# COMMON CHANNEL SIGNALING/SIGNALING SYSTEM 7 (CCS/SS7)

## INTERCONNECTION SERVICE

### 22. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service

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COMMON CHANNEL SIGNALING/SIGNALING SYSTEM 7 (CCS/SS7)

INTERCONNECTION SERVICE

22. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service

22.1 General Description

This section provides the rules and regulations pertaining to the provisioning of Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service.

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

22.2 Service Description

CCS/SS7 Interconnection Service is provisioned as a Switched Access Service in accordance with SWBT Common Channel Signaling/Signaling System 7 Network Interface Requirements TP-76638 and Bellcore Common Channel Signaling Network Specification Technical Reference TR-TSV-000905. The Reference to Technical Publications section of this tariff contains ordering information for these publications.

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 and does not want to order a DS1 Channel, SWBT will provide an STP Access Connection between the customer designated premises and SWBT's hub. When a DS1 Channel or an STP Access Connection is utilized by the customer, multiplexing from 1.544 Mbps to 56 kbps will occur at the designated SWBT hub.

One STP Port Termination is required for each 56 kbps access link utilized for CCS/SS7 Interconnection Service and will be installed at SWBT's interconnecting STP. A customer Signaling Point Code will also be installed at the Telephone Company interconnecting STP. STP and FSPOI locations are set forth in the National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4.

When a STP Access Link used to provide CCS/SS7 Interconnection Service is provisioned using FSPOI, the STP Access Mileage is ordered from the customer's designated premises to a SWBT-designated FSPOI. FSPOIs are deployed only in LATAs where SWBT had removed an STP pair through consolidation and rehoming.
22. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service

22.3 Service Provisioning

22.3.1 Transmission Specifications

Transmission specifications for CCS/SS7 Interconnection Service are set forth in Technical References TR-TSY-000440 and TR-NPL-000246. The Reference to Technical Publications section of this tariff contains ordering information for these publications.

SWBT will maintain existing transmission specifications on functioning service configurations installed prior to the effective date of this tariff except those service configurations having performance specifications exceeding the standards listed in this provision will be maintained at performance levels specified in this tariff and the appropriate technical reference publication.

22.3.2 Acceptance Testing

At the customer's request, and at no additional charge, at the time of installation SWBT will cooperatively test the parameters as specified in technical publications TR-TSV-000905, TP-76638 and TA-TAP-001004. The Reference to Technical Publications section of this tariff contains ordering information for these publications.

22.3.3 Network Management

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

SWBT maintains the right to apply protective controls which would generally be applied as a result of occurrences such as failure or overload of SWBT or customer facilities, natural disasters, mass calling or national security demands. In the event that the protective controls applied by SWBT 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 Section 2.4.4 of this tariff (Credit Allowance for Service Interruptions).

22.3.4 Provision of Service Performance Data

Subject to availability, end-to-end service performance data available to SWBT 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 tariff 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.
COMMON CHANNEL SIGNALING/SIGNALING SYSTEM 7 (CCS/SS7)

INTERCONNECTION SERVICE

22. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont’d)

22.3 Service Provisioning (Cont’d)

22.3.5 Forecast Report

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

22.3.6 Ordering

Service ordering or modification provisions will apply as set forth in Section 5 of this tariff (Ordering options for Switched and Special Access Service). 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.

22.3.7 Minimum Provisioning Requirements

CCS/SS7 Interconnection Service requires two 56 kbps STP Access Mileage and two STP Port Terminations.

22.3.8 Consolidation of STPs

When the Telephone Company consolidates its Common Channel Signaling (CCS) Network to reduce its number of STP pairs, Customer changes in CCS/SS7 Interconnection Service and translations will be required.

The Telephone Company will establish schedules for any consolidation, and will work cooperatively with existing Customers to establish dates by which necessary changes in facilities and translations will be completed. However, all of an existing Customer’s CCS/SS7 Interconnection Service in a LATA must be connected to the new serving arrangement, or disconnected no later than the date established by the Telephone Company for the consolidation.

In order to avoid duplicate charges for STP Access Mileage being rehomed, Customers who move STP Access Links will need to place “add” and “disconnect” orders with the same Due Date. The Connecting Facility Assignment (CFA) on the “add” order must be the same as the one on the “disconnect” order for Customers who order new links to the FSPOI.
22. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont’d)

22.3 Service Provisioning (Cont’d)

22.3.8 Consolidation of STPs (Cont’d)

The conversion to the consolidated architecture may require existing Customers to use duplicate STP Access Links and STP ports at the time of conversion to assure continuity of service. Where needed, such redundancy will include the Customer’s existing CCS/SS7 Interconnection Service as well as the new CCS/SS7 Interconnection Service between the Customer and the new STP. However, a Customer may have CCS/SS7 Interconnection Service under both the existing arrangement and the new arrangement pursuant only to the conversion schedule established by the Telephone Company. Existing facilities no longer required after all of a Customer’s facilities have been converted must be disconnected within 60 days of the completion of such conversion. Requests from existing Customers for augmentation of existing capacity in a LATA will be converted to the new serving arrangement in accordance with the Telephone Company’s conversion schedule. Otherwise, requests for new service will be connected to the new serving arrangement regardless of when ordered.

Recurring and nonrecurring charge credits will apply to the installation of new CCS/SS7 Interconnection Service associated with the Telephone Company’s STP consolidation as follows: Recurring charge credits will apply for new STP Access Links and STP ports provided by the Telephone Company for the period of time beginning with the installation of the new connections until the earlier of 1) the disconnection of the first pair or quad of existing connections which has traffic being converted to the new arrangement, or 2) 60 days following the completion of the conversion. Both nonrecurring and recurring charge credits will apply to any new CCS/SS7 Interconnection Service that is required by the consolidation of traffic from other LATAs for the period of time beginning with the installation of the new CCS/SS7 Interconnection Service until the earlier of 1) the disconnection of the first pair or quad of existing connections that have traffic being converted to the new connections, or 2) four months after installation of the new connections.

Due to billing system constraints, all recurring and nonrecurring charges will be billed, but appropriate credits will be applied to the Customer’s bill after the associated existing facilities are disconnected.

22.4 Rate Regulations

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

Specific rates and charges are set forth in Section 22.5. Jurisdictional reporting requirements are set forth in Section 2.3.14.
COMMON CHANNEL SIGNALING/SIGNaling System 7 (CCS/SS7)  
INTERCONNECTION SERVICE

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

22.4 Rate Regulations (Cont'd)

22.4.1 Rate Categories

There are four rate elements which apply to CCS/SS7 Interconnection Service:

- STP Access Connection (described in (A) following),
- STP Access Mileage (described in (B) following), and
- STP Port Termination (described in (C) following).
- Customer Signaling Point Code (described in (D) following).

(A) STP Access Connection

The STP Access Connection rate element provides the transmission facilities between the customer designated premises and SWBT's hub.

The STP Access Connection charges are calculated according to mileage band. There are two rates that may apply per band, i.e., a fixed monthly rate per mileage band and a monthly rate per mile. A nonrecurring charge also applies per STP Access Connection. This charge applies on a first and additional basis.

(B) STP Access Mileage (Minimum Two)

The STP Access Mileage rate element provides for the 56 kbps transmission facilities between a SWBT designated hub and the SWBT interconnecting STP. STP Access Mileage must be provisioned using a FSPOI if the LATA STP has been removed through consolidation and rehoming.

STP Access Mileage 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.

(C) STP Port Termination (Minimum Two)

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 SWBT's 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.

(D) Customer Signaling Point Code

The Customer Signaling Point Code rate element provides for the installation of the customer's CCS network signaling point (address) code at the Telephone Company interconnecting STP.

A nonrecurring installation charge applies per Customer Signaling Point Code.
COMMON CHANNEL SIGNALING/SIGNALING SYSTEM 7 (CCS/SS7)
INTERCONNECTION SERVICE

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

22.4 Rate Regulations (Cont'd)

22.4.2 Nonrecurring Charges

Nonrecurring charges are one-time charges that apply for a specific work activity (i.e., installation or change to an existing service). 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 Section 5.2.2 of this tariff (Access Order Charge).

(A) STP Access Connection

A nonrecurring charge applies for the installation of each STP Access Connection. This charge is applied on a first and additional basis. If a customer orders multiple STP Access Connections on the same access order, the first connection is assessed the "first" charge and each additional connection is assessed the "additional" charge.

(B) STP Port Termination (Minimum Two)

A nonrecurring charge applies for the installation of each STP Port Termination at SWBT's interconnecting STP.

(C) Customer Signaling Point Code

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

(D) Service Rearrangement

Charges for the rearrangement of CCS/SS7 Interconnection Service are set forth in Section 6.9.2(G) of this tariff (Nonrecurring Charges for Service Rearrangements).
22. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service (Cont'd)

22.4 Rate Regulations (Cont'd)

22.4.3 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.

STP Access Connection and STP Access Mileage are Switched Transport monthly-rated Switched Access Service rate elements; however, they are not subject to usage charges (i.e., Carrier Common Line as specified in Section 3.3.2 and Switched Transport and Local Switching as specified in Section 6.8.3).

(A) STP Access Connection

A fixed monthly rate applies, per mileage band, for each STP Access Connection between SWBT's hub and the customer designated premises.

A monthly rate per mile applies to each airline mile between SWBT's hub and the Serving Wire Center of the customer designated premises.

(B) STP Access Mileage

A fixed monthly rate applies, per mileage band, for each 56 kbps access link between SWBT's-designated hub, where multiplexing from DS1 (1.544 Mbps) to a 56 kbps circuit occurs and SWBT's interconnecting STP. If ordering to a FSPOI, a fixed monthly rate applies, per mileage band, from the serving wire center associated with a customer-designated premises and SWBT’s-designated Central Office FSPOI equipment.

A monthly rate per mile applies to each airline mile between SWBT's-designated hub, where multiplexing from DS1 (1.544 Mbps) to a 56 kbps circuit occurs, and SWBT's interconnecting STP. If ordering to a FSPOI, a monthly rate per mile applies to each airline mile between the serving wire center associated with a customer-designated premises and SWBT’s-designated Central Office FSPOI equipment.

(C) STP Port Termination

A monthly rate applies for each STP Port Termination installed at SWBT's interconnecting STP.
COMMON CHANNEL SIGNALING/SIGNALING SYSTEM 7 (CCS/SS7)

INTERCONNECTION SERVICE

22. Common Channel Signaling/Signaling System 7 (CCS/SS7) Interconnection Service

(Cont'd)

22.4 Rate Regulations

(Cont'd)

22.4.4 Determining STP Access Mileage and Charges

The mileage to be used to determine the monthly rate for the STP Access Connection and the STP Access Mileage is calculated on the airline distance between the locations involved, i.e., the SWBT hub and the customer designated premises, or the SWBT hub and the SWBT interconnecting STP.

When the STP Access Mileage used to provide CCS/SS7 Interconnection Service is provisioned using a FSPOI, the mileage rate category provides for the transmission facilities between the serving wire center associated with a customer-designated premises and SWBT’s-designated Central Office FSPOI equipment necessary to terminate the STP Access Mileage.

Mileage is shown in terms of mileage bands as specified in Section 22.5 of this tariff (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 National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4, then find the band into which the 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.

23.4.5 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.

22.4.6 Moves

The regulations for moves and application of charges are set forth in Section 6.8.10.
COMMON CHANNEL SIGNALING/SIGNALING SYSTEM 7 (CCS/SS7)

INTERCONNECTION SERVICE

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

22.5 Rates and Charges

(A) STP Access Connection (CCAX8) Rate per Month

Fixed

0 Miles ................................................. $ 439.80
Over 0 Miles ............................................ 510.80

Per Mile

0 Miles .................................................... 0.00
Over 0 Miles ............................................ 45.00

Nonrecurring Charge

Per STP Access Connection (NRBSB) .................. $ 645.00

(B) STP Access Mileage (1J5FX) Rate per Month

Fixed

0 Miles .................................................... $ 0.00
0>4 Miles ............................................... 35.00
4-8 Miles ............................................... 35.00
8-25 Miles ............................................. 35.00
25-50 Miles ........................................... 35.00
Over 50 Miles ......................................... 35.00

Per Mile

0 Miles .................................................... 0.00
0>4 Miles ............................................... 0.91
4-8 Miles ............................................... 0.91
8-25 Miles ............................................. 0.91
25-50 Miles ........................................... 0.91
Over 50 Miles ......................................... 0.91

(C) STP Port Termination (PT8SX) Rate per Month

Per Port Termination .................................. $ 228.00

Nonrecurring Charge

Per Port Termination .................................. $ 249.20

(D) Customer Signaling Point Code (NRBSF) Nonrecurring Charge

Per code ............................................. $ 41.00

(N)