

6. SWITCHED ACCESS SERVICE

6.1 General

6.1.1 Rate Categories

(A) Local Transport

The Local Transport rate category provides the transmission and tandem switching facilities between the customer's premises and the end office switch(es) where the customer's traffic is switched to originate or terminate the customer's communications. For purposes of determining Local Transport mileage, distance will be measured from the wire center that normally serves the customer's premises to the end office switch(es). Local Transport mileage measurement rules are set forth in 6.7.11 following and in this section.

Local Transport is a two-way voice frequency transmission path composed of facilities determined by the Telephone Company. The two-way voice frequency transmission path permits the transport of calls in the originating direction (from the end user end office switch to the customer's premises) and in the terminating direction (from the customer's premises to the end office switch), but not simultaneously. The voice frequency transmission path may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

Local Transport is comprised of an Entrance Facility, Direct-Trunked Transport, Tandem-Switched Transport, and Multiplexing. Descriptions of the Local Transport components are provided in (1) through (4) following.

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

Local Transport is provided at the rates and charges as set forth in 17.2.2 following. The application of these rates with respect to individual Local Access Service arrangements is set forth in 6.7.1 following.

6. **SWITCHED ACCESS SERVICE** (Continued)

6.1 General (Continued)

6.1.1 Rate Categories (Continued)

(A) Local Transport (Continued)

The number of Switched Transport transmission paths and terminations provided is based on the customer's order and is determined by the Telephone Company as set forth in 6.5 following.

(1) Entrance Facility

An Entrance Facility provides the communication path between a customer's premises and the Telephone Company's serving wire center for that premises. The Entrance Facility is dedicated to the use of a single customer and is available for use with all line side and trunk side Switched Access services. An Entrance Facility is provided even if the customer's premises and the serving wire center are located in the same building. The Entrance Facility rate element includes the transmission medium of the facility as well as certain circuit equipment that is used at the ends of the facility and employed to provision the channels on the transmission medium. The Entrance Facility rate element also includes an Interface Group, which defines the technical characteristics and types of signaling capability associated with the connection (i.e., voice grade, DS1 or DS3) that comprises the Entrance Facility. The following types of Entrance Facility are available:

(a) Voice Grade Entrance Facility

Voice Grade Entrance Facility is provided in quantities of channels. Each Voice Grade channel provides voice frequency transmission capability in the nominal frequency range of 300 to 3000 Hz and may be terminated two-wire or four-wire. When a single Voice Grade channel is ordered to be terminated at a customer's premises where the premises is all-digital and requires a minimum digital interface level of 1.544 Mbps, the Telephone Company will provide the required interface where facilities are available.

(b) DS1 Entrance Facility

DS1 Entrance Facility provides 24 channels for the transmission of nominal 56 kbps or 1.544 Mbps isochronous serial data. The actual bit rate and framing format is a function of the channel interface selected by the customer.

6. **SWITCHED ACCESS SERVICE** (Continued)

6.1 General (Continued)

6.1.1 Rate Categories (Continued)

(A) Local Transport (Continued)

(1) Entrance Facility (Continued)

(c) DS3 Entrance Facility

DS3 Entrance Facility provides 28 DS1s or 672 channels for the transmission of nominal 44.736 Mbps isochronous serial data. With DS3, an electrical interface will be installed at the customer's premises which provides an electrical signal with a transmission speed of 44.736 Mbps per channel. The minimum period for which a DS3 Entrance Facility is provided is twelve months.

(2) Direct-Trunked Transport

Direct-Trunked Transport provides the communication path between the serving wire center of a customer's premises and an end office. Direct-Trunked Transport is dedicated to the use of a single customer and does not require switching at an access tandem. Direct-Trunked Transport is available for use with all line side and trunk side Switched Access services.

Direct-Trunked Transport is not available to end offices that lack recording and measuring capabilities needed to provide Direct-Trunked Transport.

Direct-Trunked Transport provides for the transmission facilities between the Telephone Company's serving wire center and an end office when such facilities are not switched through an access tandem. This includes the transmission medium itself as well as certain circuit equipment that is used at the ends of the interoffice links and employed to provision the channels on the transitional medium and circuit equipment used within the network to manage the circuits at intermediate locations.

Direct-Trunked Transport also provides for the transmission facilities between the Telephone Company's serving wire center and a hub that interconnects facilities for both Tandem-Switched Transmission and Direct-Trunked Transport.

6. **SWITCHED ACCESS SERVICE** (Continued)

6.1 **General** (Continued)

6.1.1 **Rate Categories** (Continued)

(A) **Local Transport** (Continued)

(2) **Direct-Trunked Transport** (Continued)

Direct-Trunked Transport rates consist of a Direct-Trunked Facility rate specified in 17.2.2 following which is applied on a per mile basis and a Direct-Trunked Termination rate which is applied at each end of each measured segment of the Direct-Trunked Facility (e.g., at the end office, hub, tandem, and the serving wire center). The minimum period for which a High Capacity DS3 Direct Transport is provided is twelve months.

(3) **Tandem-Switched Transport**

Tandem-Switched Transport provides the communication path between the serving wire center of a customer's premises and an end office, and includes tandem switching functions. Tandem-Switched Transport also includes circuits dedicated to the use of a single customer (from the serving wire center to the access tandem) and circuits provided for the common use of all customers who have requested tandem switching (from the access tandem to the end office). Tandem-Switched Transport is available for use with all trunk side Switched Access services. Tandem-Switched Transport is not available for use with line side Switched Access services.

Tandem-Switched Transport provides for the transmission facilities between the Telephone Company's serving wire center and an end office that is switched through a tandem. Tandem-Switched Transport is composed of three sub elements:

- (a) Tandem-Switched Transmission, which provides for the transmission facilities from the Telephone company's serving wire center to an access tandem switch and from the Telephone Company's access tandem switch to an end office. This includes the transmission medium itself as well as certain circuit equipment that is used at the ends of the interoffice links and employed to derive the channels on the transmission medium, and circuit equipment used within the network to manage the circuits at intermediate locations.

The Tandem-Switched Facility rate specified in 17.2.2 following is applied on a per access minute per mile basis for all originating and terminating minutes of use routed over the facility. The Tandem-Switched Termination rate specified in 17.2.2 following is applied on a per access minute basis (for all originating and terminating minutes of use routed over the facility) at each end of each measured segment of Tandem-Switched Facility.

6. **SWITCHED ACCESS SERVICE** (Continued)

6.1 General (Continued)

6.1.1 Rate Categories (Continued)

(A) Local Transport (Continued)

(3) Tandem-Switched Transport (Continued)

- (b) Tandem Switching, which provides for use of the Telephone Company's access tandem.

Local Transport is provided at the rates and charges as set forth in 17.2.2 following. The application of these rates with respect to individual Switched Access Service Arrangements is set forth in 6.7.1(D) following.

The number of Switched Transport transmission paths and terminations provided is based on the customer's order and is determined by the Telephone Company as set forth in 6.5 following.

(4) Multiplexing

Multiplexing provides for arrangements to convert a single higher capacity or bandwidth circuit for bulk transport to several lower capacity or bandwidth circuits. Multiplexing is only available at Telephone Company designated Hubs arranged for multiplexing or at the access tandem trunk on the serving wire center side of the access tandem. All types of multiplexing may not be available at each Hub location.

Listed below are the multiplexing arrangements offered with switched access.

- DS1 to Voice

An arrangement that multiplexes twenty-four voice grade circuits to 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.

(N)

(N)

6. **SWITCHED ACCESS SERVICE** (Continued)

6.1 **General** (Continued)

6.1.1 **Rate Categories** (Continued)

(A) **Local Transport** (Continued)

(4) **Multiplexing** (continued)

- **DS3 to DS1**

An arrangement that multiplexes twenty-eight DS1 digital circuits to a single DS3 digital circuit at a 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.

(5) **Interface Groups**

Ten Interface Groups are provided for terminating the Local Transport at the customer's designated premises. Technical specifications concerning the available interface groups are set forth in NECA Tariff F.C.C. No. 5, Section 6.1.3.

(6) **Nonchargeable Optional Features**

Where transmission facilities permit, the Telephone Company will, at the option of the customer, provide the following optional features in association with Local Transport.

(a) **Supervisory Signaling**

Where transmission parameters permit, and where signaling conversion is required by the customer to meet its signaling capability, the customer may order an optional supervisory signaling arrangement for each transmission path provided as set forth in NECA Tariff F.C.C. No. 5, Section 15.1.1 (E).

(b) **Customer Specified Entry Switch Receive Level**

This option allows the customer to specify the receive transmission level at the first point of switching. The range of transmission levels which may be specified is described in Technical Reference PUB 62500. The feature is available with interface Groups 2 through 10 for Feature Groups A and B.

(c) **Customer Specified of Local Transport Termination**

This option allows the customer to specify, for Feature Group B routed directly to an end office or access tandem, a four-wire termination of the Local Transport at the entry switch in lieu of a Telephone Company selected two-wire.

6.7.9 **RESERVED FOR FUTURE USE**

6.7.10 **RESERVED FOR FUTURE USE**

6.7.11 **MILEAGE MEASUREMENT**

The mileage to be used to determine the rate for Direct-Trunked Transport and Tandem-Switched Transport is calculated based on the airline distance between the end office switch, which may be a Remote Switching Location, where the call carried by Local Transport service originates or terminates and the customer's serving wire center, except as set forth following. Where applicable, The V&H coordinates method is used to determine mileage. This method is set forth in the NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4 for Wire Center Information (V&H coordinates).

If the calculation results in a fraction of a mile, always round up to the next whole mile before applying the rates.

Exceptions to the mileage measurement rules are as follows:

(A) **Feature Group A - Originating Usage**

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

(B) **Feature Group A - Terminating Usage**

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

6.7.11 **MILEAGE MEASUREMENT** (Continued)

(N)

Exceptions to the mileage measurement rules are as follows: (Continued)

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

When the Alternate Traffic Routing optional feature is provided with Feature Groups B, C and D, the Local Transport access minutes will be apportioned between the two transmission routes used to provide this feature. Such apportionment will be made using: (1) actual minutes of use if available, (2) standard Telephone Company traffic engineering methodology and will be based on the last trunk CCS desired for the high usage group, as described in 6.3.1(I) preceding, and the total busy hour of capacity ordered to the end office, when the feature is provided at an end office switch, or to the subtending end offices when the feature is provided at an access tandem switch, or (3) an apportionment mutually agreed to by the Telephone Company and the customer. This apportionment will serve as the basis for Local transport mileage calculation.

(D) Feature Group C - Multiple CDPs

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

(E) Feature Groups A, B, C and D - WATS

Where Feature Groups A, B, C, and D Switched Access Services are connected with Special Access Service at a WATS Serving office, the Telephone Company will measure mileage on an airline mileage basis between:

- (1) The WATS Serving Office and the Serving Wire Center for the customer designated premises, or
- (2) The Feature Group A or B entry switch and the Serving Wire Center for the customer designated premises.

(N)

6.7.11 **MILEAGE MEASUREMENT** (Continued)

(N)

Exceptions to the mileage measurement rules are as follows: (Continued)

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

The Local Transport mileage for Feature Group B, C, and D Switched Access Service provided to a Remote Office will be measured in multiple segments.

When the facility is directly trunked to the Host Office, Direct-Trunked Facility mileage will be measured between the customer's serving wire center and the Host Office, and Tandem-Switched Facility mileage will be measured between the Host Office and the Remote Office. The Tandem Switching charge will not apply.

When the facility is directly trunked to a tandem, Direct-Trunked Facility will be measured from the Serving Wire Center to the tandem, Tandem-Switched Facility mileage will be measured from the tandem to the host, and another segment of Tandem-Switched facility will be measured from the host to the remote. The Tandem Switching charge will be applicable at the tandem.

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

(N)

ACCESS SERVICE

17. RATES AND CHARGES

17.1 Carrier Common Line Access Service

	<u>Rate</u>	
(1) Originating	\$0.010000	
(2) Terminating	\$0.000000	(R)

ACCESS SERVICE

17. **RATES AND CHARGES** (Continued)

17.2 **Switched Access Service**

17.2.1 **Nonrecurring Charges**

Rate

(A) **Local Transport - Installation**
Per Entrance Facility

(N)

-	Voice Grade Two-Wire	\$450.00
-	Voice Grade Four-Wire	\$450.00
-	High Capacity DS1	\$330.00
-	High Capacity DS3	\$445.00
-	Synchronous Optical Channel OC3	\$360.00
-	Synchronous Optical Channel OC12	\$360.00

(B) **Interim NXX Translation Per Order**

Per LATA or Market Area	\$220.00
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(N)

(C) **Trunk Activation**
Per Order

-	Per 24 Trunks Activated or Fraction thereof, on a Per Order Basis	\$459.00
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(C)

17.2.2 **Local Transport**

- **Entrance Facility**
Per Termination

-	Voice Grade Two-Wire	\$28.12
-	Voice Grade Four-Wire	\$45.01
-	High Capacity DS1	\$137.12
-	High Capacity DS3	\$1,251.98
-	Synchronous Optical Channel OC3	\$1,276.65
-	Synchronous Optical Channel OC12	\$1,363.05

(C)

ACCESS SERVICE

17 **RATES AND CHARGES** (Continued)

17.2 Switched Access Service (Continued)

17.2.2 Local Transport (Continued)

Rate

(C)

Direct Trunked Transport

- Direct Trunked Facility
Per Mile

- Voice Grade	\$2.00
- High Capacity DS1	\$9.39
- High Capacity DS3	\$81.83
- Synchronous Optical Channel OC3	\$87.60
- Synchronous Optical Channel OC12	\$109.95

- Direct Trunked Transport Termination
Per Termination

- Voice Grade	\$20.13
- High Capacity DS1	\$48.74
- High Capacity DS3	\$312.99
- Synchronous Optical Channel OC3	\$325.89
- Synchronous Optical Channel OC12	\$709.56

Multiplexing

Per Arrangement

- DS3 to DS1	\$285.57
- DS1 to Voice	\$110.25

Tandem Switched Transport

- Tandem Switched Facility
Per Access Minute Per Mile

-Terminating	\$0.000188
-Originating	\$0.000188

- Tandem Switched Termination
Per Access Minute Per Termination

-Terminating	\$0.000979
-Originating	\$0.000979

- Tandem Switching
Per Access Minute Per Tandem

-Terminating	\$0.002468
-Originating	\$0.002468

Network Blocking Per Blocked Call

Applies to FGD only

\$0.0153

(C)

ACCESS SERVICE

17 **RATES AND CHARGES** (Continued)

17.2 **Switched Access Service** (Continued)

17.2.2 **Local Transport** (Continued)

Rate (C)

Residual Interconnection Charge

Per Originating Minute \$0.002640 (C)

800 Data Base Access Service Queries

Per Query (N)

- Basic \$N/A

- Feature \$N/A (N)

17.2.3 **End Office**

(A) **Local Switching, Per Access Minute**

- Terminating \$0.013470 (R)

- Originating \$0.017393

(B) **Information Surcharge, Per 100 Access Minutes**

(N)

- Terminating \$N/A

- Originating \$N/A

(C) **Transitional End Office Access Service**

Per Terminating Minute \$0.014622 (N)

17.2.4 **Reserved for Future Use**