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ACCESS SERVICE

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4. Switched Access Service4.1 General

Switched Access Service provides a two-point electrical communications path between the Customer's premises and Telephone Company exchange locations. Switched Access Service provides for the use of common terminating, switching and trunking facilities, and jointly used subscriber plant of the Telephone Company's public switched network. Switched Access Service provides for the ability to make and receive interstate calls to and from Telephone Company exchange locations. It is typically used to originate and terminate MTS, WATS, and MTS/WATS-type services.

Switched Access Service is provided in four Feature Group arrangements. Each arrangement is differentiated by the type of connection (i.e., line side or trunk side) and the access calling pattern (e.g., 950-10XX). A detailed description of the services available with each Feature Group is set forth in Section 4.2. The physical characteristics and transmission performance capabilities for Switched Access Service are contained in Section 4.5. The technical specifications for the Entrance Facility are the same as those set forth in Section 5.

Each Switched Access Service Feature Group arrangement has two rate elements: Switched Transport, including an Entrance Facility where required, and End Office. The services covered by the Switched Transport and End Office rate elements are described in Sections 4.1.2(B) and (C), respectively. The charges for these rate elements are set forth in Section 15. There is a minimum monthly charge for Switched Access Service and it is determined in accordance with Section 4.6.3.

When a Customer changes from one type of Feature Group to another, charges as described in Section 4.6.4 shall apply. When a Customer moves to a new location, charges as described in Section 4.6.5 shall apply.

When Feature Group A Switched Access is provided, the Customer's bill from the Telephone Company will include a credit for any local message unit charges as described in Section 4.6.9.

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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.1 Feature Group Arrangements

There are four Feature Group arrangements which Switched Access Service is provided. Following is a brief description of each. More detailed descriptions are set forth in Section 4.2.

(A) Feature Group A (FGA)

FGA Access 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 and terminating communications. Special Access Service that is provided for use with FGA connects a Customer's designated premises with a WATS Serving Office and is available as set forth in Section 4.1.1(D) following. Special Access Service, as described in Section 5 following, may be ordered separately by an entity other than the Customer which orders the FGA Switched Access Service.

(B) Feature Group B (FGB)

FGB Access provides trunk side access to Telephone Company end office switches with an associated uniform 950-0XXX or 950-0XXX access code for the Customer's use in originating and terminating communications. Special Access Service that is provided for use with FGB connects a Customer designated premises with a WATS Serving Office and is available as set forth in Section 4.1.1(D) following. Special Access Service, as described in Section 5 following, may be ordered separately by an entity other than the Customer which order the FGB Switched Access Service.

(C) Feature Group C (FGC)

FGC Access provides trunk side access to Telephone Company end office switches for AT&T's use in originating and terminating communications. Special Access Service that is provided for use with Feature Group C Switched Access Service connects a Customer designated premises with a WATS Serving Office. Special Access Service, as described in Section 5.2, may be ordered separately by an entity other than the Customer which orders the FGC Switched Access Service. Existing FGC Access will be converted to Feature Group D when is becomes available in an end office, or as indicated in Section 4.1.1(E) on the FGC to FGD Conversion schedule.

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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.1 Feature Group Arrangements (Cont'd)(D) Feature Group D (FGD)

FGD Access provides trunk side access to Telephone Company end office switches with an associated uniform 101XXXX access code for the Customer's use in originating and terminating communications. WATS Access Service is a type of Special Access Service that is provided for use with Feature Group D Switched Access Service. Special Access Service used in connection with Switched Access Service connects a Customer designated premises with a WATS Serving Office. Special Access Service, as described in Section 5 following, may be ordered separately by an entity other than the Customer which orders the FGD Switched Access Service. FGD is also available with End User presubscription, as set forth in Section 4.2.4(A)(6) and Section 8. Presubscribing End Users do not need to use the 101XXXX access code to access the Customer. The provision of FGD Access is subject to local availability.

Special Access Service used in connection with Feature Groups A and B is available in nonequal access offices via FGD as follows:

- (1) When the end user's serving wire center is not a WATS serving office (WSO) channel mileage charges will apply between the end user's serving wire center and the nearest WSO.
- (2) When a Customer, other than AT&T, orders an originating only or a combined originating and terminating (two-way) Special Access Line (SAL) to be used in connection with Switched Access Service and the end user's serving wire center is a WSO which is not equipped with equal access, the Telephone Company will provide the Special Access Service to the nearest equal access WSO and the channel mileage charges for such service will be waived.
- (3) When a Customer other than AT&T, orders an originating only or a combined originating or terminating (two-way) SAL, to be used in connection with Switched Access Service and the end user's serving wire center is not a WSO and the nearest WSO is not equipped with equal access, channel mileage charges for a SAL to the nearest WSO will apply as indicated in (1) above, but the Telephone Company will provide an additional SAL to the nearest WSO equipped with equal access and the channel mileage charge for the additional SAL will be waived.

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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.1 Feature Group Arrangements (Cont'd)(E) SCHEDULE OF CONVERSION OF FGC ACCESS TO FGD IN  
FRONTIER EQUAL ACCESS END OFFICES

<u>State</u>	<u>Date of FGC to FGD Conversion</u>
Iowa*	November 1990
Minnesota*	October 1990

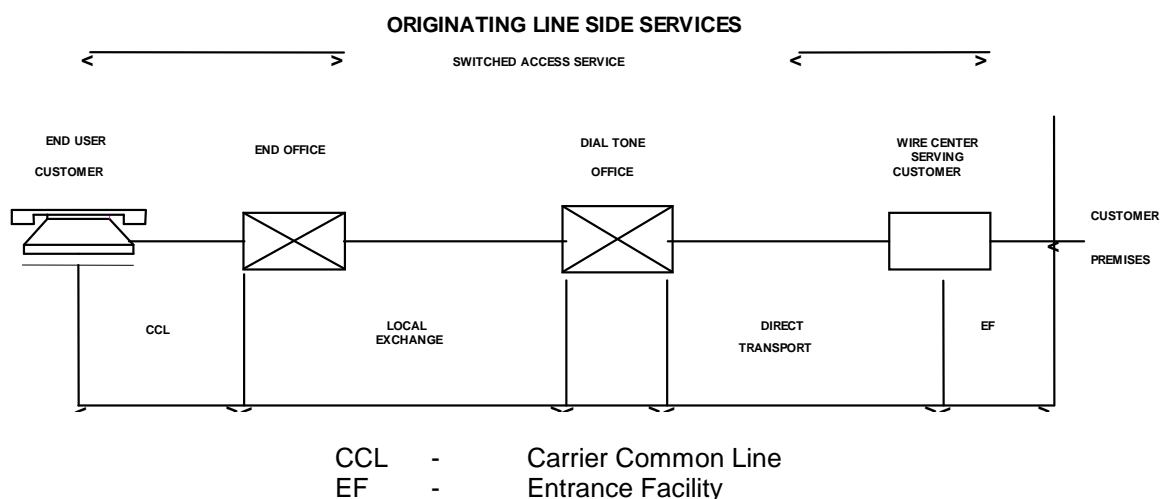
\*FGD at equal access conversion

## ACCESS SERVICE

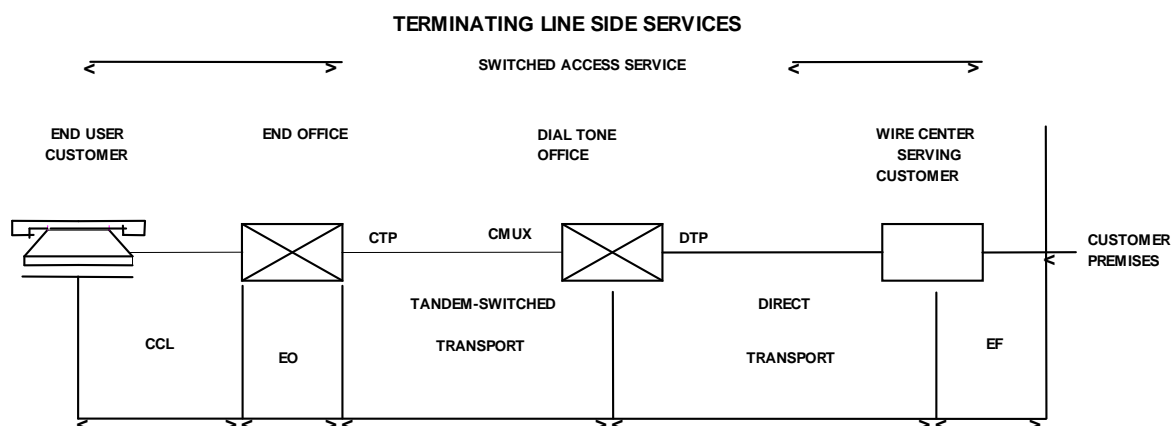
4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements

The following diagrams depict 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. Diagrams depict the entire service arrangement although the Telephone Company does not itself provide access tandem services.

The following two diagrams represent the components of line side service provided in conjunction with Feature Groups A (FGA) Switched Access service. The first diagram displays the originating FGA service and the second diagram shows terminating FGA service.



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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)

CCL - Carrier Common Line  
 EO - End Office  
 EF - Entrance Facility  
 CTP - Common Trunk Port  
 DTP - Dedicated Trunk Port  
 CMUX - Common Multiplexing

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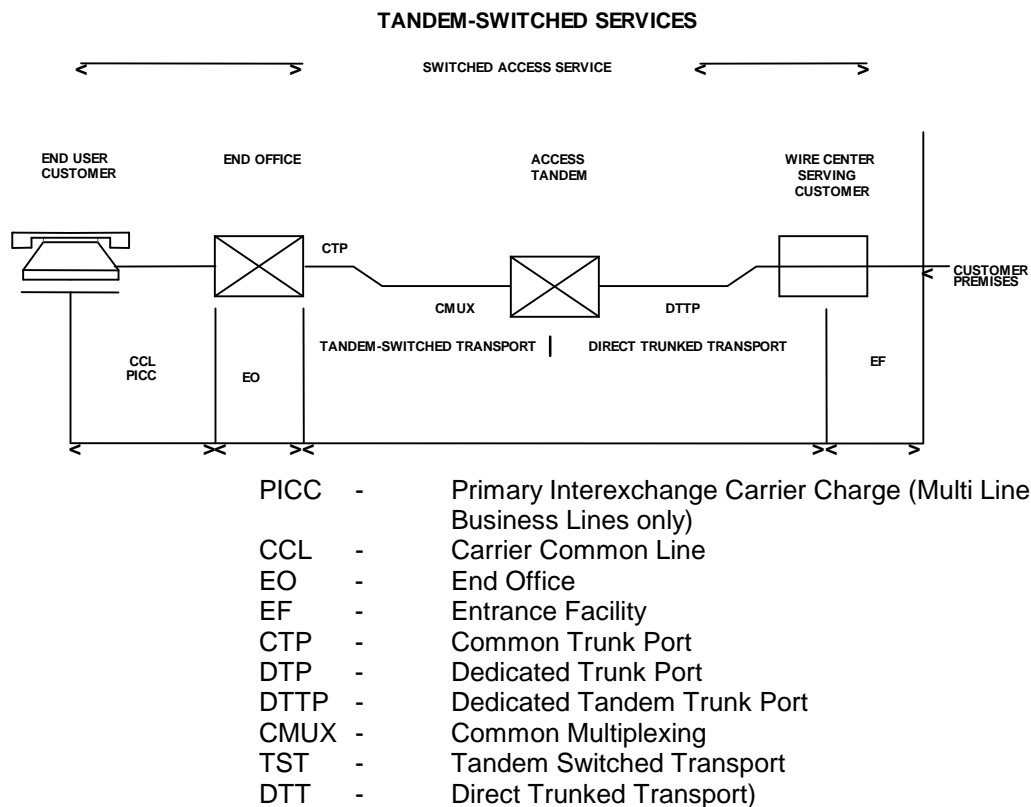
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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)

The following six diagrams display different trunk side service configurations available for the provisioning of Feature Groups B (FGB), FGC and FGD Switched Access services:

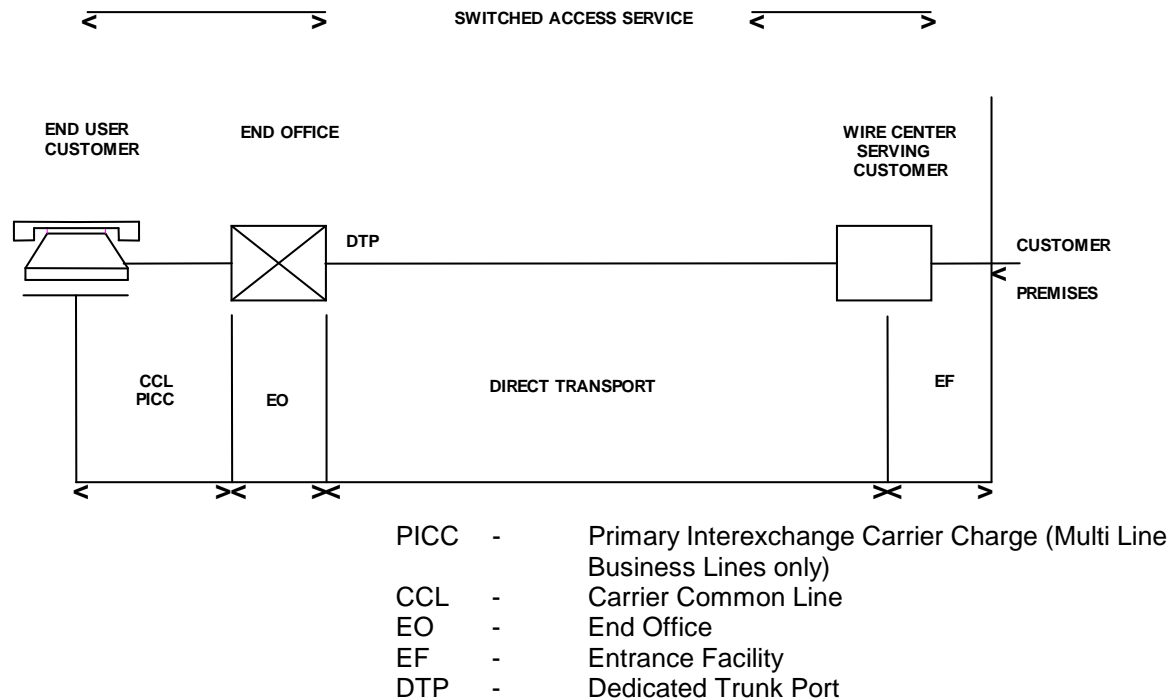
- Tandem-Switched Services - Tandem-Switched Transport from serving wire center to end office,
- Direct Transport Services - Direct Transport from serving wire center to end office
- Direct Transport and Tandem-Switched Services - Direct Transport from serving wire center to access tandem and Tandem-Switched Transport from access tandem to end office,
- Hubbed Direct Transport Service,
- Direct Transport Host-Remote Services - Direct transport from serving wire center to Host office and Host-Remote Transport from the Host Office to remote Office.
- Tandem-Switched Host-Remote Services - Tandem-Switched Transport from serving wire center to Host office and Host-Remote Transport between the Host office and the remote office.

## ACCESS SERVICE

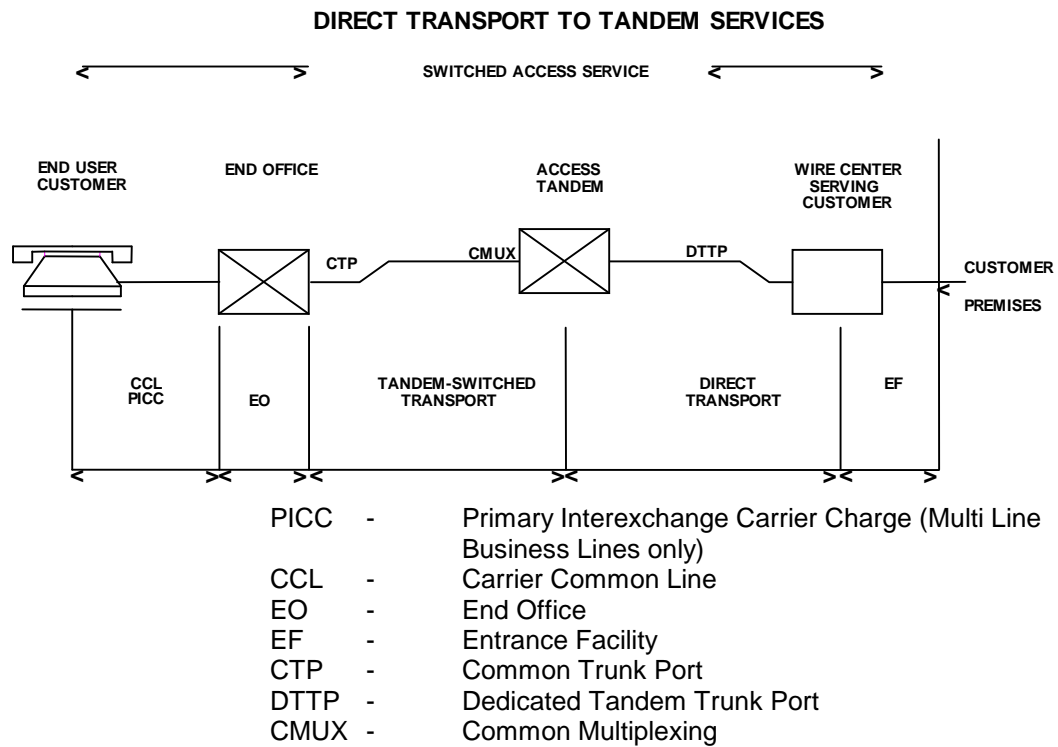
4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)



## ACCESS SERVICE

4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)**DIRECT TRANSPORT SERVICES**

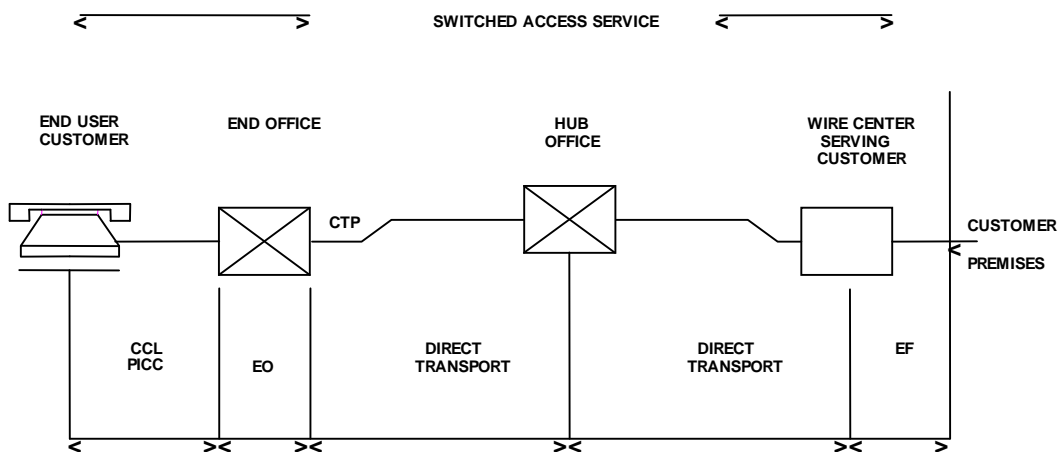
## ACCESS SERVICE

4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)

## ACCESS SERVICE

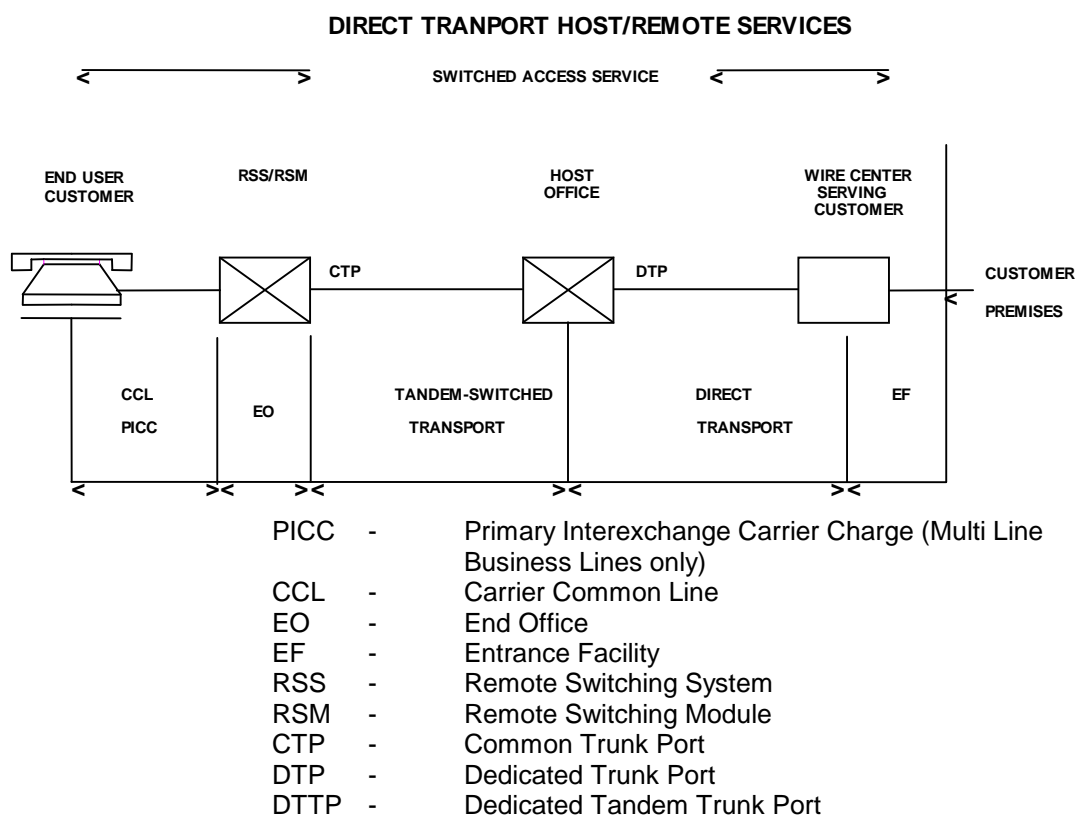
4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)

## HUBBED TRANSPORT SERVICES



PICC	-	Primary Interexchange Carrier Charge (Multi Line Business Lines only)
CCL	-	Carrier Common Line
EO	-	End Office
EF	-	Entrance Facility
CTP	-	Common Trunk Port

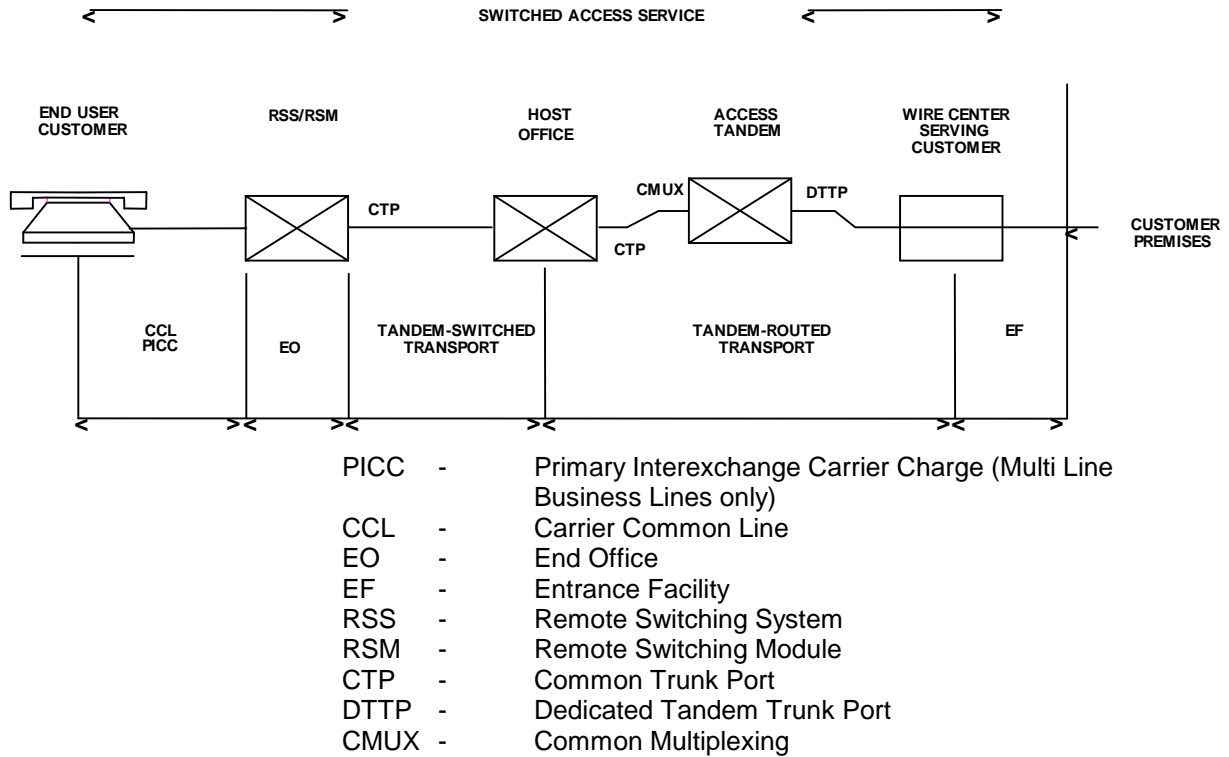
## ACCESS SERVICE

4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)

## ACCESS SERVICE

4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)

## TANDEM-SWITCHED HOST/REMOTE SERVICES



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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)(A) Switched Transport

The Switched Transport rate category provides the transmission facilities between the Customer designated premises and the end office switch(es) where the Customer's traffic is switched to originate or terminate its communications. A description of mileage measurement is specified in Section 4.6.12 and this Section 4.1.2(A).

The customer must specify when ordering (1) whether the service is directly routed to an end office switch or through an access tandem, (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. Beginning July 1, 1998, all Switched Transport that is routed through an access tandem must include Direct Transport between the serving wire center and the access tandem.

Switched Transport is a two-way voice frequency transmission path composed of facilities determined by the Telephone Company. The two-way voice frequency 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) to be used in the provision of the Direct Trunked Transport or Entrance Facility.

The design, selection of facilities and traffic routing of Switched Access Service is governed by Section 4.3.2. Switched Transport is provided at the rates and charges set forth in Section 15. The application of Switched Transport rates with respect to individual Feature Groups is as set forth in Section 4.6.11.

The Switched Transport rate category is made up of four major categories of service: Entrance Facility, Direct Trunk Transport, Tandem Switched Transport, and Multiplexing.

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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)(A) Switched Transport (Cont'd)(1) Entrance Facility

Entrance Facility recovers a portion of 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 Entrance Facility is a standard channel interface arrangement which defines the technical characteristics associated with the type of signaling capability, if any.

Three types of Entrance Facility are available: (1) Voice Grade 2 or 4 wire (an analog channel with an approximate bandwidth of 300 to 3000 hz) (2) High Capacity DS1 (an isochronous serial digital channel with a rate of 1.544 Mbps), and (3) High Capacity DS3 (an isochronous serial digital channel with a rate of 44.736 Mbps).

One charge applies for each Entrance Facility that is terminated at a customer designated premises. This charge will apply even if the customer designated premises and the serving wire center are collocated in a Telephone Company building.

At customer request, their Local Transport may be connected to the Entrance Facility of another customer, providing the other customer requests 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 the communications path between the serving wire center and the end office on circuits dedicated to the use of a single customer. Beginning July 1, 1998, all switched Transport that is routed through an access tandem must include, as Direct Trunked Transport, the dedicated facility between the serving wire center and the access tandem.

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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)(A) Switched Transport (Cont'd)(2) Direct Trunked Transport (Cont'd)

Direct Trunk Transport to an end office requires End Office Trunk Port as described in 4.1.2(B)(3) and may require multiplexing as described in 4.1.2(A)(4).

Direct Trunked Transport is available at all end offices except those 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, and (3) for originating 800 series calls from non-Service Switching Point(SSP) equipped end offices that can not accommodate direct trunking of originating 800 series calls.

Three types of Direct Trunked Transport are available: (1) Voice Grade (an analog channel with an approximate bandwidth of 300 to 3000 Hz), (2) High Capacity DS1 (an isochronous serial digital channel with a rate of 1.544 Mbps), and (3) High Capacity DS3 (an isochronous serial digital channel with a rate of 44.736 Mbps). The minimum period for which a High Capacity DS3 Direct Trunked Transport is provided is twelve months.

High Capacity DS3 Direct Trunked Transport can not be terminated at end offices that are not identified as hub offices that provide DS3 to DS1 multiplexing. Additionally, DS1 Direct Trunked Transport can not 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 are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.



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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)(A) Switched Transport (Cont'd)(2) Direct Trunked Transport (Cont'd)

Direct Trunked Transport rates consist of a Direct Trunked Facility rate 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, and serving wire center).

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

Direct Trunked Transport is not available between a host and remote.

(3) Tandem Switched Transport

The Tandem Switched Transport rate elements recover a portion of the costs associated with the communications path between the serving wire center and the end office on circuits that are switched at a tandem switch. Tandem Switched Transport consists of circuits dedicated to the use of a single Customer from the serving wire center to the tandem and circuits used on common by multiple Customers from the tandem to the end office.

Beginning July 1, 1998, the dedicated transport provided between the serving wire center and the tandem must be ordered as Direct Trunked Transport as described in (2), preceding.

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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)(A) Switched Transport (Cont'd)(3) Tandem Switched Transport (Cont'd)

Tandem Switched Transport consists of Tandem Switching , Tandem Switched Facility, Tandem Switched Termination and End Office Common Trunk Port rate elements.

The Tandem Switching rate recovers a portion of the costs of switching traffic through an access tandem. The Telephone Company does not provide Tandem Switching in Minnesota or Iowa.

The Tandem Switched Facility rate recovers a portion of the costs of the transmission facilities, including intermediate transmission circuit equipment, between end points of the interoffice circuits. The Tandem Switched Facility rate specified in Section 15 following is applied on a per access minute per mile basis for all originating and terminating minutes of use routed over this facility.

Tandem switched transport rates apply between hosts and remotes, regardless of the type of Switched Transport service the customer uses to connect to the host office.

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 15 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, and serving wire center).

Tandem Switched Transport to an end office requires End Office Common Trunk Port, as described in 4.1.2(B)(4).

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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)(A) Switched Transport (Cont'd)(4) Multiplexing

DS3 to DS1 Multiplexing charges apply when a High Capacity DS3 Entrance Facility of High Capacity DS3 Direct Trunked Facility 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) End Office

The End Office rate category provides the local end office switching and line 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 Directory Assistance Information Surcharge.

For the usage sensitive elements, i.e., Local Switching, when Feature Group Services terminate in Telephone Company end offices that are not equipped for full-time measurement capabilities, a studied average minutes of use (MOU) at a rate per MOU will be billed. In the event usage measurements are missing from full-time measurement data, a prorated amount will be calculated for the missing data. This amount will be included with the actual measurement for billing.

End office functions may, at the option of the Customer, be provided for both interstate and intrastate communications.

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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)(B) End Office (Cont'd)(1) Local Switching

The Local Switching rate element provides for the use of end office switching equipment, the terminations for the End User lines terminating in the local end office, and intercept service to the Customer. This rate element includes common line terminations and Special Access Line terminations at the WATS Serving Office. The Special Access Line 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 Line. Line side terminations are available with either dial pulse or dual tone multifrequency address signaling. The intercept service included in this rate element causes a call to an improper number to be redirected to an operator or a recorded message explaining why the call as dialed was not completed and if possible provides the correct number.

The Local Switching rate element is divided into two distinct categories, i.e., LS1 and LS2. The first category, LS1, provides local dial switching for Feature Groups A and B except for: (1) Feature Group B when utilized to provide MTS/WATS service and (2) Feature Groups A and B used in connection with Special Access in the terminating direction at an equal access WATS Serving Office. The second category, LS2, provides local dial switching for (1) Feature Groups C and D, (2) for FGB when utilized to provide MTS/WATS service and (3) for Feature Groups A and B used in connection with Special Access in the terminating direction at an equal access WATS Serving Office.

Where end offices are appropriately equipped, international dialing may be provided as a capability associated with LS2. 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 and FGD equipped end office.

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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)(B) End Office (Cont'd)(1) Local Switching (Cont'd)

Rates for LS1 and LS2 are set forth in Section 15 following. The application of these rates with respect to individual Feature Groups is as set forth in Section 4.6.11. The number of transport terminations provided will be determined in accordance with Sections 4.3.5 and 4.3.6.

Included as part of the Local Switching rate element are various optional features which the Customer can order to meet its specific communications requirements.

(2) Directory Assistance Information Surcharge

Directory Assistance Information Surcharge rates are assessed to a Customer based on the total number of access minutes. Directory Assistance Information Surcharge rates are set forth in Section 15 following.

The Directory Assistance Information Surcharge applies to each Switched Access minute of use and shall be assessed upon all Customers that use local exchange switching facilities for the provision of interstate or foreign telecommunications.

(3) End Office Dedicated Trunk Port

The End Office Dedicated Trunk Port rate is assessed on all direct-routed facilities between the serving wire center and the end office terminating in a end office trunk port. The rate is assessed for all Feature Group Services. The rate is billed without application of a meet point billing percentage. The rate is set forth in Section 15 following.

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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)(B) End Office (Cont'd)(4) End Office Common Trunk Port

The End Office Common Trunk Port rate is assessed to all originating and terminating minutes of use between the access tandem and the end office. This rate will be assessed on FGA minutes of use terminating outside of a dial tone office, and all minutes of use originating or terminating at a remote. The Common Trunk Port rate, set forth in Section 15 following, is assessed whenever the Tandem Switched Transport Termination rate applies.

(C) 800 Data Base Access Service

An 800 Carrier Identification Charge is assessed per call to the service provider the call is delivered to in accordance with SMS/800 information residing in the Telephone Company's SCP.

A POTS Translation Charge is assessed per call, in addition to the 800 Carrier Identification Charge, when the POTS number is delivered to the service provider instead of the 800 series number in accordance with SMS/800 information residing in the Telephone Company's SCP. The POTS Translation feature is described in 4.2.7 (B). A Call Handling and Destination Feature Charge is assessed to the service provider the call is intended for on a per-query basis for each 800 series query to the Telephone Company's SCP that utilizes a Call Handling and Destination feature as described in 4.2.7 (B). The query rate is assessed for all completed queries whether or not the actual 800 series call is delivered to the service provider. This charge is in Identification Charge and the POTS Translation Charge if applicable. The 800 series includes the following service access codes: 800, 888, 877, 866, 855, 844, 833 and 822. The 800 DB Access Service charges are in addition to the rates and charges for the rate categories described in 4.1.2 (A), (B), and 14.8 which are applicable to all Switched Access Service. The 800 Data Base Access Service rates are set forth in Section 15 following.

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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.2 Rate Elements (Cont'd)(D) Billing Name and Address (BNA)

The Telephone Company will keep a count of BNA requests. The Telephone Company will bill the rates set forth in Section 15 following in accordance with these counts whether or not the Telephone Company was able to provide BNA information for all requests.

A BNA tape setup charge will be assessed to the telecommunications provider or its billing agent for BNA requests on tape format.

A per query charge will apply for each message on the tape processed to supply BNA information.

(E) Abbreviated Dialing Arrangement

Abbreviated Dialing Arrangement (ADA) is an optional feature of FGB switched access service, as described in 4.2.5(I), following. Nonrecurring charges for establishing ADA translations in the initial end office requested by a Customer and each subsequent end office are set forth in Section 15, following.

4.1.3 Circuit Design Layout

The Telephone Company will provide the Customer at its request a Design Layout Report (DLR) setting forth the makeup of the facilities and services provided to the first point of switching. The DLR will be provided to the Customer at no additional charge. The information in the DLR will be updated whenever facilities provided to the Customer are materially changed.

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4. Switched Access Service (Cont'd)4.1 General (Cont'd)4.1.4 Acceptance Testing

The Telephone Company will, at the Customer's request, and at no additional charge, cooperatively test, at the time of installation, the following parameters: loss, 3-tone slope, d.c. continuity, c-notched noise and operational signaling. When the Access Connection 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 Switched Transport), balance parameters (equal level echo path loss) will also be tested, if requested by the Customer.

When 900 NXXs are opened (new translations installed) by the Telephone Company, the testing will be performed by the Telephone Company. For each new NXX installed from an equal access end office, the Telephone Company shall place one test call to the new 900-NXX-XXXX test number. This number provides an announcement identifying the IC, thereby verifying Telephone Company routing. From a Non-Conforming End Office for offices subtending an Access Tandem that performs 900 NXX six digit translations, one Non-Conforming End Office will have a call through test to the new 900-NXX-XXXX test number by the Telephone Company.

4.1.5 Special Facilities Routing

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

4.1.6 Ordering Options and Conditions

A Facilities Access Order is the vehicle by which the Customer orders, changes and discontinues Switched Access Service. The conditions under which the Facilities Access Order can be utilized are set forth in Section 9.



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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups

Switched Access Service is provided in four different Feature Group arrangements. The provision of each Feature Group requires Switched Transport facilities and the appropriate End Office functions. In addition, Special Access Lines may, at the option of the Customer, be provided for use with Feature Groups A, B, C, or D.

Two specific standard transmission performances are provided for the Feature Groups (i.e., Types B and C). The specific performance required is 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 performances are set forth in Section 4.5.1.

In addition, Data Transmission Parameters are available, on an optional basis, with the ten Interface Groups. The Data Transmission Parameters are set forth in Section 4.5.2.

Feature Groups are arranged for either originating, terminating or two-way calling. The Telephone Company will determine the directionality of calling provided, unless the Customer specifies in its order the type of directionality to be provided. Originating calling permits the delivery of calls from telephone exchange locations to the Customer designated premises. Terminating calling permits the delivery of calls from the Customer designated premises to telephone exchange locations. Two-way calling permits the delivery of calls in both directions, but not simultaneously. Design, selection of facilities and traffic routing are governed by Section 4.3.2.

In addition to Customer specification of Feature Group directionality, there are various optional features available with the Feature Groups.

Following are detailed descriptions of each of the available Feature Groups. Each Feature Group is described in terms of its specific physical characteristics and calling patterns, the transmission performances with which it is provided, optional features available and the standard testing capabilities.

The optional features are offered at Telephone Company end office switches where facilities are available.

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.1 Feature Group A (FGA)(A) Description

- (1) FGA is provided in connection with all Telephone Company end offices. It is provided on a single or multiple line group basis. FGA is arranged for use by the Customer in the provision of its FX/ONAL service, MTS/WATS-type service, a Customer provided interstate capability, or for connection to an interexchange carrier's interstate service.
- (2) FGA provides a line side termination at the first point of switching. The line side termination will be provided, at the option of the Customer, with either ground start supervisory signaling or loop start supervisory signaling.
- (3) The Telephone Company shall select the first point of switching 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 request.
- (4) 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.
- (5) FGA switching, when used in terminating direction, is arranged with dial tone start-dial signaling and dial pulse address signaling. When used in the terminating direction FGA switching may, at the option of the Customer, be arranged for 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 must be arranged for the same type of address signaling.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.1 Feature Group A (FGA) (Cont'd)(A) Description (Cont'd)

- (6) 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 Access Connections and Switched Transport provided.
- (7) FGA switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, local operator service, Information (411 and 555-1212), emergency reporting service, exchange telephone repair, time or weather announcement services of the Telephone Company, community information services of the Telephone Company, community information services of an information service provider, and other Customers' services (by dialing the appropriate digits). Customer will be billed for (a) an operator surcharge for local operator assistance calls, (b) charges for calls to certain community information services, e.g., DIAL-IT Network Services and (c) Customer call charges in accordance with the rates in force when the Telephone Company performs the billing for such Customer calls.
- (8) When a FGA switching arrangement for an individual Customer (a single line or entire hunt group) is discontinued at an end office, a regular number 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.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.1 Feature Group A (FGA) (Cont'd)(A) Description (Cont'd)

- (9) 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.

(B) Optional Features - (Subject to Local Availability)

- (1) Hunt Group Arrangement
- (2) Nonhunting Number for Use with Hunt Group Arrangement
- (3) Call Restriction
- (4) Service Code Denial
- (5) Uniform Call Distribution Arrangement
- (6) Nonhunting Number for Use with Uniform Call Distribution Arrangement
- (7) Customer Specification of Feature Group Directionality

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.1 Feature Group A (FGA) (Cont'd)(C) Transmission Performance

FGA is provided with either Type B or Type C Transmission Performance. The parameters associated with these performance criteria are guaranteed to the first point of switching. Type C Transmission Performance is provided with Interface Group 1 and Type is provided with Interface Groups 2 through 10.

In addition, Data Transmission Parameters may, at the option of the Customer, be provided with FGA to the first point of switching. Type DB Data Transmission Parameters are provided with FGA. Standard Transmission Performance is described in Section 4.5.1.

(D) Testing Capabilities

FGA is provided, in the terminating direction, with access to balance (100 type) test line and milliwatt (102 type) test line. Additional testing available as set forth in Section 8.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.2 Feature Group B (FGB)(A) Description

- (1) FGB is provided at appropriately equipped Telephone Company switches 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. The provision of FGB Access is subject to local availability.
- (2) 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 in Section 4.2.5, any other address signaling in the originating direction, if required by the Customer, must be provided by the End User using inband tone signaling techniques. Such inband tone address signal will not be regenerated by the Telephone Company and will be subject to the ordinary transmission capabilities of the Access Connections and Switched Transport provided.
- (3) The access code for FGB switching is a uniform access code. The form of the uniform access code is 1-950-10XX, 1-950-00XX, 950-10XX or 950-00XX for Customers. One uniform access code will be assigned to the Customer for its domestic communications and one uniform access code will be assigned to the Customer for its international communications, if required. These uniform access codes will be the assigned access numbers of all FGB Switched Access Service provided to the Customer by the Telephone Company.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.2 Feature Group B (FGB) (Cont'd)(A) Description (Cont'd)

- (4) FGB switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, time or weather announcement services of the Telephone Company, community information services of an information service provided 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 be billed charges for calls to certain community information services, e.g., DIAL-IT Network Service. Calls in the terminating direction will not be provided to 950-10XX or 950-00XX access codes, local operator assistance, information (411 or 555-1212) or service codes (611 or 911) where available. Calls will be completed to Information (NPA-555-1212 or 555-1212) when FGB switching is combined with Information service.
- (5) 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 provided. 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.
- (6) When all FGB switching arrangements are discontinued at an end office, a regular number 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.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.2 Feature Group B (FGB) (Cont'd)(B) Optional Features - (Subject to Local Availability)

- (1) Automatic Number Identification (ANI)
- (2) Rotary Dial Station Signaling Trunk
- (3) Up to 7 Digit Outpulsing of Access Digits to Customer
- (4) Alternate Traffic Routing
- (5) Customer Specification of Feature Group Directionality
- (6) Provision of Other Than Telephone Company Selected Traffic Routing
- (7) Abbreviated Dialing Arrangement (ADA)

(C) Transmission Performance

FGB is provided with either Type B or Type C Transmission Performance. The parameters associated with these performance criteria are guaranteed to the end office when routed directly or to the first point of switching when routed via an access tandem. Type C Transmission Performance is provided with Interface Group 1 and Type B is provided with Interface Groups 2 through 10. In addition, Data Transmission Parameters may, at the option of the Customer, be provided with FGB to the first point of switching. The DB Data Transmission Parameters are provided with FGB. Standard Transmission Performance is described in Section 4.5.1.

(D) Testing Capabilities

Where equipment is available, FGB is provided in the terminating direction with access to balance (100 type) test line, transmission measuring and noise checking (104 type) test line, milliwatt (102 type) test line, nonsynchronous or synchronous test line, automatic transmission measuring (105 type) test line, loop around test line, short circuit test line and open circuit test line. Additional testing available as set forth in Section 8.



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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.3 Feature Group C (FGC)(A) Description

- (1) FGC is provided at all Telephone Company end office switches on a direct truck basis or via Telephone Company designated access tandem switches. FGC switching is provided to AT&T at an end office switch. Originating FGC Access is available to all Customers when used to provide the Interim 800 Translation optional feature or 900 Access Service optional feature.
- (2) 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.
- (3) 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, reverive pulse or panel call indicator signaling, whichever is available. Up to 12 digits of the called party number dialed by the End User using dual tone multifrequency or dial pulse address signals will be provided by Telephone Company equipment to the Customer designated premises where the Switched Access Service terminates. Called party number signals will be subject to the ordinary transmission capabilities of the Access Connections and Switched Transport provided.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.3 Feature Group C (FGC) (Cont'd)(A) Description (Cont'd)

- (4) The telephone number dialed by the End User may be a 7 or 10 digit number for calls in the North American Numbering Plan (NANP). For international calls outside the NANP, a 5 to 12 digit number may be dialed. The form of the numbers dialed may be NXX-XXXX, 0 or 1+NXX-XXXX, NPA+NXX-XXXX, 0 or 1+NPA+NXX-XXXX, and when the end office equipped for International Direct Distance Dialing (IDDD), 01+CC+NN or 011+CC+NN.
- (5) FGC switching when used in the terminating direction, may be used to access valid NXXs in the LATA, time or weather announcement services of Telephone Company, community information services of an information provider, and other Customers' 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. The Customer will be billed charges for calls to certain community information services, e.g., DIAL-IT Network Services. Calls in the terminating direction will not be provided to 950-10XX, 950-00XX or 101XXXX access codes, local operator assistance, Information (411 or 555-1212) or service codes (611 or 911) where available. Calls will be completed to Information (NPA-555-1212 or 555-1212) when FGC switching is combined with Information service.
- (6) The Telephone Company will establish a trunk group or groups at end office switches or access tandem switches where FGC switching is provided. When required for 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.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.3 Feature Group C (FGC) (Cont'd)(B) Optional Features - (Subject to local Availability)

- (1) Automatic Number Identification (ANI)
- (2) Service Class Routing
- (3) Dial Pulse Address Signaling
- (4) Revertive Pulse Address Signaling
- (5) Panel Call Indicator Address Signaling
- (6) Alternate Traffic Routing
- (7) Trunk Access Limitation
- (8) Operator Trunks-i.e., Coin, Non-Coin and Combined Coin and Non-Coin
- (9) Customer Specification of Feature Group Directionality
- (10) Provision of Other Than Telephone Company Selected Traffic Routing
- (11) End Office End User Line Service Screening for use with Special Access Service
- (12) Hunt Group Arrangement for use with Special Access Service
- (13) Uniform Call Distribution Arrangement for use with Special Access Service
- (14) Nonhunting Number for use with Hunt Group Arrangement or Uniform Call Distribution Arrangement for use with Special Access Service
- (15) Band Advance Arrangement for use with Special Access Service
- (16) 900 Access Service

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.3 Feature Group C (FGC) (Cont'd)(C) Transmission Performance

FGC is provided with either Type B or Type C Transmission Performance as follows:

- When routed directly to the end office either Type B or Type C is provided.
- When routed to an access tandem only Type B is provided.
- Type B or Type C is provided on the transmission path from the access tandem to the end office.

Type C Transmission Performance is provided with Interface Group 1 when routed directly to an end office. Type B is provided with Interface Groups 2 through 10, whether routed directly to an end office or to an access tandem.

In addition, Data Transmission Parameters may, at the option of the Customer, be provided with FGC as follows:

- Type DB Data Transmission Parameters are provided for the transmission path when directly routed to the end office and between the Customer designated premises and the access tandem and between the access tandem and the end office when routed via an access tandem.

(D) Testing Capabilities

Where equipment is available, FGC is provided in the terminating direction with access to balance (100 type) test line, transmission measuring and noise checking (104 type) test line, milliwatt (102 type) test line, nonsynchronous or synchronous test line, automatic transmission measuring (105 type) test line, loop around test line, short circuit test line, and open circuit test line. Additional testing available as set forth in Section 8.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.4 Feature Group D (FGD)(A) Description

- (1) FGD is provided at Telephone Company designated electronic end office switches whether routed directly or via Telephone Company designated electronic access tandem switches. The provision of FGD Access is subject to local availability. Originating FGD Access is available to all Customers when used to provide 900 Access Service optional feature.
- (2) 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 answer and disconnect supervisory signaling and wink start start-pulsing signals.
- (3) FGD is provided with multifrequency address 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 Access Connections and Switched Transport provided.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.4 Feature Group D (FGD) (Cont'd)(A) Description (Cont'd)

- (4) FGD switching, when used in the terminating direction, may be used to access valid NXXs in the LATA, time or weather announcement services of the Telephone Company, and other Customer's 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 serviced by the 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., 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 billing for that Customer. Calls in the terminating direction will not be provided to 950-10XX, 950-00XX or 101XXXX access codes, local operator assistance (0- and 0+), Information (411 or 555-1212), or other service codes (611 and 911 where available). Calls will be completed to Information service (NPA-555-1212 or 555-1212) when FGD switching is combined with Information service. FGD may not be switched, in the terminating direction, to Switched Access Service Feature Groups B, C or D.
- (5) 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.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.4 Feature Group D (FGD) (Cont'd)(A) Description (Cont'd)

- (6) The access code for FGD switching is a uniform access code of the form 101XXXX. No 950-10XX, 950-00XX or 10XXX 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 described in Section 8. The telephone number dialed by the End User shall be 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.

Where no 950-10XX or 950-00XX access code is required, the form of the called party numbers dialed by the End User is 0 or 1 + 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 10XXX access code is used, FGD switching also provides for dialing the digit 0 for access to the Customer's operator. A single 10XXX access code will be the assigned number of all FGD Access provided to the Customer by the Telephone Company.

- (7) FGD also may be used to recognize originating calls where the Customer permits its End Users to use a personal identification number (PIN) when dialing 101XXXX to access the Customer's terminal. Upon receipt of a tone the End User will input his PIN and the called party number. Depending on the Customer's capability, he may or may not receive an acknowledgment tone after dialing the PIN. This dialing method is available only to End Users with DTMF address signaling. There is no additional charge for this dialing capability.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.4 Feature Group D (FGD) (Cont'd)(B) Optional Features - (Subject to Local Availability)

- (1) Automatic Number Identification (ANI) to Customer Switching for recording when the Customer performs the billing
- (2) Automatic Number Identification (ANI) to the Telephone Company for recording when the Telephone Company performs the billing
- (3) Service Class Routing
- (4) Alternate Traffic Routing
- (5) Trunk Access Limitation
- (6) International Carrier Option (available only at Telephone end office or access tandem switches equipped for International Direct Distance Dialing)
- (7) Specification of Feature Group Directionality
- (8) End Office Customer Line Service Screening (available only at electronic end offices and other Telephone Company end offices where equipment is available)
- (9) Hunt Group Arrangement for access lines used in conjunction with Special Access Service
- (10) Uniform Call Distribution Arrangement for access lines used in conjunction with Special Access Service
- (11) Nonhunting Number for use with Hunt Group Arrangement or Uniform Call Distribution Arrangement for use with Special Access Service
- (12) Band Advance Arrangement for use with Special Access Service
- (13) Interim 800 Translation
- (14) 900 Access Service



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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.4 Feature Group D (FGD) (Cont'd)(C) Transmission Performance

FGD is provided with either Type A or Type B or Type C Transmission Performance as follows:

- When routed directly to the end office either Type B or Type C is provided.
- When routed to an access tandem only Type A is provided.
- Type A is provided on the transmission path from the access tandem to the end office.

Type C Transmission Performance is provided with Interface Group 1. Type A and Type B Transmission Performance is provided with Interface Groups 2 through 10.

In addition, Data Transmission Parameters may, at the option of the Customer, be provided with FGD as follows:

- Type DA Data Transmission Parameters are provided for the transmission path between the Customer's premises and the access tandem and between the access tandem and the end office when routed via an access tandem.
- Type DB Data Transmission Parameters are provided for the transmission path when directly routed to the end office.

(D) Testing Capabilities

Where equipment is available, FGD is provided in the terminating direction with access to balance (100 type) test line, transmission measuring and noise checking (104 type) test line, milliwatt (102 type) test line, nonsynchronous or synchronous test line, automatic transmission measuring (105 type) test line, loop around test line, short circuit test line, and open circuit test line. Additional testing available as set forth in Section 8.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.5 Optional Features

The various optional features that are available with the Feature Groups and the Feature Groups with which they are available are as follows:

(A) Call Denial on Line or Hunt Group Outside the Access Area

This option allows for the screening of terminating calls and for completion only of calls within the Access Area. All other calls are routed to an appropriate access announcement. Specifically, this option would block terminating calls to the following:

- Outside the Access Area, dialed as either 7D, 10D, 1+7D, 1+10D, 950-XXXX, 101XXXX+7D, or 101XXXX+10D.
- Service Access Codes (700, 800 series and 900).
- International, dialed as either 011 or 01.
- Operator, dialed as either 0+, 0- or 00.

This arrangement is available with FGA in those offices where such capabilities exist. Blocking of the 800 Series Service Access Code may not be available in all end offices where this arrangement is otherwise available.

(B) Call Restriction

This option allows for the screening of terminating calls and for the completion only of calls to a Telephone Company specified set of service codes and NXXs within the Telephone Company local exchange calling area of the dial tone office in which the arrangement is provided. All other "toll" calls are routed to a reorder tone or recorded announcement. It is available with Feature Group A only in those offices where such capabilities exist.

(C) Service Code Denial on Line or Hunt Group

This option allows for the screening of terminating calls and for disallowing completion of calls to 0- and N11. It is available with Feature Group A only in those offices where such capabilities exist.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.5 Optional Features (Cont'd)(D) 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.

(E) Nonhunting Number for Use with Hunt Group Arrangement

This option provides an arrangement for an individual line within a multiline hunt group that provides access to that line within the hunt group when it is idle or provides busy tone when it is busy, when the nonhunting number is dialed. It is available with Feature Group A only in those offices where such capabilities exist.

(F) 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. It is available with Feature Group A only in those offices where such capabilities exist.

(G) Nonhunting Number for Use with Uniform Call Distribution Arrangement

This option provides an arrangement for a uniform call distribution multiline hunt group that provides access to an individual line within the hunt group when it is idle or provides busy tone when it is busy, when the nonhunting number is dialed. It is available with Feature Group A only in those offices where such capabilities exist.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.5 Optional Features (Cont'd)(H) Automatic Number Identification (ANI)

This option provides the automatic transmission of a three, seven or ten digit number and information digits to the Customer designated premises for calls to identify the calling station. The ANI feature, which is a software function, will be associated with all individual transmission paths in a trunk group when this feature is provided.

The three digit ANI NPA is available with 800 data base service.

The seven digit ANI telephone number is available with Feature Groups B and C. It will be transmitted on all calls except those identified as multi-party line or ANI failure.

The ten digit ANI telephone number is available only with FGD. The ten digit ANI telephone number consists of the Numbering 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 multi-party or ANI failure, in which case only the NPA will be transmitted (in addition to the information digit described below).

When 800 DB Service is ordered, the ten-digit ANI telephone number will be transmitted on all calls except those where ANI cannot be provided as stated above or from end offices not equipped to provide ANI. In these instances, only the three-digit NPA and the information digits described in the LATA Switching Systems Generic Requirements (LSSGR), Technical Reference PUB TR-TSY-000064, if applicable, will be transmitted.

With Feature C, ANI is provided from end offices at which Telephone Company recording for end user billing is not provided, or where it is not required, as with 800 series Service. It is not provided from end offices for which the Telephone Company needs to forward ANI to its recording equipment.

ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.5 Optional Features (Cont'd)(H) Automatic Number Identification (ANI) (Cont'd)

Customers who subscribe to ANI may also elect to obtain the following expanded ANI digits known as Flex ANI digits, at no additional charge:

<u>Description</u>	<u>ANI digits</u>
Public telephone without program control in station equipment	27
Public telephone-inmate	29
Public telephone with program control in station equipment	70

Flex ANI is available only with Feature Group D Service.

(I) Abbreviated Dialing Arrangement (ADA)

ADA enables end users to utilize a one or two digit access code to access customers who have ordered this option. ADA is only provided by direct routing to an end office switch. The forms of the access code for originating ADA switching are N or NX. Assignment of ADA access codes will be on a first come, first served basis and are subject to the availability of access code numbers. Calls in the terminating direction will not be completed with an ADA access code (N and NX). ADA is available only in conjunction with trunk-side access.

The abbreviations N and NX when used in the context of FGB ADA denotes the following; N signifies a number between 2 and 9, and X signifies a number between 0 and 9.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.5 Optional Features (Cont'd)(J) Revertive Pulse Address Signaling

This option provides for a dc pulsing arrangement that transmits intelligence in the following manner:

- (1) The equipment at the originating location presets itself to represent the number of pulses required and to count the pulses received from the terminating location.
- (2) The equipment at the terminating location transmits a series of pulses by the momentary grounding of its battery supply until the originating location breaks the dc path to indicate that the required number of pulses has been counted.

This option is available with Feature Group C.

(K) Dial Pulse Address Signaling

This option provides for the transmission of number information, e.g., called number, between the end office switching system and the Customer's designated premises (in either direction) by means of direct current pulses. It is available with Feature Groups C and D.

(L) Panel Call Indicator Address Signaling

This option provides a dc pulsing arrangement in which each digit is transmitted as a series of four marginal and polarized impulses. It is available with Feature Group C.

(M) 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, multi-party or hotel/motel), service prefix indicator (e.g., 0-, 0+, 01+ or 011+) or service access code (e.g., 600, 700, 800 series, or 900). It is provided in suitably equipped end office or access tandem switches and is available with Feature Groups C and D.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.5 Optional Features (Cont'd)(N) Alternate Traffic Routing

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) or to the same or 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 offices or access tandem switches and is available with Feature Groups B, C and D.

(O) Trunk Access Limitation

This option provides for the routing of originating 600, 700, 800 series, or 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 services 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.

(P) Dual Tone Multifrequency Address Signaling

This option allows reception of called party address signals from the Customer in the form of dual tone multifrequency (DTMF) signals. When Feature Group A arrangements are provided as part of a hunt group or uniform call distribution group, and the Customer requires DTMF address signaling, then all arrangements in the hunt group or uniform call distribution group will be so equipped. This option is provided in the form of a specific type of termination. It is available with Feature Group A.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.5 Optional Features (Cont'd)(Q) 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 specified type of transport termination. It is available with Feature Group B.

(R) Operator Trunk - Coin

This option provides for initial coin return control and routing of 0+, 0-, 1+, 01+ or 011+ prefixed originating coin calls requiring operator assistance on a direct trunk basis. Because operator assisted coin calling traffic is routed over a trunk group dedicated to operator assisted calls this feature is only provided in association with the service class routing option set forth in Section 4.2.5(M).

The operator assistance coin calling feature is also normally ordered in conjunction with the ANI optional feature.

This option is available with Feature Groups C and D and is provided in electromechanical end offices and other Telephone Company end offices where equipment is available. It is provided as a trunk type of termination.

(S) Operator Trunk - Non-Coin

This option provides for the routing of 0+, 0-, 1+, 01+ or 011+ prefixed originating non-coin calls requiring operator assistance on a direct trunk basis. Because operator assisted non-coin calling traffic is routed over a trunk group dedicated to operator assisted calls, this feature is only provided in association with the service class routing option set forth in Section 4.2.5(M).



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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.5 Optional Features (Cont'd)(S) Operator Trunk - Non-Coin (Cont'd)

The operator assistance non-coin calling feature is also normally ordered in conjunction with the ANI optional feature. When so equipped, the ANI 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 public stations, dormitory or inmate stations, or other screening arrangements agreed to between the Customer and the Telephone Company. This option is available with Feature Groups C and D and is provided in electromechanical end offices and other Telephone Company end offices where equipment is available. It is provided as a trunk type of termination.

(T) Operator Trunk - Combined Coin and Non-Coin

This optional provides for initial coin return control and routing of 0+, 0-, 1+, 01+, or 011+ prefixed originating operator assisted coin and non-coin calls requiring operator assistance on a direct trunk basis. Because operator assisted coin and non-coin calling traffic is routed over a trunk group dedicated to operator assisted calls, this feature is only provided in association with the service class routing option set forth in Section 4.2.5(M).

This option is normally ordered in conjunction with the ANI optional feature. 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 public stations, dormitory or inmate stations, or other screening arrangements agreed to between the Customer and the Telephone Company. This option is available with Feature Groups C and D and is provided in electromechanical end offices and other Telephone Company end offices where equipment is available. It is provided as a trunk type of termination.

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.5 Optional Features (Cont'd)(U) 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 of more 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 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.

(V) Band Advance Arrangement for Use with Special Access Service

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 Special Access Service group, when that group has exceeded its call capacity, to another Special Access Service group with a band designation equal to or greater than that of the overflowing Special Access Service group. This arrangement does not provide for call overflow from a group with a higher band designation to one with a lower one. This option is available with Feature Groups C and D.

(W) End Office End User Service Screening for Use with Special Access Service

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 arrangement with the Customer, e.g., WATS. This option is provided in all Telephone Company electronic end offices and where available, in electromechanical end offices in which Special Access Service is provided. It is available with Feature Groups C and D.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.5 Optional Features (Cont'd)(X) Hunt Group Arrangement for Use with Special Access Service

This option provides the ability to sequentially access one of two or more Special Access Lines (e.g., 800 Series Service access lines) 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 end offices in which Special Access Service is provided.

(Y) Uniform Call Distribution Arrangement for Use with Special Access Service

This option provides a type of multiline hunting arrangement which provides for an even distribution of terminating calls among the available Special Access Lines in the hunt group. Where available, this feature is only provided in Telephone Company electronic end offices in which Special Access Service is provided.

(Z) Nonhunting Number for Use with Hunt Group Arrangement or Uniform Call Distribution Arrangement for Use with Special Access Service

This option provides an arrangement for an individual Special Access Service within a multiline hunt or uniform call distribution group that provides access to that Special Access Service within the hunt or uniform call distribution when it is idle or provides busy tone when it is busy, when the nonhunting number is dialed. Where available, this feature is only provided in Telephone Company electronic end offices in which Special Access Service is provided.

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.5 Optional Features (Cont'd)(AA) Interstate Carrier Option

This option allows for Feature Group D end offices or access tandem switches to forward intrastate calls of one or more carriers to the Customer (i.e., the Telephone Company is able to route originating intrastate 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 off agency authorizing the Customer to order the option on behalf of the carrier. This option is only provided at Telephone Company end offices or access tandems equipped with Feature Group D.

(AB) Up to 7 Digit Outpulsing of Access Digits to the Customer

This option provides for the end office capability of providing up to 7 digits of the uniform access code (950-10XX or 950-00XX) 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 multi-frequency signaling, and transmission of the digits would precede the forwarding of ANI if that feature were provided. It is available with Feature Group B.

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.6 Optional Blocking and Screening Service

Central Office Blocking - Central office blocking and screening services are provided on an as available basis depending upon the capabilities of various switching machines. In addition, these services are generally only available in equal access exchanges. Accordingly, these services may not be provided in all exchanges.

(A) Originating Line Screening (OLS)

Provides call screening information to the operator for operator handled calls and blocks sent paid 1+ and 101XXXX+. This service is implemented by sending two information digits (generally known as II digits) with the Automatic Number Identification (ANI) of the originating line. These digits are transmitted to all customers with the ANI. Additional information in the form of identification of the type of line, i.e. hotel, private pay telephones, etc. may be provided to carriers for use in databases. This feature informs the customer of any restrictions associated with the line for outgoing calls to which a caller is attempting to bill a call. The Charge Per Initial or Change Request applies when this service is added or deleted to/from an existing line.

(B) Billed Number Screening (BNS)

Provides automatic blocking of third number billing, collect billing, or both. BNS is implemented via external databases that may be queried by carries as appropriate. The BNS feature is established for a particular billing number via service order. This feature informs the customer of any restrictions regarding collect or third number calls billed to the line. The Charge Per Initial or Change Request applies when this service is added or deleted to/from an existing line. This charge does not apply when BNS is ordered concurrent with the initial order for the line.

(C) International DDD (IDDD) Blocking

Provides a central office blocking service that blocks all calls dialed 011+ and 101XXXX+011+. The Charge Per Initial or Change Request applies when this service is added or deleted to/from an existing line.

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.6 Optional Blocking and Screening Service (Cont'd)(D) 900 Blocking Service

Provides 900 Blocking Service to customers who obtain local exchange service from the Telephone Company under its general or local exchange tariffs and to customers who obtain Feature Group A Switched Access service under this tariff. This service is only provided at appropriately equipped end offices. Those offices providing 900 Blocking Service are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

On each line or trunk for which 900 Blocking service is ordered, the Telephone Company will block all direct dialed calls placed to a 900 number. When capable, the Telephone Company will route the blocked calls to a recorded message.

When 900 Blocking Service is initially ordered by the end user customer, nonrecurring charges do not apply. On each subsequent order, the 900 Blocking Service charge is applied for each order to which 900 Blocking Service is added or removed. The 900 Blocking Service charge does not apply when blocking is removed from an exchange line or trunk or Feature Group A Switched Access line at the same time that it is disconnected.

The 900 Blocking Service charge is set forth in Section 15, following.

(E) Carrier Identification Parameter (CIP)

This function provides for the transmission of Carrier Identification Code (CIC) information to customers on originating Feature Group D switched access service. CIP is available from suitably equipped end offices and access tandems, when the SS7 signaling option is specified. When CIP is provided, the switch will transmit to the customer premises the 4 digit CIC of the presubscribed line or the CIC selected when the end user places a call using 101XXXX dialing. CIP is available on an originating basis as a chargeable optional feature with originating or two way Feature Group D trunk groups.

Rates for CIP are set forth in Section 15, following.

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.7 800 Data Base Access Service(A) Description

800 Data Base (800 DB) Access Service is an originating service utilizing Trunkside Access which provides for the forwarding of end user dialed 800 series-NXX-XXX calls to a customer based on the dialed 800 series number. 800 DB Service must be ordered to all end offices in a LATA and provisioned, at a minimum, to all access tandems and operator switches equipped as SSPs within a LATA. In addition, the provision of 800 DB Service requires the customer's direct access to the Service Management System/800 (SMS/800), or as alternative, the provision of such service by a Responsible Organization in accordance with the Guidelines for 800 Data Base.

When an 800 series 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 in accordance with SMS/800 information residing in the Telephone Company's Service Control Point (SCP). This basic service also includes area of service routing, which allows routing of 800 series calls to different interexchange carriers based on the Local Access and Transport Area (LATA) in which the call originates.

The customer has the option of having the dialed 800 series number (i.e., 800 series-NXX-XXXX) or the translated Plain Old Telephone Service (POTS) number (i.e., NPA-XXX-XXXX) delivered. If the translated POTS number is delivered, the customer must request the POTS Translation vertical feature through the Responsible Organization as described in (B), following. The service provider will be unable to determine that such calls originated as 1+800 series-NXX-XXXX dialed calls unless the customer also orders the Automatic Number Identification (ANI) feature as described in 4.2.5 (H).

800 DB Service provided from an equal access end office will be provisioned from the SSP switch as Feature Group D. Calls originating from end offices not equipped with equal access capabilities will be converted at the SSP switch to Feature Group D format.

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.7 800 Data Base Access Service (Cont'd)(A) Description (Cont'd)

The customer's 800 series traffic may be combined in the same trunk group arrangement with the customer's non-800 series Access Service traffic or provisioned on a separate trunk group, unless prohibited by technical limitations.

Measurement of 800 DB Service usage shall be in accordance with the regulations set forth in Section 4.6 for Trunkside Access. Specifically, 800 DB Service originating usage, whether combined with non-800 series Access Service usage on trunk groups or provided using dedicated trunk groups, shall be measured in the same manner as specified for non-800 Series Access Service usage over Trunkside Access.

The Telephone Company must be notified twenty-four (24) hours prior to any media stimulation. The Telephone Company maintains the right to apply protective controls, i.e., those actions such as call gapping, to ensure the provisioning of acceptable service to all telecommunications users of the Telephone Company's network services.

Application of rates for 800 DB Service shall be as set forth in 4.1.2 (C).

(B) Vertical Features

In addition to the basic carrier identification function, 800 series service subscribers may request vertical features through a Responsible Organization in accordance with the SMS/800 User Guide, BR 780-004-221. Vertical features will be maintained within the Telephone Company's SCP when technically feasible. The POTS Translation feature is described in (1), and the Call Handling and Destination Features are described in (2), following.



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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.7 800 Data Base Access Service (Cont'd)(B) Vertical Features (Cont'd)(1) POTS Translation

The POTS Translation vertical feature provides the option of having the ten-digit POTS number (i.e., NPA-NXX-XXXX) delivered instead of the 800 series dialed number (i.e., 800 series-NXX-XXXX) delivered to the service provider. If the POTS Translation feature is requested through the Responsible Organization, the service provider will be unable to determine that such calls originated as 1+800 series-NXX-XXXX dialed calls unless the service provider also orders, through the Telephone Company, the Automatic Number Identification (ANI) optional feature as described in 4.2.5 (H). ANI information digits of "24" indicating that the call originated as an 800 series dialed call is delivered when the ANI optional feature is ordered.

A POTS Translation Charge is assessed to the service provider for each 800 DB call delivered with the ten-digit POTS number.

(2) Call Handling and Destination Features

Call Handling and Destination Features allow service subscribers variable routing options by specifying a single carrier, multiple carriers (Exchange and /or Interexchange Carriers), single termination or multiple terminations. Multiple terminations require the POTS Translation feature described in (1), preceding. The following variable routing options are available.

- Routing by Originating NPA-NXX-XXXX
- Time of Day
- Day of Week
- Specific Date
- Allocation by Percentage

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.7 800 Data Base Access Service (Cont'd)(B) Vertical Features (Cont'd)(2) Call Handling and Destination Features (Cont'd)

Routing by originating NPA-NXX-XXXX, where technically feasible, allows a service subscriber to specify one or more multiple terminations with a single carrier and/or multiple carriers (Exchange and/or Interexchange Carriers) based on where a call originates.

Time of Day/Day of Week allows a service subscriber to specify one or more multiple terminations, with a single carrier and/or multiple carriers (Exchange and/or Interexchange Carriers) based on time of day or day of week the call originates.

Specific Date allows the service subscriber to specify alternate service routes with the date the call originates. These calls can be routed to one or multiple terminations, with a single carrier and/or multiple carriers (Exchange and/or Interexchange Carriers).

Allocation by Percentage allows the service subscriber to specify by percentage the calls to be allocated to multiple terminations and/or multiple carriers (Exchange and/or Interexchange Carriers).

A Call Handling and Destination Feature Query Charge is assessed to the service provider for each 800 series query to the SCP which utilizes one or more of the Call Handling and Destination Features.

4.2.8 Billing Name and Address(A) Definition

Billing name and address (BNA) is the complete billing name, street address, city or town, state and zip code for a telephone number assigned by the Telephone Company.

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4. Switched Access Service (Cont'd)4.2 Provision and Description of Switched Access Service Feature Groups (Cont'd)4.2.8 Billing Name and Address (Cont'd)(B) Provision

The Telephone Company will provide to an interstate telecommunications provider or its authorized billing agent non-discriminatory access to the BNA of its subscribers who authorize collect and third party calls to pay for a carriers services.

BNA service is provided for the sole purpose of billing customers for using telecommunications services of that service provider and collecting amounts due. BNA may not be resold or used for any other purpose.

BNA information will not be provided on subscribers with non-published or unlisted telephone numbers who have informed the Telephone Company not to disclose their BNA interstate service providers.

BNA service is provided on both a manual and a mechanical basis. On a manual basis, the information will be provided by voice telecommunications, telefax or by mail, as appropriate. On a mechanized basis, the information will be entered on magnetic tape containing record customer messages.

A request for information on over ten telephone numbers should be mailed to the Telephone Company. The Telephone Company will provide the response by first class U.S. Mail within ten business days.

Upon receipt of a magnetic tape of recorded customer messages, the Telephone Company will, upon request, provide BNA Service on a mechanized basis. The Telephone Company will enter the BNA information on the recorded message tape and return it by first class U.S. Mail within six business days of receipt. Other methods of delivering the data may be negotiated, and charges based on cost will apply.

The interstate telecommunications provider or its authorized billing agent may request BNA on a per-call basis or periodic basis. A per-call basis means transferring of billing information for each call at or near the time the call is completed. Periodic basis means periodic disclosure of the BNA required to bill for all of the calls handled by Interexchange Carrier and charged to the end-user's line during a billing cycle or other specified time period.

BNA rates are described in 4.1.2 (D), preceding.

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4. Switched Access Service (Cont'd)4.3 Obligations of the Telephone Company

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

4.3.1 Network Management

The Telephone Company will manage its network in a non-discriminatory manner to ensure the optimum use of the call carrying capacity of the network and to minimize the effects of traffic overloads and machine or facility failures. The Telephone Company maintains the right to apply protective controls, such as the blocking or rerouting of Customer traffic, in order to prevent or minimize the degradation of those service performance standards to other Customers. Where application of protective controls by the Telephone Company results in the interruption of a Customer's service, the provisions for credit allowance set forth in Section 2.4 shall apply.

4.3.2 Design and Traffic Routing of Switched Access Service

The Telephone Company shall design and determine the routing of 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 serving the Customer. If the Customer desires routing of Switched Access Service other than that selected by the Telephone Company, the Telephone Company will, subject to its obligation to manage its network as provided to be used in lieu of the Telephone Company selected routing. The Telephone Company shall also decide its capacity is to be provided by originating only, terminating only, or two-way trunk group, unless the Customer specifies the directionality of calling desired. Selection of facilities and equipment and traffic routing of the service are based on standard Telephone Company traffic engineering methods, available facilities and equipment and the Telephone Company traffic routing plans.

In the event a Customer converts from FGA service to FGB service, the Telephone Company will (where the capability exists) route calls from the FGA circuits to the FGB circuits for a one-year period from the date FGA service is terminated. No additional charge will apply to this call-forwarding function.

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4. Switched Access Service (Cont'd)4.3 Obligations of the Telephone Company (Cont'd)4.3.3 Provision of Service Performance Data

Service performance data for Switched Access Service will be made available for testing requested by the Customer, based on previously arranged intervals and format. This data may include, but it is not limited to: Customer equipment blockage, failure results, and transmission performance. If the Customer requests that the data be provided in other than a paper format, the cost of such exchange will be determined on an individual case basis and will be borne by the Customer.

4.3.4 Trunk Group Measurements Reports

Trunk group data in the form of usage in CCS, peg count and overflow will be made available to the Customer based on previously agreed to intervals, subject to availability.

4.3.5 Determination of Number of Transmission Paths

The number of transmission paths for Feature Groups A, B and D when ordered by a Customer other than AT&T on the basis of circuits will be the quantity specified by the Customer on the Facilities Access Order. The number of transmission paths for Feature Groups C and D when ordered by AT&T or any other Customer on the basis of Busy Hour Minutes of Capacity (BHMC) will be developed by the Telephone Company using the projected BHMC for the Feature Group end office and 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 (A) the use of access tandem switches and end office switches, (B) the use of end office switches only, or (C) the use of tandem switches only.

4.3.6 Determination of Number of End Office Terminations

For analog end office switches, a termination will be provided for each transmission path provided. For digital end office switches, an equivalent termination will be provided for each transmission path provided.

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4. Switched Access Service (Cont'd)4.3 Obligations of the Telephone Company (Cont'd)4.3.7 Design Blocking Probability

- (A) For Feature Groups A and B and for Feature Group D ordered on the basis of circuits, the level of blocking is a function of the number of circuits ordered by the Customer and the busy hour traffic offered over those circuits.
- (B) For Feature Group C and Feature Group D ordered on the basis of Busy Hour Minutes of Capacity, the Telephone Company will design facilities to adhere to a blocking objective no greater than one percent (.01) between the point of interface at the Customer designated premises and the first point of switching. 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.

The design blocking criteria for 800 series and 900 Access Service will be equivalent to the design blocking criteria of the basic serving arrangement that they are provisioned as, except under media stimulation when protective controls may be utilized to ensure the provisioning of acceptable service levels to all telecommunications users of the Telephone Company's network services.

- (C) The Telephone Company will perform routine measurement functions, except on Feature Groups A and B and for Feature Group D circuits ordered on the basis of circuits, to assure that an adequate number of transmission paths are in service. The Telephone Company will recommend that additional capacity be ordered by the Customer when additional paths are required to reduce the measured blocking to the designed blocking level. For the projected Busy Hour Minutes of 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.

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4. Switched Access Service (Cont'd)4.3 Obligations of the Telephone Company (Cont'd)4.3.7 Design Blocking Probability (Cont'd)

(C) (Cont'd)

- (1) For transmission paths carrying only first routed traffic direct between an end office and a Customer 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 Average Business Day Measurements Per Trunk Group			
	<u>15-20 Measurements</u>	<u>11-14 Measurements</u>	<u>7-10 Measurements</u>	<u>3-6 Measurements</u>
2	.070	.080	.090	.140
3	.050	.060	.070	.090
4	.050	.060	.070	.080
5-6	.040	.050	.060	.070
7-336	.030	.035	.040	.060
337-504	.025	.030	.035	.055
505 or more	.020	.025	.030	.050

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4. Switched Access Service (Cont'd)4.3 Obligations of the Telephone Company (Cont'd)4.3.7 Design Blocking Probability (Cont'd)

(C) (Cont'd)

- (2) For transmission paths carrying first routed between an end office and a Customer designated 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 Average Business Day Measurements Per Trunk Group			
	<u>15-20 Measurements</u>	<u>11-14 Measurements</u>	<u>7-10 Measurements</u>	<u>3-6 Measurements</u>
2	.045	.055	.060	.095
3	.035	.040	.045	.055
4	.035	.040	.045	.055
5-6	.025	.035	.040	.045
7-336	.020	.025	.030	.040
337-504	.015	.020	.025	.035
505 or more	.010	.015	.020	.030



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4. Switched Access Service (Cont'd)4.4 Obligations of the Customer

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

4.4.1 Report Requirements

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

(A) 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.

(B) Trunk Group Measurements Report

Where technologically feasible, the Customer must report Trunk group data in the form of usage in CCS, peg count and overflow for its end of all access trunk groups. This data will be used to monitor trunk group utilization and service performance and should be provided at intervals and in a format previously agreed upon.

4.4.2 On and Off-Hook Supervision

The Customer's facilities shall provide the necessary on-hook and off-hook supervision.

4.4.3 Customer's V&H Location

The Customer shall provide to the Telephone Company at the time services are requested the V&H coordinates of its facilities at the point of termination.

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4. Switched Access Service (Cont'd)4.5 Transmission Performance Capabilities

This section sets forth the two Standard Transmission Performances (i.e., Types B and C) available with Switched Access Service. The standard for a particular transmission path is dependent on the Feature Group, the Interface Group and whether the service is routed directly or via an access tandem. Standard Transmission Performances are set forth in Section 4.5.1. In addition, Data Transmission Parameters may be ordered by the Customer. These are provided at an additional cost and are subject to local availability.

The Telephone Company will maintain existing transmission specifications on service configurations installed prior to the effective date of this tariff, except that existing services with performance specifications exceeding the standards in this section will be maintained at the performance levels specified in this tariff. All service configurations installed after the effective date of this tariff will conform to the transmission specifications contained in this tariff.

The transmission specifications contained in this Section are immediate action limits. Acceptance limits set forth in Technical Reference PUB 62500 and Switched Access Service maintenance limits set forth therein, shall apply to this Section 4.

4.5.1 Standard Transmission Performance

Following are descriptions of the two Standard Transmission Performances available with Switched Access Service Feature Groups. Their specific applications in terms of the Feature Groups and Interface Groups with which they are provided are set forth in Sections 4.2.1(C), 4.2.2(C), and 4.2.3(C), and 4.2.4(C).

(A) Transmission Performance Type B

Transmission Performance Type B is provided with the following parameters:

(1) Loss Deviation

The maximum deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is  $\pm 2.5$  dB.

(2) Attenuation Distortion

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

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4. Switched Access Service (Cont'd)4.5 Transmission Performance Capabilities (Cont'd)4.5.1 Standard Transmission Performance (Cont'd)(A) Transmission Performance Type B (Cont'd)(3) C-Message Noise

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

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

\* For Feature Group C and D only Type B2 will be provided. For Feature Groups A and B, Type B1 or Type B2 will be provided as set forth in Technical Reference TR-NPL-000334.

(4) C-Notch Noise

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

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4. Switched Access Service (Cont'd)4.5 Transmission Performance Capabilities (Cont'd)4.5.1 Standard Transmission Performance (Cont'd)(A) Transmission Performance Type B (Cont'd)(5) Echo Path Loss

The Echo Path Loss, expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), is dependent on the routing, i.e., whether the service is routed directly from the Customer point of termination (POT) to the end office or via an access tandem. The ERL and SRL also differ by Feature Group, type of termination, and type of transmission path. They are greater than or equal to the following:

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

(6) Standard Return Loss

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

Echo return loss:	5 dB
Singing return loss:	2.5 dB

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4. Switched Access Service (Cont'd)4.5 Transmission Performance Capabilities (Cont'd)4.5.1 Standard Transmission Performance (Cont'd)(B) Transmission Performance Type C

Transmission Performance Type C is provided with the following parameters:

(1) Loss Deviation

The maximum deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is  $\pm 3.0$  dB.

(2) Attenuation Distortion

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

(3) C-Message Noise

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

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

\* For Feature Groups C and D only Type C2 will be provided. For Feature Groups A and B, Type C1 and C2 will be provided as set forth in Technical Reference TR-NPL-000334.

(4) C-Notch Noise

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

## ACCESS SERVICE

4. Switched Access Service (Cont'd)4.5 Transmission Performance Capabilities (Cont'd)4.5.1 Standard Transmission Performance (Cont'd)(B) Transmission Performance Type C (Cont'd)(5) Return Loss

The Return Loss, expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), is dependent on the routing, i.e., whether the service is routed directly from the Customer point of termination (POT) to the end office or via an access tandem. They are equal to or greater than the following:

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

(C) Transmission Performance Type A

Transmission Performance Type A is provided with the following parameters:

(1) Loss Deviation

The maximum deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is  $\pm 2.0$  dB.

(2) Attenuation Distortion

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

## ACCESS SERVICE

4. Switched Access Service (Cont'd)4.5 Transmission Performance Capabilities (Cont'd)4.5.1 Standard Transmission Performance (Cont'd)(C) Transmission Performance Type A (Cont'd)(3) C-Message Noise

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

<u>Route Miles</u>	<u>C-Message Noise</u>
less than 50	32 dBrnCO
51 to 100	34 dBrnCO
101 to 200	37 dBrnCO
201 to 400	40 dBrnCO
greater than 400	42 dBrnCO

(4) C-Notch Noise

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

(5) Echo Path Loss

The Echo Path Loss, expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), is dependent on the routing, i.e., whether the service is routed directly from the Customer point of termination (POT) to the end office or via an access tandem. They are equal to or greater than the following:

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
POT to Access Tandem	21 dB	14 dB
POT to End Office		
- Direct	NA	NA
- Via Access Tandem	16 dB	11 dB

ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.5 Transmission Performance Capabilities (Cont'd)4.5.1 Standard Transmission Performance (Cont'd)(C) Transmission Performance Type A (Cont'd)(6) Standard Return Loss

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

Echo Return LossSinging Return Loss

5 dB

2.5 dB

4.5.2 Data Transmission Parameters

There are two types of Data Transmission Parameters, i.e., Type DA and Type DB, which are provided. Following are descriptions of each.

(A) Data Transmission Parameters - Type DA(1) Signal to C-Notched Noise Ratio

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

(2) Envelope Delay Distortion

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

604 to 2804 Hz

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

1004 to 2404 Hz

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



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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.5 Transmission Performance Capabilities (Cont'd)4.5.2 Data Transmission Parameters (Cont'd)(A) Data Transmission Parameters - Type DA (Cont'd)(3) Impulse Noise Counts

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

(4) Intermodulation Distortion

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

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

(5) Phase Jitter

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

(6) Frequency Shift

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

(B) Data Transmission Parameters - Type DB(1) Signal to C-Notched Noise Ratio

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

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.5 Transmission Performance Capabilities (Cont'd)4.5.2 Data Transmission Parameters (Cont'd)(B) Date Transmission Parameters - Type DB (Cont'd)(2) Envelope Delay Distortion

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

604 to 2804 Hz

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

1004 to 2404 Hz

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

(3) Impulse Noise Counts

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

(4) Intermodulation Distortion

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

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

(5) Phase Jitter

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

(6) Frequency Shift

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

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4. Switched Access Service (Cont'd)4.6 Rate Regulations

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

4.6.1 Types of Rates and Charges

There are three types of rates and charges that may apply to Switched Access Service. These are usage rates, monthly rates and nonrecurring charges. These rates and charges are applied differently to the various rate elements. Monthly rates and nonrecurring charges are billed in advance, and usage rates are billed in arrears.

## (A) Usage Rates

Usage Rates are rates that apply only when a specific rate element is used. These are applied on a per-access minute, a per-access minute mile, a per-call or per-query basis. These rates are accumulated over a monthly period.

## (B) Monthly Rates

Monthly rates apply for the Direct Trunking, Multiplexing and Entrance facility charges. Monthly rates are flat recurring rates that apply each month or fraction thereof that a monthly rated service is provided. For billing purposes, each month is considered to have 30 days.

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.1 Types of Rates and Charges (Cont'd)(C) Nonrecurring Charges(1) Facilities Access Order Charge

Nonrecurring Charges are one-time charges that apply for a specific work activity (e.g., receiving recording and processing information necessary to execute a Customer's Facilities Access Order for Access Services). Nonrecurring charges for Facilities Access Orders are described in Section 9.2 and will apply to each order received.

Administrative charges 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.

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.2 Minimum Periods

Switched Access Service is provided for a specified minimum period. Minimum periods and charges are described in Section 2.4.2 and Section 9.

4.6.3 Minimum Monthly Charge

Switched Access Service is subject to a minimum monthly charge. The minimum charge applied to each transmission path by Feature Group provided to the Customer at an end office. The minimum monthly charge consists of the following:

(A) The minimum monthly charge for all usage sensitive rate elements is the sum of the charges for the measured or assumed monthly usage as set forth in Section 15 following.

(B) The minimum monthly charge for monthly rated services is one month.

4.6.4 Change of Feature Group Type

Changes from one type of Feature Group to another, will be treated as discontinuance of one type of service and a start of another. The nonrecurring charges described in Section 9.2 will apply except where any Feature Group service is upgraded to FGD or from FGA to FGB. In those two instances, minimum period obligations on upgrading Feature Group service will not change, i.e., the time elapsed in the existing minimum period will be credited to the new minimum period obligations on an upgraded service. For all other changes from one type of Feature Group to another, new minimum period obligations will be established.

To avoid the nonrecurring charges described in Section 9.2 for upgrading service to FGD, the IC must submit its disconnect order for FGA and FGB within thirty (30) days after the date the results of the final allocation of End Users are actually received by the IC pursuant to Section 8.3.4. The effective date for the disconnection may be no later than sixty (60) days after the allocation results are received by the IC.

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.5 Moves

A move involves 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 and the associated minimum period obligations are dependent on whether the move is to a new location within the same wire center area or to a different wire center area.

(A) Moves to a Different Wire Center Area

When a Customer designated premises is moved to a different wire center area, the move will be treated as a disconnect and a start of service. Facilities Access Order charges, as set forth in Section 9, will apply and a new minimum period will be established. The Customer will also remain responsible for fulfilling all outstanding minimum period obligations associated with the disconnected service.

(B) Moves to a Different Building Within the Same Wire Center

When a Customer designated premise is moved to a new location in a different building in the same wire center area, Facilities Access Order charges, as set forth in Section 9, will apply and the existing minimum obligations will continue in effect.

(C) Moves Within the Same Building

When a Customer designated premises is moved to a new location within the same building in the same wire center area, Facilities Access Order charges, as set forth in Section 9, will apply and the existing minimum period obligations will continue in effect.

4.6.6 Accumulation of Number of Transmission Paths

The number of transmission paths used to determine the charges as set forth in Section 15 shall be the sum of the number of paths actually provided as set forth in Section 4.3.5.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.7 Recording of Minutes of Use

Customer traffic to end office switches will be measured at end office switches or access tandem switches. At end offices or tandem switches equipped for full time measurement capability, originating and terminating calls will be measured by the Telephone Company to determine minutes of use. In some instances, this measurement is accomplished on a 100-second scan basis. At end offices providing Feature Group A where measurement capability does not exist, a surrogate assumed monthly access minute of use figure per line amounting to 7000 for two-way service will apply. Where the Feature Group A service is arranged for originating only usage, a surrogate assumed monthly access minute of use figure per line amounting to 3702 will be used. Where the Feature Group A service is arranged for terminating only usage, a surrogate assumed monthly access minute of use figure per line amounting to 3298 will be used. When a Feature A service is arranged for two-way use and usage cannot be measured in one of the two directions, a surrogate assumed monthly access minute of use figure per line amounting to 7000, or the usage in the measured direction, whichever is greater, will be used.

At end offices providing Feature Group B where measurement capability does not exist, a surrogate assumed monthly access minute of use figure per trunk amounting to 9000 for two-way service will apply. Where the Feature Group B service is arranged for originating only usage, a surrogate assumed monthly access minute of use figure per trunk amounting to 4500 will be used. Where the Feature Group B service is arranged for terminating only usage, a surrogate assumed monthly access minute of use figure per trunk amounting to 4500 will be used. When a Feature Group B service is arranged for two-way use and usage cannot be measured in one of the two directions a surrogate assumed monthly access minute of use figure per trunk amounting to 9000, or the usage in the measured direction, whichever is greater, will be used.

The Telephone Company presently measures all FGB usage. Should an order be received for FGB service that the Telephone Company cannot measure, the surrogate would be used for a period not to exceed one year from the date of the FGB installation until sufficient data can be gathered to develop an appropriate usage surrogate or until measurement equipment can be installed.

Notwithstanding the preceding, when Feature Group A is used in connection with Special Access Service where measurement capability exists at the WATS Serving Office but not at the Feature Group A entry switch, the measured originating and/or terminating minutes of use over the Special Access line 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.

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.8 Determination of Interstate Usage for Mixed Interstate and Intrastate Switched Access Service

Whenever practical, the Telephone Company will assess rates for Switched Access Service on the basis of the actual jurisdiction of access usage. When impractical for the Telephone Company to determine the jurisdictional nature of the customer traffic and its related access minutes from its usage records, the customer may be called upon to provide a projected estimate of its traffic, split between the interstate and intrastate jurisdictions. The following regulations govern situations where it is impractical for the Telephone Company to determine the actual jurisdiction of access usage.

- (A) When a Customer initially orders Feature Group A and/or Feature Group B Switched Access Service in an exchange area the Customer shall, in its order, state the number of Feature Group A and/or Feature Group B Switched Access Services which are to be provided for interstate use. The number shall be stated as the number of whole lines for Feature Group A Switched Access Service and the number of whole trunks for Feature Group B Switched Access Service.
- (B) Except as provided below, all Feature Group A and/or Feature Group B Switched Access Services ordered under this tariff not provided in a multiline hunt group or trunk group arrangement are designated as interstate services.
- (C) For multiline hunt group or trunk group arrangements, the interstate portion of Feature Group A and/or Feature Group B Switched Access Service shall be determined on the basis of the Customer's order under Section 4.6.8(A) for billing periods prior to the first billing period after the receipt of the first report on interstate and intrastate usage required pursuant to Section 4.6.8(C)(3). Thereafter, the interstate portion of the Feature Group A and/or Feature Group B Switched Access Services shall be determined as follows:



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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.8 Determination of Interstate Usage for Mixed Interstate and Intrastate Switched Access Service (Cont'd)

## (C) (Cont'd)

- (1) The number of interstate access minutes shall be determined by dividing the total number of access minutes measured or assumed by the Telephone Company by the total number of access minutes reported pursuant to Section 4.6.8(C)(3) and multiplying by the total number of access minutes recorded by the Telephone Company for the billing period. For example, if the Telephone Company measured a total of 150,000 access minutes for a Customer in a billing period, and the Customer's Section 4.6.8(C)(3) report indicates that the Customer had a total of 120,000 access minutes, of which 72,000 were interstate, then its interstate access minutes during the billing period would equal 90,000 minutes. Where both intrastate and interstate jurisdictions employ a minute of use billing approach, the measurement surrogates must be the same to assure that 100%, and only 100% of the minutes are billed.
- (2) Any Customer which obtains Feature Group A and/or Feature Group B Switched Access Service for use in a multiline hunt group or trunk group shall report its interstate usage to the Telephone Company semi-annually on January 1 and July 1 of each year. Those reports shall include (a) the name and address of the Customer, (b) the type and number of lines or trunks in each multiline hunt group or trunk group, (c) the number of total, interstate and intrastate access minutes for the month prior to the month immediately preceding the date on which the report is due, i.e., November and May.
- (3) For the purposes of this Section 4.6.8(C), the number of interstate access minutes shall be the total number of minutes used in connection with telephone calls that enter a Customer's network in a state other than where the called station is located. The number of intrastate access minutes shall be the total number of minutes used in connection with telephone calls that enter a Customer's network in the same state where the called station is located.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.8 Determination of Interstate Usage for Mixed Interstate and Intrastate Switched Access Service (Cont'd)

## (C) (Cont'd)

- (4) The Telephone Company shall have the right, upon reasonable written notice to the Customer, to examine and audit or to have its designated representative examine and audit, during normal business hours and at intervals not more frequent than annually, all call detail records and associated material relevant to the report required pursuant to Section 4.6.8(C)(3), except in extreme circumstances such as when an intrastate allocation in one update period represents a substantial change over its most recent reported figures, and the change is not due to seasonal shifts or other identifiable reasons.

The audits will be conducted by independent auditors if the Telephone Company and the Customer or the Customer alone is willing to pay the expense since it would significantly reduce concerns about the proprietary nature of the traffic data without sacrificing reliability.

- (D) When a Customer orders Feature Group C or Feature Group D Switched Access Services, the Telephone Company will, unless the Customer provides the projected interstate percentage for interstate usage in its order, determine the projected interstate percentage as follows. For originating access minutes, the projected interstate percentage will be developed on a monthly basis by end office by dividing the measured interstate originating access minutes as determined in accordance with Section 4.6.7, (the access minutes where the calling number is in one state and the called number is in another state) by the total originating access minutes. For terminating access minutes, the data used by the Telephone Company to develop the projected interstate percentage for originating access minutes and data determined in accordance with Section 4.6.7 will be used to develop projected interstate percentages for such terminating access minutes. The Telephone Company will multiply the projected interstate originating percentage by the total originating minutes and the projected interstate terminating percentage by the total terminating minutes to obtain the number of originating and terminating minutes to be billed at the rates set forth in Section 15 following.

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.8 Determination of Interstate Usage for Mixed Interstate and Intrastate Switched Access Service (Cont'd)

- (E) Except where Telephone Company measured access minutes are used as set forth in Section 4.6.8(D), the Customer reported number of interstate services or interstate percentage of use as set forth in Sections 4.6.8(A) and (D) will be used until the Customer reports a different number of lines or trunks or a different percentage for interstate use. The revised report will be the basis for future billing and will be effective on the next bill date. No prorating or back billing will be done based on the report.
- (F) Where the Customer utilizes FGA Switched Access Service for calls between a Primary Exchange Carrier and a Secondary Exchange Carrier within the same Extended Area Service calling area, and/or Feature Group B Switched Access Service for calls between a Primary Exchange Carrier's access tandem and a subtending Secondary Exchange Carrier, where the Primary and Secondary Exchange Carriers are not the same Telephone Company and do not provide service under the same access service tariff, a copy of the revised report will be provided by the Customer to each Secondary Exchange Carrier.
- (G) The PIU guidelines in 4.6.8(A) through (F) are applied to usage rated Carrier Common Line, Information Surcharge, Local Switching, Tandem Switched Transport and Residual Interconnection Charges. Separate PIU's are required for flat rated Entrance Facility, Direct Trunked Transport and Multiplexing.

4.6.9 Message Unit Credit

The monthly bills rendered to Customers for the Feature Group A Switched Access Service will include a credit to reflect any local message unit charges collected by the Telephone Company from its End Users for calls to Customers' interexchange service. No credit is given for toll charges. This credit applies to the Local Switching rate element, is applicable only for originating calls and is calculated on an exchange-by-exchange basis. Where LMS is available and to the extent the Telephone Company can prevent end users from being billed message units when accessing a Customer's service, no message unit credits will be given the Customer.

4.6.10 Certain Local Services

Customers will be billed charges for calls over Switched Access Service in the terminating direction to certain community information services, for which rates are applicable under Telephone Company Exchange tariffs, e.g., DIAL-IT Network Services.

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ACCESS SERVICE

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.11 Premium and Transitional Charges

Rates are applied either as premium rates or transitional rates.

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

- (A) Premium rates apply to Direct Trunked Transport Service, Multiplexing, Entrance Facility, to all 800 series Service access minutes, all AT&T FGB access minutes, all other access minutes used to provide MTS or WATS Service, and all access minutes that originate or terminate at end offices equipped with equal access (i.e., FGD) capabilities.
- (B) Transitional usage rates (i.e., discounted access minute rates) apply to all access minutes generated by FGA and FGB (except AT&T) services from or to an end office which is not equipped with equal access capabilities but is equipped with measurement capabilities.
- (C) The Customer will have the choice of converting existing services to equal access (i.e., Feature Group D) at no charge or retaining the existing services. Premium rates will apply to the total access minutes beginning on the date FGD is available to the Customer at the end office, whether the Customer chooses to convert to FGD or retain existing services.
- (D) When FGA or FGB Switched Access Service except as set forth in (A) preceding provided to an entry switch (i.e., dial tone office for FGA and access tandem for FGB) has usage originating from and/or terminating at both end offices that have been converted to equal access and end offices that have not been converted, the premium and non-premium transitional rates will apply in the following manner:
  - (1) All access minutes that originate from or terminate at the equal access end office(s) will be billed at premium rates. Access minutes that originate from or terminate at end offices not equipped with equal access capabilities, hereinafter referred to as non-premium access minutes, will continue to be billed at non-premium transitional rates. Non-premium transitional rates will apply as follows depending on the type of service.
    - (a) For FGA and FGB services, the number of non-premium access minutes to be billed at transitional rates is derived by subtracting the number of premium rated access minutes from the total number of access minutes.
    - (b) Premium access minutes will be determined as set forth in (2) following.

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.11 Premium and Transitional Charges (Cont'd)

## (D) (Cont'd)

(2) The number of access minutes to be rated as premium access minutes is determined as follows:

- (a) Where end office specific usage data is available, premium rates apply to the measured access minutes originating from or terminating at the equal access end office(s).
- (b) Where end office specific usage data is not available for originating and/or terminating FGA, the total originating and/or terminating usage will be measured or assumed usage at the entry switch set forth in Section 4.6.7. FGA originating and/or terminating usage will then be apportioned between premium and non-premium access minutes in the following manner. For originating usage, develop the ratio of the number of subscriber lines in the local calling area of the entry switch that are served by equal access end offices to the total number of subscriber lines in that local calling area. For terminating usage, develop the ratio of the number of subscriber lines in the valid calling area of the entry switch that are served by the equal access end offices to the total number of subscriber lines in that valid calling area. Then apply these ratios to the total number of originating and/or terminating FGA access minutes respectively to determine the usage to be billed at premium rates, unless adjusted as set forth in (d) following. The local calling area of the entry switch is as defined in the Telephone Company's local and/or general exchange service tariff. The valid calling area of the entry switch is as defined in the Telephone Company's interstate access service tariff for each feature group service. For purposes of administering this regulation, subscriber lines are defined as exchange service lines, Centrex lines and Centrex-type lines provided by the Telephone Company under its local and/or general exchange service tariff.

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.11 Premium and Transitional Charges (Cont'd)

(D) (Cont'd)

(2) (Cont'd)

- (c) Where end office specific usage data is not available for originating and/or terminating FGB, the total originating and/or terminating usage will be measured or assumed usage at the entry switch (i.e., access tandem) as set forth in Section 4.6.7. FGB originating and/or terminating usage will then be apportioned between premium and non-premium access minutes in the following manner: First, develop the ratio of the number of subscriber lines provided to end offices subtending the access tandem that are served by equal access end offices to the total number of subscriber lines in all end offices subtending the access tandem. Then apply this ratio to the total number of originating and/or terminating FGB access minutes to determine the usage to be billed at premium rates, unless adjusted as set forth in (d) following. For purposes of administering this regulation, subscriber lines are defined as exchange service lines, Centrex lines and Centrex-type lines provided by the Telephone Company under its local and/or general exchange service tariff.

The ratio used to calculate the premium usage as set forth in this subsection and (b) preceding will be determined on a quarterly basis and provided to the Customer with the last bill rendered for the preceding quarter or mailed separately within five working days after the first day of the new quarter. A quarter is defined for these purposes as beginning on the first day of January, April, July or October.

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.11 Premium and Transitional Charges (Cont'd)

(D) (Cont'd)

(2) (Cont'd)

(d) Where FGD Switched Access Service is provided to a Customer in an end office(s) where that Customer's premium access minutes have been determined in accordance with (b) and (c) preceding, such premium access minutes will be adjusted in the following manner. For each FGD access minute originating and/or terminating from that end office, the premium access minutes as set for in (b) and (c) preceding will be reduced on a one for one basis, but in no event shall the reduction exceed the total number of premium access minutes as set forth in (b) and (c) from that end office. The Customer will be billed for the revised number of premium access minutes.

(3) Where originating and/or terminating measurement capability does not exist for Feature Group A or Feature Group B Switched Access Service provided to an entry switch, the number of access minutes that will be assumed are as set forth in Section 4.6.7 preceding.

4.6.12 Mileage Measurement

The mileage to be used to determine the monthly rate for Switched Transport is calculated on the airline distance as set forth below. Where applicable, the V&H coordinates method is used to determine mileage. This method is set forth in the EXCHANGE CARRIER ASSOCIATION TARIFF F.C.C. No. 4. If the method results in fractional miles, the fractional miles are rounded up to the nearest whole number before determining the rate to be billed. For tandem switched transport, the rounded-up mileage is multiplied by the Tandem Switched Facility rate times the access minutes to be billed. For Switched Transport which is Direct Transport, the rounded-up mileage is multiplied by the corresponding Direct Trunk Mileage rate.

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.12 Mileage Measurement (Cont'd)

- (A) For Tandem-Switched Facilities ordered on a usage sensitive basis between the end office and the customer's serving wire center, mileage is measured between the end office where the call originates or terminates and the customer's serving wire center. This provision expires July 1, 1998, at which time mileage between the end office and the customer's serving wire center will be measured as described in (M) following.
- (B) When Direct Trunk Transport is ordered to the end office, Direct Trunk Facility Mileage is measured on an airline distance basis between the end office to which Direct Trunk Transport is provided and the customer's serving wire center.
- (C) Switched Transport for Feature Group A Switched Access Service is rated as Direct Trunk Transport between the customer's serving wire center and the FGA dial tone office. This Direct Trunk Facility Mileage is calculated on an airline basis, between the customer's serving wire center and the FGA dial tone office, using the V&H coordinates method. For terminating FGA service, the Switched Transport between the FGA dial tone office and the terminating end office is rated as Tandem-Switched Transport. The Tandem-Switched Facility mileage is calculated using the V&H coordinates of the dial tone office and the terminating end office.
- (D) When a non AT&T Customer's premises is within five miles of an AT&T Class 4 office, the Local Transport mileage for a call which is carried over a premium rated Switched Access Service, originating or terminating through an end office switch, shall be the distance as would be determined from that end office switch to the serving wire center for the AT&T Class 4 office unless the Customer specifies that it wants all measurements determined from its serving wire center. This designation (i.e., which serving wire center to use in calculating mileage) may be changed only once in any 12-month period. This change will be made without charge(s) to the Customer.



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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.12 Mileage Measurement (Cont'd)

- (E) When the Alternate Traffic Routing optional feature is provided with Feature Groups B, C, and D, to provide service from an end office to different customer premises locations, usage rated Switched Transport access minutes will be apportioned between the two transmission routes used to provide this feature. For terminating Feature Group B and for FGD routed via an access tandem such apportionment will be made using standard Telephone Company traffic engineering methodology and will be based on the last trunk CCS desired for the high usage group and the relative capacity ordered to the end office, when the feature is provided at an access tandem switch. For originating FGB and FGC, Switched Transport usage will be apportioned between direct routed and tandem routed using the Tandem Routed Percent factor. For Feature Group D directly routed to an end office the apportionment will be based on the actual measured data which is recorded against the specific trunk group that carried a particular call. This apportionment will serve as the basis for the Switched Transport mileage calculation. The customer will be billed accordingly.
- (F) When terminating Feature Group C Switched Access is provided from multiple Customer premises to an end office not equipped with measurement capabilities, mileage will be calculated as set forth below:
- The total Switched Transport access minutes for that end office will be apportioned amount 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 Switched Transport mileage calculation.
- (G) When the Customer utilizes FGA Switched Access Service for calls between a Primary Exchange Carrier and a Secondary Exchange Carrier within the same Extended Area Service calling area and the Primary and Secondary Exchange Carriers are not the same Telephone Company and do not provide service under the same access service tariff, the Primary Exchange Carrier and Secondary Exchange Carrier will calculate mileage for Premium and Transitional rated access minutes in the originating direction over Feature Group A Switched Access Services as follows:

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.12 Mileage Measurement (Cont'd)

## (G) (Cont'd)

- (1) The Primary Exchange Carrier will calculate originating mileage, on an airline basis, using the V&H coordinates method. This 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.
- (2) The Secondary Exchange Carrier will calculate originating mileage, on an airline basis, using the V&H coordinates method. This 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 end user's end office switch.

(H) When jointly provisioned Switched Access is provided between the Telephone Company and another Exchange Telephone Company in conjunction with 800 DB Service and ANI cannot be identified, the Telephone Company and the other Exchange Telephone Company will mutually agree upon an end office designation to determine an existing end office that reflects the closest mileage measurement to the average Switched Transport miles. This end office designation can then be used for purposes of determining the appropriate mileage by using the V&H coordinate method. When the ANI can be determined the originating end office will be used to determine the Local Transport mileage.

(I) The Switched Transport mileage for terminating Feature Group A Switched Access Service will be measured in two segments if the customer orders direct trunking. 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.

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.12 Mileage Measurement (Cont'd)

- (J) The Switched Transport mileage for Feature Groups B, C, and D Switched Access Service provided to a Remote Office will be measured in two segments when it 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. Tandem Switched Facility mileage will be measured between the Host Office and the Remote Office.
- (K) 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 Switched 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 Switched Transport mileage calculation.
- (L) The Switched Transport Facility for Feature Groups A, B, C, and D Switched Access Service connected with the 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.
- (M) When a customer orders Direct Transport Services from its serving wire center to an access tandem in conjunction with Tandem-Switched Transport to the end office, the mileage used to determine the monthly rate for the Direct Transport Channel Mileage is calculated on the airline mileage basis, between the customer's serving wire center and the access tandem. The mileage to which the Tandem-Switched Facility rate applies is calculated between the access tandem and the end office. The V&H Coordinate Method is used to determine both mileage components. If the End Office is a remote, Tandem-Switched Mileage is calculated in two segments: (1) Mileage between the access tandem and the host and (2) mileage between the host and the remote.

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4. Switched Access Service (Cont'd)4.6 Rate Regulations (Cont'd)4.6.13 Shared Use

Shared use occurs when Switched Access Service and Special Access Service are provided over the same analog or digital high capacity service through a common interface. The regulations governing the provision of Shared Use Facilities are set forth in Section 5.4.5.

4.6.14 Application of Rates for Extension Service

Feature Group A Service and WATS Access Lines provided with Feature Group C and D are available with extensions, i.e., additional terminations of the service at different building(s) in the same or a different local calling area. Feature Group A extensions within the local calling area are provided and charged for under the Telephone Company's local and/or general exchange service tariffs. Feature Group A extensions in different local calling areas and WATS Access Line extensions in the same or different local calling areas are provided and charged for as Special Access Service. The rate elements which apply are Voice Grade Channel Termination, Channel Mileage, applicable, and Signaling Capability (Optional Features and Functions), if applicable. All appropriate monthly rates and nonrecurring charges set forth in Section 15 following will apply.

4.6.15 Shared Transport

Shared Transport refers to a rate application that is applicable only when the customer orders High Capacity Direct Trunked Transport between a serving wire center and a Telephone Company hub where the Telephone Company performs multiplexing/de-multiplexing functions and the same customer then orders the derived channels as Direct Trunked Transport and Tandem Switched Transport. When the same customer also orders Special Access Service to be provided over the same high capacity facility, this service is considered to be Shared Use and the regulations set forth in 5.4.5 following must be applied to separate the portion to be charged as Switched Access Service from the portion to be charged as Special Access Service.

Except as noted above, the Switched Access Service will be ordered, provided and rated as Direct Trunked Transport (i.e., Direct Trunked Facility and Direct Trunked Termination). As each derived channel is activated for Tandem Switched Transport, the High Capacity Direct Trunked Transport and Multiplexing rates will be reduced accordingly (e.g., 1/24th for a High Capacity DS1 service, 1/672 for a High Capacity DS3 service, etc.). Tandem Switched Transport rates and charges as set forth in Section 15 following, will apply for each channel that is used to provide the Tandem Switched Transport.