# 5. SWITCHED ACCESS SERVICE

5.1 General

Switched Access Service, which is available to Customers for their use in furnishing their services to End Users, provides a two-point communications path between a Customer's Premises and an End User's Premises. It provides for the use of common terminating, switching and transport facilities. Switched Access Service provides the ability to originate calls from an End User's Premises to a Customer's Premises, and to terminate calls from a Customer's Premises location to an End User's Premises.

Rates and charges are set forth in Section 7.6. The application of rates for Switched Access Service is described in Section 7.4.

5.2 Provision and Description of Switched Access Service Arrangements
Switched Access Service is provided in the following service type:

5.2.1 Feature Group D (FGD) Access

FGD Access, which is available to all Customers, is provisioned at the DS1 level and provides trunk-side access to Company Local Switching Center switches, with an associated uniform 10XXX Access Code for the Customer's use in originating and terminating communications. Basic FGD service will be provided with Multi-Frequency In Band Signaling (SS7 is also available as a Common Switching Option for Feature Group D). In addition, Conventional Signaling for direct Carrier Trunk groups is available at the Customer's option. End Users of the Customer's service may also originate calls to certain FGD Access Customers without dialing the 10XXX Access Code if the End User is presubscribed, as described herein.

The Access Code for FGD switching is a uniform Access Code of the form 10XXX. A single Access Code will be the assigned number of all FGD access provided to the Customer by the Company. No Access Code is required for calls to a Customer over FGD Switched Access Service if the End User's telephone exchange service is arranged for Presubscription to that Customer, as set forth herein.

Where no Access Code is required, the number dialed by the Customer's End User shall be a seven or ten digit number for calls in the North American Numbering Plan (NANP), except for 00- dialed calls which are routed to the predesignated Customer. For international calls outside the NANP, a seven to twelve digit number may be dialed. The form of the numbers dialed by the Customer's End User is NXX-XXXX, 0 or 1 + NXX-XXXX, NPA + NXX-XXXX, 0 or 1 + NPA + NXX-XXXX, and, when the Local Switching Center 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, 911 for access to the Company's emergency service, or the end-of-dialing digit (#) for cut-through access to the Customer's Premises.

In addition, End Users may originate calls by dialing the 950-XXXX Access Code specific to a particular Interexchange Carrier, provided that the Interexchange Carrier has subscribed to the Company's Feature Group D with 950 Access Common Switching Optional Feature. If the End User is presubscribed to that Interexchange Carrier, no Access Code is necessary.

5.2.2 Manner of Provision

Trunks used for Switched Access Service may be configured for one-way (either originating only or terminating only) or for two-way directionality. It is the Customer's responsibility to order a sufficient number of trunks of each type in order to meet its desired grade of service objective. At the Customer's request, the Company will assist the Customer in sizing Switched Access Trunk groups.

- SWITCHED ACCESS SERVICE (Cont.)
  - 5.2 <u>Provision and Description of Switched Access Service Arrangements (Cont.)</u>
    - 5.2.3 Rate Categories
      The following rate categories apply to Switched Access Service:
      - A. Direct Connect
      - B. Tandem Connect
      - C. 800 Data Base Access Service
      - D. Toll Free 8YY Transit Traffic Service
      - E. Optional Features
      - 5.2.3.1 Except as stated as follows, Tandem Connect Service is provided in conjunction with the tandem provider serving the area. Charges are computed in accordance with Section 2.5.2.7 preceding (Ordering, Rating, and Billing of Access Services where more than one Exchange Carrier is Involved).
        - 5.2.3.1.1 <u>Direct Connect</u>: The Company will provide Direct Connect between the Customer's Premises and the Company's Local Switching Center switch(es). This transmission path is Dedicated to the use of a single Customer. DS1 and DS3 facilities are available for Direct Connect Service. A DS1 facility is capable of transmitting electrical signals at a nominal 1.544 Mbps, with the capability to channelize up to 24 voice frequency transmission paths. A DS3 facility is capable of transmitting electrical signals at a nominal 44.736 Mbps, with the capability to channelize up to 672 voice-frequency transmission paths. For DS3 facilities, if the Company is required to install additional fiber optic equipment for the benefit of the Customer, then the Customer has the option to choose either an optical or electrical interface.

When a customer purchases Direct Connect, if the number of calls over the direct trunks has reached its maximum level, calls not able to be switched over the direct trunks will overflow/be routed to the customer via an ILEC access tandem. In that event, the customer will be assessed the Tandem Connect rates for such calls.

The Direct Connect rate is assessed based on the per-minute of use charges found in a particular zone. Rates for each zone are found in Section 7.4.4.1.

5.2.3.1.2 <u>Tandem Connect</u>: Tandem Connect consists of circuits from the Customer's tandem provider to the Company's Local Switching Center.

Tandem Connect Charges apply on a per-minute-of-use basis when calls are switched by an ILEC's tandem switch to or from the Company's Local Switching Center or are switched through a tandem switch for which the Company pays the ILEC for the tandem switching capability. The rate will vary based on whether the Company pays the ILEC for leased tandem switching capability on a call. Tandem Connect rates are also Rate Zone based, and use the same Rate Zones found in Section 5.2.3.2.

Rates for Tandem Connect minutes for which the Company does not lease the tandem switching Function from the ILEC do not contain the ILEC's tandem switching charge and are denoted in the Switched Access Rates section as Tandem Connect Without Tandem Switching. Rates for Tandem Connect minutes for which the Company does lease the tandem switching function from the ILEC contain the ILEC's Tandem Switching Charge and are denoted in the Switched Access Rates section as Tandem Connect with Tandem Switching.

5.2.3.1.3 800 Data Base Access Service: 800 Data Base Access Service is a service offering utilizing originating Trunk side Switched Access Service. When an 8XX + NXX + XXXX call is originated by an End User, the Company will perform Customer identification based on screening of the full ten-digits of the 8XX number to determine the Customer location to which the call is to be routed. The 800 Data Base charge, which consists of a single, fixed rate element, applies on a per query basis.

# SWITCHED ACCESS SERVICE (Cont.)

#### 5.2 Provision and Description of Switched Access Service Arrangements (Cont.)

#### Rate Categories (Cont.) 5.2.3

5.2.3.1 (Cont.)

5.2.3.1.4

Toll Free 8YY Transit Traffic Service Toll Free 8YY Transit Traffic Service is an access service in which the Company transports Toll Free traffic originated by a third party that is not an end user or other user of the Company=s local exchange or exchange access service through its wire center to an Interexchange Carrier Customer. The connection to the interexchange carrier can to an Interexchange Carrier Customer. The connection to the interexchange carrier can be either directly via a Direct End Office Trunk (DEOT) from the Company=s switch to the IXC or indirectly via an ILEC tandem switch. In addition to the 800 Database Access Service described in Section 5.2.3.1.3 above, this service provides for the use of the Tandem Switching, Tandem Termination, and Tandem Transport facilities of the Company. In a Toll Free 8YY Transit Traffic Service call, the Company will charge only for 800 Data Base Access Service Basic Query, the tandem switching, common multiplexing and the tandem transport (termination and facility) functionalities. No charges for the carrier common line charge, the local switching charge nor the end office port charge are incorporated into the rate. The rates for Toll Free 8YY Transit Traffic Service set forth in Section 7.4.4.3 are usage sensitive. Records exchange, rating, and billing for Toll Free 8YY Transit Traffic Service is subject to the provisions of the Multiple Exchange Carrier Access Billing Guidelines (MECAB). Guidelines (MECAB).

To the extent the Company jointly provides Toll Free 8YY Transit Traffic Service in conjunction with a third-party carrier that will bill Interexchange Carrier Customers of that third-party carrier's switched access service, pursuant to that third-party carrier's tariff or other authority, for that third party carrier's portion of the total service, the Company and third-party carrier(s) will enter into a billing agreement with all billing carriers which is consistent with the provisions contained in MECAB. Toll Free 8YY Transit Traffic Service calls routed to an Incumbent Local Exchange Carrier's (ILEC) Tandem Switching facility will conform to the LATA restrictions as defined both in said ILEC's switched access tariff and in MECAB.

#### Switched Access Service Optional Feature 5.2.3.1.5

- Nonchargeable Optional Features: Where transmission facilities permit, the Company will, at the option of the Customer, provide the following nonchargeable optional feature, as described in Section 5.5.1, in association 5.2.3.1.5.1 with Switched Access Service.
  - (a) Supervisory Signaling

- SWITCHED ACCESS SERVICE (Cont.)
  - 5.2 Provision and Description of Switched Access Service Arrangements (Cont.)
    - Rate Categories (Cont.) 5.2.3
      - 5.2.3.1 (Cont.)
        - Switched Access Service Optional Feature (Cont.) 5.2.3.1.5
          - 5.2.3.1.5.2 Chargeable Optional Features: Where transmission facilities permit, the Company will, at the option of the Customer, provide the following chargeable optional features, as described in Section 5.5.2, in association with Switched Access Service.
            - (a) 800 Data Base Access Service Basic Query(b) Signaling Transfer Point Access
          - 5.2.3.1.5.3 Feature Group D Optional Features: Following are the various optional features that are available in lieu of, or in addition to, the standard features provided with Feature Group D. Optional features are provided as Common Switching Optional Features as described in Section 5.5.3.1.
            - 5.2.3.1.5.3.1 Common Switching Optional Features: At the Customer's option, the following standard features are available at the rates specified in Section
              - Alternate Traffic Routing
              - Automatic Number Identification (ANI)
              - Cut-Through

              - Service Class Routing
                Feature Group D with 950 Access
                Signaling System Seven (SS7)
                Basic Initial Address Message Delivery
                Called Directory Number Delivery
                Flexible Automatic Number Identification Delivery e) f)

              - ģ) h)
      - Rate Zone: A Rate Zone is a geographic area that comprises a specific Incumbent Local Exchange Carrier's (ILEC's) operating territory within the state. All usage rates and charges will be assessed based on the operating territory of the Incumbent Local Exchange Carrier ("ILEC") from which a call originates or to which a call terminates Zone 1 is the operating territory of the Ameritech Operating Companies. Zone 2 is the operating territory of Frontier Telephone Companies (Tariff FCC No. 5). For those calls that originate or terminate in any 5.2.3.2 area of the state not within an identified zone, the Zone 1 rates will apply.
    - Billing Validation Service: The Company shall arrange to have its billing validation data stored in one of the existing Line Information Databases (LIDB). It will be the responsibility of the Customer to identify this database through established industry procedures and to guery the billing validation data in the LIDB. Based on the received query information, the LIDB will respond 5.2.4 with an SS7 formatted confirmation of validity or denial for the requested billing option. Access to LIDB provides Customers with potential toll fraud detection.
      - The LIDB will contain a record for every working line number and Billed Number Group served by the Company. The Company will update the LIDB information on a daily basis. LIDB service is provided on an on-line, call-by-call basis. Company data accessed from the LIDB shall remain the sole property of the Company and may not be stored or reproduced by the Customer for any reason. The Company will have procedures in place to deactivate billing validation data in the event that it is being used fraudúlently.
    - <u>Design Layout Report</u>: At the request of the Customer, the Company will provide to the Customer the makeup of the facilities and services provided from the Customer's Premises to the first point of switching. This information will be provided in the form of a Design Layout Report. The Design Layout Report will be provided to the Customer at no charge. 5.2.5
    - Acceptance Testing: At no additional charge, the Company will, at the Customer's request, cooperatively test, at the time of installation, the following parameters: loss, C-notched noise, C-message noise, 3-tone slope, d.c. continuity and operational signaling.
    - Ordering Options and Conditions: Access Service is ordered under the Access Order provisions set forth in Section 3.2. Also included in that section are other charges which may be associated with ordering Switched Access Service.
    - <u>Competitive Pricing Arrangements</u>: Competitive pricing arrangements for Local Transport-Entrance Facilities and Local Transport-Direct Trunked Transport can be furnished to meet the communication needs of specific customers on a case by case 5.2.8 basis under individual contract.

# SWITCHED ACCESS SERVICE (Cont.)

5.3 Obligations of Company

In addition to the obligations of the Company set forth in other sections of this tariff, the Company has certain other obligations concerning the provision of Switched Access Service. These obligations are as follows:

5.3.1 <u>Network Management</u>

The Company will administer its Network to ensure the provision of acceptable service levels to all telecommunications users of the Company's Network Services. Generally, service levels are considered acceptable only when both End Users and Customers are able to establish connections with little or no delay encountered within the Company Network. The Company reserves the right to apply protective controls, (i.e., those actions, such as call gapping, which selectively cancel the completion of traffic), over any traffic carried over its Network, including that associated with a Customer's Switched Access Service. Generally, such protective measures would only be taken as a result of occurrences such as failure or overload of Company or Customer facilities, natural disasters, mass calling or national security demands. The Customer will notify the Company of anticipated peaked services as stated below. Based on the information provided, the Company will work cooperatively with the Customer to determine the appropriate level of control. In the event that the protective controls applied by the Company result in the complete loss of service by the Customer, the Customer will be granted a credit allowance for service interruption as set forth in 2.6.

When a Customer uses the Company's facilities to offer services for which a substantial call volume or peaked service is expected during a short period of time, the Customer must notify the Company at least 24 hours in advance of each peak period. For events scheduled during weekends or holidays, the Company must be notified no later than 5:00 p.m. local time the prior business day. Notification should include the nature, time, duration, and frequency of the event, an estimated call volume, and the NPA NXX and line number(s) to be used. On the basis of the information provided, the Company may invoke network management controls if required to reduce the probability of excessive Network congestion. The Company will work cooperatively with the Customer to determine the appropriate level of such control. Failure to provide prescribed notification may result in Customer caused Network congestion, which could result in discontinuance of service under Section 5.5 and/or damages under Section 2.1.4.

5.4 Obligations of the Customer

In addition to obligations specified elsewhere in this tariff, the Customer has certain specific obligations pertaining to the use of Switched Access Service, as follows:

- 5.4.1 Report Requirements: When a Customer orders Switched Access Service for both interstate and intrastate use, the Customer is responsible for providing Jurisdictional Reports as set forth in Section 2.3.3 preceding. Charges will be apportioned in accordance with those reports. The method to be used for determining the intrastate charges is set forth therein.
- 5.4.2 <u>Supervisory Signaling</u>: The Customer's facilities at the premises of the ordering Customer shall provide the necessary On-Hook, Off-Hook answer and disconnect supervision.
- 5.4.3 <u>Design of Switched Access Services</u>: It is the Customer's responsibility to assure that sufficient Access Services have been ordered to handle its traffic.
- 5.5 <u>Switched Access Optional Features</u>: Following are descriptions of the various optional features that are available in lieu of, or in addition to, the standard features provided with the Feature Groups for Switched Access Service.
  - 5.5.1 Nonchargeable Optional Feature
    - (a) <u>Supervisory Signaling</u>: Where the transmission parameters permit, and where signaling conversion is required by the Customer to meet its signaling capability, the Customer may order an optional supervisory signaling arrangement in the form of Multi-frequency (MF) Signaling for each transmission path.
  - 5.5.2 Chargeable Optional Features
    - (a) 800 Data Base Access Service: The Customer will be charged a per query charge based on a query of the 8XX-NXX-XXXX dialed and/or delivered to the Customer in conjunction with 800 Data Base Access Service.
    - (b) <u>Signaling Transfer Point Access</u>: The Customer will be charged a per mile charge and a per port charge for access to a specialized switch which provides SS7 network access and performs SS7 messaging routing and screening. If a Customer is connected to a third party SS7 service provider, an additional charge, as specified in Section 7.4.5.2 will apply.

# SWITCHED ACCESS SERVICE (Cont.)

## 5.5 <u>Switched Access Optional Features (Cont.)</u>:

## 5.5.3 Feature Group D Optional Features

## 5.5.3.1 Common Switching Optional Features

- a) Alternate Traffic Routing: This option provides the capability of directing originating traffic from a Local Switching Center to a direct access Trunk group, with additional traffic overflowing to the access tandem Trunk group and then to a Customer designated Premises. Multiple Customer Premises Alternate Routing is also available where originating traffic from a Local Switching Center is directed via a Trunk group to a Customer designated Premises until that group is fully loaded, and then additional originating traffic from the same Local Switching Center or access tandem is delivered via a different Trunk group to a second Customer designated Premise. The Customer shall specify the last Trunk CCS desired for the high use group.
- b) Automatic Number Identification (ANI): This option provides the automatic in-band transmission signaling of a seven or ten digit number and information digits to the Customer's Premises for calls originating in the LATA for the identification of the calling station. The ANI feature is a Local Switching Center software function which is associated on a call-by-call basis with: 1) all individual transmission paths in a trunk group routed directly between a Local Switching Center and a Customer's Premises; or where technically feasible, 2) all individual transmission paths in a Trunk group between a Local Switching Center and an Access Tandem, and a Trunk group between an Access Tandem and a Customer's Premises.
  - The ten-digit ANI telephone number is only available with Feature Group D. 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 line or ANI failure, in which case only the NPA will be transmitted.
- c) <u>Cut-Through</u>: This option allows End Users of the Customer to reach the Customer's Premises by using the end of dialing digit (#) at the end of the dialing sequence. The Company will not record any other dialed digits for these calls.
- d) Service Class Routing: This option provides the capability of directing originating traffic from a Local Switching Center to a Trunk group to a Customer designated Premises, based on the line class of service and service prefix indicator. A domestic Interexchange Carrier may not order more than four different routes per Local Switching Center or Access Tandem. An international Interexchange Carrier may order up to four additional routes.
- e) Feature Group D with 950 Access: This option provides for the routing of originating calls, dialed using a 950-10XX or 950-1XXX Access Code, to the FGD Customer using FGD signaling protocols and technical specifications. The Customer is responsible for distinguishing between standard FGD calls and 950-dialed calls delivered over the same trunks.
- f) Signaling System Seven (SS7): This option provides out of band transmission of SS7 protocol signaling information between the Local Switching Center switching system and the Customer's designated Premises. Prior to installation of any SS7 circuits, the Customer must agree to participate in SS7 certification testing. The Company will provide a testing plan to the Customer, and reserves the right to deny SS7 connectivity if the Customer's circuits do not meet the testing requirements.
- g) Basic Initial Address Message Delivery: This option permits the following optional SS7 signaling call setup parameters: User Service Information, Called Party Number, Calling Party Number, Charge Number, Originating Line Information, Transit Network Selection, Carrier Selection, Service Code and Access Transport.

- 5. SWITCHED ACCESS SERVICE (Cont.)
  - 5.5 <u>Switched Access Optional Features (Cont.)</u>:
    - 5.5.3 Feature Group D Optional Features
      - 5.5.3.1 Common Switching Optional Features (Cont.)
        - h) Called Directory Number Delivery: This option provides the Customer with the telephone number to which the call was directed. The seven or ten digit number is provided as part of the in-band transmission with MF signaling. The Called Directory Number Delivery feature is associated on a call-by-call basis with all individual transmission paths in a Trunk group routed from an Access Tandem or the originating Local Switching Center. This option is available except when FGD is provided with 950 access or Cut-Through features.
        - i) Flexible Automatic Number Identification Delivery: This feature is a network enhancement to ANI. The feature is available on inbound signaling or in the Originating Line Information Parameter in the Basic Initial Address Message Delivery optional feature for SS7 signaling. Flexible ANI will provide additional values for Information Indicator (II) digits that are associated with various classes of service not associated with the standard ANI digits. This feature may only be used in conjunction with ANI. The following Information Indicator codes are available: Confinement/Detention Facility; Outward Wide Area Telecommunications Service; Cellular Service; Private Pay Station; and, Access for Private Virtual Networks.