer's designated premises/ Signaling Point of Interface and a Telephone Company's Signaling Transfer Point (STP).

SS7 is provided in both the originating and terminating direction on FGD and each signaling connection is provisioned for two-way SS7 signaling information.

(3) Multifrequency Address Signaling(4) Calling Party Number (CPN) Parameter(5) Charge Number Parameter (CNP)(6) Carrier Selection Parameter (CSP)(7) 64 Clear Channel Capability

The 64 Clear Channel Capability optional feature, due to its technical nature, is set forth in 15.1.1 following.

(8) Carrier Identification Parameter (CIP)

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.8 Description and Provision of Feature Group D (FGD) (Cont'd)

6.8.2 Optional Features (Cont'd)

(D) Chargeable Optional Features

(1) Interim NXX Translation

The Interim NXX Translation Optional Feature is set forth in 6.10.3(A) following.

(2) Operator Transfer Service

The Operator Transfer Service Optional Feature is provided as set forth in 6.10.3 (B) following.

(3) Common Channel Signaling/Signaling System 7 (CCS/SS7) Network Connection Service (CCSNC)

The CCSNC Optional Feature is provided as set forth in 6.10.3 (C) following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.3 Design and Traffic Routing

For Feature Group D, the Telephone Company shall design and determine the routing of Tandem Switched Access Service, including the selection of the first point of switching and the selection of facilities from the interface to any switching point and to the end offices where busy hour minutes of capacity are ordered. The Telephone Company shall also decide if capacity is to be provided by originating only, terminating only, or two-way trunk groups. Finally, the Telephone Company will decide whether trunk side access will be provided through the use of two-wire or four-wire trunk terminating equipment.

For Feature Group D Direct Trunked Transport service, the Telephone Company will determine the routing of Switched Access Service from the point of interface to the first point of switching or, if the customer specified one or more hub locations for multiplexing, from the point of interface to the hub location, from one hub location to another hub location, and/or from a hub location to the first point of switching.

Selection of facilities and equipment and traffic routing of the service is based on standard engineering methods, available facilities and equipment, and actual traffic patterns. The Telephone Company will designate the first point(s) of switching and routing to be used where equal access is provided through a centralized equal access arrangement.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.4 Measuring Access Minutes

Customer traffic to end offices will be recorded at end office switches or access tandem switches. Originating and terminating calls will be measured or derived to determine the basis for computing chargeable access minutes. In the event the customer message detail is not available because the Telephone Company lost or damaged tapes or incurred recording system outages, the Telephone Company will estimate the volume of lost customer access minutes of use based on previously known values.

FGD access minutes or fractions thereof, the exact value of the fraction being a function of the switch technology where the measurement is made, are accumulated over the billing period for each end office, and are then rounded up to the nearest access minute for each end office.

Originating Usage

For originating calls over FGD the measured minutes are the chargeable access minutes.

For originating calls over FGD, provided with Multi-Frequency Signaling, usage measurement begins when the originating FGD first point of switching receives the first wink supervisory signal forwarded from the customer's point of termination.

For originating calls over FGD provided with Signaling System 7 (SS7) Signaling when the FGD end office is not routed through an access tandem for connection to the customer, usage measurement begins when the SS7 Initial Address Message is sent from the Service Switching Point (SSP) to the Service Transfer Point (STP).

For originating calls over FGD provided with Signaling System 7 (SS7) Signaling when the FGD end office is routed through a tandem for connection to the customer, usage measurement begins when the FGD end office receives the SS7 Exit Message from the tandem.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.4 Measuring Access Minutes (Cont'd)Originating Usage

The measurement of originating call usage over FGD provided with Multi-Frequency Signaling ends when the originating FGD first point of switching receives disconnect supervision from either the originating end user's end office, indicating the originating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

The measurement of originating call usage over FGD provided with SS7 Signaling ends when the originating FGD end office receives an SS7 Release Message indicating either the originating or terminating end user has disconnected.

Terminating Usage

For terminating calls over FGD the chargeable access minutes are either measured or derived.

For terminating calls over FGD provided with Multi-Frequency Signaling, where measurement capability exists, the measurement of chargeable access minutes begins when the terminating FGD first point of switching receives answer supervision from the terminating end user's end office, indicating the terminating end user has answered. This measurement ends when the terminating FGD first point of switching receives disconnect supervision from either the terminating end user's end office, indicating the terminating end user has disconnected, or the customer's point of termination, whichever is recognized first by the first point of switching.

For terminating calls over FGD, where measurement capability does not exist, terminating FGD usage is derived from originating usage, excluding usage from calls to closed end services or Directory Assistance Services.

For terminating calls over FGD with SS7 signaling, usage measurement begins when the terminating recording switch receives answer supervision from the terminating end user. The Telephone Company switch receives answer supervision and sends the indication to the customer in the form of an answer message. The measurement of terminating FGD call usage ends when the entry switch receives or sends a release message, whichever occurs first.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.5 Design Blocking Probability

The Telephone Company will design the facilities used in the provision of Switched Access Service FGD to meet the blocking probability criteria as set forth in (A) and (B) following.

- (A) For Feature Group D, the design blocking objective will be no greater than one percent (.01) between the point of termination at the customer's designated premises and the end office switch, whether the traffic is directly routed without an alternate route or routed via an access tandem. Standard traffic engineering methods as set forth in reference document Telecommunications Transmission Engineering - Volume 3 - Networks and Services (Chapters 6-7) will be used by the Telephone Company to determine the number of transmission paths required to achieve this level of blocking.
- (B) The Telephone Company will perform routine measurement functions to assure that an adequate number of transmission paths are in service. The Telephone Company will recommend that additional capacity (i.e., busy hour minutes of capacity or trunks) be ordered by the customer when additional paths are required to reduce the measured blocking to the designed blocking level. For the capacity ordered, the design blocking objective is assumed to have been met if the routine measurements show that the measured blocking does not exceed the threshold listed in the following tables.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.5 Design Blocking Probability (Cont'd)

(B) (Cont'd)

- (1) For transmission paths carrying only first routed traffic direct between an end office and customer's designated premises without an alternate route, and for paths carrying only overflow traffic, the measured blocking thresholds are as follows:

Number of Transmission Paths Per Trunk Group	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and 11:00 p.m. Per Trunk Group			
	15-20 Measurements	11-14 Measurements	7-10 Measurements	3-6 Measurements
2	7%	8.0%	9%	14.0%
3	5%	6.0%	7%	9.0%
4	5%	6.0%	7%	8.0%
5-6	4%	5.0%	6%	7.0%
7 or more	3%	3.5%	4%	6.0%

- (2) For transmission paths carrying first routed traffic between an end office and customer's premises via an access tandem, the measured blocking thresholds are as follows:

Number of Transmission Paths Per Trunk Group	Measured Blocking Thresholds in the Time Consistent Busy Hour for the Number of Measurements Taken Between 8:00 a.m. and 11:00 p.m. Per Trunk Group			
	15-20 Measurements	11-14 Measurements	7-10 Measurements	3-6 Measurements
2	4.5%	5.5%	6.0%	9.5%
3	3.5%	4.0%	4.5%	6.0%
4	3.5%	4.0%	4.5%	5.5%
5-6	2.5%	3.5%	4.0%	4.5%
7 or more	2.0%	2.5%	3.0%	4.0%

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6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.6 Network Blocking Charge

The customer will be notified by the Telephone Company to increase its capacity (busy hour minutes of capacity or quantities of trunks) when excessive trunk group blocking occurs on groups carrying Feature Group D traffic and the measured access minutes for that hour exceed the capacity purchased. Excessive trunk group blocking occurs when the blocking thresholds stated below are exceeded. They are predicated on time consistent, hourly measurements over a 30 day period excluding Saturdays, Sundays and national holidays. If the order for additional capacity has not been received by the Telephone Company within 15 days of the notification, the Telephone Company will bill the customer, at the rate set forth in 17.2.2 following, for each overflow in excess of the blocking threshold when (1) the average "30 day period" overflow exceeds the threshold level for any particular hour and (2) the "30 day period" measured average originating or two-way usage for the same clock hour exceeds the capacity purchased.

Blocking Thresholds

<u>Trunks in Service</u>	<u>1%</u>	<u>1/2%</u>
1-2	7.0%	4.5%
3-4	5.0%	3.5%
5-6	4.0%	2.5%
7 or greater	3.0%	2.0%

The 1% blocking threshold is for transmission paths carrying traffic direct (without an alternate route) between an end office and a customer's premises. The 1/2% blocking threshold is for transmission paths carrying first routed traffic between an end office and a customer's premises via an access tandem.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.8 Description and Provision of Feature Group D (FGD) (Cont'd)6.8.7 Testing Capabilities

FGD is provided, in the terminating direction where equipment is available, with seven digit access to balance (100 type) test line, milliwatt (102 type) test line, nonsynchronous or synchronous test line, automatic transmission measuring (105 type) test line, data transmission (107 type) test line, loop around test line, short circuit test line and open circuit test line. In addition to the tests described in 6.2.4 preceding, which are included with the installation of service (Acceptance Testing) and as ongoing routine testing, Additional Cooperative Acceptance Testing, Additional Automatic Testing and Additional Manual Testing, are available as set forth in 13.3.1 following.

When SS7 Signaling is ordered, network compatibility and other testing will be performed cooperatively by the Telephone Company and the customer as specified in Technical References TR-TSV 000905.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.9 Interim Access6.9.1 Abbreviated Dialing Arrangement (ADA)

FGB Switched Access Service with an ADA (FGB ADA) is available to all customers, other than providers of MTS/WATS, from Telephone Company designated end offices. FGB ADA enables end users to utilize a one or two digit access code to access customers who have ordered this service.

(A) FGB ADA Exceptions

FGB ADA is available to all customers other than providers of MTS/WATS and is provisioned like FGB Switched Access Service as set forth in 6.6.1 preceding with the following exceptions:

- (1) FGB ADA is available as originating only service, or as both originating and terminating service (2-way). FGB ADA is not available as terminating only service.
- (2) FGB ADA is only provided by direct routing to an end office switch.
- (3) The forms of the access code for originating FGB ADA switching are N or NX.* Assignment of FGB ADA access codes will be on a first-come, first-served basis and is subject to the availability of access code numbers.
- (4) Calls in the terminating direction will not be completed to FGB with an ADA access code (N and NX.)

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features

Following are descriptions of the various optional features that are available in lieu of, or in addition to, the standard features provided with the Feature Groups. They are provided as Common Switching, Transport Termination, Interim NXX Translation options or Operator Transfer Service option. Local Transport options associated with Common Channel Signaling Network Connection Service (CCSNC) are described in 6.10.1 following. All other Local Transport options, due to their technical nature, are described in 15.1.1 following.

6.10.1 Common Switching Nonchargeable Optional Features

The following table shows the Feature Groups with which the optional features are available.

		Available Feature Groups			
	Option	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
A)	Call Denial on Line or Hunt Group	X			
B)	Service Code Denial on Line or Hunt Group	X			
C)	Hunt Group Arrangement	X			
D)	Uniform Call Distribution Arrangement	X			
E)	Nonhunting Number for Use with Hunt Group or Uniform Call Distribution Arrangement	X			
F)	Automatic Number Identification (ANI)		X	X	X
G)	Up to 7 Digit Outpulsing of Access Digits to Customer		X		
H)	Delay Dial Start-Pulsing Signaling			X	
I)	Immediate Dial Pulse Address Signaling			X	
J)	Dial Pulse Address Signaling			X	
K)	Service Class Routing			X	X
L)	Alternate Traffic Routing		X	X	X
M)	Trunk Access Limitation			X	X
N)	Call Gapping Arrangement				X
O)	International Carrier Option				X
P)	Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services	X	X	X	X
Q)	End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services			X	X
R)	Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Service	X	X	X	X
S)	Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services	X	X	X	X
T)	Nonhunting Number Associated with Hunt Group Arrangement or Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services	X	X	X	

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

		Available Feature Groups			
Option		<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
U)	Digital Switched 56 Service	X	X	X	X
V)	Multifrequency Address Signaling			X	X
W)	Signaling System 7 (SS7) Signaling			X	X
X)	Calling Party Number (CPN)			X	X
Y)	Carrier Selection Parameter (CSP)				X
Z)	Charge Number Parameter (CNP)			X	X
AA)	Flexible Automatic Number Identification (Flex ANI)				X
AB)	Carrier Identification Parameter (CIP)				X

(A) Call Denial on Line or Hunt Group

This option allows for the screening of terminating Feature Group A calls. There are two screening arrangements available with this option as follows: 1) limiting terminating calls for completion to only 411 or 555-1212 whichever is available, 611, 911, 800 series service and a Telephone Company specified set of NXXs within the Telephone Company local exchange calling area of the dial tone office in which the arrangement is provided or, 2) limiting terminating calls to completion to only the NXXs associated with all end offices in the LATA, i.e., the call cannot be further switched or routed out of the LATA nor will calls be completed to 411 or 555-1212 whichever is available, 611, 911 or 800 series service. All other calls are routed to a reorder tone or recorded announcement. Arrangement 1 is provided in all Telephone Company electronic end offices and, where available, in electromechanical end offices. Arrangement 2 is provided where available. This feature is available with Feature Group A.

(B) Service Code Denial on Line or Hunt Group

This option allows for the screening of terminating calls within the LATA, and for disallowing completion of calls to 0-, 555 and N11 (e.g., 411, 611, and 911). This feature is provided where available in all Telephone Company end offices. It is available with Feature Group A.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(C) Hunt Group Arrangement

This option provides the ability to sequentially access one of two or more line side connections in the originating direction, when the access code of the line group is dialed. This feature is provided in all Telephone Company end offices. It is available with Feature Group A. All Feature Group A access services in the same hunt group must provide off-hook supervisory signaling from the same point in time in the call sequence i.e., all off-hook supervisory signals must either be provided by the customer's equipment before the called party answers or all must be forwarded by the customer's equipment when the called party answers.

(D) Uniform Call Distribution Arrangement

This option provides a type of multiline hunting arrangement which provides for an even distribution of calls among the available lines in a hunt group. Where available, this feature is provided in Telephone Company electronic end offices only. It is available with Feature Group A.

(E) Nonhunting Number for Use with Hunt Group or Uniform Call Distribution Arrangement

This option provides access to an individual line within a multiline hunt or uniform call distribution group. When the nonhunting number is dialed, access is provided when it is idle, or busy tone is provided when it is busy. Where available, this feature is provided in Telephone Company electronic end offices only. It is available with Feature Group A.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(F) Automatic Number Identification (ANI)

- (1) This option provides the automatic transmission of a seven digit or ten digit number and information digits to the customer designated premises for calls originating in the LATA, to identify the calling station. The ANI feature is an end office software function which is associated on a call-by-call basis with:
 - (a) all individual transmission paths in a trunk group routed directly between an end office and a customer designated premises or, where technically feasible, with
 - (b) all individual transmission paths in a trunk group between an end office and an access tandem, and a trunk group between an access tandem and a customer designated premises.
- (2) The seven digit ANI telephone number is generally available with Feature Groups B and C. With these Feature Groups, technical limitations may exist in Telephone Company switching facilities which require ANI to be provided only on a directly trunked basis. ANI will be transmitted on all calls except those originating from multiparty lines, pay telephones using Feature Group B, or when an ANI failure has occurred. Seven digit ANI is not available with SS7 Signaling.
- (3) The ten digit ANI telephone number is only available with Feature Group D. The ten digit ANI telephone number consists of the Number Plan Area (NPA) plus the seven digit ANI telephone number. The ten digit ANI telephone number will be transmitted on all calls except those identified as multiparty line or ANI failure, in which case only the NPA will be transmitted (in addition to the information digit described below). Ten digit ANI is provided with multifrequency address signaling or SS7 signaling.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(F) Automatic Number Identification (ANI) (Cont'd)

- (4) With Feature Group C, at the option of the customer, ANI maybe ordered from end offices where Telephone Company recording for end user billing is not provided. Additionally, ANI is provided from end offices where message detail recording is not required by the Telephone Company; as with 800 series service. ANI is not provided from end offices where the Telephone Company forwards ANI to its recording equipment.
- (5) Where complete ANI detail cannot be provided, e.g., on calls from 4 and 8 party services, information digits will be provided to the customer.

The information digits identify:

- (a) telephone number is the station billing number - no special treatment required,
- (b) multiparty line - telephone number is a 4- or 8- party line and cannot be identified - number must be obtained via an operator or in some other manner,
- (c) ANI failure has occurred in the end office switch which prevents identification of calling telephone number - must be obtained by operator or in some other manner,
- (d) hotel/motel originated call which requires room number identification,
- (e) coinless station, hospital, inmate, etc. call which requires special screening or handling by the customer, and
- (f) call is an Automatic Identified Outward Dialed (AIOD) call from customer premises equipment. The AIOD ANI telephone number is the listed telephone number of the customer and is not the telephone number of the calling party.

These ANI information digits are generally available with Feature Groups B, C, and D.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(F) Automatic Number Identification (ANI) (Cont'd)

- (6) Additional ANI information digits are available with Feature Group D also. They include:

- (a) InterLATA restricted - telephone number is identified line
- (b) InterLATA restricted - hotel/motel line
- (c) InterLATA restricted - coinless, hospital, inmate, etc., line

These information digits will be transmitted as agreed to by the customer and the Telephone Company.

Flexible Automatic Number Identification (Flex ANI) is an enhancement to ANI and is offered as a Common Switching Optional Feature Option of Feature Group D as described in 6.9.1(AA) following.

(7) Restrictions on Use and Sale of ANI

- (a) Interstate access customers of this tariff may use ANI in the following manner:
 - (i) For billing and collection information, for routing, screening, and completing the originating subscriber's call or transaction, or for services directly related to the originating telephone subscriber's call or transaction.

The customer may use ANI to offer a product or service that is directly related to the products or services previously acquired from the customer by the originating subscriber.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)

(F) Automatic Number Identification (ANI) (Cont'd)

(7) Restrictions on Use and Sale of ANI (Cont'd)

(b) Interstate access customers of this tariff may not use ANI in the following manner:

- (i) Reusing or selling the telephone number or billing information without first notifying the originating telephone subscriber and obtaining the affirmative consent of such subscriber for such reuse or sale.
- (ii) Disclosing (except as permitted in (a), preceding), any information derived from the ANI for any purpose other than 1) performing the services or transactions that are the subject of the originating subscriber's call, 2) ensuring network performance security and the effectiveness of call delivery, 3) compiling, using, and disclosing aggregate information, and 4) complying with applicable law or legal process.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(G) Up to 7 Digit Outpulsing of Access Digits to Customer

This option provides for the end office capability of providing up to 7 digits of the uniform access code (950-XXXX) to the customer designated premises.

The customer can request that only some of the digits in the access code be forwarded. The access code digits would be provided to the customer designated premises using multifrequency signaling, and transmission of the digits would precede the forwarding of ANI if that feature were provided. This feature is available with Feature Group B.

(H) Delay Dial Start-Pulsing Signaling

Where available, this option provides a method of indicating to the near end trunk circuit readiness to accept address signaling information by the far end trunk circuit. Delay dial is often referred to as an off-hook, on-hook signaling sequence. The delay dial signal is the off-hook interval and the start-pulsing signal is the on-hook interval. With integrity check, the calling office will not outpulse until a delay dial (off-hook) signal followed by a start-pulsing (on-hook) signal has been identified at the calling office. This option is available with Feature Group C.

(I) Immediate Dial Pulse Address Signaling

Where available, this option provides for the forwarding of dial pulses from the Telephone Company end office to the customer without the need of a start-pulsing signal from the customer. It is available with Feature Group C.

(J) Dial Pulse Address Signaling

Where available, this trunk side option provides for the transmission of number information, e.g., called number, between the end office switching system and the customer designated premises (in either direction) by means of direct current pulses. It is available with Feature Group C.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(K) Service Class Routing

This option provides the capability of directing originating traffic from an end office to a trunk group to a customer designated premises, based on the line class of service (e.g., coin, multiparty or hotel/motel), service prefix indicator (e.g., 0-, 0+, 01+ or 011+) or Service Access Code (e.g., 800, 888 or 900). It is provided in suitably equipped end office or access tandem switches. It is available with Feature Groups C and D.

(L) Alternate Traffic Routing

When the customer orders both Direct Trunked Transport and Tandem Switched Transport at the same end office, this option provides the capability of directing originating traffic from an end office (or appropriately equipped access tandem) to a trunk group (the "high usage" group) to a customer designated premises until that group is fully loaded, and then delivering additional originating traffic (the "overflowing" traffic) from the same end office or access tandem to a different trunk group (the "final" group) to a second customer designated premises. The customer shall specify the last trunk CCS desired for the high usage group. It is provided in suitably equipped end office or access tandem switches. It is available with Feature Groups B, C and D.

(M) Trunk Access Limitation

This option provides for the routing of originating 900 service calls to a specified number of transmission paths in a trunk group, in order to limit (choke) the completion of such traffic to the customer. Calls to the designated service which could not be completed over the subset of transmission paths in the trunk group, i.e., the choked calls, would be routed to reorder tone. It is provided in all Telephone Company electronic end offices and where available in electromechanical end offices. It is available with Feature Groups C and D.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(N) Call Gapping Arrangement

This option, provided in suitably equipped end office switches, provides for the routing of originating calls to 900 service to be switched in the end office to all transmission paths in a trunk group at a prescribed rate of flow, e.g., one call every five seconds, in order to limit (choke) the completion of such traffic to the customer. Calls to the designated service which are denied access by this feature, i.e., the choked calls, would be routed to a no-circuit announcement. It is provided in selected Feature Group D equipped end offices and is available only with Feature Group D.

(O) International Carrier Option

This option allows for Feature Group D end offices or access tandem switches equipped for International Direct Distance Dialing to be arranged to forward the international calls of one or more international carriers to the customer (i.e., the Telephone Company is able to route originating international calls to a customer other than the one designated by the end user either through presubscription or 101XXXX dialing). This arrangement requires provision of written verification to the Telephone Company that the customer is authorized to forward such calls. The written verification must be in the form of a letter of agency authorizing the customer to order the option on behalf of the international carrier. This option is only provided at Telephone Company end offices or access tandems equipped for International Direct Distance Dialing and is available only with Feature Group D.

(P) Band Advance Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services

This option, which is provided in association with two or more Special Access Service groups, provides for the automatic overflow of terminating calls to a second Special Access Service group, when the first group has exceeded its call capacity. This option is available with Feature Groups A, B, C and D.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(Q) End Office End User Line Service Screening for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services

This option provides the ability to verify that an end user has dialed a called party address (by screening the called NPA and/or NXX on the basis of geographical bands selected by the Telephone Company) which is in accordance with that end user's service agreement with the customer, e.g., WATS. This option is provided in all Telephone Company electronic end offices and, where available, in electromechanical end offices which are designated as WATS Serving Offices. It is available with Feature Groups C and D.

(R) Hunt Group Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services

This option provides the ability to sequentially access one of two or more Special Access Services utilized in the provision of WATS services (e.g., 800 Series Service Special Access services) in the terminating direction, when the hunting number of the Special Access Service group is forwarded from the customer to the Telephone Company. This feature is provided in all Telephone Company designated WATS Serving Offices. It is available with Feature Groups A, B, C and D.

(S) Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services

This option provides a type of multiline hunting arrangement which provides for an even distribution of terminating calls among the available Special Access Services utilized in the provision of WATS or WATS-type Services in the hunt group. Where available, this feature is only provided in Telephone Company designated WATS Serving Offices. It is available with Feature Groups A, B, C and D.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(T) Nonhunting Number Associated with Hunt Group Arrangement or Uniform Call Distribution Arrangement for Use with Special Access Service Utilized in the Provision of WATS or WATS-Type Services

This option provides an arrangement, for an individual Special Access Service utilized in the provision of WATS or WATS-type Services within a multiline hunt or uniform call distribution group, that provides access to that Special Access Service within the hunt or uniform call distribution group when it is idle or provides busy tone when it is busy, when the nonhunting number is dialed, without hunting to the next idle number. Where available, this feature is only provided in Telephone Company designated WATS Serving Offices. It is available with Feature Groups A, B, C and D.

(U) Digital Switched 56 Service

This option provides for a connection between a customer's premise and a suitably equipped end user's premise which uses end office switching and facilities capable of transmitting digital data up to 56 Kilobits per second. Digital Switched 56 Service is only available in appropriately provisioned Feature Group C and Feature Group D offices as set forth in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

(V) Multifrequency Address Signaling

Multifrequency Address Signaling is available as an optional feature with FGC and FGD. This feature provides for the transmission of number information and control signals (e.g., number address signals, automatic number identification) between the end office switch and the customer's premises (in either direction). Multifrequency signaling arrangements make use of pairs of frequencies out of a group of six frequencies. Specific information transmitted is dependent upon feature group and call type (i.e., POTS, coin or operator). This feature is not available in combination with SS7 signaling.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(W) Signaling System 7 (SS7) Signaling

This feature provides common channel out of band transmission of address and supervisory SS7 protocol signaling information between the end office switch or the tandem office switching system and the customer's designated premises. The signaling information is transmitted over facilities provided with the Common Channel Signaling/Signaling System 7 Network Connection Service (CCSNC) as specified in 6.1.3(A)(9) preceding. This feature is available with FGC and FGD and will be provided in accordance with the SS7 Interconnect specifications described in Technical Reference GR-905-CORE.

(X) Calling Party Number (CPN)

This feature provides for the automatic transmission of the ten digit directory number, associated with a calling station, to the customer's premises for calls originating in the LATA. The ten digit telephone number consists of the NPA plus the seven digit telephone number, which may or may not be the same number as the calling station's charge number. The ten digit telephone number will be coded as presented, or restricted via a "privacy indicator" for delivery to the called end user. This feature is automatically provided with originating FGC and FGD with SS7 signaling. CPN is available where technically feasible.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(X) Calling Party Number (CPN) (Cont'd)

(1) Restrictions on Use and Sale of CPN

- (a) Interstate access customers of this tariff may use CPN in the following manner:

- (i) For billing and collection information, for routing, screening, and completing the originating subscriber's call or transaction, or for services directly related to the originating telephone subscriber's call or transaction.

The customer may use CPN to offer a product or service that is directly related to the products or services previously acquired from the customer by the originating subscriber.

- (b) Interstate access customers of this tariff may not use CPN in the following manner:

- (i) Reusing or selling the telephone number or billing information without first notifying the originating telephone subscriber and obtaining the affirmative consent of such subscriber for such reuse or sale.
- (ii) Disclosing (except as permitted in (a), preceding) any information derived from the CPN for any purpose other than 1) performing the services or transactions that are the subject of the originating subscriber's call, 2) ensuring network performance security and the effectiveness of call delivery, 3) compiling, using, and disclosing aggregate information, and 4) complying with applicable law or legal process.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(Y) Carrier Selection Parameter (CSP)

This feature provides for the automatic transmission of a signaling indicator which signifies to the customer whether or not the call being processed originated from a presubscribed line. If the line was presubscribed, the indicator will signify if the end user did or did not dial 101XXXX. This feature is provided with originating FGD with SS7 signaling.

(Z) Charge Number Parameter (CNP)

(1) The CNP Parameter is equivalent to the existing ten digit Automatic Number Identification (ANI) available with FGC where technically feasible and FGD with MF signaling. The CNP Parameter provides for the automatic transmission of the ten digit billing number of the calling station and the originating line information. This feature is provided with originating FGC and FGD with SS7 signaling.

(2) Restrictions on Use and Sale of CNP

(a) Interstate access customers of this tariff may use CNP in the following manner:

(i) For billing and collection information, for routing, screening and completing the originating subscriber's call or transaction, or for services directly related to the originating telephone subscriber's call or transaction.

The customer may use CNP to offer a product or service that is directly related to the products or services previously acquired from the customer by the originating subscriber.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(Z) Charge Number Parameter (CNP) (Cont'd)

(2) Restrictions on Use and Sale of CNP (Cont'd)

(b) Interstate access customers of this tariff may not use CNP in the following manner:

- (i) Reusing or selling the telephone number or billing information without first notifying the originating telephone subscriber and obtaining the affirmative consent of such subscriber for such reuse or sale.
- (ii) Disclosing, except as permitted in (a), preceding, any information derived from the CNP for any purpose other than 1) performing the services or transactions that are the subject of the originating subscriber's call, 2) ensuring network performance security and the effectiveness of call delivery, 3) compiling, using, and disclosing aggregate information, and 4) complying with applicable law or legal process.

(AA) Flexible Automatic Number Identification (Flex ANI)

Flex ANI is a Common Switching Optional Feature that enhances the existing Automatic Number Identification (ANI) optional feature (described in 6.10.1 (F) preceding) by allowing Feature Group D (FGD) customers to receive additional information digits. Flex ANI provides additional values for these information digits over and above the values currently available with ANI and is used to identify additional call types, e.g., 27 for pay telephones requiring central office coin supervision capability, 29 for prison/inmate pay telephones, and 70 for pay telephones not requiring central office coin supervision. Flex ANI can also be used to provide Originating Line Screening (OLS) service. OLS service is described in 13.10 following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.1 Common Switching Nonchargeable Optional Features (Cont'd)(AA) Flexible Automatic Number Identification (Flex ANI) (Cont'd)

Flex ANI information digits are two digits in length and are activated through switched software program updates. These codes precede the 10-digit directory number of the calling line and are part of the signaling protocol in equal access end offices. The information digits are outpulsed by the switching system along with the directory number from the originating end office and are sent to the receiving office for billing, routing, or special handling purposes.

Customers who have ANI but do not order Flex ANI, will continue to receive the information digits associated with ANI. Flex ANI digits are assigned by the North American Numbering Plan Administrator. The Telephone Company will make available those information digits that are mutually agreed to by the customer and the Telephone Company.

Flex ANI is available to customers with FGD Switched Access Service equipped with ANI. Flex ANI is available in suitably equipped end offices.

(AB) Carrier Identification Parameter (CIP)

Carrier Identification Parameter (CIP) provides for the automatic transmission of the Carrier Identification Code (CIC) to the Customer Designated Premises for FGD calls originating in the LATA. The CIC is included in the Signaling System 7 information provided to the customer when the call originates from a presubscribed line or when the end user dials the customer's 101XXXX access code. CIP is available from suitably equipped end office and access tandems as identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, when used in conjunction with Common Channel Signaling/Signaling System 7 Network Connection Service (CCSNC) as described in 6.10.3 (C) following and Signaling System 7 Signaling as described in 6.10.1 (W) preceding.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.2 Transport Termination Nonchargeable Optional Features(A) Rotary Dial Station Signaling

This option provides for the transmission of called party address signaling from rotary dial stations to the customer designated premises for originating calls. This option is provided in the form of a specific type of Transport Termination. It is available with Feature Group B, only on a directly trunked basis.

(B) Operator Trunk - Coin, Non-Coin, or Combined Coin and Non-Coin

This option may be ordered to provide coin, non- coin, or combined coin and non-coin operation. It is available only with Feature Group C and is provided in electronic end offices and other Telephone Company end offices where equipment is available. It is provided as a trunk type of Transport Termination.

Coin, Non-Coin:

This arrangement provides for initial coin return control, except in the case of non-coin, and routing of 0+, 0-, 1+, 01+ or 011+ prefixed originating coin and non-coin calls requiring operator assistance to the customer designated premises. Because operator assisted coin calling traffic is routed over a trunk group dedicated to operator assisted calls, this arrangement is only provided in association with the Service Class Routing option.

This arrangement is normally ordered by the customer in conjunction with the ANI optional feature, since the preponderance of trunk groups equipped with this arrangement will be terminated in the customer's automated operator services systems, rather than in the customer's manual cord boards.

Combined Coin and Non-Coin:

When so equipped, the ANI optional feature provides for the forwarding of information digits which identify that the call has originated from a hotel or motel, and whether room number identification is required, or that special screening is required, e.g., for coinless pay telephones, dormitory or inmate stations, or other screening arrangements agreed to between the customer and the Telephone Company.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.2 Transport Termination Nonchargeable Optional Features (Cont'd)(C) Operator Trunk - Full Feature

This option provides the initial coin return control function to the customer's operator. It is available with Feature Group D and is provided as a trunk type for Transport Termination. This feature is not available with SS7 signaling.

6.10.3 Chargeable Optional Features(A) Interim NXX Translation

This service is an originating offering utilizing trunk side Switched Access Service and provides a customer identification function based on the dialed SAC and NXX code.

For example, when an 1+900+NXX-XXXX call is originated by an end user, the Telephone Company will perform the customer identification function based on the dialed digits to determine the customer location to which the call is to be routed. If the call originates from an end office switch not equipped to provide the customer identification function, the call will be routed to an office at which the function is available. Once customer identification has been established, the call will be routed to that customer. Calls originating from an end office switch at which the customer identification function is performed, but to which the customer has not ordered Interim NXX Translation, will be blocked.

Calls to a 900 number dialed via 1+ from coin telephones, 0- or 101XXXX, Inmate Service, and Hotel/Motel Service will be blocked. Calls to a 900 number dialed via 0+ will normally be blocked. Orders received from customers to unblock 0+ calls to a 900 number will be accommodated where suitably equipped facilities exist.

The manner in which Interim NXX Translation is provided is dependent on the status of the end office from which the service is provided (i.e., equipped with equal access capabilities or not equipped with equal access capabilities). When Interim NXX Translation is provided from an end office not equipped with equal access capabilities, it will be provided in conjunction with FGC Switched Access Service.

The charge for Interim NXX Translation is as set forth in 17.2.1(B) following.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.3 Chargeable Optional Features (Cont'd)(B) Operator Transfer Service

At the option of the customer, Operator Transfer Service as specified following, is available for use with Feature Group C and Feature Group D Switched Access Service. Operator Transfer Service is ordered as set forth in 5.2 preceding and is provided to the customer via separate FGC or FGD trunks dedicated to Operator Transfer Service traffic.

Operator Transfer Service is an arrangement in which Telephone Company operators transfer 0 minus (0-) calls (calls for which the end user dials 0 with no additional digits) to the customer designated by the end user.

The operator transfer function will be performed in the following manner:

- The operator answers the 0- call.
- Initially, the Operator will suggest that the end user dial the customer on a direct basis. If the end user insists that the Operator transfer the call, the Operator will ask the end user to identify the desired customer and will then transfer the call as directed.
- If the end user has no preference, or the identified customer has not subscribed to Operator Transfer Service, the end user will be asked to select from a list of available customers.

The list of available Operator Transfer Service customers will be updated monthly. The order in which customers will be read to end users will be initially determined by the sequence in which customers have ordered the Operator Transfer Service. For each subsequent month, following the initial order for Operator Transfer Service, the customer in the first position on the list will be moved to the last position on the list. All other customers on the list will be moved up one position, e.g. 3rd to 2nd, 2nd to first, etc. New Operator Transfer Service customers will initially be placed at the bottom of the list of customers.

0 minus pay telephone coin calls will be transferred to the end user designated customer. In order to accept coin sent- paid calls, the customer must order signalling as specified in GR-506-CORE and TR-NPL-000258.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.3 Chargeable Optional Features (Cont'd)(B) Operator Transfer Service (Cont'd)

The customer may receive inband, multi-wink, or expanded inband coin control signalling, where available, from end offices served by an Operator Services Access Point. Different signalling types cannot be mixed on a signal trunk group.

All non-recurring and usage sensitive rates and charges normally applicable to Feature Groups C or D apply to Operator Transfer Service. Additionally, a charge as specified in 6.1.3 (C)(2) preceding and 17.2.6 following, is assessed the customer per 0 minus call transferred.

(C) Common Channel Signaling/Signaling System 7 Network Connection Service (CCSNC)

Common Channel Signaling/Signaling System 7 (CCS/SS7) Network Connection Service (CCSNC), which is available with Feature Group C and D, where technically feasible as designated in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, provides a signaling path between a customer's designated Signaling Point of Interface (SPOI) and a Signaling Transfer Point (STP). This service provides customers with the use of a two-way signaling path for accessing information necessary for the completion of their end user's calls.

CCS/SS7 Network Connection Service is comprised of two rate elements; a Signaling Network Access Link (SNAL) and a Signaling Transfer Point (STP) Port. The SNAL is provided as a dedicated 56Kbps out-of-band signaling connection between the customer's SPOI and the STP port on the STP.

The CCS/SS7 Network Connection Service is provisioned by a mated pair of STPs as described in Technical Reference TR-TSV 000905 in order to ensure network availability and reliability. The Telephone Company shall not be held liable for service outages if the customer employs technology related to the interconnection of signaling networks that does not adhere to generally accepted industry technical standards.

ACCESS SERVICE

6. Switched Access Service (Cont'd)6.10 Chargeable and Nonchargeable Optional Features (Cont'd)6.10.3 Chargeable Optional Features (Cont'd)(C) Common Channel Signaling/Signaling System 7 Network Connection Service (CCSNC) (Cont'd)

When CCS/SS7 Network Connection service is provisioned for use with SS7 Signaling, interconnection between signalling networks must occur at an STP.

Rates and charges for the CCS/SS7 Network Connection STP Ports and Signaling Network Access Links are contained in 17.2.2 following.

(D) 800 Series Data Base ACCESS SERVICE

800 Series Data Base Access Service is provided with FGC or FGD switched access service. When a call using a toll free service access code (SAC) (e.g., 1+800 or 888+XXX-XXXX) is originated by an end user, the Telephone Company will utilize the Signalling System 7 (SS7) network to query an 800 series service data base to perform the identification function. The call will then be routed to the identified customer over FGC or FGD switched access.

The manner in which 800 Series Data Base Access Service is provided is dependent on the availability of SS7 service at the end office from which the service is provided as outlined following:

- When 800 Series Data Base Access Service originates at an end office equipped with Service Switching Point (SSP) capability for querying centralized data bases or at a non-SSP equipped end office that can accommodate direct trunking of originating 800 series service type calls, all such service will be provisioned from that end office. If the end office is not equipped with the 888 SAC SSP capability the customer must order Tandem Switched Transport to receive such traffic until the 888 SAC SSP capability becomes available. See Section 6.4.1(C) for credit applicability.
- When 800 Series Data Base Access Service originates at an end office not equipped with SSP customer identification capability, the 800 series service type call will be delivered to the access tandem on which the end office is homed and which is equipped with the SSP feature to query centralized data bases.

ACCESS SERVICE

6. Switched Access Service (Cont'd)

6.10 Chargeable and Nonchargeable Optional Features (Cont'd)

6.10.3 Chargeable Optional Features (Cont'd)

(D) 800 Series Data Base Access Service (Cont'd)

- When 800 data base access service originates at an end office equipped with SSP capability that is not capable of accommodating direct trunking of originating 800 series (other than the 800 service access codes) calls, the 800 series (other than the 800 service access codes) call will be delivered to the access tandem on which the end office is homed and which is equipped with the SSP feature to query centralized data bases.

Query charges as set forth in 17.2.2 following are in addition to those charges applicable for the Feature Group C or Feature Group D Switched Access Service.

ACCESS SERVICE

7. Special Access Service7.1 General

Special Access Service provides a transmission path to connect customer designated premises*, directly or through a Telephone Company hub or hubs where bridging or multiplexing functions are performed, or to connect a customer designated premises and a WATS Serving Office, or to connect a customer designated premises to a DSL Access Connection Point or to connect a customer designated premises to a Public Packet Data Network Service. Special Access Service includes all exchange access not utilizing Telephone Company end office switches.

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

Special Access Service purchased from the provisions of this tariff may be commingled with unbundled network elements or unbundled network element combinations purchased pursuant to the Commission's Part 51 Interconnection Rules and in compliance with the Federal Communications Commission's Report and Order and Order on Remand and Further Notice of Proposed Rulemaking in CC Docket Nos. 01-338, 96-98 and 98-147, adopted February 20, 2003 and released August 21, 2003 (FCC 03-36).

7.1.1 Channel Types

There are eight types of channels used to provide Special Access Services. Each type has its own characteristics. All are subdivided by one or more of the following:

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

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

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

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

ACCESS SERVICE

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

Following is a brief description of each type of channel:

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

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

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

Program Audio - a channel for the transmission of audio signals. The nominal frequency bandwidths are from 200 to 3500 Hz, from 100 to 5000 Hz, from 50 to 8000 Hz, or from 50 to 15000 Hz.

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

Digital Data - a channel for the digital transmission of synchronous serial data at rates of 2.4, 4.8, 9.6, 19.2, 56.0 or 64.0 Kbps.

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

Synchronous Optical - a high speed channel for the transmission of synchronous full duplex data over optical fiber at rates of 155.52 or 622.08 Mbps.

ACCESS SERVICE

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

Detailed descriptions of each of the channel types are provided in 7.4 through 7.11 following.

The customer also has the option of ordering Voice Grade and High Capacity facilities (i.e., 1.544 Mbps, 3.152 Mbps, 6.312 Mbps, 44.736 Mbps and 274.176 Mbps) to Telephone Company hubs for multiplexing to individual channels of a lower capacity or bandwidth. Descriptions of the types of multiplexing available at the hubs, as well as the number of individual channels which may be derived from each type of facility, are set forth in 7.6 and 7.10 following. Additionally, the customer may specify optional features for the individual channels derived from the facility to further tailor the channel to meet specific communications requirements. Descriptions of the optional features and functions available are set forth in 7.2.1 following.

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

Similarly, the customer has the option of ordering Synchronous Optical Channel Service to a wire center equipped for Add/Drop Multiplexing. This allows lower level signals to be added or dropped from a high speed optical carrier channel for delivery to a customer designated premises, WATS office, Public Packet Data Network Service, or another wire center. A description of Add/Drop Multiplexing is set forth in 7.11 following.

ACCESS SERVICE

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

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

Service Designator Codes

Metallic	MT
Telegraph Grade	TG
Voice	VG
Program Audio	AP
Video	TV
Digital Data	DA
High Capacity	DS
Synchronous Optical	OC

Each service consists of a basic channel to which a technical specifications package (customized or predefined), channel interface(s) and, when desired, optional features and functions are added to construct the service desired by the customer. Technical specifications packages are described in Section 15. following, optional features and functions are described in this section. Channel interfaces are described in 15.2 following.

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

When a customized channel is ordered the customer will be notified whether Additional Engineering Charges apply. In such cases, the customer will be advised and given the opportunity to change the order.

ACCESS SERVICE

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

The channel descriptions provided in 7.4 through 7.11 following, specify the characteristics of the basic channel and indicate whether the channel is provided between customer designated premises, between a customer designated premises and a Telephone Company hub where bridging or multiplexing functions are performed, between hubs, or between a customer designated premises and a WATS Serving Office, between a customer designated premises and a DSL Access Service Connection Point, between a customer designated premises and a wire center equipped with a Public Packet Data Network Service, between a Telephone Company serving wire center equipped with Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) and another telephone company ATM-equipped serving wire center, between a Telephone Company serving wire center equipped with Frame Relay Access Service (FRAS) and another telephone company serving wire center equipped with a frame relay switch that is located in a non-adjacent serving territory or between a Telephone Company serving wire center equipped with Ethernet Transport Service (ETS) and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory.

- (A) Information pertaining to the technical specifications packages indicates the transmission parameters that are available with each package. This information is displayed in matrices set forth in 15.2 following.
- (B) Channel interfaces at each Point of Termination on a two-point service may be symmetrical or asymmetrical. On a multipoint service they may also be symmetrical or asymmetrical, but communications can only be provided between compatible channel interfaces. Only certain channel interfaces are compatible. These are set forth in 15.2 following, in a combination format.
- (C) Only certain channel interface combinations are available with the predefined technical specifications packages. These are delineated in the Technical References set forth in (F) following. When a customized channel is requested, all channel interface combinations available with the specified type of service are available with the customized channel.

ACCESS SERVICE

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

- (D) The optional features and functions available with each type of Special Access Service are described in this section. The optional features and functions information also indicates with which technical specifications packages they are available. Such information is displayed in matrices set forth in 15.2 following with the optional feature or function listed down the left side and the technical specifications package listed across the top.
- (E) The Telephone Company will maintain services installed prior to April 1, 1985, at their existing transmission specifications provided such performance specifications do not exceed the standards listed in this provision. Those services exceeding the standards listed will be maintained at the performance levels specified in this tariff.
- (F) All services installed after April 1, 1985 will conform to the transmission specifications standards contained in this tariff or in the following Technical References for each category of service:

Metallic	TR-NPL-000336
Telegraph Grade	TR-NPL-000336
Voice Grade	TR-NWT-000335
	PUB 41004
	(MDP-326-584) Table 4
Program Audio	GR-337-CORE and associated Addendum
Video	GR-338-CORE
Digital Data	TR-NWT-000341 and associated Addendum
For 2.4, 4.8, 9.6 & 56.0 Kpbs	Pub 62310 (MDP-326-726)
For 19.2 Kpbs	INC Bulletin CB-INC-100
For 64.0 Kpbs	PUB 62310 (MDP-326-726)
High Capacity	GR-342-CORE
	GR-54-CORE
Synchronous Optical	GR-243-CORE
For OC3, OC3c and OC12	GR-1374-CORE
	ANSI T1.105
	ANSI T1.102

ACCESS SERVICE

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

There are three types of service configurations over which Special Access Services are provided: two-point service, multipoint service and Synchronous Optical Channel Service

(A) Two-Point Service

A two-point service connects two customer designated premises, either on a directly connected basis or through a hub where multiplexing functions are performed, or a customer designated premises and a DSL Access Service Connection Point or a customer designated premiseswire center equipped with a Public Packet Data Network Services, or a customer designated premises and a WATS Serving Office (WSO).

Applicable rate elements are:

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

ACCESS SERVICE

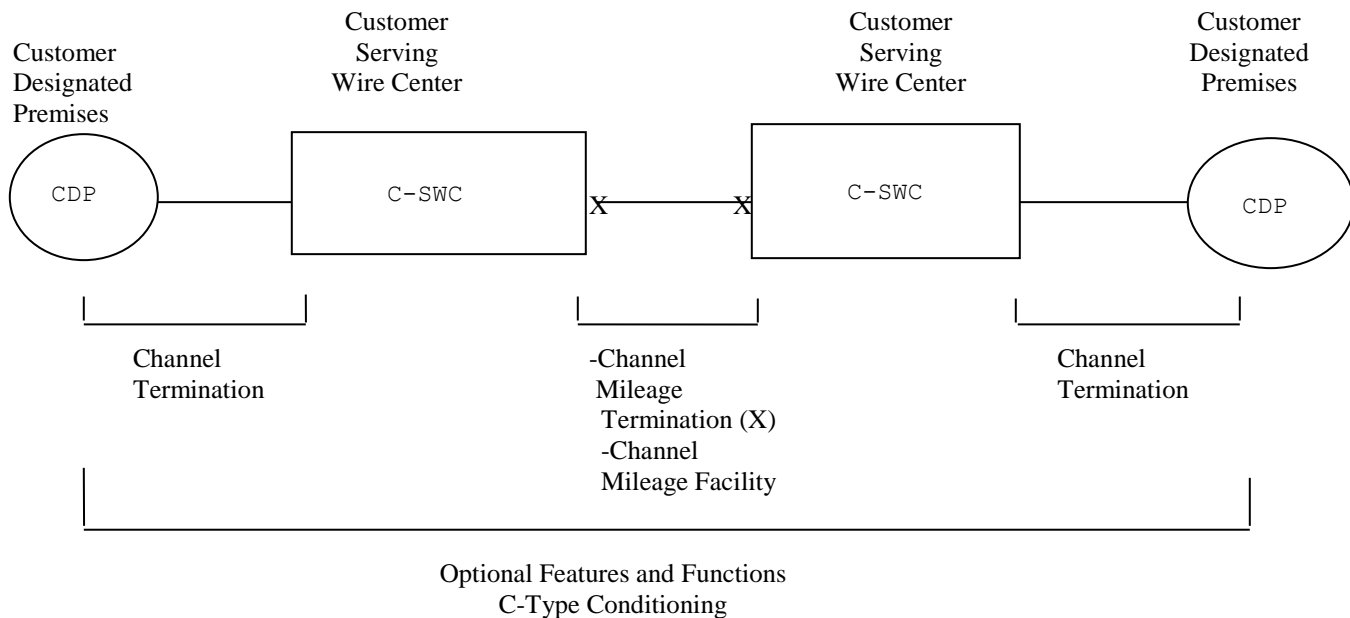
7. Special Access Service (Cont'd)

7.1 General (Cont'd)

7.1.3 Service Configurations (Cont'd)

A Special Access Surcharge, as set forth in 7.3 following, may be applicable.

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



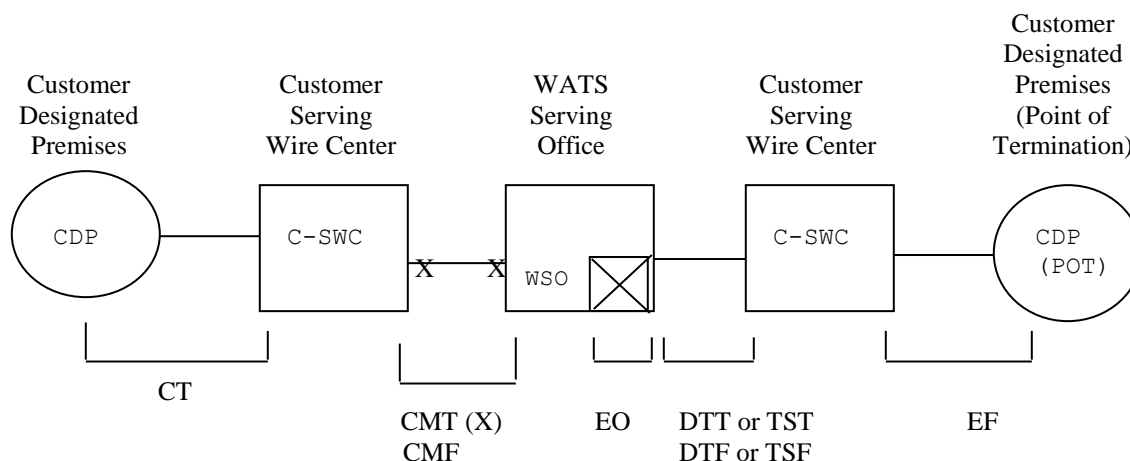
Applicable rate elements are:

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

ACCESS SERVICE

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

The following diagram depicts a two-point Voice Grade service connecting a customer designated premises to a WATS serving office.



Special Access
 CT - Channel Termination
 CMT - Channel Mileage Termination
 CMF - Channel Mileage Facility Termination

Switched Access
 EO - End Office Elements
 DTT - Direct Trunked
 TST - Tandem Switched
 DTF - Direct Trunked Facility
 TSF - Tandem Switched Facility
 EF - Entrance Facility

Applicable rate elements for Special Access are:

- Channel Termination
- Channel Mileage
 - 2 Channel Mileage Terminations plus
 - 1 section, Channel Mileage Facility per mile
- Special Access Surcharge*

* May not apply if exemption certification is provided.

ACCESS SERVICE

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

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

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

Multipoint service utilizing a customized technical specifications package, as set forth in 7.1.2 preceding and 15.2 following, will be provided when technically possible. If the Telephone Company determines that the requested characteristics for a multipoint service are not compatible, the customer will be advised and given the opportunity to change the order.

When ordering, the customer will specify the desired bridging hub(s). NATIONAL EXCHANGE CARRIER ASSOCIATION TARIFF F.C.C. NO. 4 identifies serving wire centers, hub locations and the type of bridging functions available.

Applicable Rate Elements are:

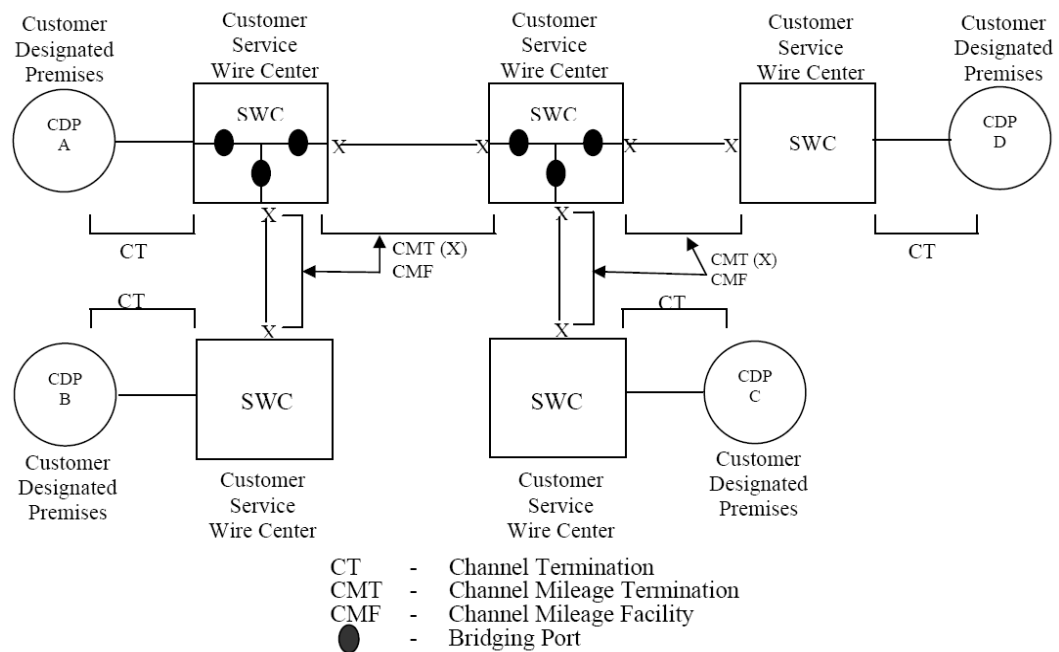
- Channel Terminations (one per customer designated premises)
- Channel Mileage (as applicable between the serving wire center for each customer designated premises and the hub and between hubs).
- Bridging
- Additional Optional Features and Functions (when applicable).

ACCESS SERVICE

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

The Special Access Surcharge, as set forth in 7.3 following, may be applicable.

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



Applicable rate elements are:

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(C) Synchronous Optical Channel Service

A Synchronous Optical Channel Service connects two customer designated premises, or a customer designated premises and a DSL Access Service Connection Point, or a customer designated premises and a wire center equipped for Add/Drop Multiplexing, or a customer designated premises and a wire center equipped with an Asynchronous Transfer Mode Cell Relay Access Service, or a customer designated premises and a wire center equipped with an Ethernet Transport Service. The connection is provided via a high speed optical carrier communications path delivering an optical handoff.

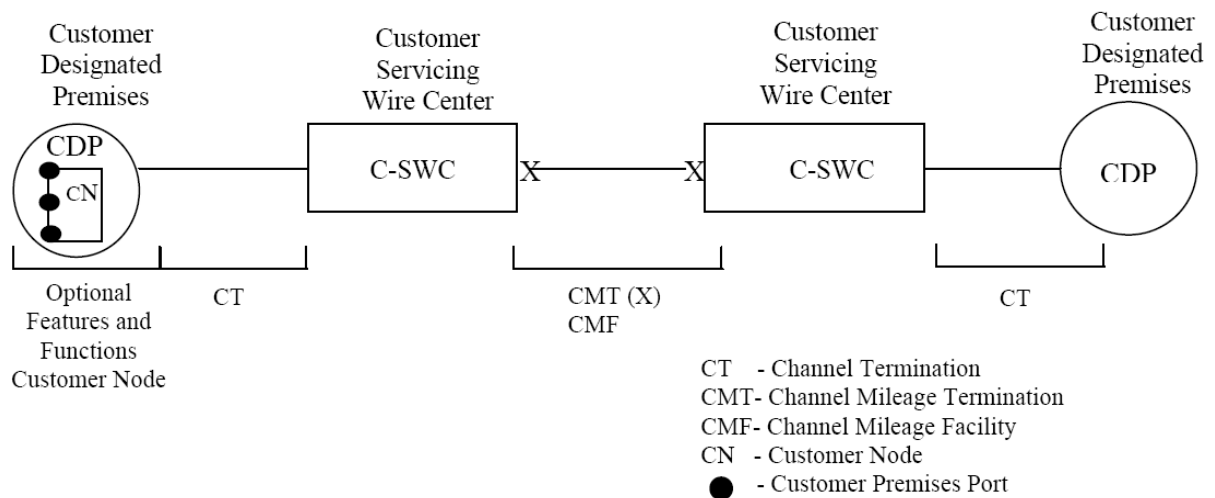
Applicable rate elements are:

- Channel Terminations
- Channel Mileage (where applicable)
- Optional Features and Functions

ACCESS SERVICE

7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(C) Synchronous Optical Channel Service

- (1) The following diagram depicts a synchronous optical channel service connecting two Customer Designated Premises (CDP). The Optional Feature and Function of a Customer Node was ordered at one CDP.



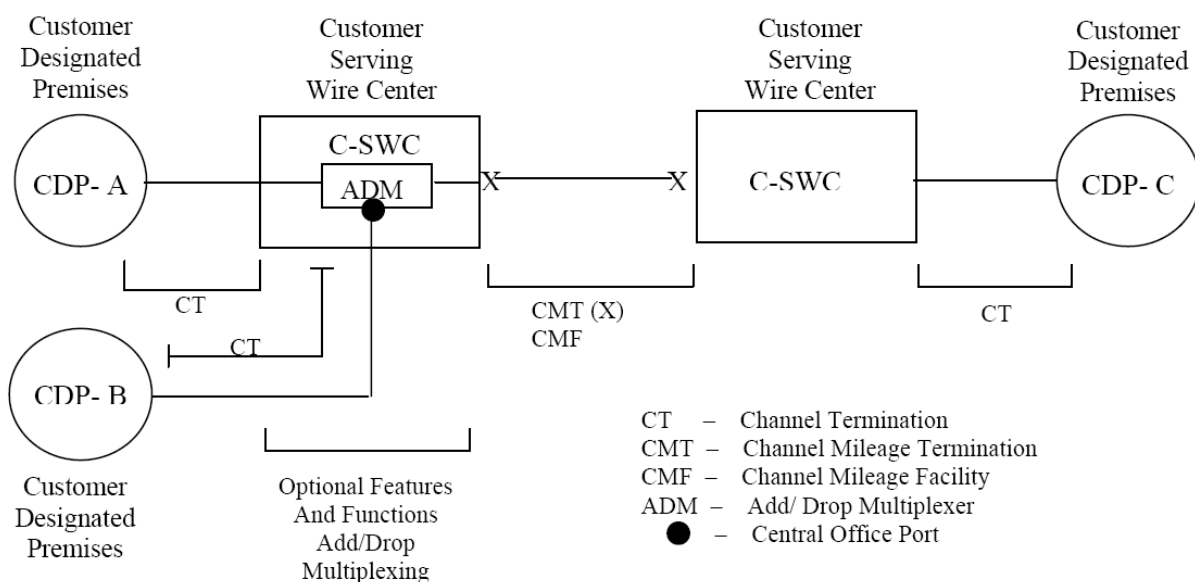
Applicable rate elements are:

- Channel Terminations
2 Channel Terminations (1 per CDP)
- Channel Mileage
2 Channel Mileage Terminations plus
1 Segment Channel Mileage Facility (per mile)
- Optional Feature
1 Customer Node, plus
3 Customer Premises Ports

ACCESS SERVICE

7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.3 Service Configurations (Cont'd)(C) Synchronous Optical Channel Service (Cont'd)

- (2) The following diagram depicts a Synchronous Optical Channel Service connecting three Customer Designated Premises. CDP-A and CDP-B are connected using an Add/Drop Multiplexer. At the Add/Drop Multiplexer, the customer may drop off lower speed special access services. Rates and charges are as set forth 17.3.8 and 17.3.11 following.



Applicable rate elements are:

- Channel Termination (applicable one (1) per CDP)
- Channel Mileage
 - Channel Mileage Termination (2 applicable)
 - 1 Section, Channel Mileage Facility per mile
- Add/Drop Multiplexing Optional Feature (1 Central Office Port applicable, i.e., each port)

ACCESS SERVICE

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

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

The arrangement required to transfer the service from one operation to the other (i.e., the transfer relay and control leads) will be rated and provided on an individual case basis and filed in Section 12. following, Specialized Service or Arrangements. The customer will pay the stated tariff rates for the Access Service rate elements for the service ordered [i.e., Channel Terminations, Channel Mileage (as applicable) and Optional Features and Functions (if any)].

7.1.5 Special Facilities Routing

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

7.1.6 Design Layout Report

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.1 General (Cont'd)7.1.7 Acceptance Testing

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

- (A) For Voice Grade analog services, the 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 of service. Additionally, for Voice Grade services, a balance (improved loss) test will be made if the customer has ordered the improved loss optional feature.
- (B) For other analog services (i.e., Metallic, Telegraph, Program Audio, and Video) and for digital services (i.e., Digital Data and High Capacity), acceptance tests will include tests applicable to the service as specified by the customer in the order for service.

In addition to the above tests, Additional Cooperative Acceptance Testing for Voice Grade service to test other parameters, as described in 13.3.1(B) following, is available at the customer's request. All test results will be made available to the customer upon request.

7.1.8 Ordering Options and Conditions

Special Access Service is ordered under the Access Order provisions set forth in Section 5 preceding. Also included in that section are other charges which maybe associated with ordering Special Access Service (e.g., Service Date Change Charges, Cancellation Charges, etc.).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations

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

7.2.1 Rate Categories

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

- Channel Terminations (described in 7.2.1(A) following)
- Channel Mileage (described in 7.2.1(B) following)
- Optional Features and Functions (described in 7.2.1(C) following).

(A) Channel Termination

The Channel Termination rate category recovers the costs associated with 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 is provided as an optional feature as set forth in (C) following.

For Synchronous Optical Channel Service the high speed optical communications path is between the Optical Line Termination (OLT) at the customer designated premises and the serving wire center of that premises.

One Channel Termination charge applies per customer designated premises at which the channel is terminated. This charge will apply even if the customer designated premises and the serving wire center are collocated in a Telephone Company building, except as provided for below. The Channel Termination charge will not apply when: 1) the customer designated premises and serving wire center are physically (including caged, cageless, shared and adjacent arrangements) or virtually collocated as those terms are used in 47 C.F.R. § 51.323 and 2) the customer obtains such collocation for the purpose of interconnection with the Telephone Company's network for the transmission and routing of telephone exchange service, exchange access service or both, and for the purpose of providing local exchange or exchange access services to its customers.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.1 Rate Categories (Cont'd)(A) Channel Termination (Cont'd)

For a Special Access Digital Data Service 56.0 (M) or 64.0 Kbps Bit Rate or for a 1.544 Mbps or 44.736 Mbps High Capacity Service connecting a customer designated premises to a Frame Relay Access Service as described in Section 16.1, following, there will be a charge for only one Channel Termination. For a 1.544 Mbps or 44.736 Mbps High Capacity Service or for an OC3 or OC12 Synchronous Optical Channel Service connecting a customer designated premises to an Asynchronous Transfer Mode Cell Relay Access Service as described in Section 16.2, following, there will be a charge for only one Channel Termination. For a 44.736 Mbps High Capacity Service or for an OC3 or OC12 Synchronous Optical Channel Service connecting a customer designated premises to an Ethernet Transport Service, there will be a charge for only one Channel Termination.

For a Metallic Service connecting to a DSL Access Service Connection Point, for interconnection with ADSL and/or SDSL Access Services provided by the Telephone Company or for interconnection with a wireline broadband Internet transmission service, there will be a charge for two Channel Terminations for each DSL Access Service Connection function ordered.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.1 Rate Categories (Cont'd)(B) Channel Mileage

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

(1) Channel Mileage Facility

The Channel Mileage Facility rate recovers the per mile cost for the transmission path which extends between the Telephone Company serving wire centers and/or hub(s), between the Telephone Company serving wire center and another wire center equipped with a Public Packet Data Network Service, between Telephone Company serving wire center equipped with ATMCRS and another telephone company ATM-equipped serving wire center, between a Telephone Company serving wire center equipped with FRAS and another telephone company serving wire center equipped with a frame relay switch that is located in a non-adjacent serving territory, or between a Telephone Company serving wire center equipped with ETS and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.1 Rate Categories (Cont'd)(B) Channel Mileage (Cont'd)(1) Channel Mileage Facility (Cont'd)

The Synchronous Optical Channel Service Channel Mileage Facility provides high speed transmission facilities between the Telephone Company serving wire centers, or between a Telephone Company serving wire center and another wire center equipped for Add/Drop Multiplexing (ADM), or between two ADM equipped wire centers, or between the Telephone Company serving wire center and another wire center equipped with Asynchronous Transfer Mode Cell Relay Access Service, or between the Telephone Company serving wire center and another wire center equipped with Ethernet Transport Service (ETS), or between a Telephone Company serving wire center equipped with ETS and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory.

(2) Channel Mileage Termination

The Channel Mileage Termination rate recovers the cost for end office equipment associated with terminating the facility (i.e., basic circuit equipment and terminations at serving wire centers and hubs). The Channel Mileage Termination rate will apply at the serving wire center(s) for each customer designated premises and Telephone Company hub where the channel is terminated. If the Channel Mileage is between Telephone Company bridging hubs, the Channel Mileage Termination rate will apply per Telephone Company designated hub. 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.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.1 Rate Categories (Cont'd)(B) Channel Mileage (Cont'd)(2) Channel Mileage Termination (Cont'd)

If the Channel Mileage is between the serving wire center for a customer designated premises and another wire center equipped for Public Packet Data Network Service, the Channel Mileage Termination Rate will apply only at the serving wire center for the customer designated premises. If the Channel Mileage is between a Telephone Company serving wire center equipped with FRAS and another telephone company serving wire center equipped with a frame relay switch that is located in a non-adjacent serving territory, or between a Telephone Company serving wire center equipped with Asynchronous Transfer Mode Cell Relay Access Service (ATM-CRS) and another telephone company ATM-equipped serving wire center, or between a Telephone Company serving wire center equipped with ETS and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory, no Channel Mileage Termination Rate will apply.

If the Channel Mileage for Synchronous Optical Channel Service is between the serving wire center for a customer designated premises and a wire center equipped for Add/Drop Multiplexing, the Channel Mileage Termination Rate will apply at both the serving wire center associated with the Customer Designated Premises and the wire center equipped for Add/Drop Multiplexing. If the Channel Mileage is between two wire centers equipped for Add/Drop Multiplexing, the Channel Mileage Termination rate will apply at both wire centers equipped for Add/Drop Multiplexing.

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.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.1 Rate Categories (Cont'd)(C) Optional Features and Functions

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

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

- Signaling Capability
- Hubbing Functions
- Conditioning
- Transfer Arrangements

Descriptions for each of the available Optional Features and Functions are set forth in 7.4 through 7.11 following.

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

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4 identifies serving wire centers, hub locations, hub level (i.e., Hub, Terminus Hub, Intermediate Hub, or Super-Intermediate Hub) and the type of bridging or multiplexing functions available. Additionally, subtending wire centers are identified for Intermediate and Super-Intermediate Hubs.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.2 Types of Rates and Charges

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

(A) Monthly Rates

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

(B) Daily Rates

Daily rates are recurring rates that apply to each 24 hour period or fraction thereof that a Program Audio or Video Special Access Service is provided for part-time use. For purposes of applying daily rates, the 24 hour period is not limited to a calendar day.

Part-time Video or Program Audio Service provided within a consecutive 30 day period will be charged the daily rate, not to exceed the monthly rate. For each day or partial day after a consecutive 30 day period of service, a charge equal to 1/30th of the monthly rate shall apply.

(C) Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for specific work activity (i.e., installation or change to an existing service). The types of nonrecurring charges that apply for Special Access Service are: installation of service, installation of optional features and functions, and service rearrangements. These charges are in addition to the Access Order Charge as specified in 17.4.1 following.

(1) Installation of Service

Nonrecurring charges apply to each service installed. The nonrecurring charges for the installation of service are set for each channel type as a nonrecurring charge for the Channel Termination.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.2 Types of Rates and Charges (Cont'd)(C) Nonrecurring Charges (Cont'd)(2) Installation of Optional Features and Functions

When optional features and functions are installed coincident with the initial installation of service, no separate nonrecurring charge is applicable. When optional features and functions are installed or changed subsequent to the installation of service, an Access Order Charge as specified in 17.4.1 following will apply per order.

(3) Service Rearrangements

Service rearrangements are changes to existing (installed) services which may be administrative only in nature, as set forth following, or that involve actual physical change to the service. Changes to pending orders are set forth in 5.4 preceding.

Changes in the physical location of the point of termination or customer designated premises are moves as set forth in 7.2.3 following.

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

Changes in ownership or transfer of responsibility from one customer to another will be treated as a discontinuance of the service and an installation of a new service. In the event the change in ownership or transfer of responsibility is as set forth in 2.1.2(A) preceding where there is no change in facilities or arrangements, the change will be treated as an administrative change.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.2 Types of Rates and Charges (Cont'd)(C) Nonrecurring Charges (Cont'd)(3) Service Rearrangements (Cont'd)

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

- Change of customer name;
- Change of customer or customer's end user premises address when the change of address is not a result of physical relocation of equipment;
- Change in billing data (name, address, or contact name or telephone number);
- Change of agency authorization;
- Change of customer circuit identification;
- Change of billing account number;
- Change of customer test line number;
- Change of customer or customer's end user contact name or telephone number; and
- Change of jurisdiction.

All other service rearrangements will be charged as follows:

- If the change involves the addition of other customer designated premises to an existing service, the nonrecurring charge for the channel termination rate element will apply. The charge(s) will apply only for the location(s) that is being added. The charge(s) will be in addition to an Access Order Charge as set forth in 17.4.1 following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.2 Types of Rates and Charges (Cont'd)(C) Nonrecurring Charges (Cont'd)(3) Service Rearrangements (Cont'd)

- If the change involves the addition of an optional feature or function (with the exception of the addition of Clear Channel Capability to an existing service), or if the change involves changing the type of signaling on a Voice Grade service, and for all other changes the Access Order Charge as set forth in 17.4.1 following will apply.
- When the Clear Channel Capability optional feature is installed on an existing facility, the addition will be treated as a discontinuance and start of service and all associated non-recurring charges will apply.

7.2.3 Moves

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

- The Point of Termination at the customer's premises; or
- The customer's premises

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

(A) Moves Within the Same Building

When the move is to a new location within the same building, the charge for the move will be an amount equal to one half of the nonrecurring (i.e., installation) charge for the service termination affected. There will be no change in the minimum period requirements. This charge is in addition to the Access Order Charge as specified in 17.4.1 following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.3 Moves (Cont'd)(B) Moves To a Different Building

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

7.2.4 Minimum Periods

The minimum service period for all Special Access services except part-time Video and Program Audio services, DS3 High Capacity Service and Synchronous Optical Channel Services is one month and the full monthly rate will apply to the first month. Adjustments for the quantities of services established or discontinued in any billing period beyond the minimum period are as set forth in 2.4.1(F) preceding. The minimum service period for part-time Video and program Audio services is a continuous 24-hour period, not limited to a calendar day. The minimum service period for DS3 High Capacity service and Synchronous Optical Channel Services is twelve months. The minimum service period will be waived for a High Capacity Service included in a Term Discount plan that is replaced with a qualifying High Capacity Service Optional Rate Plan Replacement as set forth in Section 7.2.8(A)(1)(c), following. The minimum service period will be waived for a Synchronous Optical Channel Service included in a Term Discount plan that is replaced with a qualifying SOCS Optional Rate Plan Replacement as set forth in Section 7.2.8(B)(3), following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.5 Mileage Measurement

The mileage to be used to determine the monthly rate for the Channel Mileage Facility is calculated on the airline distance between the locations involved, i.e.,

- the serving wire centers associated with two customer designated premises,
- a serving wire center associated with a customer designated premises and a Telephone Company hub,
- a serving wire center associated with a customer designated premises and a wire center equipped with a Public Packet Data Network Service,
- a serving wire center equipped with ATM-CRS and another telephone company ATM-equipped serving wire center,
- a serving wire center associated with a customer designated premises and a wire center equipped for Frame Relay Access Service,
- a serving wire center equipped with ETS and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory,
- a serving wire center associated with a customer designated premises and a DSL Access Service Connection Point or a High Speed Internet (HSI) Access Service Connection Point
- a serving wire center associated with a customer designated premises and a wire center equipped for Add/Drop Multiplexing,
- two wire centers equipped for Add/Drop Multiplexing,
- two Telephone Company hubs,
- or between the serving wire center associated with a customer designated premises and a WATS Serving Office.

The serving wire center associated with a customer designated premises is the serving wire center from which this customer designated premises would normally obtain dial tone.

Mileage charges are shown with each channel type. To determine the rate to be billed, first compute the mileage using the V&H coordinates method, as set forth in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4, then multiply the resulting number of miles times the Channel Mileage Facility per mile rate, and add the Channel Mileage Termination rate for each termination. When the calculation results in a fraction of a mile, always round up to the next whole mile before determining the mileage and applying the rates. When more than one Telephone Company is involved in the provision of service, billing will be accomplished as set forth in 2.4.7 preceding.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.5 Mileage Measurement (Cont'd)

When hubs are involved, mileage is computed and rates applied separately for each section of the Channel Mileage, i.e.,

- customer designated premises serving wire center to hub,
- hub to hub and/or
- hub to customer designated premises serving wire center.

However, when any service is routed through a hub for purposes other than customer specified bridging or multiplexing (e.g., the Telephone Company chooses to so route for test access purposes), rates will be applied only to the distance calculated between the serving wire centers associated with the customer designated premises.

See the service configuration example for multipoint service as set forth in 7.1.3(B) preceding.

When Add/Drop Multiplexing is offered in connection with Synchronous Optical Channel Service, mileage is computed and rates applied separately for each section of the Channel Mileage, i.e.,

- customer designated premises serving wire center to an Add/Drop Multiplexing (ADM) equipped wire center,
- ADM equipped wire center to ADM equipped wire center,
- ADM equipped wire center to a customer designated premises serving wire center.

7.2.6 Facility Hubs

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

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

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4 identifies serving wire centers, hub locations, hub level (i.e., Hub, Terminus Hub, Intermediate Hub, or Super-Intermediate Hub) and the type of multiplexing functions available. Additionally, subtending wire centers are identified for Intermediate and Super- Intermediate Hubs.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.6 Facility Hubs (Cont'd)

Some of the types of multiplexing available include the following:

- from higher to lower bit rate
- from higher to lower bandwidth
- from high capacity to voice frequency channels.

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

The Telephone Company will commence billing the monthly rate for the service to the hub on the date specified by the customer on the Access Order. Individual channels utilizing these services may be installed coincident with the installation of the service to the hub or may be ordered and/or installed at a later date, at the option of the customer. Except as provided for in Section 7.2.1 preceding, the customer will be billed for a Voice Grade or a High Capacity Channel Termination, Channel Mileage (when applicable), and the multiplexer at the time the service is installed. Individual service rates (by service type) will apply for a Channel Termination and additional Channel Mileage (as required) for each channelized service. These will be billed to the customer as each individual service is installed.

Cascading multiplexing occurs when a High Capacity service is de-multiplexed to provide channels with a lesser capacity and one of the lesser capacity channels is further de-multiplexed. For example, a 6.312 Mbps High Capacity service is de-multiplexed to four DS1 channels and then one of the DS1 channels is further de-multiplexed to 24 individual Voice Grade channels.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.6 Facility Hubs (Cont'd)

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

The Telephone Company will designate hubs for Program Audio and Video Services. Full-time or part-time service may be provided between customer designated premises or between a customer designated premises and a hub and billed accordingly at the monthly rates set forth in 17.3.5 and 17.3.6 following for a Channel Termination, Channel Mileage and Optional Features and Functions, as applicable. When the service is ordered to a hub, the customer may order full-time or part-time Video and Program Audio services as needed between that hub and additional customer designated premises. The rate elements required to provide the part-time service (i.e., Channel Termination, Channel Mileage and Optional Features and Functions, as applicable) will be billed at daily rates for the duration of the service requested.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.7 Mixed Use

Mixed use refers to a rate application applicable only when the customer orders High Capacity or Synchronous Optical Channel Service Special Access facilities between a customer designated premises and a Telephone Company hub or ADM equipped wire center where the Telephone Company performs multiplexing/de-multiplexing functions and the same customer then orders the derived channels as Special and Switched Access Services. If the customer has Switched Access Service between a customer designated premises and an end office that is multiplexed at a Telephone Company hub and subsequently orders the derived channels as Special and Switched Access Service, rates and charges will apply as if the service were ordered as mixed use.

Except as noted above, the High Capacity facility will be ordered, provided and rated as Special Access Service (i.e., Channel Termination, Channel Mileage, as appropriate, Multiplexing, Customer Node, Customer Premises Port and Add/Drop Multiplexing). The nonrecurring charge that applies when the mixed use facility is installed will be the nonrecurring charge associated with the appropriate Special Access High Capacity or Synchronous Optical Channel Termination.

Rating as Special Access will continue until such time as the customer chooses to use a portion of the available capacity for Switched Access Service. Individual service (i.e., Switched or Special Access) nonrecurring charges will not apply to the individual channels of the mixed use facility.

When Special Access Service is provided utilizing a channel of the mixed use facility to a hub, High Capacity rates and charges will apply for the facility to the hub, as set forth preceding, and individual service rates and charges will apply from the hub to the customer designated premises.

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.7 Mixed Use (Cont'd)

As each individual channel is activated for Switched Access Service, the High Capacity Special Access Channel Termination, Channel Mileage, and Multiplexing rates will be reduced accordingly (e.g., 1/24th for a DS1 service, 1/672nd for a DS3 service, etc.).

Similarly, as each individual channel of a Special Access Synchronous Optical Channel Service is activated for Switched Access Service, the Special Access Channel Termination, Channel Mileage, Customer Node, Customer Premises Port, and Add/Drop Multiplexing rates will be reduced accordingly (e.g., 1/2016th for an OC3 service, 1/8064th for an OC12 service).

If the Special Access charges for the mixed use facility are subject to Optional Rate Plan discounts (e.g., Term Discount Optional Rate Plan) as set forth in 7.2.8 following, the Special Access charges will be reduced to reflect mixed use before the Optional Rate Plan discounts are applied.

Switched Access Service rates and charges, as set forth in 17.2 following, will apply for each channel that is used to provide a Switched Access Service. The Switched Access Service Entrance Facility charge will be reduced by multiplying its rate by a rate reduction factor (i.e., the ratio of derived Switched Access Service channels to the total number of channels that can be derived). If the Telephone Company is providing Direct Trunked Transport, then the Direct Trunked Transport, Multiplexing, Customer Node, Customer Premises Port, and Add/Drop Multiplexing charges will be reduced by multiplying their respective rates by the rate reduction factor.

The following table shows the total voice grade equivalents for each of the services that may be used for Mixed Use.

High Capacity or Synchronous Optical Channel Service	DS3 Quantities	DS1 Quantities	Voice Grade Equivalents
DS1	n/a	1	24
DS3	1	28	672
OC3	3	84	2,016
OC12	12	336	8,064

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans

There are two Optional Rate Plans: a High Capacity Optional Rate Plan and a Synchronous Optical Channel Service Optional Rate Plan.

(A) High Capacity Optional Rate Plan

The High Capacity Optional Rate Plan offers a Term Discount. The Term Discount plan applies to Special Access DS1 and DS3 High Capacity Service Channel Termination, Channel Mileage Facility and Channel Mileage Termination monthly rates, as set forth following. The current monthly rates for such services are reduced by a fixed percentage. The amount of the discount percentage differs based on the length of the service commitment period selected by the customer. The Term Discount percentages for High Capacity Service are as set forth in Section 17.3.8 (C), following.

Discounts for the Term Discount plan are only applied to High Capacity Service provided to a customer within the same state and LATA by the same Telephone Company.

The minimum service period on a monthly rate basis is one month for DS1 service and twelve months for DS3 service.

(1) Term Discounts

DS1 and DS3 High Capacity Special Access Service may be ordered at the customer's option on a monthly rate basis or for Term Discount periods of 36 months (3 years) or 60 months (5 years).

The minimum service period for all Term Discount plans is twelve months. The customer must specify the length of the service commitment period at the time the service is ordered. The minimum service period will be waived for a High Capacity Service included in a Term

Discount plan that is replaced with a qualifying High Capacity Service Optional Rate Plan Replacement as set forth in Section 7.2.8(A)(1)(c), following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(A) High Capacity Optional Rate Plans (Cont'd)(1) Term Discounts (Cont'd)

For customers that subscribe to the Term Discount plan for 36 or 60 months, the Term Discount percentage as set forth in 17.3.8 following will be frozen from Company initiated decreases, for the entire discount period at the percent in effect at the beginning of the Term Discount period.

If a Term Discount Percentage increase occurs during the term of an existing Term Discount plan, the increased percentage will be applied automatically to the remainder of the current Term Discount period.

At the end of the Term Discount period, the customer may convert to month-to-month service or subscribe to a new Term Discount plan. If the customer does not make a choice by the end of the discount period, the rates will automatically convert to month-to-month service rates.

To be included in a Term Discount plan all eligible High Capacity rate elements must be ordered for the same commitment term (i.e., all 36 months or all 60 months) and with the same service date. When additional capacity is subsequently added, it will be available only on a month-to-month basis unless the discount period of the entire service is upgraded.

Eligible DS1 or DS3 High Capacity rate elements are those Channel Terminations, Channel Mileage Facility and Channel Mileage Terminations provided to a customer within the same state and LATA by the same telephone company. As long as the number of DS1s or DS3s included in a Term Discount plan remains constant, except for qualifying High Capacity Service Optional Rate Plan Replacements as set forth in Section 7.2.8(A)(1)(c), following, customer requests to install and disconnect DS1 or DS3 services, including changes affecting different wire centers and/or customer designated premises, will not change the current Term Discount period or the minimum service period and Discontinuance of Service charges as set forth in (C) following will not apply.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(A) High Capacity Optional Rate Plans (Cont'd)(1) Term Discounts (Cont'd)(a) Upgrades in Term Discounts

Services provided under monthly rates or Term Discount rates may be upgraded to a Term Discount plan at anytime without incurring Channel Termination nonrecurring charges or discontinuance charges for existing services. The new Term Discount plan must meet or exceed the service term of the plan being upgraded. For example, a service with a 36 month commitment period may be upgraded to a new 36 month, or 60 month service period. The monthly rates will be those that are in effect at the time the service is upgraded. A new minimum service period applies to all High Capacity Service that is upgraded.

(b) Upgrades in Capacity (DS1 to DS3)

If the customer chooses to upgrade a service under the Term Discount rate plan to a higher capacity (i.e., DS1 to DS3), discontinuance charges will not apply, provided all the following conditions are met:

- the customer's order for the disconnect of the existing DS1 Service and the installation of the new DS3 Service are received at the same time and specifically reference the application of upgrade in capacity;
- the customer's disconnect order for the existing DS1 Service must reference the DS3 Service installation order;
- the new service has a total voice equivalent channel capacity greater than the total voice equivalent channel capacity of the service being discontinued; and
- the new Term Discount period meets or exceeds the Term Discount period being discontinued.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(A) High Capacity Optional Rate Plans (Cont'd)(1) Term Discounts (Cont'd)(b) Upgrades in Capacity (DS1 to DS3) (Cont'd)

A new minimum service period applies to all upgrades. Channel Termination nonrecurring charges for an equivalent channel capacity of the existing services being upgraded to the higher speed service will not be assessed. For example, 30 existing DS1 Services are being upgraded to DS3 Service at the customer's request. A capacity of 3 is installed at the customer's request. A total of 2 DS3 Services will be installed without Channel Termination nonrecurring charges being assessed, as it will require 2 DS3 Channel rate elements to provide the equivalent channel capacity of the existing services. Channel Termination nonrecurring charges will not apply to the upgraded lower speed services placed on the higher speed service if requested at the same time as the upgrade request. Channel Termination nonrecurring charges will apply for capacity that exceeds the existing equivalent channel capacity.

Should the customer choose to upgrade either a portion of, or the entire DS1 Service under the Term Discount plan to a DS3 Service and move the service to a new customer location(s) within the same state and LATA, and when service is provided by the same telephone company, discontinuance charges will not apply.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(A) High Capacity Optional Rate Plans (Cont'd)(1) Term Discounts (Cont'd)(c) High Capacity Service Optional Rate Plan Replacements

All or a portion of existing DS1 or DS3 services included in a High Capacity Optional Rate Plan may be replaced before the end of its term commitment period with a new Synchronous Optional Channel Service (SOCS) Optional Rate Plan, with a new or existing ATM-CRS Term Discount Plan or with a new or existing ETS Term Discount Plan without incurring Discontinuance of Service charges as set forth in (d), following, if all of the requirements listed in (i,below, are met.

(i) A customer may replace all or a portion of the services included in its existing High Capacity Optional Rate Plan(s) before the end of its term commitment period(s) with newly committed SOCS channel(s) added to the customer's new SOCS Term Discount Optional Rate Plan, with newly committed ATM-CRS Port(s) added to the customer's new or existing ATM Term Discount Plan, or with newly committed ETS Port(s) added to the customer's new or existing ETS Term Discount Plan provided:

(1) The term commitment period remaining in the customer's existing ATM-CRS Term Discount Plan or existing ETS Term Discount Plan or established in the new SOCS Optional Rate Plan, new ATM-CRS Term Discount Plan or new ETS Term Discount Plan meets or exceeds the number of months remaining in the customer's existing High Capacity Optional Rate Plan(s);

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7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(A) High Capacity Optional Rate Plans (Cont'd)

(1) Term Discounts (Cont'd)

(c) High Capacity Service Optional Rate Plan Replacements

(i) (Cont'd)

- (2) The bandwidth capacity of the newly committed SOCS channel(s) included in the new SOCS Optional Rate Plan, the newly committed ATM-CRS Port(s) included in the new or existing ATM-CRS Term Discount Plan, or the newly committed ETS Port(s) included in the new or existing ETS Term Discount Plan meets or exceeds the bandwidth capacity of the service(s) being replaced in the customer's existing High Capacity Optional Rate Plan(s);
- (3) The customer commits to retain the newly committed ATM-CRS Port(s) or newly committed ETS Port(s) in-service at the same bandwidth capacity for the remaining term commitment period for its existing ATMCRS Term Discount Plan or its existing ETS Term Discount Plan or for the entire term commitment period of its new SOCS Term Discount Optional Rate Plan, new ATM-CRS Term Discount Plan or new ETS Term Discount Plan;

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(A) High Capacity Optional Rate Plans (Cont'd)(1) Term Discounts (Cont'd)(c) High Capacity Service Optional Rate Plan Replacements (Cont'd)

(i) (Cont'd)

- (4) The customer's orders for the disconnect of all or a portion of the services included in its High Capacity Optional Rate Plan and the addition of newly committed SOCS channel(s) to a new SOCS Optional Rate Plan, newly committed ATM-CRS Port(s) to a new or existing ATM-CRS Term Discount Plan or newly committed ETS Port(s) to a new or existing ETS Term Discount Plan are submitted to the Telephone Company at the same time and include cross references as described in Section 5.2.2, preceding;
- (5) Any newly committed ATM-CRS Ports or newly committed ETS Ports are added to the customer's existing ATM-CRS Term Discount Plan or existing ETS Term Discount Plan before the last year of the existing term commitment period; and
- (6) Any newly committed SOCS channels added to a new SOCS Optional Rate Plan, newly committed ATM-CRS Ports added to a new or existing ATM-CRS Term Discount Plan, or newly committed ETS Ports added to a new or existing ETS Term Discount Plan are installed at the same location as the service(s) being replaced in the customer's existing High Capacity Optional Rate Plan(s).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(A) High Capacity Optional Rate Plans (Cont'd)(1) Term Discounts (Cont'd)(c) High Capacity Service Optional Rate Plan Replacements (Cont'd)

- (ii) If any of the requirements specified in (i), above, are not met, replacement SOCS channels, replacement ATM-CRS Port(s), and/or replacement ETS Port(s) will not qualify for the provisions under Section 7.2.8(A)(1)(c). Discontinuance charges will apply to replace all or a portion of the services in an existing High Capacity Optional Rate Plan as described in (d), below.
- (iii) When a customer replaces all or a portion of its services included in its existing High Capacity Optional Rate Plan with a newly committed SOCS channel(s) added to the customer's new SOCS Optional Rate Plan, with a newly committed ATM-CRS Port(s) added to the customer's new or existing ATM-CRS Term Discount Plan or with a newly committed ETS Port(s) added to the customer's new or existing ETS Term Discount Plan provided pursuant to Sections 7.2.8(B), 16.2 and 16.3, following, the Telephone Company will waive any unsatisfied minimum period charges that may otherwise be applicable for disconnecting the customer's High Capacity Service prior to satisfying the minimum service period.
- (iv) The term discount percentage for the replacement SOCS Optional Rate Plan, replacement ATM-CRS Term Discount Plan or replacement ETS Term Discount Plan will apply on a going forward basis based on the customer's written request to establish a replacement term commitment period under Section 7.2.8(A)(1)(c).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(A) High Capacity Optional Rate Plans (Cont'd)(1) Term Discounts (Cont'd)(c) High Capacity Service Optional Rate Plan Replacements (Cont'd)

- (v) When a customer replaces all or a portion of its existing High Capacity Optional Rate Plan with a newly committed ATM-CRS Port(s) added to its existing ATM-CRS Term Discount Plan or with a newly committed ETS Port(s) added to its existing ETS Term Discount Plan, the customer's existing ATM-CRS Term Discount Plan or existing ETS Term Discount Plan term commitment period would continue uninterrupted.
- (vi) An Access Order Charge, as described in Section 5.4.1, preceding, does not apply to make a change to an existing High Capacity Optional Rate Plan as a result of a High Capacity Service Optional Rate Plan Replacement under this section. An Access Order Charge per order does apply to install a SOCS channel(s), ATM-CRS Port(s), and ETS Port(s).
- (vii) Terms and conditions for the SOCS Optional Rate Plan, ATM-CRS Term Discount Plan and ETS Term Discount Plan are specified in Sections 7.2.8(B), 16.2.5 and 16.3.5, following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(A) High Capacity Optional Rate Plans (Cont'd)(1) Term Discounts (Cont'd)(d) Discontinuance of Service

Except as specified in (c), above, discontinuance charges, as described below, will apply to the portion of the service being discontinued when the customer chooses to disconnect all or a portion of its service prior to the expiration of the term commitment period.

- (i) Should the customer choose to discontinue a Term Discount plan prior to the completion of the minimum service period, discontinuance charges will apply. Discontinuance charges equal to one-hundred percent of the total undiscounted monthly rates, less any amounts previously paid, will apply for the minimum service period. Additionally, discontinuance charges of fifteen percent for DS1 service, and thirty-five percent for DS3 service, of the total undiscounted monthly charges will apply to the remaining portion of the term commitment period.
- (ii) Should the customer choose to discontinue service ordered under a Term Discount plan after the minimum service period but before the completion of the discount period, discontinuance charges will apply. Discontinuance charges of fifteen percent for DS1 Service, and thirty-five percent for DS3 Service, of the total undiscounted monthly charges will apply to the remaining portion of the discount period. For example, a customer has a DS1 Service which it chooses to discontinue after 33 months into a 60-month service term. The discontinuance charge would be 0.15 times 27 months times the undiscounted monthly rates for that service.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan

The Synchronous Optical Channel Service (SOCS)_Optional Rate Plan offers a Term Discount. The Term Discount applies to Channel Terminations, Channel Mileage and Optional Features and Functions monthly rates, as set forth following. The Term Discount percentages for the Synchronous Optical Channel Service Term Discount are as set forth in 17.3.9 following.

Discounts for the Synchronous Optical Channel Service Optional Rate Plan A are only applied to Synchronous Optical Channel Service provided to a customer within the same state and LATA by the same Telephone Company.

OC3/OC3c and OC12 Synchronous Optical Channel Service may be ordered at the customer's option on a monthly rate basis or for Term Discount periods of 36 months (3 years) or 60 months (5 years).

The minimum service period for all term discount plans is twelve months. The minimum service period will be waived for a Synchronous Optical Channel Service included in a Term

Discount plan that is replaced with a qualifying SOCS Optional Rate Plan Replacement as set forth in Section 7.2.8(B)(3) following. The customer must specify the length of the service commitment period at the time the service is ordered.

For customers that subscribe to the Term Discount plan for 36 or 60 months, the Term Discount percentage as set forth in Section 17.3.9, following, will be frozen from Company initiated decreases, for the entire discount period at the percent in effect at the beginning of the Term Discount period.

If a Term Discount percentage increase occurs during the term of an existing Term Discount plan, the increased percentage will be applied automatically to the remainder of the current Term Discount period.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont'd)

At the end of the Term Discount period, the customer may convert to month-to-month service or subscribe to a new Term Discount plan. If the customer does not submit an access service request or other written notice of election for a new Term Discount plan fifteen business days prior to the end of the discount period, the rates will automatically convert to month-to-month service rates. The minimum service period on a monthly rate basis is twelve months for Synchronous Optical Channel Service.

To be included in a Term Discount plan, all eligible Synchronous Optical Channel Service rate elements must be ordered for the same commitment term (i.e., all 36 months or all 60 months or greater) and with the same service date. When additional capacity is subsequently added, it will be available only on a month-to-month basis unless the discount period of the entire service is upgraded.

Eligible OC3/OC3c or OC12 Synchronous Optical Channel Service rate elements are those Channel Terminations, Channel Mileage Facility, Channel Mileage Terminations, Customer Nodes, Customer Premises Ports and Central Office Ports provided to a customer within the same state and LATA by the same Telephone Company. As long as the number of OC3s, OC3cs or OC12s included in a Term Discount plan remains constant, except for qualifying SOCS Optional Rate Plan Replacements as set forth in Section 7.2.8(B)(3), following, customer requests to install and disconnect OC3, OC3c or OC12 service, including changes affecting different wire centers and/or customer designated premises, will not change the current Term Discount period or the minimum service period, and Discontinuance of Service charges as set forth in (3) following will not apply.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont'd)

(1) Upgrades in Term Discounts

Services provided under monthly rates or Term Discount rates may be upgraded to a Term Discount plan at any time without incurring nonrecurring charges or discontinuance charges for existing services. The new Term Discount plan must meet or exceed the service term of the plan being upgraded. For example, a service with a 36 month commitment period may be upgraded to a new 36 month, or 60 month service period. The monthly rates will be those that are in effect at the time the service is upgraded. A new minimum service period applies to all Synchronous Optical Channel Service that is upgraded.

(2) Upgrades in Capacity (DS1 to DS3)

If the customer chooses to upgrade a service under the Term Discount rate plan to a higher capacity (i.e., DS1 to DS3), discontinuance charges will not apply, provided all the following conditions are met:

- the customer's order for the disconnect of the existing DS1 Service and the installation of the new DS3 Service are received at the same time and specifically reference the application of upgrade in capacity,
- the customer's disconnect order for the existing DS1 Service must reference the DS3 Service installation order,
- the new service has a total voice equivalent channel capacity greater than the total voice equivalent channel capacity of the service being discontinued and,
- the new Term Discount period meets or exceeds the Term Discount period being discontinued

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont'd)(2) Upgrades in Capacity (DS1 to DS3) (Cont'd)

A new minimum service period applies to all upgrades. Channel Termination nonrecurring charges for an equivalent channel capacity of the existing services being upgraded to the higher speed service will not be assessed. For example, 30 existing DS1 Services are being upgraded to DS3 Service at the customer's request. A total of 2 DS3 Services will be installed without Channel Termination nonrecurring charges being assessed, as it will require 2 DS3 Services to provide the equivalent channel capacity of the existing services. Channel Termination nonrecurring charges will not apply to the upgraded lower speed services placed on the higher speed service if requested at the same time as the upgrade request. Channel Termination nonrecurring charges will apply for capacity that exceeds the existing equivalent channel capacity.

Should the customer choose to upgrade either a portion of, or the entire DS1 Service under the Term Discount plan to a DS3 Service and move the service to a new customer location(s) within the same state and LATA, and when service is provided by the same telephone company, discontinuance charges will not apply.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont'd)(3) SOCS Optional Rate Plan Replacements

All or a portion of existing OC3/OC3c or OC12 services included in a SOCS Optional Rate Plan may be replaced before the end of its term commitment period with a new or existing ATM-CRS Term Discount Plan or with a new or existing ETS Term Discount Plan without incurring discontinuance of Service charges as set forth in (4), following, if all of the requirements listed in (a), below, are met.

(a) A customer may replace all or a portion of the services included in its existing SOCS Optional Rate Plan(s) before the end of its term commitment period(s) with newly committed ATM-CRS Port(s) added to the customer's new or existing ATM-CRS Term Discount Plan or with newly committed ETS Port(s) added to the customer's new or existing ETS Term Discount Plan provided:

- (1) The term commitment period remaining in the customer's existing ATM-CRS Term Discount Plan or existing ETS Term Discount Plan or established in the new ATM-CRS Term Discount Plan or new ETS Term Discount Plan meets or exceeds the number of months remaining in the customer's existing SOCS Optional Rate Plan(s);
- (2) The bandwidth capacity of the newly committed ATM-CRS Port(s) included in the new or existing ATM-CRS Term Discount Plan or the newly committed ETS Port(s) included in the new or existing ETS Term Discount Plan meets or exceeds the bandwidth capacity of the service(s) being replaced in the customer's existing SOCS Optional Rate Plan(s);

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont'd)

(3) SOCS Optional Rate Plan Replacements (Cont'd)

(a) (Cont'd)

- (3) The customer commits to retain the newly committed ATM-CRS Port(s) or newly committed ETS Port(s) in-service at the same bandwidth capacity for the remaining term commitment period for its existing ATM-CRS Term Discount Plan or its existing ETS Term Discount Plan or for the entire term commitment period of its new ATM-CRS Term Discount Plan or new ETS Term Discount Plan;
- (4) The customer's orders for the disconnect of all or a portion of the services included in its SOCS Optional Rate Plan and the addition of newly committed ATM-CRS Port(s) to a new or existing ATM-CRS Term Discount Plan or newly committed ETS Port(s) to a new or existing ETS Term Discount Plan are submitted to the Telephone Company at the same time and include cross references as described in Section 5.2.2, preceding;
- (5) Any newly committed ATM-CRS Ports or newly committed ETS Ports are added to the customer's existing ATM-CRS Term Discount Plan or existing ETS Term Discount Plan before the last year of the existing term commitment period; and
- (6) Any newly committed ATM-CRS Ports added to a new or existing ATM-CRS Term Discount Plan or a newly committed ETS Ports added to a new or existing ETS Term Discount Plan are installed at the same location as the service(s) being replaced under the customer's existing SOCS Optional Rate Plan(s).

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont'd)(3) SOCS Optional Rate Plan Replacements (Cont'd)

- (b) If any of the requirements specified in (a), above, are not met, replacement ATM-CRS Port(s) and/or replacement ETS Port(s) will not qualify for the provisions under Section 7.2.8(B)(3). Discontinuance charges will apply to replace all or a portion of the services in an existing SOCS Optional Rate Plan as described in (4), below.
- (c) When a customer replaces all or a portion of the services included in its existing SOCS Optional Rate Plan with a newly committed ATM-CRS Port(s) added to the customer's new or existing ATM-CRS Term Discount Plan or with a newly committed ETS Port(s) added to the customer's new or existing ETS Term Discount Plan provided pursuant to Sections 16.2 and 16.3, following, the Telephone Company will waive any unsatisfied minimum period charges that may otherwise be applicable for disconnecting the customer's SOCS prior to satisfying the minimum service period.
- (d) The term discount percentage for the replacement ATM-CRS Term Discount Plan or replacement ETS Term Discount Plan will apply on a going forward basis based on the customer's written request to establish a replacement term commitment period under Section 7.2.8(B)(3).
- (e) When a customer replaces all or a portion of its existing SOCS Optional Rate Plan with a newly committed ATM-CRS Port(s) added to its existing ATM-CRS Term Discount Plan or with a newly committed ETS Port(s) added to its existing ETS Term Discount Plan, the customer's existing ATM-CRS Term Discount Plan or existing ETS Term Discount Plan term commitment period would continue uninterrupted.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.8 Optional Rate Plans (Cont'd)

(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont'd)

(3) SOCS Optional Rate Plan Replacements (Cont'd)

- (f) An Access Order Charge, as described in Section 5.4.1, preceding, does not apply to make a change to an existing SOCS Optional Rate Plan as a result of a SOCS Optional Rate Plan Replacement under this section. An Access Order Charge per order does apply to install an ATM-CRS Port(s) and ETS Port(s).
- (g) Terms and conditions for the ATM-CRS Term Discount Plan and ETS Term Discount Plan are specified in Sections 16.2.5 and 16.3.5, following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)7.2.8 Optional Rate Plans (Cont'd)(B) Synchronous Optical Channel Service (SOCS) Optional Rate Plan (Cont'd)(4) Discontinuance of Service

Except as specified in (3) above, discontinuance charges, as described below, will apply to the portion of the service being discontinued when the customer chooses to disconnect all or a portion of the service prior to the expiration of the term commitment period.

- (i) Should the customer choose to discontinue a Term Discount plan prior to the completion of the minimum service period, discontinuance charges will apply. Discontinuance charges equal to one-hundred percent of the total undiscounted monthly rates, less any amounts previously paid, will apply for the minimum service period. Additionally, discontinuance charges of fifteen percent (15%) for OC3/OC3c and thirty-five percent (35%) for OC12 service of the total undiscounted monthly charges will apply to the remaining portion of the term commitment period.
- (ii) Should the customer choose to discontinue service ordered under a Term Discount plan after the minimum service period but before the completion of the discount period, discontinuance charges will apply. Discontinuance charges of fifteen percent for OC3/OC3c Service, and thirty-five percent for OC12 Service, of the total undiscounted monthly charges will apply to the remaining portion of the term commitment period. For example, a customer has an OC3 Service which it chooses to discontinue after 33 months into a 60 month service term. For an OC3, the discontinuance charge would be 0.15 times 27 months times the undiscounted monthly rates for that service.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.2 Rate Regulations (Cont'd)

7.2.9 Application of Competitive and Non-Competitive Rates

(A) Transport, Optional Features and Functions, Non-End User Channel Terminations

The FCC has deemed all Special Access transport rate elements, non-end user channel terminations, end user channel terminations for services with a bandwidth greater than a DS3, and packet-based end user channel terminations to be eligible for relief from price cap regulation. Relief from price cap regulation also applies to multiplexing, certain optional features and functions and the non-recurring charges that are not associated with end-user channel terminations. These rate elements are set forth in Section 17.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.2 Rate Regulations (Cont'd)

7.2.9 Application of Competitive and Non-Competitive Rates

(B) End-User Channel Terminations

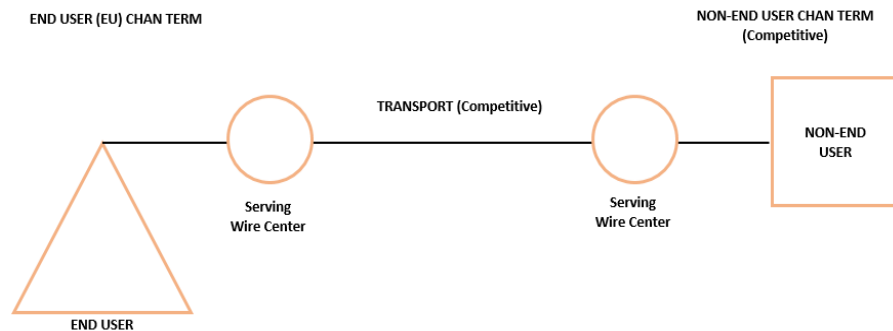
The application of rates to End User Channel Terminations for non-packet based Special Access Services with a bandwidth equal to or less than a DS3 is dependent upon whether the serving wire center is located in a Competitive County or a Non-Competitive County. If the Serving Wire Center associated with an End User Channel Termination is located in a Competitive County, competitive rates and charges in Section 17 following apply. If the End User Channel Termination is served by a serving wire center in a Non-Competitive County, non-competitive rates and charges in Section 17 apply.

All wire centers in the Telephone Company's operating territory except for the Wire Center located in Grand Isle County are deemed Competitive. The Alburg (ALBGVTXA) Wire Center in Grand Isle County is deemed Non-Competitive.

Examples of competitive and non-competitive rate applications for non-packet based circuits that have a bandwidth of a DS3 or less are illustrated in the following diagrams:

Example 1:

Non-End User to End User Circuit Design



Competitive rates apply to the non-end user Channel Termination (Chan Term). End User Channel Termination rates depend on the location of the end user service wire center (SWC). If the SWC is located in a Non-Competitive County, the end-user Chan Term is non-competitive. Otherwise, the end-user Chan Term is competitive.

ACCESS SERVICE

7. Special Access Service (Cont'd)

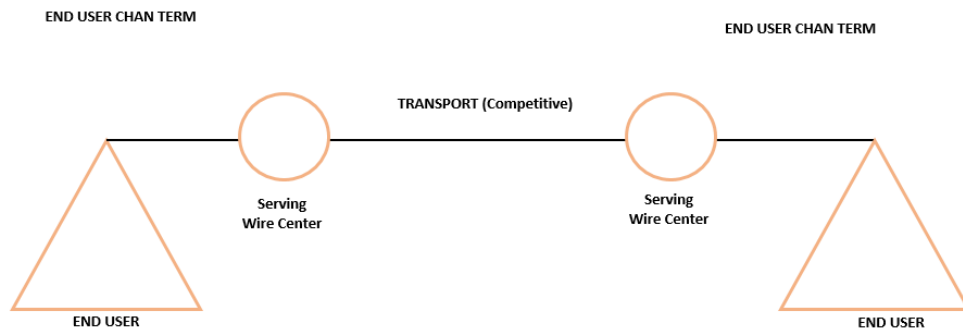
7.2 Rate Regulations (Cont'd)

7.2.9 Application of Competitive and Non-Competitive Rates

(B) End-User Channel Terminations (Cont'd)

Example 2:

End User to End User Circuit Design



Channel Termination rates depend on the location of each end user serving wire center. If SWC is located in a non-competitive county, Section 31 end-user Chan Term rates apply. Otherwise, Section 30 Rate Band 5 end-user Chan Term rates apply.

ACCESS SERVICE

7. Special Access Service (Cont'd)

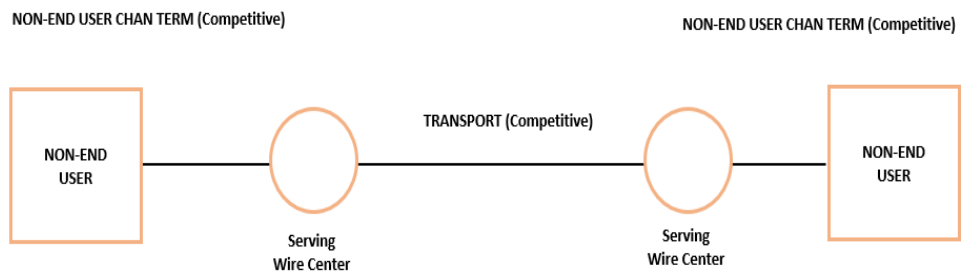
7.2 Rate Regulations (Cont'd)

7.2.9 Application of Competitive and Non-Competitive Rates

(B) End-User Channel Terminations (Cont'd)

Example 3:

**ACCESS CARRIER TERMINAL LOCATION to ACCESS CARRIER TERMINAL
LOCATION Connection**



Section 30 rates apply, regardless of whether the serving wire centers are in a Competitive or Non-Competitive County. Price Bands will be dependent on whether Phase II pricing flexibility was granted prior to June 1, 2017.

ACCESS SERVICE

7. Special Access Service (Cont'd)

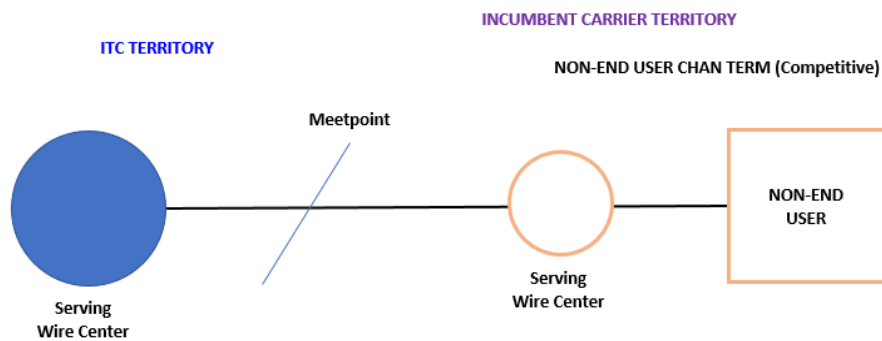
7.2 Rate Regulations (Cont'd)

7.2.9 Application of Competitive and Non-Competitive Rates

(B) End-User Channel Terminations (Cont'd)

Example 4:

Access Carrier Terminal Location to Independent Carrier (ITC)



Incumbent Carrier Rates are found in Section 30 regardless of whether the serving wire centers are in a Competitive or Non-Competitive County. Price Bands will be dependent on whether Phase II pricing flexibility was granted prior to June 1, 2017.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Surcharge for Special Access Service7.3.1 General

Special Access Services provided under this tariff may be subject to the monthly Special Access Surcharge.

7.3.2 Application

- (A) The Special Access Surcharge will apply to each interstate Special Access Service that terminates on an end user's PBX or other device, where through a function of the device, the Special Access Service interconnects to the local exchange network. Interconnection functions include, but are not limited to, wiring and software functions, bridging, switching or patching of calls or stations. The Surcharge will apply irrespective of whether the interconnection function is performed in equipment located at the customer's premises or in a Centrex CO-type switch.
- (B) Special Access Service will be exempted from the Surcharge by the Telephone Company upon receipt of the customer's written certification for the following Special Access Service terminations:
 - (1) an open-end termination in a Telephone Company switch of an FX line, including CCSA and CCSA- equivalent ONALs; or
 - (2) an analog channel termination that is used for radio or television program transmission; or
 - (3) a termination used for TELEX service; or
 - (4) a termination that by the nature of its operating characteristics could not make use of Telephone Company common lines such as, terminations which are restricted through hardware or software; or

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.3 Surcharge for Special Access Service (Cont'd)

7.3.2 Application (Cont'd)

(B) (Cont'd)

- (5) a termination that interconnects either directly or indirectly to the local exchange network where the Special Access Service accesses only FGA and no local exchange lines, or Special Access Service between customer points of termination, or Special Access Service connecting CCSA or CCSA-type equipment (inter-machine trunks); or
- (6) a termination that the customer certifies to the Telephone Company is not connected to a PBX or other device which interconnects the Special Access Service to a local exchange subscriber line.

7.3.3 Exemption of Special Access Service

- (A) Special Access Services which are terminated as set forth in 7.3.2(B) preceding will be exempted from the Special Access Surcharge if the customer provides the Telephone Company with written exemption certification. The certification may be provided to the Telephone Company as follows:
 - at the time the Special Access Service is ordered or installed;
 - at such time as the service is reterminated to a device which does not interconnect the service to local exchange facilities; or

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Surcharge for Special Access Service (Cont'd)7.3.3 Exemption of Special Access Service (Cont'd)

- (B) The exemption certification is to be provided by the customer ordering the service. The certification must be signed by the customer or authorized representative and include the category of exemption, as set forth in 7.3.2(B) preceding, for each termination, and the date which the exemption is effective.
- (C) The customer shall also notify the Telephone Company when an exempted Special Access Service is changed or reterminated such that the exemption is no longer applicable.
- (D) The Telephone Company will work cooperatively with the customer to resolve any questions regarding the exemption certification. In addition, the Telephone Company may withhold exemption of the service until the questions are resolved.

7.3.4 Rate Regulations

- (A) The surcharge will apply as set forth in 7.3.2(A) preceding, except that a surcharge will be assessed on a per voice grade equivalent basis for Special Access Services derived from High Capacity Special Access Services as illustrated in the following example:

<u>Special Access Service</u>	<u>Voice Grade Equivalent</u>	<u>Surcharge</u>	<u>Monthly Charge</u>
DS1	24 X	\$25 =	\$600.00

The preceding example illustrates the maximum number of surcharges applicable to a DS1. If the customer claims exemption(s) as set forth in 7.3.3 preceding or, is not utilizing all available voice grade equivalents and has spare capacity, the number of surcharges would be reduced accordingly.

In the case of multipoint Special Access Services, one Special Access Surcharge will apply for each termination of a Special Access Channel at an end user's premises.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.3 Surcharge for Special Access Service (Cont'd)7.3.4 Rate Regulations (Cont'd)

- (B) The Telephone Company will bill the appropriate Special Access Surcharge to the ordering customer for each interstate Special Access Service installed unless exemption certification is provided as set forth in 7.3.3 preceding.
- (C) If a written certification is not received at the time the Special Access Service is obtained, the Surcharge will be applied. Exempt status will become effective on the certification date indicated by the customer, subject to the regulations set forth in (D) following.
- (D) Crediting the Surcharge

The Telephone Company will cease billing the Special Access Surcharge when certification, as set forth in 7.3.3 preceding, is received. If the status of the Special Access Service was changed prior to receipt of the exemption certification, the Telephone Company will credit the customer's account, not to exceed ninety (90) days, based on the effective date of the change as specified by the customer in the letter of certification.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.4 Metallic Service7.4.1 Basic Channel Description

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

Metallic Special Access Services are typically used for applications such as alarm, pilot wire protective relaying, and dc tripping protective relaying. These examples of applications are not intended to limit a customer's use of the channel nor to imply that the channel is limited to a particular use.

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

7.4.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(A) following. Compatible network channel interfaces are set forth in 15.2.2(C)(1) following.

7.4.3 Optional Features and Functions(A) Central Office Bridging Capability

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

The table set forth in 15.2.1(A) following shows the technical specifications packages with which the optional features and functions are available.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.5 Telegraph Grade Service7.5.1 Basic Channel Description

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

Telegraph Grade Special Access Services are typically used for applications such as teletypewriter, telegraph grade control/remote metering, telegraph grade channel, telegraph grade extension, and telegraph grade entrance facilities. These examples of applications are not intended to limit a customer's use of the channel nor to imply that the channel is limited to a particular use.

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

7.5.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(B) following. Compatible network channel interfaces are set forth in 15.2.2(C)(2) following.

7.5.3 Optional Features and Functions

Telegraph Bridging (two-wire and four-wire)

The table set forth in 15.2.1(B) following shows the technical specifications packages with which the optional features and functions are available.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.6 Voice Grade Service7.6.1 Basic Channel Description

A Voice Grade channel is a channel which provides voice frequency transmission capability in the nominal frequency range of 300 to 3000 Hz and may be terminated as two-wire or four-wire. Voice Grade channels are provided between customer designated premises, between a customer designated premises and a Telephone Company hub or hubs, or between a customer designated premises and a WATS Serving Office (WSO).

Voice Grade Special Access Services are typically used for voice and voiceband data applications. Typical examples of voice grade circuits are Foreign Exchange lines (station end only), multipoint private line, voice trunk type, two-point voice grade data (one-way or simultaneous two-way), multipoint voice grade data, and voice grade telephoto or facsimile. These examples of applications are not intended to limit a customer's use of the channel nor to imply that the channel is limited to a particular use.

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

7.6.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(C) following. Compatible network channel interfaces are set forth in 15.2.2(C)(3) following.

7.6.3 Optional Features and Functions(A) Central Office Bridging Capability

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.6 Voice Grade Service (Cont'd)7.6.3 Optional Features and Functions (Cont'd)(A) Central Office Bridging Capability (Cont'd)

(5) Telemetry and Alarm Bridging

Split Band, Active Bridging

Passive Bridging

Summation, Active Bridging

The rates for these options are set forth in 17.3.4(C)(1)(e) following.

(B) Central Office Multiplexing

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

The rate for this option is set forth in 17.3.4(C)(5) following.

(C) Conditioning

Conditioning provides more specific transmission characteristics for Voice Grade services. The rates for these options are set forth in 17.3.4(C) following.

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.6 Voice Grade Service (Cont'd)7.6.3 Optional Features and Functions (Cont'd)(C) Conditioning (Cont'd)(1) C-Type Conditioning

C-Type Conditioning is provided for the additional control of attenuation distortion and envelope delay distortion on data services. The attenuation distortion and envelope delay distortion specifications for C-Type Conditioning are delineated in Technical Reference TR-NWT-000335.

(2) Improved Attenuation Distortion*

Improved Attenuation Distortion upgrades the frequency versus loss limits of the channel. The technical specifications for Improved Attenuation Distortion are delineated in Technical Reference TR-NWT-000335. This option is available only when ordered in combination with C-Type Conditioning.

(3) Improved Envelope Delay Distortion*

Improved Envelope Delay Distortion upgrades the frequency versus delay response limits of the channel. The technical specifications for Improved Envelope Delay Distortion are delineated in Technical Reference TR-NWT-000335. This option is available only when ordered in combination with C-Type Conditioning.

* Improved Attenuation Distortion and Improved Envelope Delay Distortion will continue to be provided to all customers who were provided with either or both of these optional features in conjunction with C-Type Conditioning prior to May 4, 1988.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.6 Voice Grade Service (Cont'd)7.6.3 Optional Features and Functions (Cont'd)(C) Conditioning (Cont'd)(4) Data Capability (D Conditioning)

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

The Signal to C-Notched Noise Ratio and intermodulation distortion parameter for Data Capability are delineated in Technical Reference TR-NWT-000335. The rate for this option is set forth in 17.3.4(C)(2) following.

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

(5) Telephoto Capability

Telephoto Capability provides transmission characteristics suitable for telephotographic communications. Specifically, Telephoto Capability is provided for the control of attenuation distortion and envelope delay distortion on telephotographic services. The attenuation distortion and envelope delay distortion parameters for Telephoto Capability are delineated in Technical Reference TR-NWT-000335.

(6) Sealing Current Conditioning

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.6 Voice Grade Service (Cont'd)7.6.3 Optional Features and Functions (Cont'd)(D) Customer Specified Premises Receive Level

This option allows the customer to specify the receive level at the Point of Termination. The level must be within a specific range on effective four- wire transmission. The ranges are delineated in Technical Reference TR-NWT-000335. The rate for this option is set forth in 17.3.4(C)(4) following.

(E) Improved Return Loss

- (1) On Effective Four-Wire Transmission at Four-Wire Point of Termination (applicable to each two- wire port): Provides for a fixed 600 ohm impedance, variable level range and simplex reversal. Telephone Company equipment is required at the customer's premises where this option is ordered. The Improved Return Loss parameters are delineated in Technical Reference TR-NWT-000335. The rate for this option is set forth in 17.3.4(C)(3) following.
- (2) On Effective Two-Wire Transmission at Two-Wire Point of Termination: Provides for more stringent Echo Control specifications. In order for this option to be applicable, the transmission path must be four-wire at one POT and two-wire at the other POT. Placement of Telephone Company equipment may be required at the customer's premises with the two-wire POT. The Improved Return Loss parameters are delineated in Technical Reference TR-NWT-000335. The rate for this option is set forth in 17.3.4(C)(3) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.6 Voice Grade Service (Cont'd)7.6.3 Optional Features and Functions (Cont'd)(F) Signaling Capability

Signaling Capability provides for the ability to transmit signals from one customer premises to another customer premises on the same service. The rate for this option is set forth in 17.3.4(C)(6) following.

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

The following network 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. The signaling capability charge will not apply when used in the provision of WATS access service.

(G) Selective Signaling Arrangement

An arrangement that permits code selective ringing for up to ten codes on a multipoint service. The rate for this option is set forth in 17.3.4(C)(7) following.

(H) Transfer Arrangement

An arrangement that affords the customer an additional measure of flexibility in the use of an access channel(s). The arrangement can be utilized to transfer a leg of a Special Access Service to another channel that terminates in either the same or a different customer premises. A key activated or dial-up control service is required to operate the transfer arrangement. A spare channel, if required, is not included as part of the option. The rate for this option is set forth in 17.3.4(C)(8) following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.6 Voice Grade Service (Cont'd)7.6.3 Optional Features and Functions (Cont'd)(I) Public Packet Switching Network (PPSN) Interface Arrangement

An arrangement that provides the interface requirements that permit a Voice Grade service to interface with a Public Packet Switching Network packet switch located in a Telephone Company premises. The interface is compatible with X.25 and X.75 packet switching protocols as defined by the CCITT. This option is provided on an Individual Case Basis as set forth in 17.3.4(C)(9) following.

(J) Four-Wire/Two-Wire Conversions

When a customer requests that an effective four-wire channel be terminated with a two-wire channel interface at the customer designated premises, a four-wire to two-wire conversion is required. The customer will be charged the four-wire Channel Termination rate as set forth in 17.3.4(A) following when an effective four-wire is specified in the order for service. The rate for the conversion is included as part of the basic four-wire Channel Termination rate.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.6 Voice Grade Service (Cont'd)7.6.3 Optional Features and Functions (Cont'd)(K) Improved Two-Wire Voice Transmission

(1) Loss Deviation

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

(2) Attenuation Distortion

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

(3) C-Message Noise

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

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

(4) Return Loss

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

ERL	13.0 dB
SRL	6.0 dB

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.7 Program Audio Service7.7.1 Basic Channel Description

A Program Audio channel is a channel with bandwidth measured in Hz for the transmission of a complex signal voltage. The actual bandwidth is a function of the channel interface selected by the customer. Only one-way transmission is provided. Program Audio channels are provided between customer designated premises or between a customer designated premises and a Telephone Company hub or hubs.

Program Audio Special Access services are typically used in full-time and part-time applications for radio broadcasting, noncommercial educational audio, and wired music. These examples of applications are not intended to limit a customer's use of the channel nor to imply that the channel is limited to a particular use.

Rates and charges for Special Access Program Audio Service are as set forth in 17.3.5 following.

7.7.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(D) following. Compatible network channel interfaces are set forth in 15.2.2(C)(4) following.

7.7.3 Optional Features and Functions(A) Central Office Bridging Capability

Distribution Amplifier

(B) Gain Conditioning

Control of 1004 Hz AML at initiation of service to 0 dB \pm 0.5 dB.

(C) Stereo

Provision of a pair of gain/phase equalized channels for stereo applications. (An additional Program Audio channel must be ordered separately.)

The table set forth in 15.2.1(D) following shows the technical specifications packages with which the optional features and functions are available.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.8 Video Service7.8.1 Basic Channel Description

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

Rates and charges for Special Access Video Service are as set forth in 17.3.6 following.

7.8.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(E) following. Compatible network channel interfaces are set forth in 15.2.2(C)(5) following.

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

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.9 Digital Data Service7.9.1 Basic Channel Description

A Digital Data channel is a channel for duplex four-wire transmission of synchronous serial data at the rate of 2.4, 4.8, 9.6, 19.2, 56.0 or 64.0* Kbps. The actual bit rate is a function of the channel interface selected by the customer. The channel provides a synchronous service with timing provided by the Telephone Company through the Telephone Company's facilities to the customer in the received bit stream. Digital Data channels are provided as either hubbed or non-hubbed services between customer designated premises or between a customer designated premises and a Telephone Company hub or hubs. The hubs providing hubbed digital service and the wire centers providing non-hubbed digital service are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. NO. 4.

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

The Telephone Company will provide a channel capable of meeting a monthly average performance equal to or greater than 99.875% error-free seconds (if provided through a Digital Data hub) while the channel is in service, if it is measured through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference PUB 62310 (MDP-326-726).

Rates and charges for Special Access Digital Data Service are as set forth in Section 17.3.7, following.

7.9.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(F) following. Compatible channel interfaces are set forth in 15.2.2(C)(6) following.

* When 64.0 Kbps service is multiplexed on a DS1 High Capacity service, the DS1 must be equipped to provide Clear Channel Capability.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.9 Digital Data Service (Cont'd)7.9.2 Technical Specifications Packages and Network Channel Interfaces (Cont'd)

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

<u>NCI</u>	<u>Bit Rate</u>
DU-24	2.4 Kbps
DU-48	4.8 Kbps
DU-96	9.6 Kbps
DU-19	19.2 Kbps
DU-56	56.0 Kbps
DU-64	64.0 Kbps

7.9.3 Optional Features and Functions

The Optional Features and Functions described in (A), (B), and (C) following are only available where Digital Data Service is provided via a hub. The Optional Features and Functions described in (D) following are available where Digital Data Service is provided on a non-hubbed basis.

(A) Central Office Bridging Capability

Bridging is not available on a 64.0 Kbps channel.

(B) Transfer Arrangement

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.9 Digital Data Service (Cont'd)7.9.3 Optional Features and Functions (Cont'd)(C) Public Packet Switching Network (PPSN) Interface Arrangement

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

The table set forth in 15.2.1(F) following shows the technical specifications packages with which the optional features and functions are available.

(D) Public Packet Data Service Interface Arrangement

An arrangement that provides for the interface requirements that permit a Digital Data Service to interface with a Public Packet Data switch located in a Telephone Company premises. The interface is compatible with Frame Relay packet switching protocols. The interface is only available for 56.0 kbps and 64.0 kbps rates.

The table set forth in 15.2.1 (F) following shows the technical specifications packages with which the optional features and functions are available.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.10 High Capacity Service7.10.1 Basic Channel Description

A High Capacity channel is a channel for the transmission of nominal 64.0 Kbps* or 1.544, 3.152, 6.132, 44.736, or 274.176 Mbps isochronous serial data. The actual bit rate is a function of the channel interface selected by the customer. High Capacity channels are provided between customer designated premises or between a customer designated premises and a Telephone Company hub or hubs. In addition, 1.544 Mbps and 44.736 Mbps High Capacity Service channels may be provided between a customer designated premises and a Telephone Company designated DSL Access Service Connection Point, between a customer designated premises and a serving wire center equipped with Asynchronous Transfer Mode Cell Relay Access Service, between a customer designated premises and a serving wire center equipped with Frame Relay Access Service (FRAS), between a Telephone Company serving wire center equipped with ATM-CRS and another telephone company ATM-equipped serving wire center and/or between a Telephone Company serving wire center equipped with FRAS and another telephone company serving wire center equipped with a frame relay switch that is located in a non-adjacent serving territory.

Additionally, a 44.736 Mbps High Capacity Service channel may be provided between a customer designated premises and a serving wire center equipped with Ethernet Transport Service (ETS) and/or between a Telephone Company serving wire center equipped with ETS and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory.

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

A channel with technical specifications package DS1 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 GR-342-CORE.

A term discount is available for High Capacity Service.

Rates and charges for Special Access High Capacity Service are as set forth in 17.3.8 following.

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.10 High Capacity Service (Cont'd)7.10.2 Technical Specifications Packages and Network Channel Interfaces

Technical Specifications Packages are set forth in 15.2.1(G) following. Compatible channel interfaces are set forth in 15.2.2(C)(7) following.

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

<u>NCI</u>	<u>Bit Rate</u>
DS-15*	1.544 Mbps (DS1)
DS-27	274.176 Mbps (DS4)
DS-31	3.152 Mbps (DS1C)
DS-44	44.736 Mbps (DS3)
DS-63	6.312 Mbps (DS2)

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.10 High Capacity Service (Cont'd)7.10.3 Optional Features and Functions(A) Automatic Loop Transfer

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

(B) Transfer Arrangement

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

ACCESS SERVICE

7. Special Access Service (Cont'd)7.10 High Capacity Service (Cont'd)7.10.3 Optional Features and Functions (Cont'd)(C) Central Office Multiplexing(1) DS4 to DS1

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

(2) DS3 to DS1

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

(3) DS2 to DS1

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

(4) DS1C to DS1

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

(5) DS1 to Voice

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

(6) DS1 to DS0

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

(7) DS0 to Subrate

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

The table set forth in 15.2.1(G) following shows the technical specifications packages with which the optional features and functions are available.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.10 High Capacity Service (Cont'd)7.10.3 Optional Features and Functions (Cont'd)(D) Clear Channel Capability (CCC)

- (1) CCC is an arrangement that allows a customer to transport 1.536 Mbps information rate signals over a 1.544 Mbps High Capacity channel or over a 1.544 Mbps High Capacity channel derived from a multiplexed 44.736 Mbps High Capacity channel with no constraint on the quantity or sequence of one and zero bits. This arrangement requires the customer signal at the channel interface to conform to Bipolar with Eight Zero Substitution (B8ZS) line code as described in Technical Reference GR-54-CORE and Technical Reference TR-342-CORE.
- (2) CCC is provided, subject to availability of facilities, on DS1/1.544 Mbps High Capacity channels between two customer designated premises and on multiplexed DS3/44.736 Mbps High Capacity channels or multiplexed DS1/1.544 Mbps High Capacity channels* between a Telephone Company hub office and a customer designated premises. The wire centers providing CCC are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., TARIFF F.C.C. NO. 4.
- (3) The CCC optional feature may be ordered at the same time the High Capacity service is ordered or it may be ordered as an addition to an existing High Capacity Service. The customer must agree to out-of-service periods required to add this feature to an existing High Capacity Service. The charges for the CCC optional feature are as set forth in 7.2.2 (C)(3) preceding.

* Available only on a DS1-to-Digital multiplexed configuration.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.10 High Capacity Service (Cont'd)7.10.3 Optional Features and Functions (Cont'd)(E) Shared SONET Ring Interoffice Transport

- (1) Shared SONET Ring Interoffice Transport (SSRIT) is a non-chargeable optional feature which provides interoffice transmission of a DS3 High Capacity Service over a SONET-based facility deployed in a ring configuration. Shared SONET Ring Interoffice Transport provides increased reliability and functionality using a self healing ring topology designed to continually monitor service quality, detect any failure within the system, and automatically self-heal within 50 milliseconds around the point of failure by switching to a protect path to ensure the flow of services between locations within the self-healing ring.
- (2) Shared SONET Ring Interoffice Transport is provided for the interoffice portion of DS3 High Capacity Service, subject to availability of SONET ring facilities. The wire centers offering Shared SONET Ring Interoffice Transport are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., WIRE CENTER INFORMATION, TARIFF F.C.C. NO. 4.
- (3) The Shared SONET Ring Interoffice Transport optional feature may be ordered at the same time the DS3 High Capacity service is ordered or it may be ordered as an addition to an existing DS3 High Capacity Service. The customer must agree to out-of-service periods required to add this feature to an existing DS3 High Capacity Service. The charges for the Shared SONET Ring Interoffice Transport optional feature are as set forth in 7.2.2.(C)(3) preceding.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Excluded from Price Cap Regulation)

Effective August 1, 2017, FCC 17-43 granted relief for all services with a bandwidth greater than a DS3 from Price Cap regulation.

7.11.1 Basic Channel Description

A Synchronous Optical Channel Service (SOCS) channel provides dedicated transport utilizing Synchronous Optical Network (SONET) transmission standards. SOCS provides optical network capability to customers requiring connections at transmission rates of 155.52 Mbps (OC3) and 622.08 Mbps (OC12). SOCS is provided between two customer designated premises (CDP) through one or more Telephone Company wire center(s) or between a CDP and a wire center equipped with Asynchronous Transfer Mode Cell Relay Service or a wire center equipped with Add/Drop Multiplexing (ADM). In addition, customers at an ADM equipped wire center may add or drop bandwidth capacity from the synchronous optical channel for delivery to a customer premises, Public Packet Data Network Service or another wire center.

OC3/OC3c Synchronous Optical Channel Service may also be provided between a customer designated premises and a Telephone Company designated DSL Access Service Connection Point.

Additionally, a Synchronous Optical Channel Service channel may be provided between a customer designated premises and a serving wire center equipped with Ethernet Transport Service (ETS) and/or between a Telephone Company serving wire center equipped with ETS and another telephone company Ethernet-equipped serving wire center that is located in a non-adjacent serving territory.

Each channel will be configured with one working and one protect fiber pair within the same sheath between the CDP and the serving wire center of the CDP which provides redundancy to protect the customer's service. Should a failure occur, the SONET technology will automatically switch the customer's transmission to the dedicated protect fiber pair.

The customer may provide node and port equipment at the CDP which allows the high speed optical carrier channel to be converted to an electrical signal at a lower speed. The provision of such equipment by the customer is subject to compatibility with the Telephone Company's equipment in the serving wire center and must comply with the standards specified in GR-253-CORE.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.1 Basic Channel Description (Cont'd)

The OC3 channel is available in a non-concatenated format (OC3) which provides three individual signals. The OC3 channel is also available in a concatenated format (OC3c) which provides a single signal appropriate for data transmissions.

A term discount is available for Synchronous Optical Channel Service. Section 7.2.8(B), preceding, specifies the conditions under which a term discount is applicable.

Synchronous Optical Channel Service is available at the wire centers as identified in National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4.

Rates and charges for Synchronous Optical Channel Service are as set forth in Section 17.3.9, following.

7.11.2 Network Channel Interfaces

Compatible channel interfaces for Synchronous Optical Channel Service are as set forth in 15.2.2(C)(8) following

The following network channel interfaces (NCIs) define the bit rates that are available for a synchronous optical channel:

<u>NCI</u>	<u>Bit Rate</u>
FCF-B	155.52 Mbps (OC3, OC3c)
FCF-D	622.08 Mbps. (OC12)

ACCESS SERVICE

7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.3 Optional Features and Functions(A) Customer Node

A Customer Node charge applies when the Telephone Company provides terminal equipment at the customer designated premises for termination of a Synchronous Optical Channel Service Channel Termination. Such equipment may be used to convert the signal from an optical to electrical format. The Customer Node charge is determined by the level of optical service (i.e., OC3, OC3c or OC12) delivered to the premises. Each Customer Node must be configured with one or more Customer Premises Ports.

Rates and charges for the Customer Node are as set forth in Section 17.3.9, following.

(B) Customer Premises Port

Customer Premises Port charges apply in conjunction with the Customer Node charge. Each Customer Premises Port provides the interface to derive a lower capacity service at the customer premises. The type and quantity of ports is determined by the customer and is based on the type of Customer Node selected and the number of DS1, DS3, STS-1 and/or OC3/OC3c channels ordered. Customer Premises Ports are available at the following speeds:

<u>Customer Premises Port</u>	<u>Speed</u>
OC3, OC3c	155.52 Mbps
STS-1	51.84 Mbps
DS3	44.736 Mbps
DS1	1.544 Mbps

Rates and charges for the Customer Premises Port are as set forth in Section 17.3.11(E)(1), following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.3 Optional Features and Functions (Cont'd)(C) Add/Drop Multiplexing

An Add/Drop Multiplexing Central Office Port charge applies to the interface provided at a Telephone Company wire center for the purpose of adding or dropping lower capacity services from Synchronous Optical Channel Service Channel Termination or Channel Mileage transport facilities. Central Office Ports are available at the following speeds:

Central Office Port	Speed
OC3, OC3c	155.52 Mbps
DS3	44.736 Mbps
DS1	1.544 Mbps

OC12 service may only be multiplexed to OC3/OC3c channels.

When an OC3 channel is derived from an OC12 service and is further multiplexed to obtain DS3 service, a DS3 port charge will apply in addition to the OC3 port charge.

When a DS3 channel is derived from an OC3 service and is further multiplexed to obtain DS1 service, a DS3 to DS1 Multiplexing charge as set forth in Section 17.3.8(D)(1), following, will apply in addition to the DS3 port charge.

When a DS1 channel is directly derived from an OC3 service, a DS1 port charge will apply.

When a DS1 channel is further multiplexed to a lower level signal, a DS1 to Voice Grade Multiplexing charge as set forth in Section 17.3.8(D)(1), following, will also apply.

Rates and charges for the Central Office Port are as set forth in Section 17.3.11(E)(2), following.

ACCESS SERVICE

7. Special Access Service (Cont'd)7.11 Synchronous Optical Channel Service (Cont'd)7.11.3 Optional Features and Functions (Cont'd)(D) Shared SONET Ring Interoffice Transport

- (1) Shared SONET Ring Interoffice Transport (SSRIT) is a non-chargeable optional feature which provides interoffice transmission of a Synchronous Optical Channel Service over a SONET-based facility deployed in a ring configuration. Shared SONET Ring Interoffice Transport provides increased reliability and functionality using a self-healing ring topology designed to continually monitor service quality, detect any failure within the system, and automatically self-heal within 50 milliseconds around the point of failure by switching to a protect path to ensure the flow of services between locations within the self-healing ring.
- (2) Shared SONET Ring Interoffice Transport is provided for the interoffice portion of Synchronous Optical Channel Service, subject to availability of SONET ring facilities. The wire centers offering Shared SONET Ring Interoffice Transport are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC., WIRE CENTER INFORMATION, TARIFF F.C.C. NO. 4.
- (3) The Shared SONET Ring Interoffice Transport optional feature may be ordered at the same time the Synchronous Optical Channel Service is ordered or it may be ordered as an addition to an existing Synchronous Optical Channel Service. The customer must agree to out-of-service periods required to add this feature to an existing Synchronous Optical Channel Service. The charges for the Shared SONET Ring Interoffice Transport optional feature are as set forth in 7.2.2.(C)(3) preceding.

ACCESS SERVICE

7. Special Access Service (Cont'd)

7.12 Individual Case Filings

Certain services set forth in Special Access Service, Section 7. are provided on an Individual Case Basis.