

**ACCESS SERVICE**

**23. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)**

**23.1 General Description**

CCS/SS7 Interconnection Service, provides a dedicated two-way signaling path between the customer designated premises and a Telephone Company interconnecting Signal Transfer Point (STP). CCS/SS7 Interconnection Service provides the customer interconnection to the Telephone Company's CCS/SS7 network and can be used to access Telephone Company services as they become available and as facilities permit.

CCS/SS7 Interconnection Service utilizes a DS1 (1.544 Mbps) transmission facility, a STP Access Link and a STP Port Termination. The DS1 (1.544 Mbps) facility is provided between the serving wire center of the customer designated premises and the Telephone Company designated hub, where multiplexing from 1.544 Mbps to 56 kbps will occur. The STP

Access Link is the 56 kbps digital transmission facility between the Telephone Company designated hub and the Telephone Company STP. The STP Port Termination provides for the physical termination of the customer's 56 kbps circuit into the Telephone Company STP, where access to the Telephone Company's CCS/SS7 network will occur.

A detailed description of the rate categories applicable to CCS/SS7 Interconnection Service, how these rate categories are applied and other nonrecurring charges are contained in 23.3 (Rate Regulations).

**ACCESS SERVICE****23. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)****23.2 Service Provisioning****23.2.1 Manner of Provisioning**

CCS/SS7 Interconnection Service is provisioned as a Switched Access Service in accordance with Southwestern Bell Telephone Company Common Channel Signaling/Signaling System 7 Network Interface Requirements TP-76638 and Bellcore Common Channel Signaling Network Specification Technical Reference TR-TSV-000905.

The customer may utilize an existing DS1 (1.544 Mbps) facility for CCS/SS7 Interconnection Service. If the customer does not have existing DS1 (1.544 Mbps) facilities available for use with CCS/SS7 Interconnection Service, the customer must order a Switched Transport DS1 (1.544 Mbps) facility and Multiplexing feature from Section 6. The Switched Transport DS1 facility must consist of an Entrance Facility and a Direct-Trunked Transport Facility as described in 6.5 (Switched Transport). The Entrance facility will provide the dedicated connection from the customer's premises to the Telephone Company's serving wire center for that premises. The Direct-Trunked Transport Facility will provide the transmission facilities between the serving wire center of the customer designated premises and the Telephone Company designated hub. Multiplexing from 1.544 Mbps to 56 kbps will occur at the designated Telephone Company hub.

CCS/SS7 Interconnection Service is provisioned in A-Link pairs (multiples of 2) or B/D-Link Quads (multiples of 4). Either of two architecture configurations may be used:

- A-Links connect a customer's Signaling Point with a Telephone Company mated Signaling Transfer Point pair per LATA.
- B/D-Links connect a customer's mated STP pair to a Telephone Company mated STP pair per LATA.

One STP Port Termination is required for each 56 kbps access link utilized for CCS/SS7 Interconnection Service and will be installed at the Telephone Company interconnecting STP. A customer Signaling Point Code will also be installed at the Telephone Company interconnecting STP. STP locations are set forth in the NECA Tariff FCC No. 4.

(T)

**ACCESS SERVICE**

**23. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)**

**23.2 Service Provisioning (Cont'd)**

**23.2.1 Manner of Provisioning (Cont'd)**

CCS/SS7 Interconnection Service ordering or modification provisions will apply as set forth in Section 5 (Ordering for Access Service). Multiple orders for this service shall be cross-related and shall identify the customer's desired diversity requirements.

The Access Order Charge applicable for Switched Access will apply per Access Order for the installation, addition, change or rearrangement of CCS/SS7 Interconnection Service.

**23.2.2 Transmission Specifications**

Transmission specifications for CCS/SS7 Interconnection Service are set forth in Technical References FR-NWT-000440 and TR-NWT-000246.

The Telephone Company will maintain existing transmission specifications on functioning service configurations installed prior to the effective date of this Guidebook except that service configurations having performance specifications exceeding the standards listed in this provision will be maintained at performance levels specified in this Guidebook and the appropriate Technical Reference Publication.

**23.2.3 Acceptance Testing**

At the customer's request, and at no additional charge, the Telephone Company will cooperatively test the parameters at the time of installation, as specified in technical publications TR-TSV-000905, TP-76638 and TA-OPT-001004.

**ACCESS SERVICE**

**23. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)**

**23.2 Service Provisioning (Cont'd)**

**23.2.4 Network Management**

The Telephone Company will administer its network to insure the provision of acceptable service levels to all telecommunications users of the Telephone Company's network services.

The Telephone Company maintains the right to apply protective controls which would generally be applied as a result of occurrences such as failure or overload of Telephone Company or customer facilities, natural disasters, mass calling or national security demands. In the event that the protective controls applied by the Telephone Company result in the complete loss of service by the customer, the customer will be granted a credit allowance in conjunction with the regulations specified in 2.5.6 (Credit Allowance for Service Interruptions) and 2.5.7 (Service Assurance Warranty Schedule (SAWS)). (T)

**23.2.5 Provision of Service Performance Data**

Subject to availability, end-to-end service performance data available to the Telephone Company through its own service evaluation routines, may be made available to the customer. This data provides information on STP Port availability. This data does not include service performance data which is provided under other guidebook sections, e.g., testing service results. If the data is to be provided in other than paper format, the charges for such exchange will be determined on an individual case basis.

**ACCESS SERVICE**

**23.Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)**

**23.2 Service Provisioning (Cont'd)**

**23.2.6 Forecast Report**

The customer shall furnish to the Telephone Company, at the time CCS/SS7 Interconnection Service is ordered and annually thereafter, an updated three year forecast of usage for the DS1 (1.544 Mbps) facility, the STP Access Link and the STP Port Termination. The forecast shall include total annual volume and busy hour busy month volume. The Telephone Company will utilize the forecast in its own efforts to project further facility requirements.

**23.3 Rate Regulations**

This section contains specific regulations governing the rates and charges that apply for CCS/SS7 Interconnection Service.

There are two types of rates and charges which apply to CCS/SS7 Interconnection Service. These are monthly recurring rates and nonrecurring charges.

Specific rates and charges are set forth in 23.4 (Rates and Charges). Jurisdictional reporting requirements are set forth in 2.4 (Jurisdictional Reports).

**ACCESS SERVICE**

**23. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)**

**23.3 Rate Regulations (Cont'd)**

**23.3.1 Rate Categories**

The following rate elements apply to CCS/SS7 Interconnection Service:

- Switched Transport DS1 (1.544 Mbps) Facility (optional) (described in (A) following),
- STP Access Link (described in (B) following) and STP Port Termination (described in (C) following)

**(A) Switched Transport DS1 (1.544 Mbps) Facility**

The Switched Transport DS1 (1.544 Mbps) facility provides the facilities between the customer's premises and the Telephone Company designated hub and is composed of a Switched Transport Entrance Facility, Direct-Trunked Transport Facility and a Multiplexing feature. The monthly recurring rates and nonrecurring charges for Switched Transport DS1 (1.544 Mbps) Entrance Facility, Direct-Trunked Transport Facility and Multiplexing feature are those contained in Section 6.9.2 of Tariff FCC No. 73. The DS1 capability can optionally be provided per a shared use DS1 as specified in 7.2.10 (Shared Use) of 16.4.11 (Shared Use). (T) (T)

**(B) STP Access Link**

The STP Access Link rate element provides for the 56 kbps transmission facilities between a Telephone Company designated hub and the Telephone Company interconnecting STP.

STP Access Link is calculated according to mileage band. There are two rates that apply per band, i.e., a fixed monthly rate per mileage band and a monthly rate per mile.

**ACCESS SERVICE**

**23. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)**

**23.3 Rate Regulations (Cont'd)**

**23.3.1 Rate Categories (Cont'd)**

STP Port Termination

The STP Port Termination rate element provides for the termination of the customer's 56 kbps circuit. One STP Port Termination must be installed at the Telephone Company interconnecting STP for each 56 kbps circuit.

There are two charges that apply to the STP Port Termination, i.e., a fixed recurring monthly rate per port termination and a nonrecurring installation charge per port.

**ACCESS SERVICE**

**23. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)**

**23.3 Rate Regulations (Cont'd)**

**23.3.2 Nonrecurring Charges**

Nonrecurring charges are one-time charges that apply for a specific work activity. Nonrecurring charges are applicable for installation of the service and for rearrangement of the service. In addition, an Access Order Charge may be applicable as specified in 5.3.1 (Access Order Charges).

**(A) STP Port Termination**

A nonrecurring charge applies for the installation of each STP Port Termination at the Telephone Company interconnecting STP.

**(B) Customer Signaling Point Code**

A nonrecurring charge applies for the translation of each Customer Signaling Point Code at the Telephone Company interconnecting STP.

**(C) Service Rearrangement**

Charges for the rearrangement of CCS/SS7 Interconnection Service are set forth in 6.8.2(D) (Nonrecurring Charges for Service Rearrangements).



**ACCESS SERVICE**

**23. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)**

**23.3 Rate Regulations (Cont'd)**

**23.3.3 Monthly Rates**

Monthly rates are fixed recurring rates that apply each month, or fraction thereof, that a specific rate element is provided. For billing purposes, each month is considered to have thirty (30) days.

CCS/SS7 Interconnection Service is a Switched Access Transport Service; however, it is not subject to the usage charges specified in Section 3 (Carrier Common Line Access Service) and Local Switching as specified in Section 6 (Switched Access Service).

**(A) STP Access Link**

A fixed monthly rate applies, per mileage band, for each 56 kbps access link between the Telephone Company designated hub, where multiplexing from DS1 (1.544 Mbps) to a 56 kbps circuit occurs, and the Telephone Company interconnecting STP.

A monthly rate per mile applies to each airline mile between the Telephone Company designated hub, where multiplexing from DS1 (1.544 Mbps) to a 56 kbps circuit occurs, and the Telephone Company interconnecting STP.

**(B) STP Port Termination**

A monthly rate applies for each STP Port Termination installed at the Telephone Company interconnecting STP.

**ACCESS SERVICE**

**23. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)**

**23.3 Rate Regulations (Cont'd)**

**23.3.4 Determining Mileage and Charges**

The mileage to be used to determine the monthly rate, per mile, for the DS1 (1.544 Mbps) facility and the STP Access Link is calculated on the airline distance between the locations involved, i.e., the serving wire center associated with the customer's premises and the Telephone Company designated hub, or the Telephone Company designated hub and the Telephone Company interconnecting STP.

Mileage is shown in terms of mileage bands as specified in 23.4 (Rates and Charges). To determine the rate to be billed, first compute the mileage using the V&H coordinates method, as set forth in the NECA (T) Tariff FCC No. 4, then determine which band (0 miles or over 0 miles) that computed mileage falls and apply the rate shown for that band. When the calculation results in a fraction of a mile, always round up to the next whole mile before determining the mileage band and applying the rates.

**23.3.5 Minimum Period**

CCS/SS7 Interconnection Service is provided for a minimum period of one month. When service is disconnected prior to the expiration of the minimum period, monthly charges are applicable for the balance of the minimum period.

If service is disconnected after the minimum period, monthly charges will be based on the actual number of days the service is furnished. In order to determine the charges for a fractional portion of a month, every month is considered to have 30 days.

**23.3.6 Moves**

The regulations for moves and application of charges are set forth in Section 6.8.10 of Tariff FCC No. 73. (T)

**ACCESS SERVICE****23. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)****23.3 Rate Regulations (Cont'd)****23.3.7 Shared Use**

Shared use is the provision of Switched Access and Special Access services over the same transmission path through the use of a common interface. The following Switched Access and Special Access Services are available for providing shared use facilities:

- Switched Access Services (DS1- and DS3- level Switched Access)
- Special Access High Capacity Service
- Self-Healing Transport Network (STN)
- MegaLink Custom Service
- Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service

Regulations for shared use facilities are set forth in Section 6.8.12 of Tariff FCC No. 73, 7.2 (Rate Regulations), 16.4 (Rate Regulations), 19.3 (Rate Regulations), and 23.3 (Rate Regulations). Ordering provisions for shared use facilities are set forth in 5.2.5 (Shared Use). (T)

Existing Switched Access transport facilities can be converted to shared use facilities by activating a portion of available capacity for Special Access. Services provided over a shared use facility are ordered, provided and rated either as Switched Access (i.e., Entrance Facility, Direct-Trunked Transport, Tandem-Switched Transport and Multiplexing) or as Special Access (i.e., Channel Termination, Channel Mileage and Multiplexing) as set forth following:

**(A)** On shared use facilities, the customer for the Switched Access Service may be different from the customer for the Special Access Service. When the Switched Access Customer is not the same as the Special Access Customer, all Special Access charges and Switched Transport charges (including Switched Transport features charges) will be billed to the customer who initially ordered the facility. All other Switched Access charges will be separately billed to the customer who ordered the Switched Access Service.

**ACCESS SERVICE**

**23. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)**

**23.3 Rate Regulations (Cont'd)**

**23.3.7 Shared Use (Cont'd)**

**(B)** When an existing Switched Access transport facility is converted to a shared use facility by using an available portion of the capacity for Special Access Service, the applicable nonrecurring charges (including the Access Order Charge) will be the nonrecurring charges associated with the Special Access service being ordered.

**(C)** The customer must place an order for each individual Switched or Special Access service utilizing the shared use facility and must also specify the channel assignment for each service.

**(D)** All channels within a shared use facility will be rated and billed as set forth in (1) through (5), following:

**(1)** When a DS1 facility is ordered and provisioned as Switched Access, all channels, including spares, will be rated and billed as Switched Access until such time as the DS1 facility becomes shared use.

**(2)** When a DS1 facility is ordered and provisioned as a Special Access High Capacity Service, all channels, including spares, will be rated and billed as Special Access until such time as the DS1 facility becomes shared use.

**(3)** Once a DS1 facility, ordered as either Switched or Special Access, becomes shared use, all spare channels on the DS1 facility will be rated and billed as Special Access.

**(4)** On a DS3 shared use facility, ordered either as a Switched Access or Megalink Custom Service, the Switched Access channels on the DS3 facility must equal the cumulative value of the channels (both active and spare) counted as Switched Access on each DS1 facility.

**ACCESS SERVICE****23. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)****23.3 Rate Regulations (Cont'd)****23.3.7 Shared Use (Cont'd)****(D) (Cont'd)****(4) (Cont'd)**

For example, a Switched Access DS1 facility, which contains 20 active and 4 spare channels, is activated on a shared use DS3 facility. The DS1 facility is considered pure switched access and the shared use DS3 facility is prorated by 24 switched channels, i.e., 24/672.

Subsequently, 6 of the switched channels from the Switched Access DS1 facility are disconnected and become spare. Since the DS1 facility is still considered pure switched, the shared use DS3 facility will continue to be prorated by 24 switched channels, i.e., 24/672.

If, at a later date, the Switched Access DS1 facility becomes shared use by the addition of 6 Special Access channels, the DS1 spare channels will then default to Special Access. The DS3 facility will be prorated by 14/672 to reflect the new switched channel value on the shared use DS1, i.e., 14 active switched, 6 active special and 4 spare.

**(5)** Channels being used in conjunction with CCS/SS7 Interconnection Service are included in the channel counts for Switched Access.

**(E)** Customers requesting Service Facility Move (SFM) of shared use facilities will be assessed nonrecurring charges as specified in Section 6.8.10 of Tariff FCC No. 73, 7.2.7 (Moves), 16.4.12 (T) (Moves), 19.3.7 (Moves) and 23.3.6 (Moves) with the nonrecurring charges being prorated as set forth in (D)(1) through (D) (5), preceding.

**ACCESS SERVICE**

**23. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)**

**23.4 Rates and Charges**

In addition, Switched Transport rates and charges may be applicable as specified in Section 6.9.2 of Tariff FCC No. 73. (T)  
(T)

(A)	STP Access Link (1J5FX)	<u>Rate per Month</u>
	Fixed	
	0 Miles	\$ 0.00
	Over 0 Miles	\$100.16
	Per Mile	\$ 0.00
	Over 0 Miles	\$ 0.91
(B)	STP Port Termination (PT8SX)	<u>Rate per Month</u>
	Per port termination	\$547.00
		<u>Nonrecurring Charge</u>
	Per port termination	\$234.49
(C)	Customer Signaling Point Code (NRBSF)	<u>Nonrecurring Charge</u>
	Per code	\$ 41.00