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- SWITCHED ACCESS (Cont'd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)

Service Commission

- 4.2.1 <u>Descriptions of Feature Groups</u> (Cont'd)
 - (B) Feature Group B (Contd)
 - (12) (Reserved for Future Use)
 - (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.

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- 4. <u>SWITCHED ACCESS</u> (Cont'd)
 - 4.2 Description of Switched Access (Cont'd)
 - 4.2.1 <u>Descriptions of Feature Groups</u> (Cont'd)
 - (C) Feature Group C

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 or BSA-D End Office Services.

(C) (C)

(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 or BSA-D is provided in the same office. When FGD or BSA-D is available, FGC will be discontinued for Interexchange Carriers (ICs) as soon as the conversion to FGD or BSA-D 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.



(M) Material omitted from this page now appears on Page 82.1.

ISSUED: May 1, 2013 EFFECTIVE: July 2, 2013

- 4. <u>SWITCHED ACCESS</u> (Cont'd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.1 Descriptions of Feature Groups (Cont'd)
 - (C) Feature Group C (Cont'd)
 - (4) FGC is arranged for either originating calling only, terminating (M) 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 Originating calling permits the special arrangements. origination of calls from the end user to the CDL. Terminating calling permits the termination of calls from the CDL to the end Two-way calling permits either the origination or termination of calls, but not simultaneously. (M)

(M)) This material previously appeared on Page 82.

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SWITCHED ACCESS (Contd)

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4.2 Description of Switched Access (Cont'd)

Service Commission

4.2.1 Descriptions of Feature Groups (Cont'd)

- Feature Group C (Cont'd)
 - 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 tieu 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.
 - 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 T-elephone 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.
 - 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.
 - 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 ren 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.
 - 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, as with 4/8 party service, no seven digit number will be provided and an "operator identification" information digit will be provided.

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4. SWITCHED ACCESS (Contd)

RECD JUL 15 2002

4.2 <u>Description of Switched Access</u> (Cont'd)

4.2.1 <u>Descriptions of Feature Groups</u> (Cont'd)

Service Commission

(C) Feature Group C

(9) (Cont'd)

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 800/888/877 Service. It is not provided from end 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)

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4. SWITCHED ACCESS (Confd)

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- 4.2 Description of Switched Access (Cont'd)
 - 4.2.1 Descriptions of Feature Groups (Cont'd)

Service Commission

- (C) Feature Group C (Cont'd)
 - (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.
 - (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).

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(C)

FACILITIES FOR INTRASTATE ACCESS

- 4. <u>SWITCHED ACCESS</u> (Cont'd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.1 Descriptions of Feature Groups (Cont'd)
 - (C) Feature Group C (Cont'd)
 - (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, TFC, 900); or end user originating line class of service (e.g., coin, multiparty, 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.

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4. SWITCHED ACCESS (Cont'd)

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4.2 <u>Description of Switched Access</u> (Cont'd)

Service Commission

- 4.2.1 Descriptions of Feature Groups (Cont'd)
 - (C) Feature Group C (Cont'd)
 - (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 4.2.1(C)(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 0- originating 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 iDDL.
 - (b) Operator Assistance-Noncoin Arrangements in all Telephone Company end offices 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) Operator Assistance - Combined (coin and noncoin) Arrangements in Telephone Company end offices where equipment is available - This arrangement provides the combined features described in (a) and (b).

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4. SWITCHED ACCESS (Cont'd)

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4.2 Description of Switched Access (Cont'd)

Service Commission

- 4.2.1 <u>Descriptions of Feature Groups</u> (Cont'd)
 - (C) Feature Group C (Cont'd)
 - (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.

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4. SWITCHED ACCESS (Cont'd)

REC'D JUL 15 2002

4.2 <u>Description of Switched Access</u> (Cont'd)

Service Commission

4.2.1 <u>Descriptions of Feature Groups</u> (Cont'd)

(D) Feature Group D

Feature Group D (FGD), which is available to all customers, provides trunk-side access to Telephone Company end office switches with an associated 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.

(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 switch trunk equipment. The switch 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 crigination or termination of calls, but not simultaneously.

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4. SWITCHED ACCESS (Cont'd)

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- 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.1 <u>Descriptions of Feature Groups</u> (Contd)

Service Commission

- (D) Feature Group D (Cont'd)
 - (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.
 - (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 (both equal access and non equal access) a single FGD trunk group may be used. Traffic terminating that access tendem (both equal access end office using a FGD trunk group will be ordered as FGB or FGC and billed at FGB or FGC rates. 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.

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- 4. SWITCHED ACCESS (Contd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)

Service Commission

- 4.2.1 Descriptions of Feature Groups (Cont'd)
 - (D) Feature Group D (Confd)
 - (8) The access code for FGD is a uniform access code of 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 to 4 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> (Cont'd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.1 Descriptions of Feature Groups (Cont'd)
 - (D) Feature Group D (Cont'd)
 - (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(A)(D). In those situations where no billing number is available in the end office switch, as with 4/8 party service, no ten digit number will be provided, only the 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 tandem switches which are 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) 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.

(N)

(N)

Original Sheet 92.1

FACILITIES FOR INTRASTATE ACCESS

- 4. <u>SWITCHED ACCESS</u> (Cont'd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.1 <u>Descriptions of Feature Groups</u> (Cont'd)
 - (D) Feature Group D (Cont'd)

(11) (Cont'd) (N)

- (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.
- 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).

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(N)

- 4. <u>SWITCHED ACCESS</u> (Cont'd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.1 <u>Descriptions of Feature Groups</u> (Cont'd)
 - (D) Feature Group D (Cont'd)

(11) (Cont'd) (N)

- (d) When FGD, TFC SAC Access service with SS7 Out of Band Signaling is ordered, 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 Bellcore Technical Reference Publication TR-TSV-000905. Successful completion is necessary to 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.
- (12) 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.
- (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.

(M) This material previously appeared on Sheet 93.

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Gary Kepley

(N)

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- 4. SWITCHED ACCESS (Cont'd)
 - 4.2 Description of Switched Access (Cont'd)
 - 4.2.1 Descriptions of Feature Groups (Cont'd)
 - (D) Feature Group D (Cont'd)
 - (13) (Cont'd)



(T)

- (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 TFC SAC Access service with SS7 Out of Band Signaling is ordered, 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 Bellcore Technical Reference Publication TR-TSV-000905. Successful completion is necessary to 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.
- (M) Material omitted from this page now appears on Sheet 92.2.

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(T)

FACILITIES FOR INTRASTATE ACCESS

- SWITCHED ACCESS (Cont'd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.1 <u>Descriptions of Feature Groups</u> (Cont'd)
 - (D) Feature Group D (Cont'd)
 - (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, TFC, 900); or end user originating line class of service (e.g., coin, multiparty, 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.

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4. SWITCHED ACCESS (Confd)

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4.2 <u>Description of Switched Access</u> (Cont'd)

Service Commission

- 4.2.1 Descriptions of Feature Groups (Cont'd)
 - (D) Feature Group D (Cont'd)
 - (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 contrigent 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 fo2ows: 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 though 10. In addition, Data Transmission Parameters may, at the option of the customer, be provided with FGD.
 - (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.

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4. SWITCHED ACCESS (Cont'd)

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- 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.1 <u>Descriptions of Feature Groups</u> (Cont'd)

Service Commission

(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. SAC Access Service may also be provided in conjunction with BSA-C or BSA-D as shown in 4.2.2. When a 1+500-NXX-XXXX 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+800-NXX-XXXX, 1+888-NXX-XXXX or 1+877-NXX-XXXX call is originated by an end user for 800/888/877 SAC Access Service, the 800/888/877 Customer Identification Function as described in 4.2.11 determines the customer to which the 800/888/877 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.

- Service Access Code (SAC) Access Service is provided at Telephone Company appropriately equir:ped 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 1+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 or BSA-D 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, FGD, BSA-C or BSA-D. 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.

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FACILITIES FOR INTRASTATE ACCESS

- 4. SWITCHED ACCESS (Cont'd)
 - 4.2 Description of Switched Access (Cont'd)
 - 4.2.1 <u>Descriptions of Feature Groups</u> (Cont'd)
 - (E) SAC Access Service (Cont'd)
 - (5) For other than FGC or BSA-C, end offices that lack equal access or the Customer Identification Function capabilities, may only be served via a Telephone Company access tandem over FGD or BSA-D trunks or SAC Access Service trunk groups. For FGC or BSA-C, SAC Access Service can be provided through existing trunk groups or separate FGC or BSA-C trunk groups which handle 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 or BSA-D 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 or a BSA-C trunk group.
 - (6) 500 SAC Access Services 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. 800/888/877 SAC Access Service originating from equal access end offices with the 800/888/877 Customer Identification Function 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 end offices without the Customer Identification Function capabilities, or from end offices not having equal access capability, may be provided using conventional signaling. On traffic using conventional signaling, other than FGC or BSA-C, 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 4.2.1(D) apply or BSA-D parameters as specified in 4.2.2(D) apply.

For SAC Access Service traffic, other than 800/888/877 SAC Access, originating from all other end offices, FGC parameters as specified in 4.2.1(C) apply or BSA-C parameters as specified in 4.2.2(C) apply.

The Entrance Facility interface at the customer's premises, as set forth in 4.2.3 for FGD and BSA-D also apply to SAC Access Service.

(C)

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4. SWITCHED ACCESS (Cont'd)

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4.2 Description of Switched Access (Cont'd)

Service Commission

4.2.2 Description of Basic Serving Arrangements (BSAs)

The Telephone Company, under the ordering provisions in Section 3, at rates and charges specified in 4.6, will provide Lineside, Trunkside and Dedicated Network Access Link (DNAL) Switched Access Basic Serving Arrangements (BSAs) as follows:

(A) BSA-A

Basic Serving Arrangement A (BSA-A), 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. BSA-A 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.

(1) BSA-A is provided at all Telephone Company end office switches and switches customer communications to and from Common Lines, or Special Access Lines.

BSA-A 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.

- (2) BSA-A 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. BSA-A may also be provided with certain Basic Service Elements (BSEs) as shown in 4.2.22.
- (3) The customer shall select the first point of switching, within the selected BSA-A Access Area.
- (4) BSA-A 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.

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SWITCHED ACCESS (Cont'd)

4.2 Description of Switched Access (Cont'd)

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Service Commission

4.2.2 <u>Description of Basic Serving Arrangements (BSAs)</u> (Cont'd)

(A) BSA-A (Cont'd)

(5) BSA-A, when being used in the terminating direction, is arranged with dial tone start-dial signaling and dial pulse address signaling.
BSA-A, 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 BSA-A is provided. When BSA-A is provided in a Hunt Group Arrangement or Uniform Call Distribution Arrangement, as discussed in 4.2.22, all BSA-A will be arranged for the same type of signaling.

No address signaling is provided by the Telephone Company when BSA-A 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.

(6) BSA-A, when used in the terminating direction, may be used to access valid NXXs in the BSA-A Access Area. For BSA-A, the Access Area is defined as the local calling area of the end office switch from which the BSA-A is provided. The description of any specific BSA-A Access Area will be provided to the customer upon request. Access is also provided for Extended BSA-A terminating calls established on a 1+ basis (i.e., toll) outside the specific BSA-A Access Area (i.e., local calling area) however inside the LATA. When a BSA-A 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) 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 General and/or Local Tariffs, 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 BSA-A is provided. Call Denial on Line or Hunt Group is an arrangement which will screen terminating calls except calls to 411, 611, 911, 800, 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.

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4. SWITCHED ACCESS (Cont'd)

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- 4.2 Description of Switched Access (Cont'd)
 - 4.2.2 Description of Basic Serving Arrangements (BSAs) (Cont'd)

Service Commission

- (A) <u>BSA-A</u> (Confd)
 - (6) (Contd)

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.

- (7) BSA-A is provided on a single line basis. When BSA-A is provided in a Hunt Group Arrangement or a Uniform Call Distribution Arrangement, the BSA-A 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 BSA-A in a Hunt Group Arrangement or Uniform Call Distribution Arrangement with the Nonhunting Number Arrangement will be similarly arranged.
- (8) A seven digit telephone number assigned by the Telephone Company is provided for access to BSA-A 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.
- (9) BSA-A 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.

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 BSA-A; 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.

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4. SWITCHED ACCESS (Contd)

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4.2 <u>Description of Switched Access</u> (Cont'd)

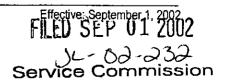
Service Commission

- 4.2.2 Description of Basic Serving Arrangements (BSAs) (Cont'd)
 - (A) BSA-A (Cont'd)
 - (10) When all BSA-A 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.
 - (11) BSA-A 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 Arrangement 2 through 10. In addition, Data Transmission Parameters may, at the option of the customer, be provided with BSA-A.

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4. SWITCHED ACCESS (Contd)

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4.2 Description of Switched Access (Cont'd)

Service Commission

4.2.2 <u>Description of Basic Serving Arrangements (BSAs)</u> (Cont'd)

(B) <u>BSA-B</u>

Basic Serving Arrangement B (BSA-B), 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.

(1) BSA-B, when provided without the use of a Telephone Company access tandem switch (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, BSA-B 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.

BSA-B utilizes a two-point electrical communications path between the Interface Arrangement and Common Line or a 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.

- (2) BSA-B 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. BSA-B may also be provided with certain Basic Service Elements (BSEs) as shown in 4.2.22.
- (3) The Telephone Company will select the trunking arrangement from the end office within the selected Access Area from which BSA-B is to be provided. If the customer orders an Automatic Number Identification (ANI) Arrangement, as shown in 4.2.22, or Rotary Dial Station Signaling, as shown in 4.2.5(M), special routing and trunking arrangements may be required.

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4. SWITCHED ACCESS (Cont'd)

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4.2 <u>Description of Switched Access</u> (Cont'd)

Service Commission

4.2.2 Description of Basic Serving Arrangements (BSAs) (Cont'd)

- (B) BSA-B (Cont'd)
 - (4) BSA-B 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.
 - (5) BSA-B, when being used in the terminating and originating direction, is provided with multifrequency address signating. 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 BSA-B terminates. Except for BSA-B provided with the ANI arrangement or Rotary Dial Station Signaling, 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) BSA-B, when being used in the terminating direction, may be used to access valid NXXs in the BSA-B Access Area. If the BSA-B connection is made directly to an end office, the Access Area is that of that end office only. If the BSA-B connection is made to an access tandem, the Access Area is that of all end offices subtending that access tandem. The description of any BSA-B 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. Premium End Office Switching Unbundled (EOSU) rates in 4.5.2(N)(5) and 4.6.3(C) apply to all BSA-B usage originating or terminating at an equal access end office. When a provider of MTS and WATS subscribes to BSA-B and BSA-C at an end office, BSA-C usage and BSA-B terminating usage will be subject to premium EOSU rates and BSA-B originating usage will be subject to nonpremium EOSU rates.

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4. SWITCHED ACCESS (Contd)

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4.2 <u>Description of Switched Access</u> (Cont'd)

Service Commission

4.2.2 Description of Basic Serving Arrangements (BSAs) (Cont'd)

- (B) BSA-B (Cont'd)
 - (7) A separate trunk group will be established based on the directionality (i.e., originating only, terminating only, or two-way traffic) of the BSA-B arrangement provided.
 - (8) The access code for BSA-B 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 BSA-B by dialing 1+950-XXXX.
 - (9) BSA-B may, at the option of the customer, be arranged to provide an ANI arrangement to obtain the salting station billing numbers. ANI is not available if the BSA-B 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, as with 4/8 party service, 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 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. BSA-B 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 Eial Station Signaling arrangements.

(10) The Telephone Company will determine the end office ANI protocol for BSA-B. The Telephone Company makes no guarantee that ANI will be available at all end offices which have access to BSA-B.

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4. SWITCHED ACCESS (Cont'd)

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4.2 <u>Description of Switched Access</u> (Cont'd)

4.2.2 <u>Description of Basic Serving Arrangements (BSAs)</u> (Confd)

Service Commission

- (B) BSA-B (Contd)
 - (11) BSA-B 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, BSA-B 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 BSA-B; 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) When all BSA-B 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 BSA-3 associated with the number dialed has been disconnected.
- (13) BSA-B 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 BSA-B.
- (14) BSA-B 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 4.2.22, 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.

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4. SWITCHED ACCESS (Confd)

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- 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.2 <u>Description of Basic Serving Arrangements (BSAs)</u> (Cont'd)

Service Commission

(C) BSA-C

Basic Serving Arrangement C (BSA-C) provides trunk-side access to Telephone Company end office switches for providers of MTS and WATS for originating and terminating communications. BSA-C is available in all end offices which are not equipped for FGD or BSA-D End Office Services.

(1) BSA-C is provided at all Telephone Company end office switches or Telephone Company designated access tandem switches. BSA-C is available at an end office switch unless FGD or BSA-D is provided in the same office. When FGD or BSA-D is available, BSA-C will be discontinued as soon as the conversion to BSA-D can be arranged.

BSA-C 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) BSA-C 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.

BSA-C may also be provided with certain Basic Service Elements (BSEs) as shown in 4.2.22.

- (3) The Telephone Company will select the trunking arrangement from the end office within the selected Access Area from which BSA-C is to be provided. If the customer orders an ANI arrangement as shown in 4.2.22 and 4.5.10, or Service Class Routing Arrangement, special routing and trunking arrangements may be required.
- BSA-C 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.

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4. SWITCHED ACCESS (Contd)

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4.2 <u>Description of Switched Access</u> (Cont'd)

4.2.2 Description of Basic Serving Arrangements (BSAs) (Confd)

Service Commission

- (C) BSA-C (Confd)
 - (5) BSA-C 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 BSA-C terminates. Such called party number signals will be subject to the ordinary transmission capabilities of the Switched Transport provided.
 - (6) BSA-C, when being used in the terminating direction, may be used to access NXXs in the BSA-C Access Area. If the BSA-C connection is made directly to an end office the Access Area is that of that end office only. If the BSA-G 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 BSA-C 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 BSA-C arrangement provided.
 - (8) No access code is required for BSA-C. 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-XXXXX, 0 or 1 + NPA + NXX-XXXXX, and, when the International Direct Distance Dialing Arrangement (IDDD) is provided, 01 + CC + NN or 011 + CC + NN.
 - (9) BSA-C 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, as with 4/8 party service, no seven digit number will be provided and an "operator identification" information digit will be provided.

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SWITCHED ACCESS (Contd)

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4.2 <u>Description of Switched Access</u> (Cont'd)

4.2.2 <u>Description of Basic Serving Arrangements (BSAs)</u> (Cont'd)

Service Commission

(C) BSA-C (Cont'd)

(9) (Cont'd)

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.

BSA-C 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 BSA-C.

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 800/888/877 Service. It is not provided from end offices for which the Telephone Company needs to forward ANI to its recording equipment.

- (10) BSA-C 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) BSA-C 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 tine and open circuit test line.
 - (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), BSA-C will be provided with automatic testing.

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4. SWITCHED ACCESS (Cont'd)

4.2 <u>Description of Switched Access</u> (Cont'd)

RECT) JUL 15 2002

4.2.2 <u>Description of Basic Serving Arrangements (BSAs)</u> (Cont'd)

Service Commission

(C) BSA-C (Cont'd)

(11) (Cont'd)

(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 6.5 when: (a) the customer requests a test not specified in the preceding; (b) the test requested is not essential to the ongoing maintenance of BSA-C; or (c) the customer requests testing on a more frequent basis than scheduled in the Telephone Company's Central Office Maintenance Planning System (COMPS).

- BSA-C may, at the option of the customer, be provided with Alternate Traffic Routing. This arrangement, as shown in 4.2.22, 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.
- BSA-C 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, 800, 888, 877, 900); or end user originating line class of service (e.g., coin, multiparty, hotel/motel).
- (14) BSA-C may, at the option of the customer, be provided with a Trunk Access Limitation Arrangement in all Telephone Company and 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.

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Missouri Public

- 4. SWITCHED ACCESS (Cont'd)
 - 4.2 Description of Switched Access (Cont'd)

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4.2.2 <u>Description of Basic Serving Arrangements (BSAs)</u> (Cont'd)

Survice Commission

- (C) <u>BSA-C</u> (Cont'd)
 - (15) BSA-C is provided with the following features in the originating direction for operator assistance services. BSA-C may require the routing by Service Class Routing Arrangement.
 - (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 0- originating calls is not provided with ANI. BSA-C is provided in a directly routed arrangement 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) Operator Assistance-Noncoin Arrangements in all Telephone Company end offices 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. 8SA-C 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) Operator Assistance Combined (coin and noncoin) Arrangements in Telephone Company end offices where equipment is available This arrangement provides the combined features described in (a) and (b).
- (16) BSA-C 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 BSA-C.

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4. SWITCHED ACCESS (Contd)

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- 4.2 Description of Switched Access (Cont'd)
 - Description of Basic Serving Arrangements (BSAs) (Cont'd) 422

Service Commission

(D) BSA-D

Basic Serving Arrangement D (BSA-D), available to all customers at appropriately equipped electronic end office switches, provides trunk-side access to Telephone Company end office switches with an associated 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.

- BSA-D 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 clant 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 BSA-D is provided at suitably equipped Telephone Company end office or access tandem switches.
- BSA-D is provided as trunk-side switching through the use of end office or Telephone Company access tandem switch trunk equipment. The switch trunk equipment is provided with answer and disconnect supervisory signaling and wink start pulsing signals except when SS7 Out of Band Signaling is specified. BSA-D may also be provided with certain Basic Service Elements as shown in 4.2.22.
- The Telephone Company will select the trunking arrangement from the end office, within the selected Access Area from which BSA-D is to be provided. If the customer orders an Automatic Number Identification (ANI) Arrangement or an Alternate Traffic Routing Arrangement, as shown in 4.2.22, Service Class Routing Arrangement, Trunk Access Limitation Arrangement; or Operator Assistance Full Feature Arrangement, special routing and trunking arrangements may be required.
- BSA-D is arranged for either originating calling only, terminating calling only, or two-way calling and is based on the trunks or BHMC ordered. The Telephone Company will determine the type of directional cating 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
- BSA-D is provided with multifrequency address signaling or SS7 Out of Band SignaEng. 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 BSA-D terminates. Such address signals will be subject to the ordinary transmission capabilities of the Switched Transport provided.

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4. SWITCHED ACCESS (Confd)

RECD JUL 15 2002

- 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.2 Description of Basic Serving Arrangements (BSAs) (Cont'd)

Service Commission

- (D) BSA-D (Confd)
 - (6) BSA-D, when being used in the terminating direction, may be used to access valid NXXs in the BSA-D Access Area. If the BSA-D connection is made directly to an end office the Access Area is that of that end office only. If the BSA-D connection is made to a Telephone Company access tandem, the Access Area is all end offices subtending that access tandem that have BSA-D capabilities. When the customer wants access to all end offices subtending that access tandem (both equal access and non equal access) a single BSA-D trunk group may be used. Traffic terminating at a non equal access end office using a BSA-D trunk group will be ordered as BSA-B or BSA-C and billed at BSA-B or BSA-C rates. Separate trunk groups for the combined use of BSA-D and BSA-B or BSA-D and BSA-C are not required. The description of any BSA-D Access Area will be provided to the customer upon request. BSA-D may also be used in the terminating direction to access information services (e.g., time and temperature) and other services by diafing 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 BSA-D arrangement provided.
 - (8) The access code for BSA-D is a uniform access code of 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-XXXXX, 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, BSA-D 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. BSA-D also provides for the 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 BSA-D 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 BSA-D Switched Access Service. When the customer orders BSA-D Switched Access Service with 950-XXXX Access as described in 4.2.5(T), BSA-D switched access calls may also be originated by using the customer's 950-XXXX access code(s). All such calls will be rated as BSA-D switched access calls.

BSA-D, 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. SWITCHED ACCESS (Confd)

4.2 Description of Switched Access (Confd)

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4.2.2 Description of Basic Serving Arrangements (BSAs) (Contd)

Service Commission

(D) BSA-D (Cont'd)

(9) BSA-D 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 4.2.22. In those situations where no billing number is available in the end office switch, as with 4/8 party service, no ten digit number will be provided, only the 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 multifrequericy 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) BSA-D 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.

BSA-D 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.

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4. SWITCHED ACCESS (Contd)

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- 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.2 <u>Description of Basic Serving Arrangements (BSAs)</u> (Cont'd)

Service Commission

- (D) BSA-D (Cont'd)
 - (11) BSA-D 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), BSA-D 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 BSA-D 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 BSA-D or 800 SAC Access service with SS7 Out of Band Signaling is ordered, 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 Bellcore Technical Reference Publication TR-TSV-000905. Successful completion is necessary to 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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FACILITIES FOR INTRASTATE ACCESS

- 4. <u>SWITCHED ACCESS</u> (Cont'd)
 - 4.2 Description of Switched Access (Cont'd)
 - 4.2.2 Description of Basic Serving Arrangements (BSAs) (Cont'd)
 - (D) BSA-D (Cont'd)
 - (12) BSA-D may, at the option of the customer, be provided with Alternate Traffic Routing. This arrangement, as shown in 4.2.22, 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.
 - (13) BSA-D 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, TFC, 900); or end user originating line class of service (e.g., coin, multiparty, hotel/motel). Service classes of traffic unable to be served by a customer will be handled at the option of the Telephone Company.
 - (14) BSA-D 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.
 - (15) BSA-D 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.
 - (16) BSA-D 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. BSA-D 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. 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.
 - (17) BSA-D 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 though 10. In addition, Data Transmission Parameters may, at the option of the customer, be provided with BSA-D.
 - (18) BSA-D trunking arrangements are available with two basic forms of signaling protocol. The standard signaling protocol provided with BSA-D is Overlap Outpulsing. At the option of the customer, where technically available BSA-D may be provided with Non-Overlap Outpulsing signaling protocol.

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4. SWITCHED ACCESS (Cont'd)

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- 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.2 <u>Description of Basic Serving Arrangements (BSAs)</u> (Cont'd)

Service Commission

- (D) BSA-D (Contd)
 - (16) BSA-D 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. BSA-D 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. 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.
 - (17) BSA-D 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 though 10. In addition, Data Transmission Parameters may, at the option of the customer, be provided with BSA-D.
 - (18) BSA-D trunking arrangements are available with two basic forms of signaling protocol. The standard signaling protocol provided with BSA-D is Overlap Outpulsing. At the option of the customer, where technically available BSA-D may be provided with Non-Overlap Outpulsing signaling protocol.

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- 4. SWITCHED ACCESS (Cont'd)
 - 4.2 Description of Switched Access (Cont'd)

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4.2.2 <u>Description of Basic Serving Arrangements (BSAs)</u> (Cont'd)

Service Commission

- (E) (Reserved for Future Use)-
- (F) Alarm Signal Transport Service (ASTS)

ASTS is offered via DC (Metallic) and telegraph-grade facilities in conjunction with special scanning equipment in the central office.

DC (Metallic) and telegraph-grade facilities and services were discontinued effective November 3, 1991.

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4. SWITCHED ACCESS (Cont'd)

4.2 Description of Switched Access (Cont'd)

4.2.3 <u>Description of Switched Transport</u>

(A) General

(1) Switched Transport provides the transmission of Switched Access communications including SAC Access Service, between the CDL and the originating or terminating end office switch(es) in the Access Area with one exception. Switched Transport associated with FGA or BSA-A 1+ terminating traffic provides for the transmission of Switched Access outside the Access Area, however within the LATA. Switched Transport is comprised of the following rate elements; an Entrance Facility Rate, a Direct-Trunked Transport Rate, a Tandem-Switched Transport Rate and an Interconnection Rate. A Dedicated Switched Access Transport Rate is associated with CCS7 Access Service.

(C) (C)

The Entrance Facility Rate is assessed upon customers for the use of Telephone Company Voiceband, DS1 and DS3 high capacity facilities, including interface arrangements, between the point of termination at the Customer Designated Location (CDL) and the Telephone Company's serving wire center. The Entrance Facility is further described in 4.2.3(B).

(C) (N)

(C)

The Direct-Trunked Transport Rate is assessed upon customers for the use of Voiceband, DS1 and DS3 high capacity transport facilities dedicated to a single customer between a serving wire center and end office (including host end offices), end offices used to provide Tandem Switch Signaling, between a serving wire center and a Telephone Company Hub for multiplexing purposes, between two Telephone Company hubs, between a serving wire center and a Directory Assistance Center, between a Telephone Company Hub and an end office and between a serving wire center and a Telephone Company access tandem. The Direct-Trunked Transport Rate is flat-rated and has both distance-sensitive and nondistance-sensitive components. Direct-Trunked Transport is further described in 4.2.3(C).

A Dedicated Trunk Port is applicable to the purchase of dedicated trunks terminated by that port. The Dedicated Trunk Port provides for the termination of a dedicated trunk at the end office or access tandem. The Dedicated Trunk Port is a flat rated charge assessed on a per trunk basis. The rate is determined based on whether the trunk is voice grade or DS1.

(N)

Material omitted from this page now appears on Original Sheet 104.14.2.

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ISSUED: May 1, 2012

(N)

FACILITIES FOR INTRASTATE ACCESS

4. <u>SWITCHED ACCESS</u> (Cont'd)

- 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.3 <u>Description of Switched Transport</u> (Cont'd)
 - (A) General (Cont'd)
 - (1) (Cont'd)

The Tandem-Switched Transport Rate is assessed upon customers for the use of transport between a serving wire center and 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 or BSA-A dial tone office and other end offices in the local calling area. Tandem-Switched Transport consists of circuits used in common by multiple customers from the Telephone Company access tandem to an end office. The Tandem-Switched Transport Rate includes four sub-elements, a Tandem-Switched Transport -Facility, a Tandem-Switched Transport - Termination, a Tandem Switching and Shared Multiplexing rate. The Tandem Switching Rate is not applicable for transport between a host end office and a remote end office or to FGA or BSA-A Transport. For Tandem-Switched Transport, a Shared Multiplexing rate will be assessed on all access minutes that traverse a common trunk group from the Telephone Company access tandem to an end office. Tandem-Switched Transport is further described in 4.2.3(D).

The Shared Trunk Port provides for the termination of a Tandem-Switched Trunk at an end office. The Shared Trunk Port is usage rated and shall be assessed to all access minutes which utilize Tandem-Switched Transport. This includes minutes of use associated with FGA service when traffic is terminated in an end office that is not the dial tone office and on minutes of use provided at a remote office.

The Shared Trunk Port charge does not apply to switched access minutes of use that originate or terminate at MTSOs directly interconnected to a Telephone Company access tandem.

When the Tandem-Switched Transport is provided by more than one telephone company, the Shared Trunk port charge shall be billed by the Telephone Company in whose territory the end office is located, as in 2.7.2(G).

(N)

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4. <u>SWITCHED ACCESS</u> (Cont'd)

4.2 <u>Description of Switched Access</u> (Cont'd)

4.2.3 Description of Switched Transport

(A) General

(1) (Cont'd)

The Interconnection Rate is assessed upon all customers for interconnecting with the Telephone Company's switched access network. The Interconnection Rate is further described in 4.2.3(E).

The Dedicated Switched Access Transport Rate is assessed upon customers subscribing to CCS7 Access Service for the use of facilities between the customer's common channel signaling network and the Telephone Company's signaling transfer point. It is a flat rated, distance-sensitive monthly rate. This rate element is further described in 4.2.3(A)(2).

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

(2) Switched Transport is a two-way voice frequency transmission path composed of facilities determined by the Telephone Company. The two-way voice frequency path permits the transport of calls in the originating direction (from the end office switch to the CDL), and in the terminating direction (from the CDL to the end office switch), but not simultaneously. The voice frequency transmission path may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of 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) whether the first point of switching will be an end office switch or an access tandem switch, 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.

(N) | (N)

ISSUED: May 1, 2013 EFFECTIVE: July 2, 2013

4. SWITCHED ACCESS (Cont'd)

Description of Switched Access (Cont'd) 4.2

4.2.3 Description of Switched Transport (Cont'd)

(A) General (Cont'd)

- The number of Switched Transport transmission paths provided between an (4) end office switch and the first point of switching are determined by the Telephone Company using standard traffic engineering methods. The number of Switched Transport transmission paths provided between the first point of switching and the CDL is determined:
 - (a) by the customer, when ordering FGA or BSA-A, based on the number of lines ordered, or;
 - by the Telephone Company, when the customer orders FGB, FGC, FGD, BSA-B, BSA-C, BSA-D or SAC Access Service. If ordered in trunks, the customer may determine the number of trunks. If ordered in BHMC, the Telephone Company will determine the number of trunks, using standard traffic engineering methods.

(B) **Entrance Facility**

The Entrance Facility provides the transmission path and interface between the Telephone Company provided Switched Access 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.). Each High Capacity Analog or Digital Entrance Facility, as listed following, is subject to the minimum capacity requirements when ordered as in 3.5.5. Provision of the Entrance Facilities 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)(4)] 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 (C).

The following Standard Entrance Facilities are available:

Two-Wire VF Four-Wire VF Group Analog (12/30/93 existing customers only) Supergroup Analog (12/30/93 existing customers only) Mastergroup Analog (12/30/93 existing customers only) DS1 Digital DS1C Digital (12/30/93 existing customers only) DS3 Digital (12/02/2024 existing customers only DS3C Digital (12/30/93 existing customers only)

4.	SWITCHED ACCESS	(Cont'd)	Ì
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4.2	Description of	Switched Access	(Cont'd)
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4.2.3

criptic	on of Sv	vitched	Access (Cont'd)		
Desc	ription	of Swit	ched Transport (Cont'd)		
(B)	Entra	ince Fa	acility (Cont'd)	(C)	
	The number of Entrance Facilities provided is determined by the 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 transmission signals within the frequency bandwidth of approximately 300 to 3000 Hz.	(C)	
		(b)	The Two-Wire Entrance Facility is not provided in association with FGC, FGD, BSA-C and BSA-D when the first point of switching is an access tandem. In addition, the two-wire Entrance Facility is not provided in association with FGB and BSA-B when the first point of switching is an access tandem where two-wire terminations are not provided.	(C)	
		(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.		
		(d)	The Two-Wire Entrance Facility is provided with loop supervisory signaling. When the Entrance Facility is associated with FGA or BSA-A, such signaling may be loop start or ground start. When the Entrance Facility is associated with FGB, FGC, FGD, BSA-B, BSA-C and BSA-D, such signaling, except for two-way calling, may be reverse battery signaling. The Entrance Facility may, at the option of the customer, be provided with DX supervisory signaling or E&M supervisory signaling as in 4.2.3 (G)(4).	(C) (C)	
	(2)	Four-	-Wire Voice Frequency Entrance Facility	(C)	
		(a)	The Four-Wire Voice Frequency Entrance Facility provides four-wire voice	(C)	

frequency transmission at the point of termination at the CDL. The Entrance Facility is capable of transmission of the human voice and associated

telephone signals within the frequency bandwidth of approximately 300 to

3000 Hz.

- 4. <u>SWITCHED ACCESS</u> (Cont'd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.3 <u>Description of Switched Transport</u> (Cont'd)
 - (B) Entrance Facility(Cont'd)
 - (2) <u>Four-Wire Voice Frequency Entrance Facility</u> (Cont'd)
 - (b) The transmission path between the point of termination at the CDL and the first point of switching may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of the human voice and associated telephone signals within the frequency bandwidth of 300 to 3000 Hz.
 - (c) The Entrance Facility is provided with loop supervisory signaling. When the Entrance Facility is associated with FGA or BSA-A, such signaling may be loop start or ground start signaling. When the Entrance Facility is associated with FGB, FGC, FGD, BSA-B, BSA-C and BSA-D such signaling, except for two-way calling, may be reverse battery signaling. The Entrance Facility may, at the option of the customer, be provided with supervisory signaling as in 4.2.3 (G)(4).
 - (3) Group Analog Entrance Facility (12/30/93 Existing Customers Only
 - a) The Group Analog Entrance Facility provides a group level analog transmission at the point of termination at the CDL subject to the limitations in 3.5. The Entrance Facility is capable of transmitting electrical signals between the frequencies of 60 to 108 kHz, with the capability to multiplex up to 12 voice frequency transmission paths.
 - Between the serving wire center and the point of termination at the CDL, the Telephone Company may, at its option, provide multiplex equipment to derive 12 transmission paths of frequency bandwidth of approximately 300 to 3000 Hz.
 - (b) The Entrance Facility is provided with individual transmission path supervisory signaling.
 - (c) The Group Analog Entrance Facility is obsolete technology and is available only to existing customers as of December 30, 1993.

ISSUED: May 1, 2013 EFFECTIVE: July 2, 2013

(C)

(C)

FACILITIES FOR INTRASTATE ACCESS

- 4. <u>SWITCHED ACCESS</u> (Cont'd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.3 Description of Switched Transport (Cont'd)
 - (B) Entrance Facility (Cont'd)
 - (4) Supergroup Analog Entrance Facility (12/30/93 Existing Customers Only)
 - (a) The Supergroup Entrance Facility Arrangement provides supergroup level analog transmission at the point of termination at the CDL subject to the limitations in 3.5. The Entrance Facility s capable of transmitting electrical signals between the frequencies of 312 to 552 kHz, with the capability to multiplex up to 60 voice frequency transmission paths.

Between the first point of switching and the point of termination the Telephone Company may, at its option, provide multiplex equipment to derive 60 transmission paths of frequency bandwidth of approximately 300 to 3000 Hz to promote transmission efficiency, if required.

- (b) The Entrance Facility provided with individual transmission path SF supervisory signaling.
- (c) The Supergroup Analog Entrance Facility is obsolete technology and is available only to existing customers as of December 30, 1993.
- (5) <u>Mastergroup Analog Entrance Facility</u> (12/30/93 Existing Customers Only)
 - (a) The Mastergroup Analog Entrance Facility provides mastergroup level analog transmission at the point of termination at the CDL subject to the limitations in 3.5. The Entrance Facility is capable of transmitting electrical signals between the frequencies of 564 to 3084 kHz, with the capability to multiplex up to 600 voice frequency transmission paths.

Between the first point of switching and the point of termination at the CDL, the Telephone Company may, at its option, provide multiplex equipment to derive 600 transmission paths of frequency bandwidth of approximately 300 to 3000 Hz to promote transmission efficiency, if required.

- (b) The Entrance Facility is provided with individual transmission path SF supervisory signaling.
- (c) The Mastergroup Analog Entrance Facility is obsolete technology and is available only to existing customers as of December 30, 1993.

ISSUED: May 1, 2013 EFFECTIVE: July 2, 2013

- 4. <u>SWITCHED ACCESS</u> (Cont'd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.3 <u>Description of Switched Transport</u> (Cont'd)
 - (B) Interface Arrangements (Cont'd)
 - (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 subject to the limitations in 3.5. The Entrance Facility 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 first point of switching, DS1 signals in D4 or D3 format.

- (b) The Entrance Facility is provided with individual transmission path bit stream supervisory signaling.
- (7) <u>DS1C Digital Entrance Facility</u> (12/30/93 Existing Customers Only)

(a) The DS1C Digital Entrance Facility provides a DS1C level digital transmission at the point of termination at the CDL subject to the limitations in 3.5. The Entrance Facility is capable of transmitting electrical signals at 3.152 Mbps, with the capability to multiplex up to 48 voice frequency transmission paths.

Between the first point of switching and the point of termination, when analog switching utilizing analog terminations is provided, the Telephone Company may, at its option, provide multiplex equipment to derive up to 48 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 first point of switching, DS1 signals in D4 or D3 format.

- (b) The Entrance Facility is provided with individual transmission path bit stream supervisory signaling.
- (c) As of December 30, 1993, the DS1C Digital Entrance Facility is available to existing customers only.

ISSUED: May 1, 2013 EFFECTIVE: July 2, 2013

- SWITCHED ACCESS (Cont'd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.3 <u>Description of Switched Transport</u> (Cont'd)
 - (B) Entrance Facility (Cont'd)
 - (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 a DS3 level digital transmission at the point of termination at the CDL subject to the limitations in 3.5. The Entrance Facility 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 first point of switching, DS1 signals in D4 or D3 format.

**Grandfathered effective December 9, 2024

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FACILITIES FOR INTRASTATE ACCESS

- 4. SWITCHED ACCESS (Cont'd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.3 <u>Description of Switched Transport</u> (Cont'd)
 - (B) Entrance Facility (Cont'd)
 - (9) DS3 Digital Entrance Facility ** (Cont'd)
 - (b) The Entrance Facility 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.
 - (10) DS3C Digital Entrance Facility
 - (a) The DS3C Digital Entrance Facility provides a DS3C level digital transmission at the point of termination at the CDL subject to the limitations in 3.5. The Entrance Facility is capable of transmitting electrical signals at 89.472 Mbps, with the capability to multiplex up to 1344 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 1344 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 first point of switching, DS1 signals in D4 or D3 format.

- (b) The Entrance Facility 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) As of December 30, 1993, the DS3C Entrance Facility is available to existing customers only.

**Grandfathered effective December 9, 2024

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- 4. <u>SWITCHED ACCESS</u> (Cont'd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.3 <u>Description of Switched Transport</u> (Cont'd)
 - (C) <u>Direct-Trunked Transport</u>

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) or from a serving wire center to 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 or access tandem and a Telephone Company Hub office other than the serving wire center where multiplexing is performed; and a serving wire center and end office where Tandem Switch Signaling is provided as described in 4.2.5 (A)(E) and 4.2.21.

The Direct-Trunked Transport Rate is flat-rated and has both distance-sensitive and nondistance-sensitive components. The distance-sensitive mileage recovers costs of the transmission facilities, including intermediate transmission circuit equipment, between the end points of the circuit. There are two non-distance sensitive components; the termination which recovers costs of circuit equipment at the ends of the transmission links, and the trunk port component which recovers costs of the trunk ports. A Dedicated Trunk Port charge shall be assessed on a per voice grade or DS1 channel terminating at an end office or access tandem. 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.

ISSUED: May 1, 2012 EFFECTIVE: July 3, 2012

- 4. <u>SWITCHED ACCESS</u> (Cont'd)
 - 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.3 <u>Description of Switched Transport</u> (Cont'd)
 - (D) <u>Tandem-Switched Transport</u>

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 shall 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 used in common by multiple customers from the Telephone Company access tandem to an end office. For examples of Tandem Switched Transport see Section 2.7 preceding.

Effective July 1, 2021, as established in the 8YY Access Charge Reform (FCC 20-143), existing tandem switching charges and transport charges for originating 8YY traffic are eliminated and a single joint tandem switched access service rate element for 8YY originating access service is established. The 8YY originating Joint Tandem Switched Transport rate is provided at the rates set forth in Section 4.6.2 (F).

The Tandem-Switched Transport Rate includes four sub-elements, a Tandem-Switched Transport - Facility, a Tandem-Switched Transport - Termination, Tandem Switching Rate and Shared Multiplexing.

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. The Tandem Switching Rate is a usage rated, per minute rate to recover 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. For Tandem Switched Transport, a Shared Multiplexing Rate will be assessed to all minutes of use from the Telephone Company Access Tandem to an end office. The Shared Multiplexing rate recovers multiplexing costs on the end office side of the tandem.

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Issued: May 14, 2021 Effective: July 1, 2021

4. <u>SWITCHED ACCESS</u> (Cont'd)

- 4.2 <u>Description of Switched Access</u> (Cont'd)
 - 4.2.3 Description of Switched Transport (Cont'd)
 - (E) Interconnection Rate

The Interconnection Rate is assessed upon all customers for interconnecting with the Telephone Company's switched access network. The Interconnection Rate has two rate levels. One rate applies to customers utilizing Telephone Company transport and a different rate that is applicable to Switched Access EIS Cross Connect arrangements. It is a usage rated per minute rate and applies to all originating and terminating minutes of use whether transported via Direct-Trunked Transport, Tandem-Switched Transport, or Entrance Facilities arrangements. The Interconnection Rate does not apply to switched access minutes of use that originate or terminate at MTSOs directly interconnected to a Telephone Company access tandem office.

The application of originating and terminating rates are as set forth below:

- (a) Terminating per minute charge(s) apply to:
 - all terminating access minutes of use;
 - all originating access minutes of use associated with FGA or BSA-A Access Services where the off-hook supervisory signaling is forwarded by the customer's equipment when the called party answers;
 - all originating access minutes of use associated with calls placed to Service Access Code numbers, less those originating access minutes of use associated with calls placed to 500, 700, TFC and 900 numbers for which the customer furnishes a report as described in Section 12, of either the number of minutes or a report of the percent of minutes that terminate to a subscriber or common line, rather than a dedicated access line.
- (b) The originating per minute charge(s) apply to:
 - all originating access minutes of use;
 - less those originating access minutes of use associated with FGA or BSA-A
 Access Services where the off-hook supervisory signaling is forwarded by
 the customer's equipment when the called party answers;
 - less all originating access minutes of use associated with calls placed to Service Access Code numbers;
 - plus all originating access minutes of use associated with calls placed to 500, 700, TFC and 900 numbers for which the customer furnishes a report of either the number of minutes or a report of the percent of minutes that terminate to a subscriber or common line, and for which a corresponding reduction in the number of terminating access minutes of use has been made as set forth in (a).

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ISSUED: May 1, 2013 EFFECTIVE: July 2, 2013

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4. <u>SWITCHED ACCESS</u> (Cont'd)

4.2 <u>Description of Switched Access</u> (Cont'd)

4.2.3 <u>Description of Switched Transport</u> (Cont'd)

(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 when FGA is provisioned on a Switched DS1 and on High Capacity shared use switched and special access facilities.

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.

DS3 to DS1

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.

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ISSUED: May 1, 2012 EFFECTIVE: July 3, 2012

ISSUED: May 1, 2012

FACILITIES FOR INTRASTATE ACCESS

- 4. SWITCHED ACCESS (Cont'd)
 - 4.2 Description of Switched Access (Cont'd)
 - 4.2.3 Description of Switched Transport (Cont'd)
 - **Optional Arrangements** (G)

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- (1) Switched Transport facilities will be engineered and routed based on standard engineering methods, available facilities and equipment, and the Telephone Company traffic routing plans. The Telephone Company will work cooperatively with customers in providing design and traffic routing information. If the customer is provided with FGB, FGC, FGD, BSA-B, BSA-C, BSA-D or SAC Access Service and desires Provision of Other Than Telephone Company Selected Traffic Routing, it may specify the desired routing at rates and charges to be developed on an Individual Case Basis.
- (2) (Reserved for Future Use)
- (3) (Reserved for Future Use)
- (4) The Telephone Company will provide Optional Arrangements in association with the Entrance Facilities listed in 4.2.3(B). 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 Entrance Facility as listed in 4.2.3 (B). 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.

Overland Park, Kansas

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

EFFECTIVE: July 3, 2012 Gary Kepley

Missouri Public

SWITCHED ACCESS (Cont'd)

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4.2 <u>Description of Switched Access</u> (Cont'd)

Service Commission

4.2.4 Description of End Office Services

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. Standard Arrangements for End Office Services include the End Office Switching Rate Element. 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: FGA, FGB, FGC, FGD, BSA-A, BSA-B, BSA-C, BSA-D 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.

End Office Switching provides the following:

- The facilities to terminate end user Common Lines in end office switches or Special Access Lines in WATS Serving Offices.
- 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 operator or recording tells a caller why a
 call, as dialed, could not be completed, and if possible, provides the correct number.

End Office Switching is divided into two categories; End Office Switching - Bundled (EOSB) and End Office Switching - Unbundled (EOSU). Application of the charges is in 4.5.2(N)(5) and the rates are in 4.6.3(B), (C) and (D).

End Office Switching is not provided in conjunction with switched access minutes of use that originate or terminate at a Mobile Telephone Switching Office (MTSO) directly interconnected to a Telephone Company access tandem office.

Missouri Public

Effective: September 1, 2002

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Service Commission

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FACILITIES FOR INTRASTATE ACCESS

4. <u>SWITCHED ACCESS</u> (Cont'd)

4.2 <u>Description of Switched Access</u> (Cont'd)

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) Alternate Traffic Routing

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.

When a FGD, 500 SAC, or 900 SAC customer subscribes to Tandem Switch Signaling and Alternate Traffic Routing the customer may have a maximum of one route to which the traffic can overflow.

When a FGD customer subscribes to TAS (Tandem Access Sectorization) and Alternate Traffic Routing, the "final" trunk group and any intermediate trunk groups carrying additional originating overflowing traffic must terminate at the same CDL as does the "high usage" trunk group.

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

This option is available with BSA-B, BSA-C and BSA-D as a chargeable BSE as specified in 4.2.22 and 4.5.10.

Material omitted from this page now appears on Original Sheet 105.1.

ISSUED: May 1, 2012 EFFECTIVE: July 3, 2012 Gary Kepley

4. <u>SWITCHED ACCESS</u> (Cont'd)

4.2 Description of Switched Access (Cont'd)

4.2.5 End Office Services Optional Arrangements (Cont'd)

(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.

These information digits shall only be used for billing and collection, routing, screening, and completion of the originating subscriber's call or transaction or for service directly related to the originating subscriber's call or transaction.

The ANI provided shall not be reused or resold without first notifying the originating telephone subscriber and obtaining affirmative consent of the subscriber for reuse or resale.

Unless the originating subscriber has given consent for the reuse or resale, any information provided shall not be used for any purpose other than:

- performing the services or transactions that are subject of the originating subscriber's call;
- ensuring network performance security, and the effectiveness of call delivery;
- compiling, using and disclosing aggregate information; and,
- complying with applicable laws.

The above restrictions shall not prevent the subscriber to the ANI Arrangement from using information acquired from an ANI Arrangement, such as the telephone number or information derived from analysis of the characteristics of calls received through the ANI Arrangement, to offer a product or service that is directly related to the products or services previously purchased by a customer of the ANI Arrangement subscriber.

The seven digit ANI telephone number is available with FGB and FGC. It will be transmitted on all calls except those identified as a multiparty line or 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 a multiparty line or 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 800 Service. It is not provided from end offices for which the Telephone Company needs to forward ANI to its recording equipment.

Where ANI cannot be provided (e.g., on calls from 2 (in some instances),4, and 8 party services) information digits will be provided to the customer. The information digits are used in the following situations:

(M) Material omitted from this page now appears on Sheet 106.

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EFFECTIVE: July 2, 2013

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FACILITIES FOR INTRASTATE ACCESS

4. SWITCHED ACCESS (Cont'd)

- 4.2 Description of Switched Access (Cont'd)
 - 4.2.5 End Office Services Optional Arrangements (Cont'd)
 - (B) Automatic Number Identification (ANI) Arrangement (Cont'd)
 - (1) Telephone number is the station billing number - no special treatment is required.
 - (2) Multiparty line telephone number is a 2 (in some instances), 4, or 8 party line and cannot be identified number must be obtained via an operator or in some other manner.
 - (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
 - Call is an Automatic Identified Outward Dialed (AIOD) call from end user terminal equipment. (6)

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

- InterLATA Area restricted telephone number is identified line.
- 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.

The ANI Arrangement is available with BSA-B, BSA-C and BSA-D as a chargeable BSE as specified in 4.2.22 and 4.5.10.

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

> This option is provided in conjunction with FGA and BSA-A and allows for the screening of terminating calls within the FGA and BSA-A Access Area, and for completion only of calls to 411, 611, 911, 800, 888, 877, 555-1212, and a specified set of NXX codes within the FGA and BSA-A Access Area. The set of NXX codes to which calls will be completed is selected by the FGA or BSA-A customer, in cooperation with the Telephone Company, from those NXX codes within the local calling area of the end office where the FGA or BSA-A connection is provided. All other calls are routed to a reorder tone or recorded announcement. This arrangement is provided at no charge in Telephone Company end offices, where available.

This material previously appeared on Sheet 105.1. (M)

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Missouri Public

SWITCHED ACCESS (Cont'd)

REC'D JUL 15 2002

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

4.2.5 End Office Services Optional Arrangements (Cont'd)

Service Commission

(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, 101XXXX+7D, or 101XXXX+10D.
- Service Access Codes (500, 700, 800, 888, 877 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 or BSA-A. Blocking of the 800/888/877 Service Access Code may not be available in 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, 101XXXX+7D, or 101XXXXK+10D.
- Service Access Codes (500, 700, 800, 888, 877 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 or BSA-A. Blocking of the 800/888/877 Service Access Code may not be available in all end offices where this arrangement is otherwise available.

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