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4. <u>SWITCHED ACCESS</u>

4.1 General

Switched Access provides two-point communications paths between the point of termination at a CDL and the points of termination at Telephone Company end user premises within the Access Area. Each path is established through the use of Switched Transport, (Entrance Facilities, Direct-Trunked Transport and/or Tandem Switched Transport) End Office Services, and Common Lines or Special Access Lines. Switched Access provides for the ability to originate calls from an end user's premises to the CDL and to terminate calls from the CDL to an end user's premises. Specific descriptions of Switched Access are in 4.2.

Switched Access Feature Group's are ordered in either quantities of lines or trunks or in Busy Hour Minutes of Capacity (BHMC). FGA is furnished on a per-line basis, and FGB, FGC, FGD and SAC Access Service are furnished on a per-trunk basis in accordance with the capacity ordered in trunks or BHMC.

Quantities of lines, trunks or total BHMC of the circuit group connecting the first point of switching and the CDL are determined at the Telephone Company's first point of switching.

A customer may designate one or more CDLs within the LATA for FGA, FGB, FGC, FGD Switched Access or SAC Access Service.

When Switched Access is ordered in BHMC, the BHMC must be differentiated by Feature Group type and directionality of traffic as in 4.3.2 in order for the Telephone Company to properly design Switched Access to meet the traffic carrying capacity requirements of the customer.

When a customer plans to use Switched Access in connection with the resale of services of an IC, the provisions for such Switched Access charges are in Section 12.

Switched Access is provided with basic testing as described in 4.2.4(B)(10), (C)(11), (D)(13), (E)(13), and 4.2.7. Additional testing is provided as described in 6.6. Testing is provided only on the FIA supplied by the Telephone Company.

Shared use between Switched Access and Special Access over high capacity facilities is described in 5.6.7.

Switched Access may be ordered by the customer for mixed intrastate and interstate communications as in 4.3.2 and 4.3.3.

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4. <u>SWITCHED ACCESS</u> (Continued)

4.2 <u>Description of Switched Access</u>

4.2.1 <u>Types of Feature Groups</u>

The Telephone Company, under the ordering provisions in Section 3, at rates and charges as specified in 4.6, will provide Switched Access as follows:

(A) <u>Feature Group A</u> (USOC - OHY; OHX)

Feature Group A (FGA), which is available to all customers, provides line-side access to Telephone Company end office switches with an end user access code of NXX-XXXX for the customer's use in originating and terminating communications. FGA is available as Message Telecommunications Service-type or Wide Area Telecommunications Service-type (MTS/WATS-type) access or as Foreign Central Office/Off Network Access Line (FCO/ONAL) open end access, for customer provided intrastate communications capability or connection to an interexchange intrastate service. A more detailed description of FGA is in 4.2.4(B).

(B) Feature Group B (USOC - OHB)

Feature Group B (FGB), which is available to all customers, provides trunk-side access to Telephone Company end office switches with an associated uniform 950-XXXX access code for originating and terminating communications for customer provided intrastate communications capability or connection to an interexchange intrastate service. A more detailed description of FGB is in 4.2.4(C).

(C) Feature Group C (USOC - OHC)

Feature Group C (FGC) provides trunk-side access to Telephone Company end office switches for providers of MTS and WATS for originating and terminating communications. FGC is available in all end offices which are not equipped for FGD End Office Services. A more detailed description of FGC is in 4.2.4(D).

(D) Feature Group D (USOC - OHD)

Feature Group D (FGD), which is available to all customers, provides trunk-side access to Telephone Company end office switches with an associated 10XXX or 101XXXX access code for providers of MTS/WATS and MTS/WATS-type services for originating and terminating communications for customer provided intrastate communications capability or connections to an interexchange intrastate service. A more detailed description of FGD is in 4.2.4(E).

(E) SAC Access Service

Service Access Code (SAC) Access Service is an originating service that is provided via SAC Access Service switched trunk groups, or may be provided in conjunction with FGC or FGD. When a 1+500-NXX-XXX or 0+500-NXX-XXXX call is originated by an end user for 500 SAC Access Service, the 500 Customer Identification Function, as described in 4.2.20, determines the customer to which the call is to be routed based on the 500 NXX code dialed. When a 1+Toll Free-NXX-XXXX call is originated by an end user for Toll Free SAC Access Service, the Toll Free Customer Identification Function as described in 4.2.11 determines the customer to which the Toll Free call is routed. When a 1+900-NXX-XXXX call is originated by an end user for 900 SAC Access Service, the 900 Customer Identification Function, as described in 4.2.12, determines the customer to which the call is to be routed based on the 900 NXX code dialed. A more detailed description of SAC Access Service is in 4.2.4(F).

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REFERENCE TO OTHER TARIFFS

Whenever reference is made in this tariff to other tariffs of GTE, the reference is to the tariffs in force as of the effective date of this tariff, and to amendments thereto and successive issues thereof.

REFERENCE TO TECHNICAL PUBLICATIONS

(1) NECA Technical Reference Publication AS No. 1 - Issued March, 1984; entire issue

Addendum - Issued March, 1987

- (2) GTE Technical Interface Reference Manual, Issue 2 Issued August, 1984, Revised December 1985, August 1986 and October 1988; Sections 3300, 5107, 6000, 6103 and 7000
- (5) American National Standards Institute Publication ANSI T1.102, Issued 1987
- (5) American National Standards Institute Publications, for the service category of Frame Relay:

T1.602-1989, Issued 1988 T1.606-1990, Issued 1989 T1.617-1991, Issued 1991 T1.618-1991, Issued 1991

- (3) Underwriters Laboratory Publication UL 94, Issued 1990
- (1) AT&T Technical Reference Publication 41014 Issued February, 1978; entire issue
- (2) GTE Service Corporation Telephone Operations Traffic Grade of Service Standards, Issued April, 1985; entire issue
- (4) Bellcore Technical Reference Publication

TR-TSV-000905, Issue 1, August, 1989 TR-NWT-000499, Issue 4, November, 1991 TR-NWT-000063, Issue 4, July, 1991 TR-TSY-000191, Issue 1, May, 1986 TR-TSY-000487, Issue 1, July, 1989 TR-NPL-000320, Issue 1, April, 1988

- (4) Multiple Exchange Carrier Access Billing (MECAB) Guidelines Issued December, 1991.
- (4) Multiple Exchange Carrier Ordering and Design (MECOD) Guidelines Issued November, 1989.

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- ISSUED: MAY 31, 2012 BY: President Richmond, Virginia
- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)

4.2.3 <u>Description of Switched Transport</u> (Continued)

- (A) <u>General</u> (Continued)
 - (1) (Continued)

The application of the Switched Transport rates and the determination of mileage measurements for Switched Transport is in 4.5.2(N)(2).

(2) Switched Transport facilities provide two-way voice frequency transmission paths which permits the transport of calls in the originating direction (from 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 the human voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz. Direct-Trunked Transport and Entrance Facilities are composed of facilities as ordered by the customer.

Switched Transport facilities will be engineered and routed based on standard engineering methods, available facilities and equipment, Telephone Company traffic routing plans and the customer's order for service.

The Telephone Company will work cooperatively with the customer in determining (1) service to be routed directly to an end office switch or via a Telephone Company access tandem and (2) the directionality of the service.

(3) For Tandem-Switched Transport the number of Switched Transport transmission paths provided between an end office switch and a Telephone Company access tandem are determined by the Telephone Company using standard traffic engineering methods. The number of Switched Transport transmission paths provided between the Telephone Company access tandem and serving wire center of the CDL is determined by the customer's order. If ordered in BHMC, the Telephone Company will determine the number of trunks, using standard traffic engineering methods. When Direct-Trunked Transport is ordered directly to a Telephone Company access tandem, facilities between the serving wire center of the CDL and the Telephone Company access tandem will be determined by the customer's order.

4. <u>SWITCHED ACCESS</u> (Continued)

4.2 <u>Description of Switched Access</u> (Continued)

4.2.3 <u>Description of Switched Transport</u> (Continued)

(B) Entrance Facilities

The Entrance Facility provides the transmission path and the interface between the Telephone Company's serving wire center and customer provided facilities at the point of termination at the CDL.

Switched Access is provided in a number of separate Entrance Facilities. Each Entrance Facility provides a specified facility interface (e.g., two-wire, four-wire, DS1, etc.). Provision of the Interface Arrangements for two-wire and four-wire voice frequency Entrance Facility and any Optional Arrangements may require placement of Telephone Company equipment [e.g., supervisory signaling equipment as described in 4.2.3(G)] on the customer's premises.

Where transmission facilities permit, the individual transmission paths between the point of termination and the first point of switching may, at the option of the customer, be provided with Optional Arrangements as in 4.2.3(G).

The following Standard Entrance Facilities are available:

Two-Wire Voice Frequency Four-Wire Voice Frequency DS1 Digital DS3 Digital

The number of Entrance Facilities provided is determined by customer's order for service.

- (1) Two-Wire Voice Frequency Entrance Facility
 - (a) The Two-Wire Voice Frequency Entrance Facility, except as in (b), provides two-wire voice frequency transmission at the point of termination at the CDL. The interface is capable of transmitting signals within the frequency bandwidth of approximately 300 to 3000 Hz.
 - (b) The Two-Wire interface is not provided in association with FGC and FGD when the first point of switching is a Telephone Company access tandem. In addition, the two-wire interface is not provided in association with FGB when the first point of switching is a Telephone Company access tandem where two-wire terminations are not provided.
 - (c) The transmission path between the point of termination at the CDL and the serving wire center may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of the human voice and associated telephone signals within the frequency bandwidth of 300 to 3000 Hz.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.3 <u>Description of Switched Transport</u> (Continued)
 - (B) Entrance Facilities (Continued)
 - (1) <u>Two-Wire Voice Frequency Entrance Facility</u> (Continued)
 - (d) The Two-Wire interface is provided with loop supervisory signaling. When the interface is associated with FGA, such signaling may be loop start or ground start. When the interface is associated with FGB, FGC, and FGD, such signaling, except for two-way calling, may be reverse battery signaling. The interface may, at the option of the customer, be provided with DX supervisory signaling or E&M supervisory signaling as in 4.2.3(G).
 - (2) Four-Wire Voice Frequency Entrance Facility
 - (a) The Four-Wire Voice Frequency Entrance Facility provides four-wire voice frequency transmission at the point of termination at the CDL. The interface is capable of transmission of the human voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.
 - (b) The transmission path between the point of termination at the CDL and the serving wire center may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of the human voice and associated telephone signals within the frequency bandwidth of 300 to 3000 Hz.
 - (c) The interface is provided with loop supervisory signaling. When the interface is associated with FGA, such signaling may be loop start or ground start signaling. When the interface is associated with FGB, FGC, and FGD, such signaling, except for two-way calling, may be reverse battery signaling. The interface may, at the option of the customer, be provided with supervisory signaling as in 4.2.3(G).
 - (3) <u>(Reserved for Future Use)</u>
 - (4) <u>(Reserved for Future Use)</u>
 - (5) (Reserved for Future Use)

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.3 <u>Description of Switched Transport</u> (Continued)
 - (B) Entrance Facilities (Continued)
 - (6) <u>DS1 Digital Entrance Facility</u>
 - (a) The DS1 Digital Entrance Facility provides DS1 level digital transmission at the point of termination at the CDL. The interface is capable of transmitting electrical signals at 1.544 Mbps, with the capability to multiplex up to 24 voice frequency transmission paths.

Between the first point of switching and the point of termination at the CDL, when analog switching utilizing analog terminations is provided, the Telephone Company may, at its option, provide multiplex equipment to derive 24 transmission paths of frequency bandwidth of approximately 300 to 3000 Hz. When digital switching or analog switching with digital carrier terminations is provided, the Telephone Company will provide, at the customer's request, at the first point of switching, DS1 signals in D4 or D3 format.

- (b) The interface is provided with individual transmission path bit stream supervisory signaling.
- (7) (Reserved for Future Use)

(8) DS2 Digital Entrance Facility

The Telephone Company currently does not offer the DS2 Entrance Facility.

- (9) DS3 Digital Entrance Facility
 - (a) The DS3 Digital Entrance Facility provides, on a protected basis, a DS3 level digital transmission at the point of termination at the CDL. The interface is capable of transmitting electrical signals at 44.736 Mbps, with the capability to multiplex up to 672 voice frequency transmission paths.

Between the first point of switching and the point of termination at the CDL, when analog switching utilizing analog terminations is provided, the Telephone Company may, at its option, provide multiplex equipment to derive up to 672 voice frequency transmission paths of frequency bandwidth of approximately 300 to 3000 Hz. When digital switching or analog switching with digital carrier terminations is provided, the Telephone Company will provide, at the customer's request, at the first point of switching, DS3 signals in D4 or D3 format.

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- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.3 <u>Description of Switched Transport</u> (Continued)
 - (B) <u>Entrance Facilities</u> (Continued)
 - (9) <u>DS3 Digital Entrance Facility</u> (Continued)
 - (b) The interface is provided with individual transmission path bit stream supervisory signaling.
 - (c) To insure compatibility of transmission, the utilization of the same manufacturer's equipment (end-to-end) may be required. The Telephone Company reserves the right to choose this equipment.
 - (d) The customer may specify either an electrical or optical interface as set forth in 3.1.1(F).
 - (10) (Reserved for Future Use)
 - (C) Direct-Trunked Transport

The Direct-Trunked Transport rate is assessed upon customers for the use of Voiceband, DS1 or DS3 High Capacity transport dedicated to a customer from a serving wire center to an end office (including host end offices) when such facilities are not switched through a Telephone Company access tandem. Direct Trunked Transport also provides for the transmission facilities between:

- a serving wire center or end office and a Telephone Company Hub office other than the serving wire center where multiplexing is performed;
- a serving wire center and a Telephone Company access tandem for Tandem-Switched Transport services when Direct-Trunked Transport routing is desired directly to the Telephone Company access tandem.

The Direct-Trunked Transport Rate is flat-rated and, with the exception of Voiceband Transport, has both distance-sensitive and nondistance-sensitive components. Voiceband Transport has only a distance-sensitive component. The distance-sensitive mileage recovers costs of the transmission facilities, including intermediate transmission circuit equipment, between the end points of the circuit. The non-distance sensitive component, i.e., the termination component, recovers costs of circuit equipment at the ends of the transmission links. Direct-Trunked Transport is not provided at Telephone Company end offices that are not capable of measuring switched access minutes of use. These end offices are specified in NECA Tariff FCC No. 4.

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- 4. SWITCHED ACCESS (Continued)
- 4.2 **Description of Switched Access (Continued)**
- 4.2.3 Description of Switched Transport (Continued)
 - (D) Tandem-Switched Transport

The Tandem-Switched Transport Rate is assessed upon customers for the use of transport from a serving wire center to an end office that is switched at a Telephone Company access tandem. The Tandem-Switched Transport rate may also be assessed for transport between a Telephone Company access tandem and end office, between a host end office and a remote end office and between a FGA dial tone office and other end offices in the local calling area. Tandem-Switched Transport consists of circuits dedicated to the use of a single customer from the serving wire center to the Telephone Company access tandem and circuits used in common by multiple customers from the Telephone Company access tandem to an end office. The Tandem-Switched Transport Rate includes three subelements, a Tandem-Switched Transport - Facility, a Tandem-Switched Transport - Termination, and a Tandem Switching Rate. The Tandem-Switched Transport - Facility is usage rated and distance-sensitive, i.e., a per access minute per airline mile rate. The rate recovers costs of the transmission facilities, including intermediate transmission circuit equipment, between the end points of the circuit. The Tandem-Switched Transport - Termination is a usage rated, per minute rate to recover costs incurred at the ends of the transmissions links. For Toll Free originating access minutes, the Tandem (C) Switching Rate provides for tandem transport, tandem transmission, and tandem switching. No other Tandem Switched Transport usage charges will be assessed for Toll Free originating access minutes. For Other Than Toll Free originating access minutes, the Tandem Switching Rate is a usage rated, per minute rate to recover (C) a portion of the tandem switching costs. The Tandem Switching Rate is not applicable for transport between a host end office and a remote end office or to FGA Transport.

- (E) (Reserved for Future Use)
- (F) Multiplexing

Multiplexing provides for arrangements to convert a single higher capacity or bandwidth circuit for bulk transport to several lower capacity or bandwidth circuits. Monthly rates and nonrecurring charges for multiplexing apply as follows: 1) the DS3/DS1 Multiplexing Charge applies to all DS3 to DS1 multiplexing arrangements; 2) the DS1/Voice Multiplexing Charge applies to all DS1 Entrance Facility and Direct-Trunked Transport circuits that terminate in an analog office and where the multiplexer performs DS1/Voice multiplexing functions; 3) a Multiplexing Charge will always apply on High Capacity shared use switched and special access facilities.

4. <u>SWITCHED ACCESS</u> (Continued)

4.2 <u>Description of Switched Access</u> (Continued)

4.2.3 <u>Description of Switched Transport</u> (Continued)

(F) <u>Multiplexing</u> (Continued)

Listed below are the multiplexing arrangements offered with switched access.

DS1 to Voice

An arrangement that multiplexes twenty-four voice grade circuits to a single DS1 digital circuit at a rate of 1.544 Mbps, or multiplexes a single DS1 digital circuit at a rate of 1.544 Mbps to twenty-four voice grade circuits.

<u>DS3 to DS1</u>

An arrangement that multiplexes twenty-eight DS1 digital circuits to a single DS3 digital circuit at rate of 44.736 Mbps, or multiplexes a single DS3 digital circuit at a rate of 44.736 Mbps to twenty-eight DS1 digital circuits.

- (G) Optional Arrangements
 - (1) The Telephone Company will provide Optional Arrangements in association with the Entrance Facilities listed in 4.2.3(B) (1) and (2). The provision of such Optional Arrangements may require placement of Telephone Company equipment on the customer's premises. These Optional Arrangements are nonchargeable.

Supervisory Signaling

A supervisory signaling capability is provided for each Interface Arrangement as listed in 4.2.3 (B)(1) and (2). Where the transmission parameters permit and where signaling conversion is required by the customer to meet his signaling capability, the customer may order a supervisory signaling arrangement for each transmission path provided as follows:

For Interface Arrangements (1) and (2)

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

For Interface Arrangement (2)

SF Supervisory Signaling arrangement, or E&M Type III Supervisory Signaling arrangement.

These optional supervisory signaling arrangements are unavailable in conjunction with Signaling System 7 (SS7) Out of Band Signaling as described in 4.2.5(AA).

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- 4. SWITCHED ACCESS (Continued)
- 4.2 Description of Switched Access (Continued)

4.2.4 Description of End Office Services

- (A) General
 - (1) End Office Services provide the end user termination functions and end office switching necessary to complete the transmission of Switched Access communications to and from the end users served by the end office. End Office Services Optional Arrangements are available as defined in 4.2.5.

End Office Services are provided in association with Switched Transport when ordered as in Section 3. End Office Services will be provided as one of the following types: Feature Group A (FGA), Feature Group B (FGB), Feature Group C (FGC), Feature Group D (FGD), and SAC Access Service.

The number of End Office Service transmission paths and line terminations provided will be determined by the Telephone Company based on standard traffic engineering methods.

The rates are further differentiated based upon the directionality of the traffic carried over the (2) Switched Access Service.

(C) (C)

- (3) End Office Switching provides the following:
 - (a) The facilities to terminate end user Common Lines in end office switches or Special Access Lines in WATS Serving Offices.
 - (b) The end office switching functions necessary to complete a Switched Access Communication to or from end user Common Lines or Special Access Lines served by the end office.
 - The termination of a call at a Telephone Company intercept operator or recording. The (c) operator or recording tells a caller why a call, as dialed, could not be completed, and if possible, provides the correct number.
- (B) FGA
 - (1) FGA is provided at all Telephone Company end office switches and switches customer communications to and from Common Lines, or Special Access Lines, as in 4.2.1(A).

FGA utilizes a two-point electrical communications path between the Interface Arrangement and the Common Line or Special Access Line which is a voice grade transmission path comprised of any form or configuration of plant capable of, and typically used in the telecommunications industry for, the transmission of the human voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.4 <u>Description of End Office Services</u> (Continued)
 - (B) <u>FGA</u> (Continued)
 - (2) FGA is provided as line-side switching through end office switch line equipment. Line-side switching may, at the option of the customer, be provided with ground start supervisory signaling or loop start supervisory signaling.
 - (3) The customer shall select the first point of switching, within the selected FGA Access Area.
 - (4) FGA is arranged for originating calling only, terminating calling only or two-way calling. The Telephone Company will determine the type of calling to be provided unless the customer requests the option, Customer Specification of Switched Access Directionality as described in 4.2.5(H). For such specification, additional charges on an Individual Case Basis will apply if the calling arrangements are different than that the Telephone Company would have provided without such special arrangements. Originating calling permits the origination of calls from the end user to the CDL. Terminating calling permits the termination of calls from the CDL to the end user. Two-way calling permits either the origination or termination of calls, but not simultaneously.
 - (5) FGA, when being used in the terminating direction, is arranged with dial tone start-dial signaling and dial pulse address signaling. FGA, when being used in the terminating direction, may, at the option of the customer, be arranged for Dual Tone Multifrequency (DTMF) address signaling, subject to availability of equipment in the end office from which FGA is provided. When FGA is provided in a Hunt Group Arrangement or Uniform Call Distribution Arrangement, all FGA will be arranged for the same type of signaling.

No address signaling is provided by the Telephone Company when FGA is used in the originating direction. Address signaling in such cases, if required by the customer, must be provided by the end user using inband tone signaling techniques. Such inband tone address signals will be subject to the ordinary transmission capabilities of the Switched Transport provided.

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- 4. SWITCHED ACCESS (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)

4.2.4 <u>Description of End Office Services</u> (Continued)

- (B) <u>FGA</u> (Continued)
 - (6) FGA, when used in the terminating direction, may be used to access valid NXXs in the FGA Access Area. For FGA, the Access Area is defined as the local calling area of the end office switch from which the FGA is provided. The description of any specific FGA Access Area will be provided to the customer upon request. Access is also provided for FGA terminating calls established on a 1+ basis (i.e., toll) outside the specific FGA Access Area (i.e., local calling area) however inside the LATA. When a FGA customer chooses to terminate toll calls outside the LATA via an Interexchange Carrier's Service (i.e., no screening or blocking performed by customer), the rates and charges in 4.5.2(N)(3)(c) apply. The Telephone Company may, at the customer's request, and depending on the technical capabilities, screen and block such interLATA calls. Access is also provided to local operator service (0- and 0+), directory assistance (411 and 555-1212), emergency reporting service (911), local telephone repair (611), information services (e.g., time and temperature) and IC services (by dialing the appropriate digits). The customer will be billed for an operator surcharge as in the Telephone Company's General Customer Services Tariff, for local operator assistance (0-) calls; certain community information service calls; directory assistance (411 and 555-1212) calls; and customer call charges in accordance with other IC tariffs in force when the Telephone Company performs the billing for such customer calls.

Access to these services may, at the option of the customer, be blocked when the Call Denial on Line or Hunt Group three digit or six digit dial code screening arrangements are provided, subject to the availability of the equipment in the end office from which FGA is provided. Call Denial on Line or Hunt Group is an arrangement which will screen terminating calls except calls to 411, 611, 911, Toll Free, (T) 555-1212, and a set of NXXs selected by the customer, in cooperation with the Telephone Company for each end office switch and route all other calls to reorder tone or recorded announcement.

Three digit dial code screening is an arrangement which will screen terminating calls and allow completion of calls to one or more specific NXXs (or all NXXs) within the Home NPA, or calls to one, two, or three digit service codes (e.g., 0, 411) and route all others to reorder tone or recorded announcement.

Six digit dial code screening is an arrangement which will screen Access Area terminating calls and allow completion of calls to selected NXXs within foreign NPAs and route all other calls in the foreign NPA to reorder tone or recorded announcement.

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- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.4 <u>Description of End Office Services</u> (Continued)
 - (B) <u>FGA</u> (Continued)
 - (7) (Reserved for Future Use)
 - (8) FGA is provided on a single line basis. FGA may, at the option of the customer, be provided in a Hunt Group Arrangement or a Uniform Call Distribution Arrangement. When FGA is provided with these arrangements, the FGA may also, at the option of the customer, be provided with a Nonhunting Number Arrangement. The Uniform Call Distribution Arrangement and the Nonhunting Number Arrangement are only available from certain Telephone Company end office switches. All FGA in a Hunt Group Arrangement or Uniform Call Distribution Arrangement with the Nonhunting Number Arrangement will be similarly arranged.
 - (9) A seven digit telephone number assigned by the Telephone Company is provided for access to FGA 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.
 - (10) FGA is provided with basic testing at no additional charge. Basic tests include: loss, 3 tone slope, (C-message and C-notched), dc continuity and when applicable operational signaling.
 - (a) Where Telephone Company equipment is available a seven digit access number will be provided to the customer for testing in the terminating direction. These access numbers shall include: balance (100 type) test line, and milliwatt (102 type) test line.

Additional testing will apply as in 6.6 when: (a) the customer requests a test not specified in the preceding; (b) the test requested is not essential to the ongoing maintenance of FGA; or (c) the customer requests testing on a more frequent basis than scheduled for in the Telephone Company's Central Office Maintenance Planning System (COMPS). The Telephone Company will routinely perform maintenance testing from the dial tone end office to the customer's first point of switching.

- (11) (Reserved for Future Use)
- (12) When all FGA 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.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 Description of Switched Access (Continued)

4.2.4 Description of End Office Services (Continued)

- (B) FGA (Continued)
 - (13) FGA is provided with either Type B or Type C transmission performance. The parameters associated with these performances are guaranteed to the first point of switching. Type C transmission performance is provided with Interface Arrangement 1 and Type B is provided with Interface Arrangements 2 through 10. In addition, Data Transmission Parameters may, at the option of the customer, be provided with FGA.
- (C) FGB
 - (1) FGB, when provided without the use of a Telephone Company access tandem (in a directly routed arrangement), is provided at all Telephone Company appropriately equipped electronic end office switches. When provided via Telephone Company appropriately equipped electronic access tandem switches, FGB End Office Services are provided at all Telephone Company subtending end office switches in the terminating direction and at appropriately equipped end offices in the originating direction utilizing the end user access code of 950-XXXX. For those subtending end offices that are not appropriately equipped, access in the originating direction is available by the end user access code of 1+950-XXXX.

FGB utilizes a two-point electrical communications path between the Interface Arrangement and Common Line or a Special Access Line, as in 4.2.1(B), which is a voice grade transmission path comprised of any form or configuration of plant capable of, and typically used in the telecommunications industry for, the transmission of the human voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

- (2) FGB is provided as trunk-side switching through the use of end office switch trunk equipment. The switch trunk equipment is provided with wink start pulsing and answer and disconnect supervisory signaling.
- (3) The Telephone Company will select the trunking arrangement from the end office, within the selected Access Area from which FGB is to be provided. If the customer orders an Automatic Number Identification (ANI) Arrangement or Rotary Dial Station Signaling, where available, special routing and trunking arrangements may be required.
- (4) FGB is arranged for either originating, terminating, or two-way calling based on the trunks or BHMC ordered. The Telephone Company will determine the type of directional calling to be provided unless the customer requests the option, Customer Specification of Switched Access Directionality as described in 4.2.5(H). For such specification, additional charges on an Individual Case Basis will apply if the calling arrangements are different from that the Telephone Company would have provided without such special arrangements. Originating calling permits the origination of calls from the end user to the CDL. Terminating calling permits the termination of calls from the CDL to the end user. Two-way calling permits either the origination or termination of calls, but not simultaneously.

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ISSUED: May 22, 2018 BY: President Richmond, Virginia

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)

4.2.4 <u>Description of End Office Services</u> (Continued)

- (C) <u>FGB</u> (Continued)
 - (5) FGB, when being used in the terminating and originating direction, is provided with multifrequency address signaling. At the option of the customer, up to 7 Digits Outpulsing of Access Digits to the customer will be provided in the originating direction by the Telephone Company equipment to the CDL where the FGB terminates. Except for FGB provided with the ANI arrangement or Rotary Dial Station Signaling as in 4.2.5(M), 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 signals will not be regenerated by the Telephone Company and will be subject to the ordinary transmission capabilities of the Switched Transport provided.
 - (6) FGB, when being used in the terminating direction, may be used to access valid NXXs in the FGB Access Area. If the FGB connection is made directly to an end office the Access Area is that of that end office only. If the FGB connection is made to an access tandem the Access Area is that of all end offices subtending that access tandem. The description of any FGB Access Area will be provided to the customer upon request. Access is also available to information services (e.g., time and temperature) and IC services by dialing the appropriate digits and other services when those services can be reached using valid NXX codes.
 - (7) A separate trunk group will be established based on the directionality (i.e., originating only, terminating only, or two-way traffic) of the FGB arrangement provided.
 - (8) The access code for FGB is a uniform access code in the form of 950-XXXX. For end offices not appropriately equipped an IC may instruct their end users to access the FGB by dialing 1+950-XXXX.
 - (9) FGB may, at the option of the customer, be arranged to provide an ANI arrangement to obtain the calling station billing numbers. ANI is not available if the FGB connection is at a Telephone Company access tandem. The ANI arrangement provides seven digit calling station billing number information to the CDL. In those situations where no billing number is available in the end office switch, no seven (C) digit number will be provided and an "operator identification" information digit will be provided.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)

4.2.4 <u>Description of End Office Services</u> (Continued)

- (C) <u>FGB</u> (Continued)
 - (9) (Continued)

In those cases where an ANI failure has occurred in the end office switch, no seven digit number will be provided, and an "identification failure" information digit will be provided. ANI will be available using multifrequency signaling provided by the Telephone Company.

Rotary Dial Station Signaling will be made available in certain end offices using dial repeating equipment provided by the Telephone Company. The customer must order Switched Transport arranged to pass the dial repeating signals. FGB is provided in directly routed arrangements where the ANI or Rotary Dial Station Signaling arrangements are provided.

Only calls from end users terminated on the end office switch will be provided with the ANI or Rotary Dial Station Signaling arrangements.

- (10) The Telephone Company will determine the end office ANI protocol for FGB. The Telephone Company makes no guarantee that ANI will be available at all end offices which have access to FGB.
- (11) FGB is provided with basic testing at no additional charge. Basic tests include: loss, 3 tone slope, (C-message and C-notched noise) and where applicable, dc continuity, signaling and balance testing.
 - (a) Where Telephone Company equipment is available, a seven digit access number will be provided to the customer for testing in the terminating direction. These access numbers shall include: balance (100 type) test line, milliwatt (102 type) test line, data transmission (107 type) test line, loop around test line, short circuit test line and open circuit test line.
 - (b) Where Telephone Company equipment is available and the customer is equipped with compatible remote office test lines, FGB will be provided with automatic testing (105 type or equivalent) in the originating direction.

Additional testing charges apply as in 6.6 when: (a) the customer requests a test not specified in the preceding; (b) the test requested is not essential to the ongoing maintenance of FGB; or (c) the customer requests testing on a more frequent basis than scheduled in the Telephone Company's Central Office Maintenance Planning System (COMPS). The Telephone Company will routinely perform maintenance testing from its access tandem or end office (if direct routed) to the customer's first point of switching.

(12) (Reserved for Future Use)

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.4 <u>Description of End Office Services</u> (Continued)
 - (C) <u>FGB</u> (Continued)
 - (13) When all FGB is discontinued at an end office and/or in an Access Area, a regular number intercept announcement is provided. This arrangement provides, for a limited period of time, an announcement that the FGB associated with the number dialed has been disconnected.
 - (14) FGB is provided with either Type B or Type C transmission performance. The parameters associated with these performances 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 Arrangement 1 and Type B is provided with Interface Arrangements 2 through 10. In addition, Data Transmission Parameters may, at the option of the customer, be provided with FGB.
 - (15) FGB may at the option of the customer and with the concurrence of the Telephone Company, be provided with Alternate Traffic Routing. This arrangement, as shown in 4.2.5(A), delivers originating traffic from an end office over a designated trunk group to the CDL. When that trunk group is fully loaded, additional originating traffic is automatically delivered over one or more designated trunk groups to one or more CDLs.
 - (D) <u>FGC</u>
 - (1) FGC is provided at all Telephone Company end office switches or Telephone Company designated access tandem switches. FGC is available at an end office switch unless FGD is provided in the same office. When FGD is available, FGC will be discontinued as soon as the conversion to FGD can be arranged.

FGC utilizes a two-point electrical communications path between the Interface Arrangement and Common Line or Special Access Line which is a voice grade transmission path comprised of any form or configuration of plant capable of, and typically used in the telecommunications industry for, the transmission of the human voice and associated signals within the frequency bandwidth of approximately 300 to 3000 Hz.

- (2) FGC is provided as trunk-side switching through the use of end office switch trunk equipment. The switch trunk equipment is provided with answer and disconnect supervisory signaling. Wink start pulsing signals are provided in all offices where available. In those offices where wink start pulsing signals are not available, delay dial start pulsing signals will be provided.
- (3) The Telephone Company will select the trunking arrangement from the end office within the selected Access Area from which FGC is to be provided. If the customer orders an ANI arrangement or Service Class Routing Arrangement, special routing and trunking arrangements may be required.

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- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.4 <u>Description of End Office Services</u> (Continued)
 - (D) <u>FGC</u> (Continued)
 - (4) FGC is arranged for either originating calling only, terminating calling only, or two-way calling based on the trunks or BHMC ordered. The Telephone Company will determine the type of Directional calling to be provided unless the customer requests the option, Customer Specification of Directionality as described in 4.2.5(H). For such specification, additional charges on an Individual Case Basis will apply if the trunk group Routing arrangements are different from that the Telephone Company would have provided without such special arrangements. Originating calling permits the origination of calls from the end user to the CDL. Terminating calling permits the termination of calls from the CDL to the end user. Two-way calling permits either the origination or termination of calls, but not simultaneously.
 - (5) FGC is provided with multifrequency address signaling except in certain electromechanical end office switches where multifrequency signaling is not available. In such electromechanical end office switches, the address signaling will be dial pulse or revertive pulse signaling, whichever is available. Dial pulse address signaling may, at the option of the customer, be provided in lieu of multifrequency address signaling if such signaling facilities are available in the end office. Up to twelve digits of the called party number dialed by the customer's end user will be provided by Telephone Company equipment to the CDL where the FGC terminates. Such called party number signals will be subject to the ordinary transmission capabilities of the Switched Transport provided.
 - (6) FGC, when being used in the terminating direction, may be used to access NXXs in the FGC Access Area. If the FGC connection is made directly to an end office the Access Area is that of that end office only. If the FGC connection is made to a Telephone Company access tandem the Access Area is that of all end offices subtending that Telephone Company access tandem. The description of any FGC Access Area will be provided to the customer upon request. Access is also available to Directory Assistance and other services (by dialing the appropriate codes) when the services can be reached using valid NXX codes.
 - (7) A separate trunk group will be established based on the directionality (i.e., originating only, terminating only, or two-way traffic) of the FGC arrangement provided.
 - (8) No access code is required for FGC. In certain locations, due to Central Office equipment limitations, two or three digit access codes may be used. The telephone number dialed by AT&TC's end user shall be a seven or ten digit number for calls in the North American Numbering Plan (NANP). For international calls outside the NANP, a five to twelve digit number may be dialed. The form of the numbers dialed by AT&TC's end user is NXX-XXXX, 0 or 1 + NXX-XXXX, NPA + NXX-XXXX, 0 or 1 + NPA + NXX-XXXX, and, when the International Direct Distance Dialing Arrangement (IDDD) is provided, 01 + CC + NN or 011 + CC + NN.

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ISSUED: June 1, 2021 BY: President Richmond, Virginia

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)

4.2.4 <u>Description of End Office Services</u> (Continued)

- (D) <u>FGC</u> (Continued)
 - (9) FGC may, at the option of the customer, be arranged to provide an ANI arrangement to obtain the calling station billing number. The ANI arrangement provides seven digit station billing number information to the CDL. In those situations where no billing number is available in the end office switch, no seven digit number will be provided and an "operator identification" information digit will be provided.

In those cases where an ANI failure has occurred in the end office switch, no seven digit number will be provided and an "identification failure" information digit will be provided. ANI will be made available using multifrequency signaling provided by the Telephone Company.

FGC is provided in directly routed arrangements to the end office switch where the ANI arrangement is provided. The Telephone Company will determine the end office ANI protocol for FGC.

Only calls from end users terminated on the end office switch will be provided with the ANI arrangement. ANI is provided from end offices for which Telephone Company recording for end user billing is not provided, or where it is not required, as with Toll Free Service. It is not provided from end (T) offices for which the Telephone Company needs to forward ANI to its recording equipment.

- (10) FGC may, at the option of the customer, be arranged for International Direct Distance Dialing (IDDD) arrangement in the originating direction. End offices or Telephone Company access tandems equipped for IDDD will be designated by the Telephone Company. The CDL must be equipped to receive the IDDD supervisory and address signals and the CDL must provide operator assistance to the end users if necessary to obtain the IDDD address signals once the CDL acknowledges it is ready to receive IDDD address signals.
- (11) (Reserved for Future Use)
- (12) (Reserved for Future Use)
- (13) FGC is provided with basic testing at no additional charge. Basic tests include: loss, 3 tone slope, (C-message and C-notched), and where applicable, signaling and balance testing.
 - (a) Where Telephone Company equipment is available, a seven digit access number will be provided to the customer for testing in the terminating direction. The access number shall include: balance (100 type) test line, milliwatt (102 type) test line, automatic transmission measuring (105 type) test line, data transmission (107 type) test line, nonsynchronous or synchronous test line, loop around test line, short circuit test line and open circuit test line.

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- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)

4.2.4 <u>Description of End Office Services</u> (Continued)

- (D) <u>FGC</u> (Continued)
 - (13) (Continued)
 - (b) Where Telephone Company equipment is available and the customer is equipped with compatible equipment (remote office test lines and 105 test lines with associated responders or their functional equivalent), FGC will be provided with automatic testing.
 - (c) At the option of the Telephone Company, cooperative testing may be provided in lieu of automatic testing. Cooperative testing is where the Telephone Company provides a technician at its office(s) and the customer provides a technician at its CDL, with suitable test equipment to perform the required tests. The Telephone Company will routinely perform maintenance testing from its access tandem or end office (if direct routed) to the customer's first point of switching.

Additional testing charges will apply as in 6.6 when: (a) the customer requests a test not specified in the preceding; (b) the test requested is not essential to the ongoing maintenance of FGC; or (c) the customer requests testing on a more frequent basis than scheduled in the Telephone Company's Central Office Maintenance Planning System (COMPS).

- (14) FGC may, at the option of the customer, be provided with Alternate Traffic Routing. This arrangement, as shown in 4.2.5(A), delivers originating traffic from an end office over a designated trunk group to the CDL. When that trunk group is fully loaded, additional originating traffic is automatically delivered over one or more designated trunk groups to one or more CDLs.
- (15) FGC may, at the option of the customer, be provided with a Service Class Routing Arrangement. This arrangement allows originating traffic to be delivered over selected trunk groups to specified CDL based on service prefix (e.g., 0-, 0+, 1+, 01, 011); service class codes (e.g., 500, 700, Toll Free, 900); (T) or end user originating line class of service (e.g., coin, hotel/motel).
- (16) (Reserved for Future Use)
- (17) FGC may, at the option of the customer, be provided with a Trunk Access Limitation Arrangement in all Telephone Company end offices. This arrangement provides for the routing of designated (e.g., 900 Service Code) originating calls to a specified number of transmission paths in a trunk group to the CDL in order to limit the amount of such traffic that can be completed.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.4 <u>Description of End Office Services</u> (Continued)
 - (D) <u>FGC</u> (Continued)
 - (18) FGC is provided with the following features in the originating direction for operator assistance services. FGC may require the routing by Service Class Routing Arrangement as in 4.2.4(D)(15).
 - (a) Operator Assistance-Coin Control Arrangements for Telephone Company end offices where equipment is available - Such arrangements provide coin return control and routing of 0+, 0-, 01+ and 011+ prefixed originating calls to the CDL. The operator services system arrangement for receipt of 0+, 0-, 1+, 01+ and 011+ calls may, at the option of the customer, be provided with the ANI arrangement. The cord board arrangement for receipt of 0originating calls is not provided with ANI. FGC is provided in a directly routed arrangement where the Operator Assistance-Coin Control arrangement is provided. Only calls from coin station lines terminated on the end office switch where the Operator Assistance-Coin Control Arrangement is provided will be provided to the CDL.
 - (b) <u>Operator Assistance-Noncoin Arrangements in all Telephone Company end offices</u> Such arrangements provide routing of 0+, 0-, 1+, 01+, and 011+ prefixed originating calls to the CDL. This arrangement for receipt of 0+, 0-, 1+, 01+, and 011+ originating calls may, at the option of the customer, be provided with the ANI arrangement.

The cord board arrangement for receipt of 0- originating calls is not provided with ANI. FGC is provided in a directly routed arrangement where the Operator Assistance-Noncoin Arrangement is provided. Only calls from end users terminated on the end office switch where the Operator Assistance-Noncoin Arrangement is provided will be provided to the CDL.

- (c) <u>Operator Assistance Combined (coin and noncoin) Arrangements in Telephone Company</u> <u>end offices where equipment is available</u> - This arrangement provides the combined features described in (a) and (b).
- (19) FGC is provided with either Type B or Type C transmission performance as follows: a) when routed directly to the end office, either Type B or Type C is provided; b) when routed to an access tandem, only Type B is provided; or c) 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 Arrangement 1 when routed directly to an end office. Type B is provided with Interface Arrangements 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.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.4 <u>Description of End Office Services</u> (Continued)
 - (E) <u>FGD</u>
 - (1) FGD is provided at Telephone Company appropriately equipped electronic end office switches.

FGD utilizes a two-point electrical communications path between the Interface Arrangement and Common Line or Special Access Line which is a voice grade transmission path comprised of any form or configuration of plant capable of, and typically used in the telecommunications industry for, the transmission of the human voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

SS7 Out of Band Signaling for FGD is provided at suitably equipped Telephone Company end office or access tandem switches.

- (2) FGD is provided as trunk-side switching through the use of end office or Telephone Company access tandem trunk equipment. The trunk equipment is provided with answer and disconnect supervisory signaling and wink start pulsing signals except when SS7 Out of Band Signaling is specified.
- (3) The Telephone Company will select the trunking arrangement from the end office, within the selected Access Area from which FGD is to be provided. If the customer orders an Automatic Number Identification (ANI) Arrangement, Alternate Traffic Routing Arrangement, Service Class Routing Arrangement, Trunk Access Limitation Arrangement, or Operator Assistance Full Feature Arrangement, special routing and trunking arrangements may be required.
- (4) FGD is arranged for either originating calling only, terminating calling only, or two-way calling and based on the trunks or BHMC ordered. The Telephone Company will determine the type of directional calling to be provided unless the customer orders an Operator Assistance Full Feature Arrangement or requests the option, Customer Specification of Switched Access Directionality as described in 4.2.5(H). For such arrangements, additional charges on an Individual Case Basis will apply if the trunking arrangements are different from that the Telephone Company would have provided without such special arrangements. Originating calling permits the origination of calls from the end user to the CDL. Terminating calling permits the termination of calls from the CDL. Two-way calling permits either the origination or termination of calls, but not simultaneously.
- (5) FGD is provided with multifrequency address signaling or SS7 Out of Band Signaling. Up to twelve digits of the called party number dialed by the end user will be provided by Telephone Company equipment to the CDL where the FGD terminates. Such address signals will be subject to the ordinary transmission capabilities of the Switched Transport provided.

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- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)

4.2.4 <u>Description of End Office Services</u> (Continued)

- (E) <u>FGD</u> (Continued)
 - (6) FGD, when being used in the terminating direction, may be used to access valid NXXs in the FGD Access Area. If the FGD connection is made directly to an end office the Access Area is that of that end office only. If the FGD connection is made to a Telephone Company access tandem, the Access Area is all end offices subtending that access tandem that have FGD capabilities. When the customer wants access to all end offices subtending that access tandem a single FGD trunk group may be used. Separate trunk groups for the combined use of FGD and FGB or FGD and FGC are not required. The description of any FGD Access Area will be provided to the customer upon request. FGD may also be used in the terminating direction to access information services (e.g., time and temperature) and other services by dialing the appropriate codes when the services can be reached using valid NXX codes.
 - (7) A separate trunk group will be established based on directionality (i.e., originating only, terminating only, or two-way traffic) of the FGD arrangement provided.
 - (8) The access code for FGD is a uniform access code of the form 101XXXX. No access code is required if the end user's Telephone Company local service is arranged for Primary Interexchange Carrier (PIC) arrangement as in 6.5 to the same customer. The number dialed by the end user shall be a seven or ten digit number for calls in the North American Numbering Plan (NANP). For international calls outside the NANP, a five to twelve digit number may be dialed. The form of the numbers dialed by the end users is NXX-XXXX, 0 or 1 + NXX-XXXX, NPA + NXX-XXXX, 0 or 1 + NPA + NXX-XXXX, and, when the International Direct Distance Dialing Arrangement (IDDD) is provided, 01 + CC + NN or 011 + CC + NN. When the 101XXXX access code is used, FGD also provides for dialing the digit 0 for access to the customer's operator, or the end-of-dialing digit (#) for cut-through access to the CDL. FGD also provides for the dialing of digits 00 for access on a non-DDD basis to the customer's operator when the end user's service is designated to the customer as in 6.5 and 4.2.5(V). A single access code will be the assigned number for all FGD provided to the customer by the Telephone Company.

In addition to the standard 101XXXX access code, the customer has the option to use 950-XXXX as an access code for FGD Switched Access Service. When the customer orders FGD Switched Access Service with 950-XXXX Access as described in 4.2.5(T), FGD switched access calls may also be originated by using the customer's 950-XXXX access code(s). All such calls will be rated as FGD switched access calls.

FGD, provided with multifrequency address signaling or SS7 Out of Band Signaling, is arranged to receive address signaling through the use of Dual Tone Multifrequency (DTMF) or dial pulse address signaling from the end user.

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- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)

4.2.4 <u>Description of End Office Services</u> (Continued)

- (E) <u>FGD</u> (Continued)
 - (9) FGD may, at the option of the customer, be arranged to provide ANI arrangement to obtain the calling station billing number. The ANI arrangement provides ten digit station billing number information to the CDL. When SS7 Out of Band Signaling is specified, the customer may obtain an ANI equivalent by ordering the Charge Number optional feature as described in 4.2.5(AD). In those situations where no billing number is available in the end office switch, no ten digit number will be provided, only the (C) area code and an "operator identification" information digit will be provided.

In those cases where an ANI failure has occurred in the end office switch, no ten digit number will be provided, and an "identification failure" information digit will be provided. ANI will be made available using multifrequency signaling provided by the Telephone Company.

Dependent upon the group type, the ANI spill may be forwarded prior to the called number in appropriately equipped end offices. When the ANI spill is sent prior to the called number, ten digits will be forwarded (NPA + NXX-XXXX). When the ANI spill is sent after the called number, the conventional seven digits will be forwarded. The Telephone Company will determine the sequencing and protocol of the ANI spill and called number.

(10) FGD may, at the option of the customer, be arranged for the International Direct Distance Dialing (IDDD) Arrangement in the originating direction. End offices or Telephone Company access tandems equipped for IDDD will be designated by the Telephone Company. The CDL must be equipped to receive the IDDD supervisory and address signals and the CDL must provide operator assistance to the end users if necessary to obtain the IDDD address signals once the CDL acknowledges it is ready to receive IDDD address signals.

FGD may also be arranged to forward the international calls of one or more international carriers to the customer. This arrangement requires verification by the Telephone Company that the customer is authorized to forward such calls.

- (11) (Reserved for Future Use)
- (12) (Reserved for Future Use)

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- 4. SWITCHED ACCESS (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)

4.2.4 <u>Description of End Office Services</u> (Continued)

- (E) <u>FGD</u> (Continued)
 - (13) FGD is provided with basic testing at no additional charge. Basic tests include: loss, 3 tone slope, (C-message and C-notched), and where applicable, signaling and balance testing.
 - (a) Where Telephone Company equipment is available, a seven digit access number will be provided to the customer for testing in the terminating direction. These access numbers shall include: balance (100 type) test line, milliwatt (102 type) test line, nonsynchronous or synchronous test line, automatic transmission measuring (105 type) test line, data transmission (107 type) test line, loop around test line, short circuit test line and open circuit test line. Access to test lines by other than seven digits is at the option of the Telephone Company and may vary in availability.
 - (b) Where Telephone Company equipment is available and the customer is equipped with compatible equipment (remote office test lines and 105 test lines with associated responders or their functional equivalent), FGD will be provided with automatic testing.
 - (c) At the option of the Telephone Company, cooperative testing may be provided in lieu of automatic testing. Cooperative testing is where the Telephone Company provides a technician at its office(s) and the customer provides a technician at its CDL, with suitable test equipment to perform the required tests. The Telephone Company will routinely perform maintenance testing from its access tandem or end office (if direct routed) to the customer's first point of switching. Additional testing charges will apply as in 6.6 when: (a) the customer requests a test not specified in the preceding; (b) the test requested is not essential to the ongoing maintenance of FGD; or (c) the customer requests testing on a more frequent basis than scheduled in the Telephone Company's Central Office Maintenance Planning System (COMPS).
 - (d) When FGD or Toll Free SAC Access service with SS7 Out of Band Signaling is ordered, (T) network compatibility and other operational tests will be performed cooperatively by the Telephone Company and the customer at locations, dates, and times as specified by the Telephone Company in consultation with the customer. These tests are as specified in Technical Reference Publication TR-TSV-000905. Successful completion is necessary to (T) receive the SS7 signaling option. To protect the security of the SS7 network, certain of the information provided, i.e., point codes, by the Telephone Company to the customer will be subject to a nondisclosure agreement.

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- 4. SWITCHED ACCESS (Continued)
- 4.2 Description of Switched Access (Continued)

4.2.4 Description of End Office Services (Continued)

- (E) FGD (Continued)
 - (14)FGD may, at the option of the customer, be provided with Alternate Traffic Routing. This arrangement, as shown in 4.2.5(A), delivers originating traffic from an end office over a designated trunk group to the CDL. When that trunk group is fully loaded, additional originating traffic is automatically delivered over one or more designated trunk groups to one or more CDLs.
 - (15) FGD may, at the option of the customer, be provided with a Service Class Routing Arrangement. This arrangement allows originating traffic to be delivered over selected trunk groups to specified CDLs based on service prefix code (e.g., 0-, 0+, 1+, 01, 011); service class codes (e.g., 500, 700, Toll Free, (T) 900); or end user originating line class of service (e.g., coin, hotel/motel). Service classes of traffic unable to be served by a customer will be handled at the option of the Telephone Company.
 - (16) (Reserved for Future Use)
 - (17) FGD will be arranged to accept calls from Telephone Company local service without the 101XXXX uniform access code. Each Telephone Company local service will be marked to identify which 101XXXX code its calls will be directed to for InterLATA Area service.
 - (18) FGD may, at the option of the customer, be provided with a Trunk Access Limitation Arrangement. The Trunk Access Limitation Arrangement provides for the routing of designated (e.g., 900 Service class code) originating calls to a specified number of transmission paths in a trunk group.
 - (19) FGD may, at the option of the customer, be provided with an Operator Assistance Full Feature Arrangement. This arrangement provides, to the customer operator, the initial coin control function. FGD is provided in a directly routed arrangement from the end office switch when this feature is provided. This feature may require the routing by Service Class Routing Arrangement, in (15). The coin collection and return protocol required by the customer must be compatible with Telephone Company equipment. Offering of this feature is contingent upon suitable administrative procedures/ agreements for coin services being negotiated between the customer and the Telephone Company. This option is unavailable in conjunction with SS7 Out of Band Signaling.
 - (20) FGD is provided with either Type A, Type B, or Type C transmission performance as follows: a) when routed directly to the end office, either Type B or Type C is provided; b) when routed to a Telephone Company access tandem, only Type A is provided; c) Type A is provided on the transmission path from the Telephone Company access tandem to the end office. Type C transmission performance is provided with Interface Arrangement 1. Type A and Type B are provided with Interface Arrangements 2 through 10. In addition, Data Transmission Parameters may, at the option of the customer, be (T) provided with FGD.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 Description of Switched Access (Continued)

4.2.4 Description of End Office Services (Continued)

- (E) <u>FGD</u> (Continued)
 - (21) FGD trunking arrangements are available with two basic forms of signaling protocol. The standard signaling protocol provided with FGD is Overlap Outpulsing. At the option of the customer, where technically available FGD may be provided with Non-Overlap Outpulsing signaling protocol.
- (F) <u>SAC Access Service</u>
 - (1) Service Access Code (SAC) Access Service is provided at Telephone Company appropriately equipped end offices or tandem switches.
 - (2) Originating SAC Access Service is a trunk side switched service that is available to the customer via SAC Access Service trunk groups. The appropriate Customer Identification Function, in 4.2.11, 4.2.12 and 4.2.20 must be ordered in conjunction with each SAC Access Service trunk group. SAC Access Service traffic at the option of the customer can be carried on the same group with non-SAC Access traffic.
 - (3) When a 1+N00-NXX-XXXX or 0+500-NXX-XXXX call is originated by an End User, the Telephone Company will perform the selected Customer Identification Function based upon the dialed digits to determine the disposition of the call. If the call originates from an end office not equipped to provide the Customer Identification Function, the call will be routed to an office where the function is available. Once the Customer Identification Function has been performed, the call will be routed to the customer.
 - (4) The manner in which SAC Access Service is provided is dependent on the status of the end office from which the service is provided (i.e., equipped with equal access or not equipped with equal access capabilities). When SAC Access Service is provided from an end office equipped with equal access capabilities, all such service will be provisioned in accordance with the technical characteristics available with FGD except when more than one Telephone Company access tandem is employed in the transport of a SAC Access Service call.

When SAC Access Service is provided from an end office not equipped with equal access capabilities, such service will be provisioned in accordance with the technical characteristics available with FGC or FGD. In either case, when more than one Telephone Company access tandem is employed in the transport of a SAC Access Service call, Standard Transmission characteristics are not guaranteed.

(5) For other than FGC, end offices that lack equal access or the Customer Identification Function capabilities, may only be served via a Telephone Company equal access tandem over FGD trunks or SAC Access Service trunk groups. For FGC, SAC Access Service can be provided through an existing trunk group or separate FGC trunk group which handles SAC Access Service. SAC Access Service from a Telephone Company access tandem, with both equal and nonequal access end offices, can be combined on a single FGD trunk group to the CDL. SAC Access Service from a Telephone Company access tandem with non-equal access end offices can be provided on a FGC trunk group.

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ISSUED: June 1, 2021 BY: President Richmond, Virginia

- 4. SWITCHED ACCESS (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)

4.2.4 <u>Description of End Office Services</u> (Continued)

- (F) <u>SAC Access Service</u> (Continued)
 - (6) 500 SAC Access Service originating from equal access end offices with the 500 Customer Identification Function, described in 4.2.20, may be provided using exchange access signaling with overlap outpulsing and ten digit ANI. 900 SAC Access Service originating from equal access end offices with the 900 Customer Identification Function, described in 4.2.12, may be provided using exchange access signaling with overlap outpulsing and ten digit ANI. Toll Free SAC Access Service (T) originating from equal access end offices with the Toll Free Customer Identification Function (T) described in 4.2.11 may be provided using exchange access signaling without overlap outpulsing and with ten digit ANI. SAC Access Service originating from equal access capability, may be provided using conventional signaling. On traffic using conventional signaling, other than FGC, the customer's facilities shall provide off hook supervision upon receipt of the transmitted digits.

SAC Access Service may also be provided with SS7 Out of Band Signaling from suitably equipped end office or access tandem switches.

(7) For SAC Access Service traffic originating from equal access end offices with the Customer Identification Function capabilities, FGD parameters as specified in 4.2.4(E)(1), (2), (3), (5), (9), (13), (14), (18), and (20) apply.

For SAC Access Service traffic, other than Toll Free SAC Access, originating from all other end (T) offices, FGC parameters as specified in 4.2.4(D)(1), (2), (3), (5), (9), (13), (14), (17), and (19) apply.

The Entrance Facility interface at the customer's premises, as set forth in 4.2.3 (B), for FGD also apply to SAC Access Service.

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4. <u>SWITCHED ACCESS</u> (Continued)

4.2 <u>Description of Switched Access</u> (Continued)

4.2.5 End Office Services Optional Arrangements

The following optional arrangements are available in offices where equipment, facilities, and other conditions permit. The Telephone Company makes no guarantee that these optional arrangements will be available in all locations.

Unless otherwise noted, these End Office Services Optional Arrangements are nonchargeable.

(A) <u>Alternate Traffic Routing</u>

This option provides the capability of directing originating traffic from an end office (or appropriately equipped Telephone Company access tandem) via a trunk group (the "high usage" group) to a CDL until that group is fully loaded, and then delivering additional originating traffic (the "overflowing" traffic) from the same end office or Telephone Company access tandem to a different trunk group or groups (via one or more intermediate high usage groups) to one or more CDLs until the originating traffic is directed to a final group. The customer shall specify the last trunk CCS desired for the high usage group and each intermediate group.

This option is provided in suitably equipped end offices or Telephone Company access tandems and is available with FGB, FGC, and FGD.

(B) Automatic Number Identification (ANI) Arrangement

This option provides the automatic transmission of a seven or ten digit number and information digit to the CDL for calls originating in the Access Area to identify the calling station. The ANI arrangement will be associated with all individual transmission paths in a trunk group when this arrangement is provided.

The seven digit ANI telephone number is available with FGB and FGC. It will be transmitted on all calls except those identified as an ANI failure. The ten digit ANI telephone number is only available with FGD. When FGD with SS7 Out of Band Signaling is specified, the customer may order an ANI equivalent by ordering the Charge Number optional feature as described in 4.2.5(A)(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 an ANI failure in which case only the NPA will be transmitted (in addition to the information digit described below). The ANI telephone number is the listed telephone number of the end user that originates the call.

With FGC, ANI is provided from end offices at which the Telephone Company recording for end user billing is not provided, or where it is not required, as with Toll Free Service. It is not provided from end offices for which (T) the Telephone Company needs to forward ANI to its recording equipment.

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- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.5 End Office Services Optional Arrangements (Continued)
 - (B) <u>Automatic Number Identification (ANI) Arrangement</u> (Continued)

Where ANI cannot be provided information digits will be provided to the customer. The information digits are used in the following situations:

- (1) Telephone number is the station billing number no special treatment is required.
- (2) (Reserved for future use)
- (3) ANI failure has occurred in the end office switch which prevents identification of calling telephone number number must be obtained by operator or in some other manner.
- (4) (Reserved for Future Use)
- (5) The configuration of the line requires special screening or handling by the customer, or
- (6) Call is an Automatic Identified Outward Dialed (AIOD) call from end user terminal equipment.

These ANI information digits are available with FGB, FGC, and FGD only. In addition, the following information digits are available with FGD only:

- (a) InterLATA Area restricted telephone number is identified line.
- (b) InterLATA Area restricted line requires special screening or handling by the customer.

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

(C) Intra Access Area Call Denial on Line or Hunt Group

This option allows for the screening of terminating Feature Group A calls. The following screening arrangements are available with this option:

- (1) Screening of terminating calls for completion to only 411, 611, 911, 555-1212 all valid NXXs associated with the end offices within the LATA, i.e., the call cannot be further switched or routed out of the LATA.
- (2) Screening of terminating calls within the Feature Group A Access Area for completion to only 411, 611, 911, Toll Free, 555-1212, and a Telephone Company specified set of NXXs within the (T) Telephone Company local exchange calling area of the dial tone office in which the arrangement is provided.

All other calls are routed to a reorder tone or recorded announcement. Arrangement 1 is provided where available. Arrangement 2 is provided in all Telephone Company electronic end offices and, where available, in electromechanical end offices. These options are available with Feature Group A.

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(T)

(T)

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4. <u>SWITCHED ACCESS</u> (Continued)

4.2 <u>Description of Switched Access</u> (Continued)

4.2.5 End Office Services Optional Arrangements (Continued)

(D) InterLATA Call Denial on Line or Hunt Group

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

- InterLATA, dialed as either 7D, 10D, 1+7D, 1+10D, 950-XXXX 10XXX+7D, 101XXXX+7D, 10XXX+10D or 101XXXX+10D.
- Service Access Codes (500, 700, Toll Free and 900).
- International, dialed as either 011 or 01.
- Operator, dialed as either 0+, 0- or 00.

This arrangement is provided in Telephone Company end offices, where available. It is available with FGA at rates and charges in Section 4.5.2(B). Blocking of the Toll Free Service Access Code may not be available in (T) all end offices where this arrangement is otherwise available.

(E) 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, 10XXX+7D, 101XXXX+7D, 10XXX+10D or 101XXXX+10D.
- Service Access Codes (500, 700, Toll Free and 900).
- International, dialed as either 011 or 01.
- Operator, dialed as either 0+, 0- or 00.

This arrangement is provided in Telephone Company end offices, where available. It is available with FGA at rates and charges in Section 4.5.2(B). Blocking of the Toll Free Service Access Code may not be available in (T) all end offices where this arrangement is otherwise available.

(F) 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. It is provided in all Telephone Company end offices where available. When FGA 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. It is available with FGA.

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4. SWITCHED ACCESS (Continued)

4.2 <u>Description of Switched Access</u> (Continued)

4.2.5 End Office Services Optional Arrangements (Continued)

- (G) Hunt Group Arrangement
 - (1) 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. It is available with FGA. This arrangement contemplates one access code (i.e., telephone number) per arrangement.
 - (2) This option provides the ability to sequentially access one of two or more lines in the terminating direction, when the hunting number of the line group is forwarded from the customer to the Telephone Company.
- (H) Customer Specification of Switched Access Directionality

This option allows the customer to specify the directionality of the trunk group (i.e., originating, terminating, or two-way) in lieu of Telephone Company specification. It is available with all Feature Groups. Rates and charges will be developed on an Individual Case Basis.

(I) International Direct Distance Dialing Arrangement

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

(J) 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. Where available, this arrangement is provided with originating use for FGA or terminating use for Special Access Lines.

(K) 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. Where available, this arrangement is provided with originating use for FGA and terminating use for Special Access Lines. It can only be provided from suitably equipped stored program controlled switches.

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4. <u>SWITCHED ACCESS</u> (Continued)

4.2 <u>Description of Switched Access</u> (Continued)

4.2.5 End Office Services Optional Arrangements (Continued)

(L) Operator Assistance Full Feature Arrangement

This option, which is available only on a direct trunking arrangement, provides the initial coin return control function to the customer's operator. It is available with FGD. Rates and charges will be developed on an Individual Case Basis. This option is unavailable in conjunction with SS7 Out of Band Signaling.

(M) Rotary Dial Station Signaling

This option provides for the transmission of called party address signaling from rotary dial stations to the CDL, for originating calls. It is available with FGB where conditions permit.

(N) Service Class Routing

This option provides the capability of directing originating traffic from an end office to a CDL, based on the service prefix code (e.g., 0+ or 01+) or service class code (e.g., 500, 600, 700, Toll Free or 900). It is provided (T) in suitably equipped end offices or Telephone Company access tandems and is available with FGC and FGD. Originating 500-NXX-XXXX calls are routed in accordance with the 500 Customer Identification Function described in 4.2.20. Originating Toll Free-NXX-XXXX calls are routed in accordance with the Toll Free (T) Customer Identification Function as described in 4.2.11. (T)

(O) Service Code Denial on Line or Hunt Group

This option allows for the screening of terminating calls within the Access Area and for disallowing completion of calls to 0- and N11 (e.g., 411, 611 and 911). Where available this arrangement is provided in Telephone Company end offices. It is available with FGA and can only be provided from suitably equipped stored program controlled switches.

(P) Trunk Access Limitation

This option, where available, provides for the routing of originating 900 or 900 like Service calls to a specified number of transmission paths in a trunk group, in order to limit (choke) the completion of such traffic to a customer. Calls to the designated service which could not be completed over the subset of transmission paths in the trunk group (i.e., the choked calls) would be routed to reorder tone. It is available with FGC and FGD.

(Q) <u>Uniform Call Distribution Arrangement</u>

This option provides a type of multiline hunting arrangement which provides for an even distribution of calls among the available lines in a hunt group. Where available, this arrangement is provided with originating use for FGA and terminating use for Special Access Lines.

VERIZON SOUTH INC. VIRGINIA ISSUED: August 1, 2000 BY: President Richmond 4. SWITCHED ACCESS (Continued) Section 4 Original Page 35 EFFECTIVE: August 1, 2000

4.2 Description of Switched Access (Continued)

4.2.5 End Office Services Optional Arrangements (Continued)

(R) 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 access code to the CDL. 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 CDL using multifrequency signaling, and transmission of the digits would precede the forwarding of ANI if that arrangement was provided. It is available with FGB in suitably equipped end offices.

(S) Band Advance Arrangement

This arrangement is available for Special Access Lines used with a Switching Interface. This option, which is provided in association with two or more groups, provides for the automatic overflow of terminating calls from a line group, that has exceeded its call capacity, to another line group with equal or a greater number of bands than that of the overflowing line group. This arrangement does not provide for call overflow from a group with a higher designation to one with a lower band designation.

(T) FGD Switched Access with 950-XXXX Access

FGD Switched Access with 950-XXXX Access is a optional arrangement that provides for the routing of originating calls using a customer's 950-XXXX access code(s) to the customer over the customer's FGD trunks. All such calls will be rated as FGD switched access calls.

This optional arrangement, available where technically feasible in equal access end offices, uses FGD signaling protocols and technical specifications. The 950-XXXX traffic can be routed over FGD trunks combined with the customer's standard FGD traffic directly to the CDL or through a Telephone Company access tandem to the CDL. The customer must be able to differentiate standard FGD calls from 950-XXXX calls delivered over the same FGD trunks. FGD Switched Access with 950-XXXX Access is not available with certain Telephone Company Access tandem switches when the signaling from an end office to the Telephone Company Access tandem is multifrequency address signaling and the signaling from the Telephone Company Access tandem to the CDL is SS7 Out of Band signaling. The customer may not have originating FGD switched access with 950-XXXX access and originating FGB switched access in the same end office utilizing the same 950-XXXX Customer Identification Code.

(U) Operator Assistance for SAC Access Service

This option provides for operator completion of N00-NXX-XXXX type calls which are generated by an end user by dialing 0-. This option is available with SAC Access Service and with FGC and FGD which are used in conjunction with SAC Access Service.

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- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.5 End Office Services Optional Arrangements (Continued)
 - (V) Switched Access Interface

This arrangement provides the line switching and supervisory functions necessary to interface Voice Grade Special Access and Switched Access Services together for the provision of customer WATS and WATS-Type service. This service provides a transmission path capable of originating and/or terminating the customer's intrastate and combined interstate/intrastate traffic. Combining of intrastate and interstate traffic will be provided in accordance with any individual state regulations as outlined in 4.2.5(V)(5).

This arrangement is only available from Telephone Company designated end offices which are identified as WATS Serving Offices (WSO) in NECA Tariff FCC No. 4. Technical limitations resident in certain end office switches may preclude the availability of certain Switched Access Interface features. Depending on the configuration selected below, the Telephone Company will provide such services from the closest WSO that is technically equipped to provide such services. Special Access Transport charges as described in 5.1.1(B)(2) will be applicable to the WATS Serving Office appropriately equipped for the service feature requested.

The Switched Access portion of this arrangement is available from Section 4 of this tariff, except as set forth in (5) following, and provides connectivity from the Telephone Company's WATS Serving Office to the CDL of the customer. The Special Access portion of this feature is available from Section 5 of this tariff and provides connectivity from the Telephone Company's WATS Serving Office to the end user's CDL.

Switched Access Interface Service is available in the following configurations/ features:

(1) Originating Only Feature

The Originating Only feature is available from appropriately equipped WATS Serving Offices on a per line basis and provides for the transporting of intrastate calls from a special access line to the customer via either FGA, FGB, FGC or FGD switched access. It is provided in the following two arrangements:

(a) <u>Restricted Geographic Screening Arrangement - Originating Only</u>

This arrangement provides the ability to screen a dialed number by NPA and/or NXX on the basis of a geographical band which is in accordance with an end user's service agreement with the customer. The geographical bands available are those in effect as of the effective date of this tariff provision. The customer must provide the Telephone Company with the band information required for each Special Access line subscribed to this service.

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- BY: President Richmond, Virginia
- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.5 End Office Services Optional Arrangements (Continued)
 - (V) <u>Switched Access Interface</u> (Continued)
 - (1) <u>Originating Only Feature</u> (Continued)
 - (a) Restricted Geographic Screening Arrangement Originating Only (Continued)

This arrangement is provided when used exclusively for interstate traffic (excluding international). This arrangement is not available for Multi-jurisdictional traffic (combined interstate and intrastate) as set forth in 4.2.5(V)(1)(b).

This arrangement is available from appropriately equipped WATS Serving Offices in conjunction with FGC and FGD and provides for:

- the transporting of all interstate 1+NPA/NXX-XXXX and 1+FNPA-555-1212 calls to Directory Numbers that are associated with a customer selected geographic band to the customer;
- the blocking of all 1+NPA-NXX-XXXX and 1+FNPA-NXX-XXXX calls directed to Directory Numbers that do not lie within the geographic band selected by the customer;
- the blocking of all 1+500-NXX-XXXX, 0+500-NXX-XXXX, 1+700-NXX-XXXX, 1+Toll (T)
 Free-NXX-XXXX and 1+900-NXX-XXXX calls; (T)
- the blocking of all 0+NPA-NXX-XXXX calls;
- the transporting of all calls originated by dialing 0 (zero) to the Telephone Company operator;
- the transporting of all calls originated by dialing 00 (Zero, Zero) to the IC customer (available only with FGD);
- the blocking of all international calls preceded by the access codes 01 and 011; and
- the blocking of all calls preceded by the access code 101XXXX.

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- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.5 End Office Services Optional Arrangements (Continued)
 - (V) <u>Switched Access Interface</u> (Continued)
 - (1) Originating Only Feature (Continued)
 - (b) Unrestricted Arrangement Originating Only

This arrangement is a multi-jurisdictional offering provided from a Telephone Company appropriately equipped WATS Serving Office and provides for the transporting of interstate and intrastate calls from a Special Access Line to the customer via FGA, FGB, FGC and/or FGD Switched Access. FGA access is obtained from a WATS Serving Office by dialing a standard seven digit number*. FGB access is obtained from a WATS Serving Office by dialing 950-XXXX or 1+950-XXXX. The combining of interstate and intrastate traffic will be in accordance with 4.2.5(V)(5). This arrangement provides for transporting the following types of calls:

- 1+NPA-NXX-XXXX, 1+700-NXX-XXXX, and 1+FNPA-555-1212 calls to the IC customer or via facilities of the Telephone Company where state restrictions exist as detailed in 4.2.5(V)(5):
- 1+Toll Free SAC-NXX-XXXX calls to the carrier in accordance with the Toll Free (T) Customer Identification Function described in 4.2.11; (T)
- 1+900-NXX-XXXX calls to the carrier in accordance with the 900 Customer Identification Function described in 4.2.12.;
- 1+500-NXX-XXXX or 0+500-NXX-XXXX calls to the carrier in accordance with the 500 Customer Identification Function described in 4.2.20;
- 0+NPA-NXX-XXXX calls to the IC customer or via facilities of the Telephone Company where state restrictions exist as detailed in 4.2.5(V)(5) following;
- calls originated by dialing 0 (zero) to the Telephone Company operator;
- calls originated by dialing 00 (Zero, Zero) to the IC customer (available only with FGD);
- calls originated by dialing 01 or 011 to the IC customer; and
- 1+ or 0 (zero)+ NPA-NXX-XXXX calls preceded by the access code 101XXXX to the carrier designated by the dialed digits (available only with FGD).

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^{*} Some WATS Serving Offices (WSO) are not technically capable of providing originating or combined originating/terminating WATS Access Lines in connection with FGA. Should an ASR be received requesting service at such a location, the Telephone Company will file a Petition for Waiver to offer a free WATS Access Line Extension to a WSO which can provide the service.

(T)

(T)

ISSUED: June 1, 2021

- BY: President Richmond, Virginia 4. SWITCHED ACCESS (Continued)
- 4.2 Description of Switched Access (Continued)

4.2.5 End Office Services Optional Arrangements (Continued)

- (V) Switched Access Interface (Continued)
 - (1) <u>Originating Only Feature</u> (Continued)
 - (b) Unrestricted Arrangement Originating Only (Continued)

Optional Access Code Arrangement

Subject to technical availability, on an individual line basis, calls preceded by the access code 101XXXX will be blocked.

(2) <u>Toll Free Type Terminating Only Feature</u>

The Toll Free Type Terminating Only feature is available on a per-line basis from appropriately (T) equipped WATS Serving Offices and provides for the termination of all calls from the subscribing carrier (originated on a 1+Toll Free basis) directed to the Special Access via FGA, FGB, FGC and (T) FGD Switched Access.

(3) <u>Combined Originating Toll Free Type Terminating Calling Feature</u>

The Combined Originating/Terminating Calling feature is available on a per-line basis from appropriately equipped WATS Serving Offices and provides the functionalities of both the Originating Only and the Toll Free Type Terminating Only features. (T)

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ISSUED: June 1, 2021 BY: President

- Richmond, Virginia 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 Description of Switched Access (Continued)

4.2.5 End Office Services Optional Arrangements (Continued)

- (V) Switched Access Interface (Continued)
 - (4) The following matrix details the direction, call type, service prefix and traffic types provided on each Switched Access Interface Arrangement.

	Switched Access Interface Analygements				
	Restricted Geographic Screening <u>Arrangement</u>	Unrestricted <u>Arrangement</u>	Toll Free Type Terminating Only	Combined Originating/ Toll Free Type Terminating	(T) (T)
Section Ref.	(V)(1)(a)	(V)(1)(b)	(V)(2) <u>Directionality</u>	(V)(3)	
Originating Only Terminating Only Two-Way	x	х	x	x	
Call Type (1+)					
Local IntraLATA/Intrastate IntraLATA/Interstate InterLATA/Intrastate InterLATA/Interstate	B D B D	B R/D* D D* D	B C C C C	B R/D/C* D/C D/C* D/C	
Service Prefix					
0- 00- 0+ IDDD 101XXXX	R D B B B	R D D* D/B*		R D D* D/B*	
Traffic Type					
411 911 976 700 500/Toll Free/900	B R R B B	B R D D		B R D D	(T)

Switched Access Interface Arrangements

D = Telephone Company DELIVERS traffic to the customer.

R = Telephone Company RETAINS and completes traffic.

*

C = Telephone Company COMPLETES traffic to the end user's premises.

B = Telephone Company BLOCKS traffic to an announcement.

Intrastate traffic will be delivered to the customer except where a state restriction on the passage of intraLATA and/or interLATA traffic exists. These restrictions are detailed in 4.2.5(V)(5).

EFFECTIVE: August 1, 2000

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- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)

4.2.5 End Office Services Optional Arrangements (Continued)

- (V) <u>Switched Access Interface</u> (Continued)
 - (5) Intrastate Traffic Restriction

In accordance with the State Corporation Commission of the Commonwealth of Virginia's Order issued July 24, 1995 in Case No. PUC 850035, all intrastate intraLATA 1+ communications are to be completed by the Telephone Company.

An interstate Switched Access Interface and an intrastate Switched Access Interface must be ordered for the provisioning of multi-jurisdictional access.

Unless the customer subscribes to the 101XXXX blocking option offered in Section 4.2.5(V)(1)(b) preceding, all calls carried over a Special Access Line used in conjunction with a Switched Access Interface for multi-jurisdictional access will be passed to the authorized carrier specified by the dialed access code for completion except intrastate intraLATA 1+ communications are to be completed by the Telephone Company in accordance with the Virginia Commission's Order issued July 24, 1995 in Case No. PUC 850035.

The terms, conditions, and rates for the intrastate Special Access and Switched Access associated with this feature are as set forth in Sections 4 and 5 of this tariff. The terms, conditions, and rates for the interstate Switched Access are as set forth in the Telephone Company Facilities for Interstate Access Tariff.

When the customer orders Special Access from Section 5 of the interstate tariff for the facilities between the end user's premises and the WATS Serving Office for use with Multi-jurisdictional Access as set forth above, and if the Telephone Company intrastate tariff also provides for customer billing for these facilities, the customer will be exempted from the intrastate charges in this tariff.

- (W) (Reserved for Future Use)
- (X) (Reserved for Future Use)

4. <u>SWITCHED ACCESS</u> (Continued)

4.2 <u>Description of Switched Access</u> (Continued)

4.2.5 End Office Services Optional Arrangements (Continued)

- (Y) Switched Data Service
 - (1) Switched 56

This option provides for a connection capable of up to 56 Kbps digital transmission between the customer's CDL and a suitably equipped end office. Switched Data service lines connected at those suitably equipped end offices will be accessed on a switched basis for digital transmission up to 56 Kbps. These locations are identified in the National Exchange Carrier Association, Inc., Tariff F.C.C. No. 4 Wire Center and Interconnection Information.

This option is provided only with FGD. A separate FGD trunk group must be established for the provision of Switched Data service. This trunk group requires the use of a DS1 digital interface as described in Section 4.2.3(B)(6). Switched Data and Non-Switched Data traffic may not be combined on the same trunk group.

Access is made via the standard dialing pattern as set forth in section 4.2.4(E)(8).

(2) Switched 64

This option provides for a connection capable of up to 64 Kbps digital transmission with clear channel capability between the customer's CDL and a suitably equipped end office. Clear channel capability allows for full bandwidth availability to the customer with no part of the channel used for control, framing or signaling.

Switched 64 requires all digital facilities including the use of a DS1 digital interface as described in Section 4.2.3(B) (6) and is available only with FGD from end offices capable of providing SS7 signaling, Bipolar with Eight Zero Substitution (B8ZS) line code format and Integrated Services Digital Network (ISDN) or other Switched Data based services. These locations are identified in the National Exchange Carrier Association, Inc., Tariff F.C.C. No. 4 Wire Center and Interconnection Information.

Access is made via the standard dialing pattern as set forth in Section 4.2.4(E)(8).

A separate FGD trunk group must be established for the provision of Switched 64 service.

Switched data and non-switched data traffic may not be combined on the same trunk group.

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ISSUED: June 1, 2021

- BY: President Richmond, Virginia 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.5 End Office Services Optional Arrangements (Continued)
 - (Z) (Reserved for Future Use)
 - (AA) Signaling System 7 (SS7) Out of Band Signaling

This option is provided in conjunction with Common Channel Signaling System 7 (CCS7) Access Service and is only available with Switched Access FGD service, 500 SAC Access, Toll Free SAC Access and 900 SAC (T) Access Services. SS7 Out of Band Signaling provides common channel out of band transmission of address and supervisory SS7 protocol signaling information between an end office or Telephone Company access tandems and the CDL. FGD Switched Access, 500 SAC Access, Toll Free SAC Access, and 900 SAC (T) Access service equipped with SS7 Out of Band Signaling are available with the following interface arrangements: DS1 Digital, DS1C Digital (existing customers only), DS3 Digital, and DS3C Digital (existing customers only). SS7 Out of Band Signaling is provided at suitably equipped Telephone Company end offices or Telephone Company access tandems. The technical specifications for SS7 Out of Band Signaling are described in Technical Reference Publication TR-TSV-000905. (T)

(AB) Calling Party Number (CPN) Parameter

The CPN parameter, available as a nonchargeable option for originating FGD with SS7 Out of Band Signaling, provides for the automatic transmission of the ten digit directory number, associated with a calling station, to the customer's premises for originating calls. The ten digit number consists of the NPA plus the seven digit telephone number which may or may not be the same number as the calling station's charge number. The CPN parameter also includes a "privacy indicator" which allows the ten digit telephone number to be coded as presented or restricted for delivery to the called end user. The technical specifications for CPN are described in Technical Reference Publication TR-TSV-000905. (T)

(AC) Carrier Selection Parameter (CSP)

The CSP, available as a nonchargeable option for originating FGD with SS7 Out of Band Signaling, provides for the automatic transmission of a signaling indicator which signifies to the customer whether or not a given call originated from a presubscribed line. If the line was presubscribed, the indicator will signify if the end user did or did not dial 101XXXX. The technical specifications for CSP are described in Technical Reference (T) Publication TR-TSV-000905.

(AD) Charge Number (CN) Parameter

The CN parameter, available as a nonchargeable option for originating FGD with SS7 Out of Band Signaling, is equivalent to the existing ten digit Automatic Number Identification (ANI) available with FGD with MF signaling. The CN parameter provides for the automatic transmission of the ten digit billing number of the calling station and the originating line information. The technical specifications for CN are described in Technical Reference Publication TR-TSV-000905.

ISSUED: August 1, 2000 BY: President Richmond, Virginia

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.5 End Office Services Optional Arrangements (Continued)
 - (AE) Carrier Identification Parameter (CIP)

EFFECTIVE: August 1, 2000

Carrier Identification Parameter is available as an optional feature in conjunction with originating FGD with SS7 Out of Band Signaling. CIP provides for the transmission of the Carrier Identification Code (CIC) or the access code 101XXXX to the customer with the Initial Address Message (IAM). CIP is available with originating FGD in suitably equipped end offices and access tandems. CIP will be populated by a 4-digit CIC at the rates shown in 4.6.8. Application of the charges is in 4.5.2(H)(9).

The Telephone Company will make every effort to maintain the CIP information, equipment and facilities in a format which facilitates the customer's use of the CIP offering. Changes (i.e., technology, customer account makeup, etc.) can occur affecting such information, however, and the Telephone Company cannot guarantee that the CIP equipment and facilities will be completely capable of processing CIP data at all times. Accordingly, the Telephone Company shall not be liable for any incidental, indirect, special or consequential damages (including lost revenue or profits) of any kind, resulting from inaccuracy of CIP data and/or the inability of its equipment and facilities to process CIP data.

4. <u>SWITCHED ACCESS</u> (Continued)

4.2 <u>Description of Switched Access</u> (Continued)

4.2.6 Call Restriction and Code Screening Reports

The customer, when ordering Call Denial on Line or Hunt Group, Service Class Routing or Trunk Access Limitation as in 4.2.5, shall report the appropriate codes to be instituted in each end office switch.

4.2.7 Installation and Acceptance Testing of Switched Access

- (A) The Switched Access provided under this tariff (a) will include any Telephone Company installed equipment, entrance cable or drop wiring, and wiring or cable within a building necessary to terminate the Switched Access at a point of termination reasonably situated so as to serve the CDL, and (b) will be installed by the Telephone Company to such a point of termination. The customer shall be responsible for providing facilities beyond the point of termination. When performing installation and acceptance testing, the Telephone Company will, on a cooperative basis, test the line or trunk beyond the customer's first point of switching (i.e., End-To-End).
- (B) At no additional charge, the Telephone Company will, at the customer's request, cooperatively test, at the time of installation, loss, 3-tone slope, DC continuity, C-notched noise, C-message noise and operational signaling, when applicable. When the Interface Arrangement is established at the Telephone Company's first point of switching, and the customer requests these tests, the Telephone Company will perform the tests independently and provide the results to the customer. When the Interface Arrangement provides a four-wire voice transmission facility and the point of termination provides two-wire voice transmission (i.e., there is a four-wire to two-wire conversion at the point of termination), echo control (balance-echo return loss/equal level echo path loss) may also be tested.

Additional charges will apply as in 6.6(A)(1) when: (a) the customer requests a test not set forth above, or (b) the test requested is not essential to the installation of the particular Switched Access ordered.

If acceptance tests are not started within 15 minutes after the scheduled appointment time for such tests, as negotiated between the Telephone Company and the customer, additional charges will apply, as in 6.2(D) and 6.2(G), unless the delay is caused by the Telephone Company.

4.2.8 Provision of Design Layout Report

The Telephone Company will provide to the customer the makeup of the Switched Transport portion of the Switched Access provided under this tariff to enable the customer to design its overall service. This information will be reissued or updated whenever the makeup of the facilities provided to the customer are materially changed.

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4. SWITCHED ACCESS (Continued)

4.2 Description of Switched Access (Continued)

4.2.9 Network Management

The Telephone Company will administer its network to ensure the provision of standard traffic grade of service levels to all telecommunications users of the Telephone Company's network services. The Telephone Company maintains the right to apply protective controls such as diversion of overflow traffic to informational announcements or restriction of access to congested traffic areas on any traffic carried over its network in order to assure satisfactory service levels to all customers. These controls include the right to restrict and, if necessary, deny access to and from the point of termination at the CDL.

Outage credit will apply as in 2.4.4, in cases where all transmission paths are blocked as a result of application of protective controls, except that to the extent that these controls relate to emergency situations, no notice requirement is necessary beyond that already provided for in this tariff.

4.2.10 (Reserved for Future Use)

4.2.11 Toll Free* Customer Identification Function

This function utilizes Toll Free Data Base Query Service, as described in 4.2.19, to screen all ten digits of all Toll (T) Free-NXX-XXXX type calls generated by end users to determine the customer to which the Toll Free call is to be routed. This function is provided in conjunction with Toll Free SAC Access Service. (T)

4.2.12 <u>900 Customer Identification Function</u>

This function provides for screening of the first six digits of all 900-NXX-XXXX type calls generated by end users to determine the customer to which the call is to be routed. This function is provided in conjunction with 900 SAC Access Service and with FGC and FGD.

4.2.13 Design and Routing of Switched Access

The Telephone Company shall work cooperatively with the customer to design and determine the routing and directionality of Switched Access including the selection of facilities from the first point of switching to the CDL. Selection of facilities, equipment and routing of the Switched Access is based on standard engineering methods, facilities and equipment available, Telephone Company traffic routing plans, and the customer's order for service.

4.2.14 Provision of Switched Access Performance Data

Performance data for Switched Access will be made available to the customer based on Telephone Company established intervals and availability. This data may include, but is not limited to, equipment blockage and failure results, ineffective attempt performance, transmission failures, and other service-related data. Any request for data or format that is not Telephone Company Standard will be handled on an Individual Case Basis with any associated cost to be borne by the customer. Performance data related to customer provided facilities will not be provided.

"Toll Free" service includes any access service which utilizes the following NPAs: 800, 888, 877, 866, 855, 844, (N) 833, 822, or other NPAs (as they become available to the Industry). (N)

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(T)

4. <u>SWITCHED ACCESS</u> (Continued)

4.2 <u>Description of Switched Access</u> (Continued)

4.2.15 <u>Transmission Performance</u>

Each Switched Access transmission path is provided with a standard transmission performance. The standard for a particular path is dependent on the Interface Arrangement and whether the Switched Access is routed direct or via a Telephone Company access tandem. In addition, Data Transmission Parameters may be ordered by the customer. The transmission performance parameters are set forth in Section 7000 of the GTE Technical Interface Reference Manual. The transmission performance parameters relate only to the Telephone Company provided portion of the service.

The transmission specifications and diversity requirements for CCS7 Access service are as described in Bellcore Technical Reference Publication TR-TSV-000905.

4.2.16 Design Blocking Probability

The Telephone Company will design the facilities used in the provision of Switched Access to meet the blocking probability criteria as follows:

- (A) For FGA no design blocking criteria apply.
- (B) For FGB, FGC and SAC Access Service, the design blocking objective will be one percent (.01) between the CDL and the first point of switching as in reference document GTE Service Corporation Telephone Operations Traffic Grade of Service Standards. 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.
- (C) For FGD the design blocking objective will be one percent (.01) between the CDL and the end office switch as in reference document GTE Service Corporation Telephone Operations - Traffic Grade of Service Standards. 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.
- (D) When FGB, FGC, FGD or SAC Access Service is ordered in trunks, the Telephone Company cannot guarantee these design blocking probabilities. The Telephone Company will perform routine measurement functions, except on FGA, to assure that an adequate number of transmission paths are in service. The Telephone Company will recommend that additional capacity (BHMC or quantities of trunks) be ordered by the customer when additional paths are required to reduce the measured blocking to the designed blocking level. For the capacity ordered, the design blocking objective is assumed to have been met if the routine measurements show that the measured blocking does not exceed the threshold listed in the following tables.

Section 4 First Revised Page 47 Cancels Original Page 47 EFFECTIVE: January 1, 2001

- ISSUED: December 21, 2000 BY: President Richmond, Virginia
- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.16 Design Blocking Probability (Continued)
 - (D) (Continued)
 - (1) For FGB and FGC transmission paths carrying traffic between a CDL and the first point of switching, or FGD transmission paths, carrying traffic direct between a CDL and an end office, the measured blocking thresholds are as follows:

Number of Transmission Paths <u>Per Trunk Group</u>	Measured Blocking Thresholds in the Daily Busiest Hour for the Number of Measurements Per Trunk Group			
	15-20 <u>Measurements</u>	11-14 <u>Measurements</u>	7-10 <u>Measurements</u>	5-6 <u>Measurements</u>
2	.070	.080	.090	.140
3	.050	.060	.070	.090
4	.050	.060	.070	.080
5-6	.040	.050	.060	.070
7 or more	.030	.035	.040	.060

(2) For FGD transmission paths carrying traffic between a CDL and an end office via an access tandem, the measured blocking thresholds are as follows:

Number of Transmission Paths Per Trunk Group	Measured Blocking Thresholds in the Daily Busiest Hour for the Number of Measurements Per Trunk Group			
	15-20 <u>Measurements</u>	11-14 <u>Measurements</u>	7-10 <u>Measurements</u>	5-6 <u>Measurements</u>
2	.045	.055	.060	.095
3	.035	.040	.045	.060
4	.035	.040	.045	.055
5-6	.025	.035	.040	.045
7 or more	.020	.025	.030	.040

4.2.17 Special Facilities Routing

A customer may request that the facilities used to provide Switched Access be specially routed. The regulations, rates and charges for Special Facilities Routing (i.e., Avoidance, Diversity and Cable-Only) are in Section 9.

4.2.18 (Reserved for Future Use)

(T)

Section 4 Fourth Revised Page 48 Cancels Third Revised Page 48 EFFECTIVE: July 1, 2021

- ISSUED: June 1, 2021 BY: President Richmond, Virginia
- 4. SWITCHED ACCESS (Continued)
- 4.2 <u>Description of Switched Access</u> (Continued)
- 4.2.19 <u>Toll Free* Data Base Query Service</u>

(T)

Toll Free Data Base Query Service, offered in conjunction with Toll Free SAC Access Service, performs the Toll Free (T) Customer Identification Function, as described in 4.2.11, to determine the customer to whom Toll Free calls must be routed. For all 1+Toll Free-NXX-XXXX calls originated by an end user, the Telephone Company will perform the customer identification function using a Telephone Company Toll Free Data Base to screen the dialed ten digits of the Toll Free call to determine the customer selected by the Toll Free subscriber to carry that Toll Free call. If the Toll Free call originates from an end office switch not equipped to provide the customer identification function, the call will be routed to a Telephone Company access tandem switch equipped to provide the customer identification function. Once customer identification has been established through Toll Free Data Base Query Service, the Toll Free call will be routed to the selected customer for completion.

Basic Toll Free Data Base Queries provide instructions to route 1+Toll Free-NXX-XXXX calls on a simple call turn (T) around basis to one particular customer or to different customers based on the LATA in which the Toll Free call (T) originates.

Premium Toll Free Data Base Queries provide instructions to route 1+Toll Free-NXX-XXXX calls to: (T)

- (A) Different customers based on time of day, day of week, or based on number of calls allocated by Toll Free (T) subscriber selected percentages.
- (B) Different terminating locations based on time of day, day of week, or based on number of calls allocated by Toll Free subscriber selected percentages. (T)
- (C) Standard seven digit local exchange telephone numbers at the terminating end based on the Toll Free (T) subscriber's specific requirements.

The Toll Free subscriber is responsible for arranging the entry of the various routing instructions discussed herein into (T) the Number Administration Service Center's (NASC's) Service Management System (SMS).

Rate regulations and charges applicable to Toll Free Data Base Query Service appear in 4.5.2(H) and 4.6.3(A). (T)

4.2.20 500 Customer Identification Function

This function provides for screening of the first six digits of all 500-NXX-XXXX type calls generated by end users to determine the customer to which the call is to be routed. This function is provided in conjunction with 500 SAC Access Service and with FGC and FGD.

- 4.2.21 (Reserved for Future Use)
- "Toll Free" service includes any access service which utilizes the following NPAs: 800, 888, 877, 866, 855, 844, 833, 822, or (N) other NPAs (as they become available to the Industry).

Section 4 **First Revised Page 49 Cancels Original Page 49** EFFECTIVE: July 1, 2021

ISSUED: June 1, 2021 BY: President Richmond, Virginia

- 4. SWITCHED ACCESS (Continued)
- 4.3 **Obligations of the Customer**
- 4.3.1 On and Off-Hook Supervision

The customer facilities shall provide the necessary on and off-hook supervision.

4.3.2 **ASR Requirements**

The customer shall order all Switched Access as described in Section 3, 4.3.2 and 4.3.3.

ASRs for Entrance Facilities and Direct-Trunked Transport must specify the customer designated location, type of service (e.g., Voice Grade, DS1 or DS3), the channel interface, and any optional arrangements desired. In addition, ASRs for Direct-Trunked Transport must specify any Hubs involved and the end office, when direct routing to an end office is desired, or the Telephone Company access tandem if direct routing to a Telephone Company access tandem switch for purposes of obtaining Tandem-Switched Transport is desired.

ASRs for Direct-Trunked Transport must also specify the Feature Group, number of lines or trunks at the end office or Telephone Company access tandem, major traffic types and directionality. Ordered quantities shall be specified by originating and terminating direction and by traffic type (e.g., MTS/MTS-type or WATS/WATS-type). Where the customer desires to segregate its originating traffic into separate trunk groups by type of traffic, the customer must specify the ordered quantities by trunk group and by traffic type. For example, if a customer desires a separate trunk group to carry its 500, Toll Free or 900 traffic, the order must specify the trunks or BHMCs associated with 500, Toll (T) Free or 900 traffic for that trunk group.

Customers may order Tandem-Switched Transport by specifying the number of trunks required between the CDL and access tandem switch or BHMCs between the CDL and the end office. The customer shall provide, when it orders BHMC, its projected interstate BHMC between the CDL and each end office in the Access Area by traffic type. The customer shall provide, when it orders lines or trunks, its projected interstate traffic distribution by percent for each end office in the Access Area by traffic type. If the customer fails to provide its traffic distribution, the Telephone Company will use appropriate Telephone Company traffic studies to project distribution by end office.

When FGA is ordered the customer shall specify whether or not the terminating traffic is to be restricted to the Access Area as in 4.2.4(B)(6), and 4.2.5(C), (D) or (E), or extended beyond the Access Area (i.e., local calling area) as in 4.5.2(N)(3). If the customer wishes to restrict the traffic, the rates in 4.5.2(B) may apply, depending upon the optional arrangement selected.

When the Alternate Traffic Routing optional arrangement is provided, Percent Traffic Routed (PTR) values must be provided on the ASR as described in 4.5.2(N)(2)(h).

When a customer orders Switched Access for mixed interstate and intrastate usage, the customer shall provide an estimate of the total usage which will be interstate by traffic type. If the customer fails to provide this estimate, all usage will be allocated as 58% interstate and 42% intrastate. The customer or Telephone Company allocated percentages will be used as a basis of the jurisdictional determination for billing purposes of all charges until the service is activated and a more accurate determination can be provided as in 4.3.3 and 4.5.2(J).

(T)

Section 4 Third Revised Page 50 Cancels Second Revised Page 50 EFFECTIVE: February 8, 2008

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- 4. SWITCHED ACCESS (Continued)
- 4.3 <u>Obligations of the Customer</u> (Continued)
- 4.3.3 Jurisdictional Report Requirements
 - (A) Jurisdictional Reports
 - (1) Percent Interstate Usage (PIU) Factor
 - (a) When the Telephone Company receives sufficient call detail to permit it to determine the jurisdiction of some or all originating and terminating access minutes of use, the Telephone Company will use that call detail to render bills for those minutes of use and will not use customer reported Percent Interstate Usage (PIU) factors to determine the jurisdiction of those minutes of use.

The Telephone Company will apply the PIU factor, either provided by the customer or as set forth in sections (1)(b) or (A)(3), only to minutes of use for which the Telephone Company does not have sufficient call detail to determine jurisdiction. The customer-provided PIU factor will be used until the customer provides an updated PIU factor, as set forth in (A)(3) following. No prorating or back billing will be done based on the updated report.

There may be some portion of terminating minutes where it is not possible to know, and therefore to send, the needed originating number information. A "floor" of 7.00 percent(%) will be set for terminating access minutes lacking originating number information, for all switched access customers.

- When the percentage of terminating traffic call detail to determine jurisdiction does not exceed the sum of the floor plus a 2.00 percent (%) grace threshold or 9.00 (%), the Telephone Company will apply the PIU factor, either provided by the customer or as set forth in section (1)(b).
- 2) When the percentage is greater than 9.00 percent (%), the Telephone Company will assess rates from this tariff on all minutes exceeding the floor. For example, if 30 percent (%) of a customer's terminating minutes sent to the Telephone Company do not contain sufficient originating information to allow the Telephone Company to determine the originating location, then the Telephone Company would apply the provisions of this tariff to those minutes exceeding the "floor", or 23.00 percent (%) in this example.

In the event that the Telephone Company applies rates to terminating calls without originating number information as provided in this tariff, customers will have the opportunity to request backup documentation of the Telephone Company's basis for such application, and further request that the Telephone Company change the application of the intrastate access rate upon a showing of why the intrastate rate should not be applied.

(C)

(T) (C)

Section 4 Third Revised Page 51 Cancels Second Revised Page 51 EFFECTIVE: July 1, 2021

ISSUED: June 1, 2021 BY: President Richmond, Virginia

- 4. SWITCHED ACCESS (Continued)
- 4.3 <u>Obligations of the Customer</u> (Continued)
- 4.3.3 Jurisdictional Report Requirements (Continued)
 - (A) Jurisdictional Reports (Continued)
 - (1) Percent Interstate Usage (PIU) Factor (Continued)
 - (b) When the customer initially orders Switched Access Service(s), the customer will state in the order (Access Service Request) a PIU factor. This factor will be used by the Telephone Company as the customer-provided PIU factor until the customer provides updated PIU factors, as required in (A)(3) following. For each service listed below, the customer may provide separate PIU factors, in accordance with (a) and (c).
 - Feature Group A (FGA) Switched Access Service Notes 1, 2
 - Feature Group B (FGB) Switched Access Service Notes 1, 2
 - Feature Group C (FGC) Switched Access Service Notes 1, 2
 - Feature Group D (FGD) Switched Access Service Notes 1, 2
 - Basic Serving Arrangement A (BSA-A) Notes 1, 2, 3
 - Basic Serving Arrangement B (BSA-B) Notes 1, 2, 3
 - Basic Serving Arrangement C (BSA-C) Notes 1, 2, 3
 - Basic Serving Arrangement D (BSA-D) Notes 1, 2, 3
 - 500 Access Services Notes 1, 2
 - 700 Access Services Notes 1, 2
 - Toll Free Services Notes 1, 2, 4
 - 900 Access Services Notes 1, 2

When a customer submits an order for Switched Access services, the customer must state the PIU on a statewide, LATA, or Billing Account Number (BAN) level.

When the customer provides PIU factors, the Company will subtract the developed PIU from 100 and the difference is the PIU usage. The sum of the interstate and intrastate percentages will equal 100 percent. The customer may only provide a PIU factor that is a whole number (a number from 0 to 100).

- NOTE 1: The PIU Factor will apply to all associated elements and services, e.g. End Office Switching, Information Surcharge, Interconnection Charge, and, if applicable, Tandem Switched Transport and Tandem Switching minutes of use.
- NOTE 2: The PIU Factor for Switched Access services must be provided by the customer of record when used in conjunction with Collocation Services as described in Section 19 or used in conjunction with Tandem Switch Signaling.
- Note 3: When determining the jurisdiction of Switched Access traffic provided via a BSA or Basic Service Element (BSE) and the intrastate equivalent of the BSA or BSE is only available on a bundled feature group basis, intrastate usage will be prorated to the bundled intrastate feature group equivalent of the BSA.
- Note 4: "Toll Free" service includes any access service which utilizes the following NPAs: 800, 888, 877, 866, 855, 844, 833, 822, (T) or other NPAs (as they become available to the Industry). (T)

Section 4 First Revised Page 51.1 Cancels Original Page 51.1 EFFECTIVE: February 8, 2008

ISSUED: February 5, 2008 BY: President Richmond, Virginia

- 4. SWITCHED ACCESS (Continued)
- 4.3 <u>Obligations of the Customer</u> (Continued)
- 4.3.3 Jurisdictional Report Requirements (Continued)

(A) Jurisdictional Reports (Continued)

- (1) Percent Interstate Usage (PIU) Factor (Continued)
 - (c) For purposes of developing the projected interstate percentage for Feature Group C (or BSA-C) (C) and Feature Group D (or BSA-D), the customer shall consider every call, that originates from a calling party in one state and terminates to a called party in a different state, to be interstate communications. The customer shall consider every call that terminates to a called party within the same state as the state where the calling party is located, to be intrastate communications. The manner in which a call is routed through the telecommunications network does not affect the jurisdiction of a call; i.e., a call between two points within the same state is an intrastate call even if it is routed through another state.

For Feature Group A (or BSA-A) and Feature Group B (or BSA-B), pursuant to Federal Communications Commission order FCC 85-145 adopted April 16, 1985, interstate usage is to be developed as though every call, that enters a customer network at a point within the same state as that in which the called station is situated, is an intrastate communication and every call, that enters a customer's network at a point in a state other than that where the called station is situated, is an interstate communication.

(2) Entrance Facilities and Direct-Trunked Transport Facilities

The Telephone Company will develop a PIU factor to apply to Entrance Facility and Direct-Trunked Transport rate elements when sufficient call detail exists. The Telephone Company will apply the PIU factor provided by the customer as set forth in 4.3.3 (A)(3) only when the Telephone Company does not have sufficient data to develop a PIU factor.

A customer may provide a separate PIU factor for each rate element (Entrance Facility, Direct-Trunked Transport) at a Billing Account Number or higher reporting level reflecting the originating and terminating traffic of all Switched Access services that use such facilities. A consolidated PIU factor for all Entrance Facility and Direct-Trunked Transport rate elements may be provided at the option of the customer, if such PIU factor is representative of the actual intrastate use of the service.

(3) Jurisdictional Report Updates

The customer may update the interstate and intrastate jurisdictional reports on a quarterly basis. The reports will be based on the prior three months and will be due within fifteen days after the end of the quarter, beginning with the completion of the first full quarter of service. In the event that the Telephone Company does not have sufficient data to rely on actual call detail or to develop a PIU factor, these factors will be applied to activity dated on or after the first day of the next calendar month, which begins at least 15 business days after the day on which the revised report or letter is received.

If the revised factors represent what the Telephone Company considers to be a substantial deviation (a deviation of 5 (five) percentage points or more for the preceding twelve calendar months is a substantial deviation) from the customer's previously reported factors and cannot be attributed to seasonal changes or other identifiable reasons, the Telephone Company will request a Jurisdictional Report Verification of the factors as set forth in 4.3.3 (C) following.

Section 4 Second Revised Page 51.2 Cancels First Revised Page 51.2 EFFECTIVE: March 16, 2014

ISSUED: February 19, 2014 BY: President Richmond, Virginia

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.3 <u>Obligations of the Customer</u> (Continued)
- 4.3.3 <u>Jurisdictional Report Requirements</u> (Continued)
 - (A) <u>Jurisdictional Reports</u> (Continued)
 - (3) <u>Jurisdictional Report Updates</u> (Continued)

When the Telephone Company does not have sufficient data to rely on actual call detail or to develop a PIU factor, the revised report or letter will serve as the basis for the next three months' billing and will be effective on the bill date for that service. If the customer does not supply an updated quarterly report or letter, the Telephone Company will assume the customer provided PIU factors to be the same as those provided in the last quarterly report or letter accepted by the Telephone Company.

For those cases in which a quarterly report or letter has never been received from the customer, the Telephone Company will assume the customer provided PIU factors to be the same as provided in the order for service.

A customer may file jurisdictional reports aggregating usage at a statewide, LATA, or Billing Account Number (BAN) level.

(B) Maintenance of Customer Records

The customer shall retain for a minimum of twelve months call detail records that substantiate the interstate percent provided to the Telephone Company as set forth in (A) preceding for switched access service. Such records shall consist of (1) and (2) following, if applicable:

- (1) All call detail records such as work papers and/or backup documentation including paper or any other (C) form of records for billed customer traffic, call information including call originating and terminating address (i.e., calling, called number), the call duration, all originating and terminating trunk groups or access lines over which the call is routed, and the point at which the call enters the customer's network; and
- (2) If the customer has a mechanized system in place that calculated the PIU Factor, then a description of that system and the methodology used to calculate the PIU Factor must be furnished and any other pertinent information (such as but not limited to flowcharts, source code, etc.) relating to such system must also be made available.

VERIZON SOUTH INC. VIRGINIA ISSUED: December 11, 2002 BY: President Richmond, Virginia

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.3 Obligations of the Customer (Continued)
- 4.3.3 <u>Jurisdictional Report Requirements</u> (Continued)
 - (C) Jurisdictional Reports Verification

The Telephone Company may request the customer to verify their jurisdictional reports. The customer shall keep records of call detail from which the percentage of interstate and intrastate use can be ascertained. The Telephone Company will request the customer to provide the records of call detail and other information as specified in (B) preceding, that the customer uses to determine the percentage of interstate and intrastate use in some or all of the states where the customer has provided such factors. No more than one verification request per state will be made per year.

- (1) If the PIU factors filed by the customer cannot be validated by the data provided, and the data provided by the customer is sufficient to calculate a PIU factor different than the customer's reported PIU factor, the Telephone Company will use these records to:
 - (a) Revise the customer's PIU factor.
 - (b) Calculate the interstate and intrastate access charges that should have been billed to the customer for the prior period specified in (B) preceding that the inaccurate PIUs had been used and debit or credit the customer for the difference between the charges that should have been billed with the default PIU and the charges that were billed.

The customer shall supply the data to the Telephone Company within 30 days of the Telephone Company request. The Telephone Company will request data for the four prior quarters unless a shorter period is requested by the customer and agreed to by the Telephone Company.

- (2) If the customer fails to supply data (as specified in (B) preceding) within 45 calendar days of the Company's request, sufficient for the Company to substantiate or determine PIU factors, then:
 - (a) The Company will apply a default PIU factor of 50% to the traffic for which the Company does not have sufficient call detail to determine the jurisdiction of the traffic ("unknown jurisdiction" usage) (i.e., 50% of the unknown jurisdiction usage will be billed under the interstate jurisdiction and 50% of the unknown jurisdiction usage will be billed under the intrastate tariff) in lieu of the PIU factors last submitted by the customer.
 - (b) The Company will apply the default PIU factor to all future access minutes of use with unknown jurisdiction beginning with the first bill date following the 45 calendar day period during which the customer was to submit the records of call detail requested by the Company. The application of the default PIU factor will continue until the customer provides the Company with records of call detail or other data that are sufficient for the Company to substantiate the customer-provided PIU factors.

(N)

VERIZON SOUTH INC. VIRGINIA ISSUED: December 11, 2002 BY: President Richmond, Virginia

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.3 Obligations of the Customer (Continued)
- 4.3.3 <u>Jurisdictional Report Requirements</u> (Continued)
 - (D) <u>Contested Jurisdictional Reports</u>

If the Telephone Company determines that the customer-provided PIUs are inaccurate, after reviewing the data provided by the customer, then the Telephone Company will report the results of the analysis to the customer by Certified U.S. Mail (return receipt requested). The Telephone Company will request that the customer provide updated PIU factors consistent with those contained in the Telephone Company's report.

If the Telephone Company applies the revised or default PIU factor to the customer's account as provided in (C) preceding in lieu of the customer-provided PIU factor, the customer may contest application of the default PIU by providing written notification, by Certified U.S. Mail (return receipt requested), to the Telephone Company within thirty (30) calendar days from the date the revised or default PIU is applied or the date that the Telephone Company provides notice to the customer of its decision to apply the revised or default PIU. The customer may request that the dispute be resolved by a neutral arbitrator mutually agreed upon by the Telephone Company and the customer. Arbitration is an option provided in addition to the customer's existing right to file a complaint or legal action in a court of law or at the Virginia State Corporation Commission for resolution of the dispute. The arbitration hearing will be conducted in a state or location within the Telephone Company operating territory where the customer maintains its principal place of business or at a location within the Telephone Company operating territory that is mutually agreed upon by both parties. The arbitration procedures shall be governed by the law (both statutory and case) of the state in which the arbitration hearing is held, including, but not limited to, the Uniform Arbitration Act, as adopted in that state. The arbitrator shall determine the customer's PIU for each state for each category of traffic based on the standards in (A) preceding.

(N)

(N)

VERIZON SOUTH INC. VIRGINIA ISSUED: December 11, 2002 BY: President Richmond, Virginia

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.3 Obligations of the Customer (Continued)
- 4.3.3 <u>Jurisdictional Report Requirements</u> (Continued)
 - (D) <u>Contested Jurisdictional Reports</u> (Continued)

Prior to the arbitration hearing, each party shall notify the arbitrator of the PIU factor(s) which that party believes to be correct. The arbitrator, in deciding, may adopt the PIU percentage of either party or may adopt a PIU different from those proposed by the parties. If the arbitrator adopts a PIU proposed by one of the parties, the other party (whose PIU was not adopted) shall pay all costs of the arbitration. If the arbitrator adopts a PIU percentage higher than either of the PIU proposed by the parties, then the party proposing the lower PIU shall pay all costs of the arbitration. If the arbitrator adopts a PIU lower than either of the PIU proposed by the parties, then the party proposing the lower PIU shall pay all costs of the arbitration. If the arbitrator adopts a PIU lower than either of the PIU proposed by the parties, then the party proposing the higher PIU shall pay all costs of the arbitration. If the arbitrator adopts a PIU which falls between the two percentages adopted by the parties, then the parties shall each pay one-half of the arbitration costs.

The PIU factor(s) for each state for each category of traffic determined by the arbitrator will be applied by the Telephone Company to all future access minutes of use with unknown jurisdiction from that customer in that state until the customer provides the Telephone Company with records of call detail or other data that are sufficient for the Telephone Company to substantiate the customer-provided PIU factors.

Absent the customer's written notification, within the timeframe noted above, the customer must comply with the provisions set forth in (B) and (C) preceding. If the customer fails to comply with these provisions, the customer will be in violation of this Tariff and the Telephone Company may refuse additional applications for service and/or refuse to complete any and all pending orders for service or may discontinue the provision of the services to the customer as specified in Section 2.1.8 preceding.

The Telephone Company retains the right to pursue any and all other legal remedies, whether in addition to, or in lieu of, the above procedures, to recover any under-billed switched access charges associated with incorrect customer-provided PIU factors under the applicable interstate or intrastate tariffs.

(N)

EFFECTIVE: January 10, 2003

- ISSUED: December 11, 2002 BY: President Richmond, Virginia
- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.4 <u>Payment Arrangements and Credit Allowances</u>
- 4.4.1 (Reserved for Future Use)
- 4.4.2 <u>Cancellation of Applications</u>

A customer may cancel an application for Switched Access in accordance with the regulations and charges in Section 3.

4.4.3 <u>Credit Allowances</u>

- (A) Allowances for service interruptions are in 2.4.4.
- (B) Usage Sensitive Service credit will be included in the FGA monthly bills rendered to customers to reflect usage charges collected from their end users for interstate calls. The amount of credit applies to the End Office Switching rate element for originating calls. When the customer is provided originating only FGA service, the credit will apply to either the actual access minutes measured or the assumed minutes as in 4.5.2(O)(3).

No credit will apply for terminating only FGA.

(C) (Reserved for Future Use)

(M)

(M)

ISSUED: June 1, 2021 BY: President Richmond, Virginia

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 Rate and Charge Regulations
- 4.5.1 Rate Elements

For the purposes of determining the rates and charges for Switched Access, including SAC Access Service, the following rate elements may apply:

Entrance Facility Direct-Trunked Transport Tandem-Switched Transport Multiplexing End Office Switching Toll Free Data Base Query

(T)

FGB, FGC, FGD and SAC Access Service are also subject to the Network Blocking charge per call as in 4.5.2(I).

4.5.2 Rate Regulations

This section contains the specific regulations governing the rates and charges that apply for Switched Access including SAC Access service, and Toll Free Data Base Query service. (T)

(A) <u>Types of Rates and Charges</u>

The following types of rates and charges apply to Switched Access.

(1) Usage Rated

Usage rates are rates applied on a per Access Minute basis or they are applied on a per query basis either as basic or premium as described in 4.5.2(H).

End Office Switching rate element is usage rated.

The Tandem-Switched Transport - Termination and Tandem Switching rate elements are usage rated.

The Tandem-Switched Transport - Facility rate element is both usage and distance-sensitive.

(2) Flat Rated

Flat rates apply, on a per month basis, regardless of the amount of rate element usage. Flat rates may be either distance-sensitive or nondistance-sensitive.

Direct-Trunked Transport is flat-rated and, with the exception of Voiceband Transport, is both distance and nondistance-sensitive. Voiceband Transport is distance-sensitive only.

The Entrance Facility is flat-rated and is nondistance-sensitive.

The Multiplexing charge is a flat-rated element.

Section 4 Third Revised Page 52 Cancels Second Revised Page 52 EFFECTIVE: July 1, 2021

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 <u>Rate and Charge Regulations</u> (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (A) <u>Types of Rates and Charges</u> (Continued)
 - (3) <u>Nonrecurring Charges</u>

Nonrecurring charges are one-time charges that apply for specific work activities in conjunction with providing Switched Access Service or a change to an existing Switched Access Arrangement.

- (a) <u>Switched Access Installation and Ordering Charges</u>
 - (1) Service Installation Charge

For Entrance Facilities, this charge applies to customer requests for installation of Switched Access Entrance Facilities from the CDL to the serving wire center. The Service Installation Charge applies on a per Entrance Facility basis and is dependant upon the type of Entrance Facility ordered (i.e., Voiceband, DS1 or DS3). In addition, for DS1 Entrance Facilities, a separate nonrecurring charge applies for the first DS1 Entrance Facility ordered and each additional DS1 Entrance Facility between the same CDL and serving wire center. The "First System" charge is assessed per entrance facility for the first DS1 ordered. When the same customer requests additional DS1 service on the same ASR, to be installed at the same time between the same CDL and serving wire center, the "Additional System" charge will apply. Changes in the type of Entrance Facility will be treated as a discontinuance of one type of service and a start of another. The Service Installation charge shall apply to the new Entrance Facility installation.

For multiplexing, this charge applies per multiplexing arrangement ordered and is dependent upon the type of multiplexing performed.

(2) Switched Access Ordering Charge

This charge, applied on a per ASR basis, is associated with the work performed by the Telephone Company in connection with the receiving, recording and processing of service requests. The Switched Access Ordering Charge applies to all requests to establish Entrance Facilities, Direct-Trunked Transport Facilities, and Tandem-Switched Transport Facilities. Where Entrance Faculties and Direct-Trunked and/or Tandem-Switched Transport are ordered on a single ASR, only one Switched Access Ordering Charge applies. This charge is in addition to any Service Installation Charge for Entrance Facility installations.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 <u>Rate and Charge Regulations</u> (Continued)
- 4.5.2 <u>Rate Regulations (Continued)</u>
 - (A) <u>Types of Rates and Charges</u> (Continued)
 - (3) <u>Nonrecurring Charges</u> (Continued)
 - (a) <u>Switched Access Installation and Ordering Charges</u> (Continued)
 - (2) Switched Access Ordering Charge (Continued)

The Switched Access Ordering Charge also applies to requests to activate additional trunks or to increase BHMC on existing Switched Transport Facilities and, changes in the type of Feature Group or Direct-Trunked Transport, for any modifications or changes to existing services that are not considered an administrative change as described in 4.5.2(A)(3)(b).

Changes in name or ownership or transfer of responsibility from one customer to another requires the discontinuance of service and the start of a new service when an interruption or relocation of service is involved. The Switched Access Ordering Charge and Service Installation Charge, if appropriate, and any appropriate Minimum Period Charges will apply per service change.

- (b) Administrative changes will be made without charge to the customer. Administrative changes are as follows:
 - Change in name or ownership or transfer of responsibility from one customer to another, provided there is no interruption of use or relocation of Switched Access service.
 - Change of customer or customer's end user premise address when the change of address is not a result of a physical relocation of equipment,
 - Change in billing data (name, address or contact name or telephone number),
 - Change in customer circuit identification,
 - Change of billing account number,
 - Change of customer testline number,
 - Change of customer or customer's end user contact name or telephone number, and
 - Change of agency authorization.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 <u>Rate and Charge Regulations</u> (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (A) <u>Types of Rates and Charges</u> (Continued)
 - (3) <u>Nonrecurring Charges</u> (Continued)
 - (c) <u>Design Change Charge</u> (USOC H28)

A design change is any change to a pending ASR or a change to an existing service which requires engineering review or change. Design changes may include the addition or deletion of End Office Services Optional Arrangements or changes in the signaling arrangements associated with the Entrance Facilities as described in 4.2.3(B). Design changes do not include a change of Switched Access Entrance Facilities or facility type, IC CDL, end user premises, end office switch, or Feature Group type. Changes of this nature will require the issuance of a new ASR and the cancellation of the original ASR with the appropriate cancellation charges applied.

The Telephone Company will review the requested change, notify the customer whether the change can be accommodated and if a new service date is required. If the customer authorizes the Telephone Company to proceed with the design change, a Design Change Charge will apply.

The Design Change Charge for Switched Access Service in Section 4.6.1(B) will apply on a per ASR per occurrence basis for each request requiring a design change.

The Design Change Charge is in addition to any Switched Access Installation or Ordering charges associated with the change requested.

If a change of service date is required, the Service Date Change Charge in 3.2.2(A) will also apply.

(B) Installation Charge for FGA Optional Call Blocking Arrangements (USOC - CAH)

This charge applies per FGA line equipped with either of the optional call blocking arrangements in Section 4.2.5(D) and (E); InterLATA Call Denial on Line or Hunt Group or Call Denial on Line or Hunt Group outside the Access Area. This charge applies in addition to applicable Switched Access Ordering Charge.

- (C) (Reserved for Future Use)
- (D) (Reserved for Future Use)

Section 4 First Revised Page 56 Cancels Original Page 56 EFFECTIVE: July 1, 2021

ISSUED: June 1, 2021 BY: President Richmond, Virginia

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 <u>Rate and Charge Regulations</u> (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (E) Change of Switched Access Type

Changes from one type of Switched Access to another will be treated as a discontinuance of one type of FIA and start of another. The Switched Access Installation and Ordering Charges will apply, with the following exception. When a customer upgrades a FGA, FGB, or FGC to a FGD at the same first point of switching, the charge will not apply. If however, optional features are added to the service at the time the conversion takes place, the Ordering Charge for these additions will apply.

(F) Moves

A move involves a change in the physical location of the point of termination of Switched Access. The charge for the move depends on whether the move is within the same CDL or to a different CDL.

(1) Same CDL

When the move is to a new point within the same CDL, the Switched Access Ordering Charge in 4.6.1(B) will apply. There will be no change in the minimum period requirements.

(2) <u>A Different CDL</u>

The Switched Access Installation and Ordering charges, as specified in 4.6.1(B) will apply to the Switched Access, installed at the CDL. A new minimum period will also be established for the installed Switched Access. The customer will remain responsible for all remaining minimum period charges associated with the disconnected Switched Access.

- (G) Signaling System 7 (SS7) Out of Band Signaling
 - (1) (Reserved for Future Use)
 - (2) Switched Access Ordering Charges will apply for a change in FGD switched access and Toll Free (T) SAC Access signaling from multifrequency address signaling to SS7 Out of Band Signaling.
 - (3) Switched access ordering charges will not apply if Calling Party Number (CPN) Parameter, Carrier Selection Parameter (CSP), and/or Charge Number (CN) Parameter are ordered at the same time as SS7 Out of Band Signaling is ordered in conjunction with FGD. The Switched Access Ordering Charge will apply if these optional features are ordered subsequent to the provision of SS7 Out of Band Signaling.

Section 4 First Revised Page 57 Cancels Original Page 57 EFFECTIVE: July 1, 2021

ISSUED: June 1, 2021 BY: President Richmond, Virginia

- 4. SWITCHED ACCESS (Continued)
- 4.5 Rate and Charge Regulations (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)

(H) <u>Toll Free Data Base Query Service</u>

(T)

- Query usage charges for Toll Free Data Base Query Service shown in 4.6.3(A) apply as follows: (T)
- A Basic Toll Free Data Base Query charge will apply for each basic Toll Free call query received at (T) the Telephone Company's Toll Free data base. Per query charges are accumulated over a monthly (T) period and billed to the customer on a monthly basis.
- (2) A Premium Toll Free Data Base Query charge will apply for each premium Toll Free call query (T) received at the Telephone Company's Toll Free data base. Per query charges are accumulated over (T) a monthly period and billed to the customer on a monthly basis. The Premium Toll Free Data Base (T) Query charge is in addition to the Basic Toll Free Data Base Query charge. (T)

(I) <u>Network Blocking Charge for Tandem Switched FGB, FGC, FGD, and SAC Access Service</u>

The customer will be notified by the Telephone Company to increase its capacity when excessive trunk group blocking occurs on groups carrying FGB, FGC, FGD or SAC Access Service traffic and the measured access minutes for the Daily Busiest Hour exceed the capacity purchased. Excessive trunk group blocking occurs when the blocking thresholds stated below are exceeded. They are predicated on Daily Busiest Hour measurements for four contiguous weeks using the five highest traffic days of the week, excluding national holidays. The Telephone Company will not bill the customer a Network Blocking Charge if an ASR for additional capacity is received by the Telephone Company within 15 days of the notification. If an ASR is not received within 15 days of notification the rate in 4.6.1(D), will apply when (1) the Daily Busiest Hour average blocking for the four contiguous weeks exceeds the threshold level and (2) the average originating or two-way usage measured for these same hours exceeds the Switched Access capacity purchased.

Blocking Thresholds				
Trunks in Service	<u>1%</u>	<u>1/2%</u>		
1-2 3-4 5-6 7-or more	.070 .050 .040 .030	.045 .035 .025 .020		

The one percent blocking threshold is for FGB, FGC and SAC Access Service transmission paths carrying traffic between a CDL and the first point of switching, or FGD transmission paths carrying traffic direct between a CDL and an end office. The one-half percent blocking threshold is for FGD transmission paths carrying traffic between a CDL and an end office via an access tandem.

4. <u>SWITCHED ACCESS</u> (Continued)

4.5 <u>Rate and Charge Regulations</u> (Continued)

4.5.2 <u>Rate Regulations</u> (Continued)

(J) Determination of Intrastate Charges for Mixed Interstate and Intrastate Switched Access

When mixed interstate and intrastate Switched Access Service is provided, all charges, will be prorated based on the jurisdictional distribution of access minutes as in 4.3.2 and 4.3.3. The portion of a Switched Access Service to be charged as intrastate is determined in the following manner:

For usage rated elements, multiply the percent intrastate use times the total usage, either measured or assumed, rounded to whole access minutes times the appropriate tariff rate element.

For monthly and nonrecurring rate elements, multiply the percent intrastate use times the quantity of each chargeable element times the stated tariff rate per element.

(K) Local Dial-It Services

Customer will be billed charges for terminating Switched Access calls to certain community information services, for which rates are applicable under the Telephone Company's General Customer Services Tariff (e.g., 976 Dial-It Network Services).

(L) Directory Assistance

Terminating Switched Access calls dialed to Directory Assistance will be rated under the applicable rates for the Switched Access in 4.6. In addition, the charge per call to Directory Assistance in the Telephone Company's General Customer Services Tariff may also apply.

- (M) (Reserved for Future Use)
- (N) Description and Application of Rates
 - (1) (Reserved for Future Use)

Section 4 First Revised Page 59 Cancels Original Page 59 EFFECTIVE: JULY 1, 2012

- ISSUED: MAY 31, 2012 BY: President Richmond, Virginia
- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 Rate and Charge Regulations (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (N) <u>Description and Application of Rates</u> (Continued)
 - (2) <u>Switched Transport</u>

Switched Transport is determined as follows:

 (a) The Tandem-Switched Transport - Facility rate is applied per access minute per airline mile for each Switched Access Feature Group type. Tandem-Switched Transport - Facility airline (C) mileage will be measured from the access tandem to the end office or host office: (C)

When the end office is acting as a host office, a separate mileage calculation determines the (C) mileage from the host office to the remote office. Traffic originating from and/or terminating to the remote will be billed Tandem-Switched Transport charges. The Tandem Switching charge does not apply to traffic between a host and remote office.

The V&H coordinate method is used to determine the actual mileage as set forth in NECA, Inc.'s Tariff FCC No. 4. If the calculated miles include a fraction, the value is rounded up to the next full mile.

Where Tandem-Switched Transport - Facility is provided by more than one telephone company, the mileage for each will be determined as in 2.7.

(D) (D)

> (D) (D)

(D)

(D)

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 <u>Rate and Charge Regulations</u> (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (N) <u>Description and Application of Rates</u> (Continued)
 - (2) <u>Switched Transport</u> (Continued)
 - (b) The Tandem-Switched Transport Termination rate applies per access minute for each termination (i.e., the first point of switching and the end office serving the end user) for all Switched Access Feature Group types. When both terminations are provided by the Telephone Company, the Tandem-Switched Transport Termination rate applies twice, including those situations when the terminations are co-located.

Where the Tandem-Switched Transport - Facility is provided by more than one telephone company, the Tandem-Switched Transport - Termination rate applies for the termination (i.e., the first point of switching or the end office serving the end user) at the Telephone Company end of the Switched Transport as in 2.7. The Tandem-Switched Transport - Termination rate will not apply when the Telephone Company is the intermediate provider of the Tandem-Switched Transport - Facility.

(c) For FGA, the Entrance Facility charge shall apply between the CDL and the serving wire center of the CDL. If the serving wire center is not the dial tone office, Direct-Trunked Transport shall apply between the serving wire center and the dial tone office. Tandem-Switched Transport (Facility and Termination) rates, excluding the Tandem Switching charge, shall apply between the dial tone office and the end office for FGA traffic that originates and/or terminates within the FGA Access Area. For FGA traffic that terminates beyond the FGA Access Area, Switched Transport rates apply as described in 4.5.2(N)(3).

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 Rate and Charge Regulations (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (N) <u>Description and Application of Rates</u> (Continued)
 - (2) <u>Switched Transport</u> (Continued)
 - (d) The Direct-Trunked Transport rate is applied on a monthly airline mile and termination basis, except that Direct-Trunked Voiceband Transport is applied on a monthly airline mile basis only.

To determine the Direct-Trunked Transport airline mileage, the distance will be measured from the wire center that normally serves the CDL to the access tandem, end office, WSO (for WATS and WATS-type), or the end office that serves as the host for a remote office. The V&H coordinate method is used to determine the actual mileage as set forth in NECA Inc.'s Tariff FCC No. 4. If the calculated miles include a fraction, the value is rounded up to the next full mile.

For traffic originating from or terminating to a remote office, the mileage will be calculated separately from the end office switch that serves as the host to the remote using the V&H coordinates method. The Direct-Trunked Transport Rate applies from the customer's serving wire center to the end office that serves as the host office. Traffic originating from and/or terminating to the remote will be billed Tandem-Switched Transport charges based on mileage between the host and remote office. The Tandem Switching Charge is not applicable for Tandem-Switched Transport between the end office that serves as the host to the remote office.

When Telephone Company Hubs are involved, mileage is computed and rates applied separately for each section of the Direct-Trunked Transport, i.e., customer serving wire center to Hub, Hub to Hub, Hub to Tandem or Hub to end office.

Where Direct-Trunked Transport includes termination rates, i.e., High Capacity DS1 and DS3 transport, one Termination rate applies for the termination of each end of the interoffice facility.

(e) The Entrance Facility rate is a flat-rated charge assessed per Voiceband, DS1 or DS3 termination at the CDL. This charge will apply even if the CDL and the serving wire center are co-located in a Telephone Company building.

For DS1 Entrance Facilities, a "First System" charge is assessed per Entrance Facility for the first DS1 ordered. When the same customer requests additional DS1 service on the same ASR to be installed at the same time between the same CDL and serving wire center, the "Additional System" charge will apply.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 Rate and Charge Regulations (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (N) <u>Description and Application of Rates</u> (Continued)
 - (2) <u>Switched Transport</u> (Continued)
 - (f) The Tandem Switching rate is usage-sensitive and is applied per access minute to all feature groups for Tandem-Switched Transport with two exceptions. The Tandem-Switching Rate is not applicable for Tandem-Switched Transport between a host office and a remote office, nor is it applicable for FGA.
 - (g) (Reserved for Future Use)
 - (h) When the Alternate Traffic Routing optional arrangement is provided in conjunction with Feature Groups B and D and the end office or Telephone Company access tandem switch is unable to determine the specific trunk group carrying alternate routed traffic to multiple CDLs, switched transport access minutes will be apportioned among the number of trunk groups utilized to provide this optional arrangement. Such apportionment will occur through the application of Percent Traffic Routed (PTR) values provided by the customer on the ASR. The PTR value for each trunk group, the percentage of total traffic to be attributed to each trunk group, will be determined by dividing the BHMC for each trunk group by the total BHMC for all trunk groups carrying alternate routed traffic. The resulting percentage, or PTR value, for each trunk group will be multiplied times the total alternate routed traffic quantity to apportion usage to the individual trunk group. This apportionment will serve as the basis for the switched transport mileage calculation for alternate routed originating traffic as described herein.

When Feature Group B or D Switched Access service is terminated from multiple CDLs through a Telephone Company access tandem or is terminated from multiple CDLs directly to an end office and the end office or Telephone Company access tandem is unable to determine the specific trunk group carrying such terminating traffic, switched transport access minutes will be apportioned among the number of trunk groups carrying such terminating traffic. Such apportionment will occur through the application of PTR values provided by the customer on the ASR. The PTR value for each trunk group will be determined by dividing the BHMC for each trunk group by the total BHMC for all trunk groups carrying such terminating traffic. The resulting PTR value for each trunk group will be multiplied times the total terminating traffic quantity to apportion usage to the individual trunk group. This apportionment will serve as the basis for the switched transport mileage calculation for traffic terminating from multiple CDLs as described herein.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 Rate and Charge Regulations (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (N) <u>Description and Application of Rates</u> (Continued)
 - (2) <u>Switched Transport</u> (Continued)
 - (h) (Continued)

The PTR values as described herein must be included on any ASR establishing or changing any Switched Access service arrangement requiring the use of PTRs. The notation of such PTR values on ASRs must indicate whether the PTR will be used to apportion alternate routed originating traffic to multiple CDLs or to apportion traffic terminating from multiple CDLs. The Telephone Company may conduct verification audits, not to exceed one each year, for each customer, and for each location. Such audits may be conducted by independent auditors if the Telephone Company and the customer, or the customer alone, is willing to pay the expense.

(3) Extended FGA Terminating Traffic

(a) For calls established on a 1+ or expanded seven digit measured calling basis, outside the specific FGA Access Area, however inside the LATA, in conjunction with terminating FGA traffic to an end office, the following rates apply:

for each access minute, the rates per access minute for End Office Switching, in 4.6.3 and the Information Surcharge in 4.6.4.

for each access minute, the Tandem-Switched Transport Facility rate per access minute per airline mile in 4.6.2 and the Tandem-Switched Transport - Termination in 4.6.2.

When the serving wire center of the CDL is the dial tone office, the Tandem-Switched Transport - Facility rate is applicable and mileage is measured from the serving wire center (i.e., the dial tone office) of the CDL to the end office.

When the serving wire center of the CDL is not the dial tone office, the Direct-Trunked Transport rate is applicable for mileage measured between the serving wire center of the CDL and the dial tone office. The Tandem-Switched Transport - Facility rate is applicable for mileage measured between the dial tone office and the end office.

The Tandem Switching rate is not applicable for Extended FGA terminating traffic.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 Rate and Charge Regulations (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (N) <u>Description and Application of Rates</u> (Continued)
 - (3) <u>Extended FGA Terminating Traffic</u> (Continued)
 - (b) (Reserved for Future Use)
 - (c) When FGA terminating traffic is extended outside the LATA, as in 4.2.4(B)(6) Switched Access rate elements, in 4.6.3 and 4.6.4, will be billed to the FGA customer for the terminating interLATA access function provided via the FGA connection, and Switched Access rate elements, in 4.6.2(A) and (B), 4.6.3 and 4.6.4, will be billed to the IC providing the interLATA service to the FGA customer for the originating interLATA access function.
 - (4) (Reserved for Future Use)
 - (5) (Reserved for Future Use)
 - (6) (Reserved for Future Use)
 - (7) <u>(Reserved for Future Use)</u>

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- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 <u>Rate and Charge Regulations</u> (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (N) <u>Description and Application of Rates</u> (Continued)
 - (8) NXX Translation Nonrecurring Charge

The NXX Translation Nonrecurring Charge, as set forth in 4.6.1(C), shall apply to each 500 or 900 NXX code activated or deactivated in a Telephone Company switch capable of performing the customer identification function for 500 SAC

Access Service or 900 SAC Access Service. The total nonrecurring charge per customer order shall be determined by multiplying the number of switches in which the Telephone Company must activate or deactivate the NXX code within the serving area specified by the customer's order times the appropriate nonrecurring charge. Separate nonrecurring charges apply to the activation or deactivation of the first NXX code contained on the customer's ASR and to the activation or deactivation of each additional NXX code contained on the same ASR. In addition, the Switched Access Ordering Charge, as set forth in 4.6.1(B) will apply per ASR submitted for the activation or deactivation of NXX codes.

(O) Measuring Access Minutes

Customer traffic to end offices will be measured (i.e., recorded or assumed) by the Telephone Company at end offices or Telephone Company access tandems. Originating and terminating calls will be measured (i.e., recorded or assumed) by the Telephone Company to determine the basis for computing chargeable access minutes. For terminating calls over FGA, FGB, FGC (to SAC Access and Directory Assistance Services) and FGD, the measured access minutes are the chargeable access minutes. For originating calls over FGA and FGB, the measured access minutes are the chargeable access minutes.

For originating calls over FGC, chargeable access minutes are derived from measured access minutes through the use of a Telephone Company factor. A description of the factor is in (4).

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

When measurement capability for FGA and FGB is not available, access minutes shall be assumed as described in (3).

When usage data is required for a specific end office in an Access Area with multiple end offices, and usage to that office cannot be measured, a portion of total usage will be allocated to the specific end office based upon the portion of subscriber lines served by that end office.

4. <u>SWITCHED ACCESS</u> (Continued)

4.5 <u>Rate and Charge Regulations</u> (Continued)

- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (O) <u>Measuring Access Minutes</u> (Continued)

For originating calls over FGC, chargeable access minutes are derived from measured access minutes (M) through the use of a Telephone Company factor. A description of the factor is in (4).

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

When measurement capability for FGA and FGB is not available, access minutes shall be assumed as described in (3).

When usage data is required for a specific end office in an Access Area with multiple end offices, and usage to that office cannot be measured, a portion of total usage will be allocated to the specific end office based upon the portion of subscriber lines served by that end office.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 <u>Rate and Charge Regulations</u> (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (O) <u>Measuring Access Minutes</u> (Continued)
 - (1) <u>Feature Group A Usage Measurement</u>

For originating calls over FGA, usage measurement begins when the FGA first point of switching receives an off-hook supervisory signal forwarded from the CDL. Where FGA is used for MTS/WATS-type service, this off-hook signal is generally provided by the customer's equipment. Where FGA is used for FCO/ONAL-type services, the off-hook signal is generally forwarded by the customer's equipment when the called party answers.

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

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

(2) Feature Group B Usage Measurement

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

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

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

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

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 <u>Rate and Charge Regulations</u> (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (O) <u>Measuring Access Minutes</u> (Continued)

(3) Usage Measurement Not Available For Feature Groups A and B

When originating and/or terminating measurement capability does not exist, the number of access minutes per FGA line or FGB trunk, per month, will be assumed based on the following:

- A single monthly surrogate of assumed minutes per two-way line/trunk per month shall apply as in 4.6.7. For FGA lines, the terminating assumed usage will be 47% of the two-way surrogate and the originating assumed usage will be 53% of the two-way surrogate. For FGB trunks, the terminating assumed usage will be one half of the two-way surrogate and the originating will be one half of the two-way surrogate.
- When measurement capabilities do not exist for a one way FGA line or FGB trunk, a single monthly surrogate of assumed minutes per one way line/trunk per month shall apply as in 4.6.7.
- When measurement capabilities do not exist in one direction for a two-way line (e.g., recording for terminating only) the number of access minutes per line, per month will be the assumed surrogate for a two-way line or the recorded usage for the single direction, whichever is greater.
- In the event of measurement equipment failure, minutes of use will be determined as follows:

For the initial month of service, FGA or FGB minutes will be assumed as indicated above unless actual usage recorded prior to the failure is greater than the assumed usage.

For subsequent months, the greater of 1) actual usage recorded prior to the failure, or 2) the average of the three month current months' usage (or less if three months are not available) will be used.

(4) Feature Group C Usage Measurement

For originating calls over FGC, usage measurement begins when the originating FGC first point of switching receives answer supervision from the CDL, indicating the called party has answered. However, for billing purposes usage begins at the time that the originating end user's call is delivered by the Telephone Company, and acknowledged as received by the customer's facilities connected with the originating central office.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 <u>Rate and Charge Regulations</u> (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (O) <u>Measuring Access Minutes</u> (Continued)
 - (4) <u>Feature Group C Usage Measurement</u> (Continued)

For originating calls over FGC, measured access minutes are converted into chargeable access minutes using the following equation and factor:

Originating Minutes = Conversation minutes + (factor x quantity of completed calls).

Factor = non-conversation minutes per completed call + [(non-conversation minutes per incompleted call) x (1 - completion ratio) divided by completion ratio].

The measurement of originating call usage over FGC ends when the FGC first point of switching receives disconnect supervision from either the end office switch, indicating the originating end user has disconnected, or the CDL, whichever is recognized first by the first point of switching.

For terminating calls over FGC to services other than SAC or Directory Assistance, terminating FGC usage is not directly measured at the first point of switching, but is derived from originating usage, excluding usage from calls to SAC Access Directory Assistance Services.

Terminating call usage over FGC, other than SAC Access and Directory Assistance, is derived from originating usage as follows:

Terminating Minutes = Originating conversation minutes x In/Out ratio.

In/Out Ratio = Relationship between originating (i.e. Out) and terminating (i.e. In) conversation minutes.

For terminating calls over FGC to SAC Access or Directory Assistance Service, usage measurement begins when the FGC first point of switching receives answer supervision from the end office switch, indicating the terminating SAC Access Service end user has answered, or from the Directory Assistance Service location, indicating the Directory Assistance operator has answered.

The measurement of terminating call usage over FGC to SAC Access or Directory Assistance Services ends when the FGC first point of switching receives an on-hook supervisory signal from the end office switch, indicating the terminating SAC Access Service end user has disconnected, or from the Directory Assistance location, indicating the Directory Assistance operator has disconnected, or from the CDL, whichever occurs first.

4. <u>SWITCHED ACCESS</u> (Continued)

4.5 Rate and Charge Regulations (Continued)

- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (O) <u>Measuring Access Minutes</u> (Continued)
 - (5) Feature Group D Usage Measurement

For originating calls over FGD with multifrequency (MF) signaling, usage measurement begins when the FGD first point of switching receives the first wink supervisory signal forwarded from the CDL.

For originating calls over FGD with SS7 Out of Band Signaling, usage measurement for direct trunks begins when the FGD first point of switching sends an Initial Address Message. Usage measurement for tandem trunks begins when the FGD first point of switching receives an Exit Message.

The measurement of originating call usage over FGD with MF signaling ends when the FGD first point of switching receives disconnect supervision from either the end office switch, indicating the originating end user has disconnected, or the CDL, whichever is recognized first by the first point of switching.

The measurement of originating call usage over FGD with SS7 Out of Band Signaling ends when a Release Message is sent or received by the originating end user's end office, whichever occurs first.

For terminating calls over FGD with MF signaling, or FGD with SS7 Out of Band Signaling, usage measurement begins when the FGD first point of switching receives answer supervision from the end office switch, indicating the terminating end user has answered.

The measurement of terminating call usage over FGD with MF signaling ends when the FGD first point of switching receives disconnect supervision from either the end office switch, indicating the terminating end user has disconnected, or the CDL, whichever is recognized first by the first point of switching.

The measurement of terminating call usage over FGD with SS7 Out of Band Signaling ends when the FGD first point of switching receives or sends a Release Message, whichever occurs first.

(6) SAC Access Service Usage Measurement

SAC Access Service usage measurement shall be in accordance with the regulations set forth for FGC and FGD. Specifically, for usage originating from end offices not equipped with equal access capabilities, access minutes shall be measured in the same manner in which FGC access minutes are measured. For usage originating from end offices equipped with equal access capabilities, access minutes shall be measured in the same manner in which FGD access minutes are measured.

- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 Rate and Charge Regulations (Continued)
- 4.5.2 <u>Rate Regulations</u> (Continued)
 - (P) FGD Switched Access Service With 950-XXXX

When a customer orders FGD Switched Access Service with 950-XXXX Access, as described in 4.2.5(T), to be included with the installation of new FGD switched access facilities, appropriate Switched Access Installation Charges and Switched Access Ordering Charges will apply for the installation of the new FGD switched access facilities.

When a customer orders FGD Switched Access Service with 950-XXXX Access to be added to an existing FGD switched access service, only the Switched Access Ordering Charge and the Design Charge will apply for the addition of this optional end office service arrangement.

4.5.3 (Reserved for Future Use)

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- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.5 <u>Rate and Charge Regulations</u> (Continued)
- 4.5.4 (Reserved for Future Use)

4.5.5 Application of Rates for FGA Extension Service

FGA is available with extensions (i.e., additional terminations of the service at different buildings in the same LATA). FGA extensions are provided and charged for as Special Access. The rate elements which apply are Special Transport (from the extension bridging point to the wire center serving the CDL), and Special Access Lines. All appropriate monthly rates and nonrecurring charges are in 5.7.

\$ 5.39

- ISSUED: MAY 31, 2013 BY: President Richmond, Virginia
- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.6 Rates and Charges
- 4.6.1 Nonrecurring Charges
 - (A) (Reserved for Future Use)
 - (B) Switched Access Service Ordering Charges

(USOC)	Switched Access Ordering Charge (SESSE)	Design <u>Change Charge</u> (H28)	
Former Contel Territory Per ASR	Former GTE Territory Per ASR	_Per ASR	(C)
\$35.17	\$ 100.00	\$ 26.21	(C)

(C) <u>NXX Translation Charges</u>

(1) 500 NXX Translation Charge

First NXX		Each Additional NXX
	Per ASR/Per End Office	Per ASR/Per End Office
(USOC)	(NW51X)	(NW5AX)
	¢ 22.00	¢ 11.00
	\$ 22.00	\$ 11.00

(2) 900 NXX Translation Charge

	First NXX	Each Additional NXX
	Per ASR/Per End Office	Per ASR/Per End Office
(USOC)	(NXSAX)	(NXSAX)

Network Blocking Charge

Applies to FGB, FGC, FGD and SAC Access Service Per Call

\$.01

(E) FGA Optional Toll Blocking

(USOC)

(D)

Per FGA Line Nonrecurring Charge (CAH)

\$41.60

(C) (C)

(C) | | | (C)

ISSUED: BY:	Pres	IE 1, 2021 ident mond, Virginia	Cancels Fifth Revised Page 73 EFFECTIVE: JULY 1, 2021
4. 4.6 4.6.2	Rates	CHED ACCESS (Continued) and Charges (Continued) ned Transport	
	(A)	Tandem-Switched Transport - Facility Tandem-Switched Transport - Facility Per Access Minute Per Airline Mile Originating VOIP Other Than Toll Free	
		Originating Non VOIP Other Than Toll Free0.000030Terminating to Verizon End Office0.000000Terminating to Third Party0.000002	
	(B)	Tandem-Switched Transport - Termination Tandem-Switched Transport - Termination Per Access Minute, Per Termination \$0.0000	
	(C)	Tandem Switching RatePer Originating VOIP Other Than TollFree MOU\$0.001574per Originating VOIP Toll Free MOU\$0.001000per Originating Non VOIP Other ThanToll Free MOU0.000512per Originating Non VOIP Toll Free MOU0.001000per Terminating to Verizon End0.000000Office0.000000per Terminating to Third Party MOU0.001574	
	(D)	Tandem Dedicated Trunk PortTandem Dedicated Trunk Port - DS1 Monthly Rate (USOC)Tandem Dedicated Trunk Port - Voice C Monthly Rate (PT8LX) \$12.50Tandem Dedicated Trunk Port - Voice C Monthly Rate (PT8KX) \$12.50	Grade
	(E)	Per Airline Mile, Per Month Mon	Transport Facility-Voiceband <u>thly Rate</u> IRL) <u>ritory Former GTE Territory</u> \$0.00
	(F)	Direct-Trunked Transport - DS1 Direct- Direct-Trunked Direct- Transport-Facility - DS1 Transport-Te Per Airline Mile, Per Month Mon	Trunked rmination - DS1 thly Rate IRL) Former GTE \$14.17

ISSUED: BY:	MAY 31, 2013 President Richmond, Virgii	nia			EFFECTIVE: JULY 1,	2013
4. 4.6 4.6.2	SWITCHED ACCES Rates and Charges Switched Transpo	s (Continued)				(X)
	(G) <u>Direct-Tru</u>	nked Transport - DS3				
	(USOC)	Transport- Per Airline	<u>Trunked</u> Facility - <u>DS3</u> Mile, Per Month S, 1YTYS)	<u>Direct-Trunked</u> <u>Transport-Termination -</u> <u>Monthly Rate</u> (TRL)	<u>DS3</u>	(Ç)
		Former Contel <u>Territory</u> \$50.00	Former GTE <u>Territory</u> \$33.96	Former Contel <u>Territory</u> \$500.00	Former GTE <u>Territory</u> \$339.60	(C) (X)

- ISSUED: MAY 31, 2013 BY: President Richmond, Virginia
- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.6 <u>Rates and Charges</u> (Continued)
- 4.6.2 <u>Switched Transport</u> (Continued)
 - (H) Entrance Facility 2-Wire and 4-Wire Voiceband

<u>Service</u> Installation Char Per Entrance Fac (USOC) (EFG2X, EFG4	ility	Entrance Facili 2-Wire Voicet Monthly Rate (EFG2X)	band	<u>4-Wire</u> Mon	<u>ce Facility -</u> e <u>Voiceband</u> thly <u>Rate</u> FG4X)	(C)
\$200.00	Former <u>Terr</u> \$25	itory	rmer GTE <u>Ferritory</u> \$33.05	Former Contel <u>Territory</u> \$38.00	Former GTE <u>Territory</u> \$49.17	(C)
(I) <u>Entrance Facility -</u>	<u>DS1</u>					
Service Installati <u>Charge</u> (USOC) (EFGDX)	<u>Entrance Fa</u> on	<u>icility - DS1</u> Monti <u>Rate</u> (EFGI	<u> </u>			(C)
\$450.00		<u>ontel Territory</u> 275.41		<u>GTE Territory</u> \$300.00		(C)
(J) <u>Entrance Facility</u> ,	per DS3					
(USOC)		<u>.</u>	_	Service Installat <u>Charge</u> (EF2Q4)	ion	(C)
	Former Contel <u>Territory</u>	Former GTE <u>Territory</u>			ormer GTE <u>Ferritory</u>	
	\$1,286.43	\$1,750.00	\$1,00	0.00 \$1	1,000.00	
(USOC)		<u>.</u>		Service Installat <u>Charge</u> (EF2RX)	ion	
	Former Contel <u>Territory</u>	Former GTE <u>Territory</u>	Forme <u>Territ</u>		ormer GTE Ferritory	
	\$1,286.43	\$1,312.50	\$1,00	0.00	\$750.00	(C)

Material formerly appearing on this page now appears on Page 74.1

(X)

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- ISSUED: MAY 31, 2013 BY: President Richmond, Virginia
- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.6 <u>Rates and Charges</u> (Continued)
- 4.6.2 <u>Switched Transport</u> (Continued)
 - (K) <u>Multiplexing</u>

	DS1 to	Voice		DS3 to DS1			
	Service Insta		у	Service Installation		onthly	
(11000)	Charge	<u>Rate</u>		Charge		ate	
(USOC)	(MKW1X)	· · ·	,	(MKW3X)	,	KW3X)	(C)
		Former Contel <u>Territory</u>	Former GTE <u>Territory</u>		Former Contel <u>Territory</u>	Former GTE <u>Territory</u>	
	\$800.00	\$200.44	200.00	\$450.00	\$430.00	\$339.65	(C) (X)

ISSUED: BY:	Pres	e 22, 2023 iident inia (T)		EFFECTIVE: JULY 1, 2023	
4. 4.6 4.6.3	Rates	CHED ACCESS (Continued) and Charges (Continued) office Services Basic Toll Free Data Base Query Charge Rate Per Query \$0.0002 (R)	Premium Toll Free Dat Query Charge Rate Per Query \$0.000000	a Base	
	(B)	(Reserved for Future Use)			
	(C)	End Office Switching Bundled The rates for End Office Switching Bundled are bas Per Originating VOIP Other Than	sed on originating and	terminating Access Minutes.	
			¢ 000406		
		Toll Free Access Minute	\$.002406		(-)
		Per Originating VOIP Toll Free Access Minute	.000000		(R)
		Per Originating Non VOIP Other Than			
		Toll Free Access Minute	.009869		
		Per Originating Non VOIP Toll Free Access Minute			(R)
			.000000		(13)
		Per Terminating Access Minute	.000000		
	(D)	End Office Switching – Unbundled (EOSU) Circuit The rates for End Office Switching - Unbundled Cir Access Minutes. Per Originating VOIP Access Minute	cuit Switched Line are	e based on originating and terminating	
		Per Originating Non VOIP Access Minute	.009869		
		Per Terminating Access Minute	.000000		
	(E)	End Office Switching – Unbundled (EOSU) Circuit The rates for End Office Switching – Unbundled C terminating Access Minutes. Per Originating VOIP Other Than Toll Free Access Per Originating VOIP Toll Free Access Minute	ircuit Switched Trunk	are based on originating and	(R)
		Per Originating Non VOIP Other Than			. ,
		Toll Free Access Minute	.009869		
		Per Originating Non VOIP Toll Free Access Minute	.000000		(R)
		Per Terminating Access Minute	.000000		()
		rei Teiminaling Access Minute	.000000		
	(F)	<u>Dedicated End Office Trunk Port*</u> DS1, rate per channel Voice Grade, rate per channel	<u>USOC</u> PT8JX PT8HX	<u>Rate</u> \$11.25 11.25	
	(G)	<u>Shared End Office Trunk Port</u> The rates for Shared End Office Trunk Port are bas Per Minute of Use – Originating VOIP Other Than Toll Free		terminating Access Minutes.	
			0.000000		(R)
		Per Minute of Use – Originating VOIP Toll Free	0.000000		(13)
		Per Minute of Use – Originating Non VOIP Other			
		Than Toll Free	0.001688		
		Per Minute of Use – Originating Non VOIP Toll Fre	e 0.000000		(R)
		Per Minute of Use - Terminating	0.000000		

* Rate will only apply to the portion associated with originating usage.

(R)

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- 4. <u>SWITCHED ACCESS</u> (Continued)
- 4.6 <u>Rates and Charges</u> (Continued)
- 4.6.3 End Office Services (Continued)
 - (H) Composite Terminating End Office Charge (CTEOC)

The composite terminating end office charge will apply to all terminating access minutes of use.

	Former GTE <u>Territory*</u>	Former Contel <u>Territory**</u>	
Per Minute of Use - Terminating	\$0.000000	\$0.000000	

4.6.4 (Reserved for Future Use)

4.6.5 FGA Usage Sensitive Credit Allowance

Usage Sensitive Service Credit Allowance

Credit Per Originating FGA Access Minute#

\$.0017060

The credit is applied to the End Office Switching rate element.

- **4.6.6** (Reserved for Future Use)
- 4.6.7 (Reserved for Future Use)

4.6.8 Carrier Identification Parameter (CIP)

Nonrecurring Charge, per CIC,	
per access tandem direct trunk group	\$ 1,120.00
per end office direct trunk group	80.00
Monthly Rate, per trunk	.46

* Facilities for Interstate Access Tariff FCC No. 14

** Access Service Tariff FCC No. 16