

19. Self-healing Transport Network (Cont'd)

19.1 General Description<sup>(1)</sup>

Self-healing Transport Networks (STN) provide for dedicated digital transport from two or more customer specified STN Access Nodes, one of which, at a minimum, must be a Telephone Company central office (CO Access Node). An Access Node is a Telephone Company central office or a customer premises equipped with STN features and functions. The Telephone Company will identify central offices equipped with STN features and functions. For a listing of the Telephone Company offices equipped with STN capabilities, see the National Exchange Carrier Association, Inc., Tariff F.C.C. No. 4.

Rates and charges for Self-healing Transport Network for are set forth in Section 19.4 following, with the exception of the services provided by the Telephone Company in the Metropolitan Statistical Areas (MSAs) in which the Telephone Company has received Phase II pricing flexibility pursuant to Subpart H of Part 69 of the Commission's Rules. The rates and charges for the Self-healing Transport Network in the MSAs that have received Phase II pricing flexibility are set forth in Section 39.

<sup>(1)</sup> The regulations below are effective December 4, 2012.

For Volume Options 3, 6, 12, and 24, Customers may not purchase additional STN service; however, they may continue to purchase additional Digital Transport Links (DTL's) and directly related elements associated with an existing STN service, subject to existing capacity availability, for the remainder of any Minimum Period. Existing service will be provided according to all applicable rates, terms and conditions for the remainder of any Minimum Period. Upon the expiration of any Minimum Period, service will be provided on a month-to-month basis at the then-applicable month-to-month rate until service is discontinued by the Telephone Company. No new or additional Minimum Period commitments of any kind, including any otherwise available renewals, extensions or renegotiations, will be available. Upon the expiration of any Minimum Period commitment, no move, adds or change orders will be accepted.

For Volume Options 36 and 48, Customers are limited to existing service and quantities at existing locations. The Telephone Company will not accept any requests for additions, partial disconnections, moves, upgrades or changes to STN Volume Options 36 and 48. Customers with existing Volume Options 36 and/or 48 will not be able to add access nodes, reconfigure the ring, or move access nodes. They may continue to add additional Digital Transmission Links (DTLs) and Interfaces at current Tariff rates.

19. Self-healing Transport Network (Cont'd)

19.1 General Description (Cont'd)

STN provides premises-to-premises arrangements or premises-to-hub arrangements for interconnection to other Access Services with transmission speeds of 1.544 Mbps or greater. STNs are characterized by a ring configuration which provides redundant transmission over separate physical facilities. Digital Transmission Links (DTL) interconnect customer selected Access Nodes to form the ring configuration. The DTL is a high capacity channel which delivers the same bandwidth signal at each Access Node in a given STN. The standard Volume Option DTL transport signal is a 44.736 Mbps bandwidth or equivalent. Each DTL will include Network Access Points (NAP) located in customer specified Access Nodes. A NAP designates the point at which a particular DTL may be interconnected with a Premises Access Node or with High Capacity Services or MegaLink Custom Services in a central office Access Node. Only two NAPs, one of which must be located in a Premises Access Node, may be specified for each DTL. The high capacity channel is available for use only at the designated NAPs. STN is equipped with self-healing characteristics, multiplexing capabilities, performance monitoring, and network supervision. Multiplexing may be provided only in a Telephone Company Central office node which has been designated as a Hubbing and Bridging office in the National Exchange Carrier Association, Inc., Tariff F.C.C. No. 4.

In addition to the standard 44.736 Mbps electrical interface, STN also offers the following SONET (Synchronous Optical Network) based Interfaces.

<u>SONET-based Interface</u>	<u>Bandwidth</u>
DS1	1.544 Mbps
EC-1	51.84 Mbps
OC3	155.520 Mbps
OC3c	155.520 Mbps (concatenated)
OC12	622.080 Mbps
OC12c	622.080 Mbps (concatenated)

SONET interfaces are available only where STN is provisioned using SONET-based facilities. Therefore, the SONET-based Interface Options will not be available at those locations. The Telephone Company will notify the customer accordingly when the service is ordered.

19. Self-healing Transport Network (Cont'd)

19.1 General Description (Cont'd)

Technical specifications for SONET-based Interfaces are contained in the following publications:

Bellcore Document GR-253-CORE

Bellcore Document TR-NWT-000496

Bellcore Document GR-1374-CORE

American National Standard, ANSI T1.105-1991

American National Standard, ANSI T1.102-1993

In the event of a single facility failure or single Access Node failure on a given ring, STN will restore transmission within an engineered objective of 50 milliseconds, not to exceed 2.5 seconds. For a single facility failure, 100% of the STN transmission will be restored within 2.5 seconds. The loss of an Access Node will result in the restoration of the transmission of the total STN ring minus the failed Access Node transmission.

The STN architecture is designed to permit rearrangement of NAPs and/or Multiplexers as set forth in Section 19.3.2.

DTLs, Optional SONET-based Interfaces, Multiplexers and Access Nodes may be added to existing STN service.

The Telephone Company will meet or exceed the specified acceptance and maintenance parameters set forth for STN Services in Southwestern Bell Technical Publication 76635 and for SONET-based Interfaces in Southwestern Bell Technical Publication 76839.

There are five basic rate categories which apply to STN. Three of the rate categories apply based on the DTL Volume Option selected; the other two rate categories apply to STN, independent of the DTL Volume Option selected by the customer.

The three basic rate categories which apply on a DTL Volume Option basis are Basic Configuration, Additional Access Node and Additional DTL. The Basic Configuration rate category provides for the appropriate number of Access Nodes equipped with the number of DTLs in the customer selected DTL Volume Option. The Additional Access Node rate category provides for any quantity of Access nodes in addition to the Basic Configuration. The Additional DTL rate category provides for any quantity of DTLs required by the customer over and above those included in the DTL Volume Option selected by the customer. Additional DTLs are provided on both a Basic Configuration and an Additional Access Node basis. The SONET-based Interfaces (DS1, EC-1, OC3c, OC12) provide for the circuit card plug-in units and fiber-optic terminal multiplexing equipment (if required) to convert the optical carrier (OC) signal to the bandwidth that corresponds with the interface as specified in the preceding table.

19. Self-healing Transport Network (Cont'd)

19.1 General Description (Cont'd)

The two basic rate categories that apply to STN, independent of the selected DTL Volume Option are Transport and Optional Features and Functions. The Transport rate category provides for the transmission facilities between the Access Nodes. The Optional Features and Functions rate category provides for optional features and functions which may be added to an STN to improve its quality or utility to meet specific communications requirements. There are three types of Optional Features and Functions available to STN; Multiplexing, SecureNet Interconnection, and SONET-based Interface Options. The Optional Features and Functions rate categories are detailed as follows:

The Multiplexing rate category provides for an arrangement that converts a standard DTL (44.736 Mbps) into 28 (1.544 Mbps) channels using digital time division multiplexing at the Central Office.

The SecureNet Interconnection with High Capacity DS1 Services rate category provides for interconnection with High Capacity DS1 Services equipped with the SecureNet Hub Redundancy feature (Option 1) as set forth in 7.3.10(E)(6)(a) (Hub Redundancy) preceding. Because SecureNet is only provisioned via specific pairs of Telephone Company central offices, interconnection of STN and High Capacity Services equipped with SecureNet Option 1 requires that the customer must designate both SecureNet offices as STN Access Nodes.

This SecureNet Interconnection will be available only on the standard DTL (44.736 Mbps) interface, not on SONET-based interfaces.

The STN Interconnection with SecureNet Equipped MegaLink Custom Service rate category provides for interconnection of an STN with MegaLink Custom Services equipped with the SecureNet Serving Wire Center and Facility Redundancy feature as set forth in 20.2.2(B) (Serving Wire Center and Facility Redundancy) following.

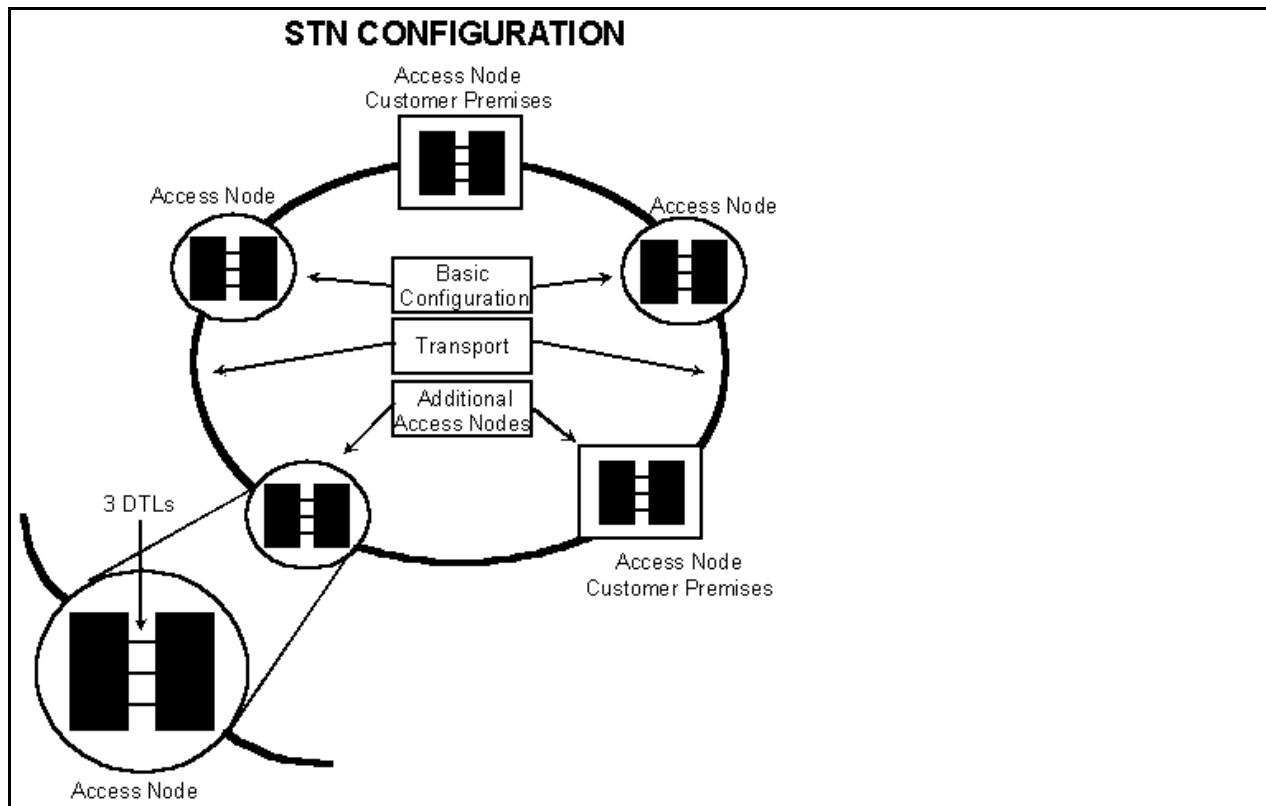
In addition, other service specific charges and nonrecurring charges may apply as specified in Section 19.3 (Rate Regulations).

Ordering and billing provisions as set forth in 2.6 (Jointly Provided Access Services) will apply when more than one Exchange Telephone Company is involved when those telephone companies have agreed upon facilities and terms and conditions of the jointly provided service.

19. Self-healing Transport Network (Cont'd)

19.1 General Description (Cont'd)

The following diagram depicts an STN configuration transversing five Access Nodes:



This configuration depicts an STN arrangement using the Basic Configuration equipped with DTL Volume Option 3 which includes three Access Nodes and three DTLs, plus two Additional Access Nodes.

- Basic Configuration (described in Section 19.3.1(A) (1))
- DTL Volume Option (described in Section 19.3.1(A))
- Additional Access Nodes (described in Section 19.3.1(A) (2))

19. Self-healing Transport Network (Cont'd)

19.2 Service Provisioning

19.2.1 Testing

(A) Acceptance Testing

At the time STN services are installed and at no additional charge, the Telephone Company will, at the customer's request, cooperatively test STN as specified in Technical Publication 76635, and for SONET-based Interfaces in Technical Publication 76839.

(B) Testing Capabilities

In addition to the above tests, Additional Cooperative Acceptance Testing to test other parameters not defined in Technical Publication 76635 or 76839 is available at the customer's request. Charges as defined in Section 13.4.9 (Testing Service for Special Access and Self-Healing Transport Network) will apply. All test results will be made available to the customer upon request.

19.2.2 Design Layout Report

At the request of the customer, the Telephone Company will provide to the customer the makeup of the facilities and services provided under this tariff as STN to aid the customer in designing its overall service. This information will be provided in the form of a Design Layout Report. The Design Layout Report will be provided to the customer at no charge, and will be reissued or updated whenever these facilities are materially changed.

19.2.3 Special Construction

Where facilities and equipment do not exist or are not available, Special Construction charges, as set forth in Section 5.2.6(C) preceding, may apply.

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations

This section contains specific regulations governing the rates and charges for STN.

Effective November 1, 2017, Competitive Counties and Non-Competitive Counties have been established and are defined in Section 2.7 and the wire centers within such counties are listed in Sections 15.2(C) and (D).

For all rate elements in Section 19, price flex rates and charges, as provided in Section 39.5.2, apply, subject to service availability,<sup>(1)</sup> regardless of whether the county is Competitive or Non-Competitive.

If the Telephone Company initiates rate changes resulting in a decrease of rates for an existing service with a 3 or 5 year billing period, those rate changes will be passed along to the customer. Rate changes resulting in an increase of rates for an existing 3 or 5 year billing period will not exceed the original rate for that selected bill period. Rate changes may occur as a result of F.C.C. action.

Other Access Services used in conjunction with STN are governed by specific regulations and applicable rates and charges set forth in other sections of this tariff unless otherwise noted herein.

19.3.1 Rate Categories

There are five basic rate categories which apply to STN. There are three rate categories that apply on a DTL Volume Option basis. These rate categories may not be intermixed between different Volume Options on a particular STN. Two rate categories apply to STN, independent of the DTL Volume Option selected by the customer.

(A) DTL Volume Option-Based Rate Categories

The three basic rate categories which apply on a DTL Volume Option basis are as follows:

- Basic Configuration
- Additional Access Node
- Additional DTL

(1) See Footnote 1 on Page 19.3.

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.1 Rate Categories (Cont'd)

(A) DTL Volume Option Rate Categories (Cont'd)

(1) Basic Configuration

The Basic Configuration rate category provides for the following Access Nodes equipped with the number of DTLs in the customer selected DTL Volume Option:

<u>DTL Volume Option</u>	<u>Number of Access Nodes</u>
3	3
6	4
12	4
24	5
36	5
48	5

(2) Additional Access Node

The Additional Access Node rate category provides for any quantity of Access Nodes in addition to the Basic Configuration.

(3) Additional DTL

The Additional DTL rate category provides for any quantity of DTLs required by the customer over and above those included in the DTL Volume Option selected by the customer. Additional DTLs are provided on both a Basic Configuration and an Additional Access Node basis.



19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.1 Rate Categories (Cont'd)

(B) STN Rate Categories

The two basic rate categories that apply to STN, independent of selected DTL Volume Option are as follows:

(1) Transport

The Transport rate category provides for the transmission facilities between the Access Nodes.

(2) Optional Features, BSEs and Functions

The Optional Features, BSEs and Functions rate category provides for the following optional features, BSEs and functions which may be added to an STN to improve its quality or utility to meet specific communications requirements:

(a) Central Office Multiplexing BSE

The Multiplexing rate category provides for an arrangement that converts a standard DTL (44.736 Mbps) at an Access CO node into 28 (1.544 Mbps) channels using digital time division multiplexing.

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.1 Rate Categories (Cont'd)

(B) STN Rate Categories (Cont'd)

(2) Optional Features, BSEs and Functions (Cont'd)

(b) SecureNet Interconnection of High Capacity DS1 Service

The SecureNet rate category provides for interconnection with High Capacity DS1 Service equipped with the SecureNet Hub Redundancy feature as set forth in 7.3.10(E)(6)(a) (Hub Redundancy) preceding.

(c) STN Interconnection with SecureNet Equipped MegaLink Custom Service

This rate category provides for interconnection of an STN with MegaLink Custom Service equipped with the SecureNet Serving Wire Center and Facility Redundancy feature as set forth in 20.2.2(B) (Serving Wire Center and Facility Redundancy) following.

(d) C-Bit Parity Framing Format Option

C-Bit Parity Framing Format Option (C-Bit) allows customers to specify the C-Bit format rather than using the standard M13 multiplex format interface. C-Bit allows DS3 framing bits to be rearranged for additional performance monitoring capabilities by the customer. The performance monitoring capability is inherent to the customer's CPE. The Telephone Company does not monitor the C-Bits for performance or any other purpose.

When C-Bit is ordered with new STN service, the C-Bit nonrecurring charge does not apply. When C-Bit option is requested for existing STN service, a nonrecurring charge will apply as set forth in Section 19.4 following.

C-Bit Parity Framing Format is not available when multiplexing is utilized on the DTL as described in Section 19.1.

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.1 Rate Categories (Cont'd)

(B) STN Rate Categories (Cont'd)

(2) Optional Features, BSEs and Functions (Cont'd)

(e) SONET-based Interface Options

The SONET-based Interface Option provides the circuit or channel card plug-in units and fiber-optic terminal multiplexing equipment (if required) to convert the optical carrier signal to the bandwidth that corresponds with the interface as specified in Section 19.1.

STN Volume Option	-----Interface (Port)-----					
	DS1	EC-1	OC3	OC3c	OC12	OC12c
3	X	X				
6	X	X	X	X		
12	X	X	X	X	X	X
24	X	X	X	X	X	X
36	X	X	X	X	X	X
48	X	X	X	X	X	X

If the customer elects a DS1 interface at any STN node, the first DS1 interface ordered will dedicate an entire DTL. This DTL will then accommodate up to 27 additional DS1 interfaces (total of 28 DS1s per DTL).

If the customer elects an EC-1 interface, this interface is the sole interface of that particular DTL.

If the customer elects an OC3 interface, this interface utilizes (3) three DTLs of bandwidth capacity.

If the customer elects an OC3c interface, this is a concatenated signal which cannot be demultiplexed into a lower capacity. The OC3c interface utilizes (3) three DTLs of bandwidth capacity.

If the customer elects an OC12 interface, this interface utilizes (12) twelve DTLs of bandwidth capacity.

If the customer elects an OC12c interface, this is a concatenated signal which cannot be demultiplexed into a lower capacity. The OC12c interface utilizes (12) twelve DTLs of bandwidth capacity.

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.1 Rate Categories (Cont'd)

(B) STN Rate Categories (Cont'd)

(2) Optional Features, BSEs and Functions (Cont'd)

(e) SONET-based Interface Options (Cont'd)

Rates and charges for SONET-based Interface Options, as shown following in Section 19.4, are applied in addition to any other applicable STN rate element rates and charges such as for Basic Configuration, Additional Access Nodes, Additional DTLs, etc.

Table A, following, represents the possible point-to-point interface combinations available for STN SONET-based Interface Options.

TABLE A

Network Access Point (NAP) SONET Based Interface Combinations

	NAP B							
		DS1 <sup>(2)</sup>	DS3	EC-1	OC3	OC3C	OC12	OC12c
NAP A	DS1 <sup>(2)</sup>	X	X <sup>(1)</sup>	X <sup>(3)</sup>	X		X	
	DS3	X <sup>(1)</sup>	X	X	X		X	
	EC-1	X <sup>(3)</sup>	X	X	X		X	
	OC3	X	X	X	X		X	
	OC3C					X	X	
	OC12	X	X	X	X	X	X	
	OC12c							X

- <sup>1</sup> This option is via the conventional Central Office Hub multiplexing and standard DTL. DS1 interfaces do not apply.
- <sup>2</sup> If the DS1 interface on one NAP is derived from SONET technology, the interface on the opposite NAP, if not a DS1 interface, must be a SONET signal (OC3, OC12).
- <sup>3</sup> As of December 29, 2009, this option is no longer available.

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.2 Nonrecurring Charges\*

Nonrecurring charges are one-time charges that apply for a specific work activity (e.g., installation or change to an existing service). Nonrecurring charges are applicable for initial and subsequent installation of service, service rearrangements and NAP Rearrangement.

(A) Nonrecurring Charges for Installation of Service

There are two types of nonrecurring charges for Installation of Service: Initial and Subsequent. These nonrecurring charges apply to STN components and apply to selected STN rate elements on a first and additional basis.

(1) Initial

Initial nonrecurring charges apply for the installation of the Basic Configuration, and any Additional Access Nodes and Additional DTLs when STN service is first established.

(2) Subsequent

Subsequent nonrecurring charges apply when the customer requests to modify an existing STN service by adding Access Nodes or additional DTLs after the initial Service Order.

(B) Nonrecurring Charges for Service Rearrangements

Nonrecurring charges apply for Service Rearrangements or changes. Service Rearrangements are changes to existing services which do not result in either a change in the Minimum Period requirements as set forth in 19.3.5 following or a change in the physical location of the point of termination at the customer's premises or the customer's end user's premises. A change in service arrangement is a change in the physical location of the Point of Termination at the customer designated premises as set forth in 19.3.7 following.

\* For Services ordered under MVP, refer to Section 38.3(E) (5).

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.2 Nonrecurring Charges (Cont'd)

(B) Nonrecurring Charges for Service Arrangements (Cont'd)

Changes which result in the establishment of a new minimum period are treated, with the exception of Minimum Period Upgrades (19.3.10), as a discontinuance of the existing service and an installation of a new service and all applicable nonrecurring charges will apply. Changes in the physical location of the point of termination are treated as moves and are described and charged for as specified in 19.3.7 (Moves).

A nonrecurring charge will apply per DTL on a first and additional basis for the following change or combination of changes requested by the customer on the same Access Order and will be charged as set forth in 19.4(C) (2).

- Change of Access Carrier Name Abbreviation (ACNA)
- Change of Billing Account Number (BAN)
- Change of customer Circuit Identification (CKR)

The customer requesting administrative service rearrangements will be responsible for all billing associated with the changes requested.

When a change of customer name and change in billing data (name, address, contact name, or telephone number) are requested in association with a change in the customer of record, the Access Order Charge will apply as set forth in Section 5.4(A) (Access Order Charge) preceding.

(C) Nonrecurring Charge for NAP Rearrangement

A nonrecurring charge will apply for customer requested rearrangements of a NAP to another STN Access Node on the same STN Volume Option as set forth in 19.4 following.

(D) Nonrecurring Charge for Basic Configuration

A nonrecurring charge as set forth in 19.4 following also applies.

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.2 Nonrecurring Charges (Cont'd)

(E) Nonrecurring Charge for Additional Access Node

A nonrecurring charge applies on a per node basis as set forth in 19.4 following. The nonrecurring charge will be applied depending on whether the Access Node is a central office or a customer premises.

(F) Nonrecurring Charge for Additional DTL

A nonrecurring charge is applied for the first DTL on the initial service order and for each additional DTL placed on the same order.

A nonrecurring charge is also applicable for a subsequent DTL placed on an order following the initial Service Order. A different nonrecurring charge is applicable for each subsequent additional DTL placed on the same order.

(G) Nonrecurring Charge for Optional Features and Functions

(1) Multiplexer

A nonrecurring charge will be applied for the installation of each Multiplexer; additionally, a nonrecurring charge will apply for each multiplexer relocation required by the customer during the Minimum or Optional Renewal Period.

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.2 Nonrecurring Charges (Cont'd)

(G) Nonrecurring Charge for Optional Features and Functions (Cont'd)

(2) SecureNet Interconnection of High Capacity DS1 Service

A nonrecurring charge is applicable for the interconnection of each DTL in a given STN arrangement with High Capacity DS1 Service equipped with the SecureNet Hub Redundancy feature as set forth in 7.3.10(E)(6)(a) (Hub Redundancy) preceding.

(3) STN Interconnection with SecureNet Equipped MegaLink Custom Service

A nonrecurring charge is applicable for the interconnection of each DTL in a given STN arrangement with a MegaLink Custom Service equipped with the SecureNet Serving Wire Center and Facility Redundancy feature as set forth in 20.5.3(D) (STN Interconnection with SecureNet Equipped MegaLink Custom Service) following.

(4) SONET-based Interface Options

A nonrecurring charge is applicable on a per node, first and additional basis for each SONET-based Interface Option. If multiples of the same type Interface option are ordered on the same access order, the first Interface option is assessed the "first" nonrecurring charge and each additional is assessed the "additional" installation charge. These nonrecurring charges are applicable in addition to all other STN nonrecurring charges (e.g. Basic Configuration, Additional Access Nodes, Additional DTLs, etc).

(5) C-Bit Parity Framing Format Option

A nonrecurring charge is applied on a per DTL first and additional basis when the option is added to an existing STN.



19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.3 Monthly Recurring Rates

Monthly rates are recurring charges that apply each month that the service is provided and are specific to the Minimum Period selected by the customer.

Except for the Transport rate element and any STN Optional Features and Functions selected, the DTL Volume Option selected by the customer will dictate the basic rates that will apply throughout the selected Minimum Period and any Optional Renewal Periods.

- (A) Monthly Recurring Rate for Basic Configuration  
One Basic Configuration monthly recurring rate will apply for each STN arrangement, specific to the DTL Volume Option selected by the customer.
- (B) Monthly Recurring Rate for Additional Access Node  
A monthly recurring rate specific to the DTL Volume Option selected by the customer is applied on a per node basis to add Access Nodes to the Basic Configuration.
- (C) Monthly Recurring Rate for Additional DTL  
A monthly recurring rate specific to the DTL Volume Option selected by the customer is applied to add DTLs to the selected DTL Volume Option. The rate is applied when an Additional DTL is added to the Basic Configuration. A different monthly recurring rate is applied if an Additional DTL is added to an Additional Access Node. Example below illustrates a typical application of the Additional DTL rate element.

Example:

Customer has existing a V.O. 3 DTL STN under a 60 Month Minimum Period. The STN has 5 Access Nodes (3 with the Basic Configuration and 2 Additional Access Nodes). Customer desires to add 3 Additional DTLs to this arrangement.

<u>Existing Arrangement</u>	<u>Monthly Rate</u>
Basic Config (1)	= \$ 4,484.00
Addtl Access Node (2)	= <u>4,354.00</u>
Total	= \$ 8,838.00

New Arrangement (w/Addtl DTLs)

Basic Config	= \$ 4,484.00
Addtl Access Node (2)	= 4,354.00
Addtl DTL to Basic Config (3)	= 3,300.00
Addtl DTL to A.A. Nodes (3) x (2)	= <u>1,110.00</u>
Total	= \$13,248.00

- (D) Monthly Recurring Rate for Transport

The monthly recurring Transport rate applies on a per mile basis to each STN arrangement. This charge is applied to the airline mileage measured between Access Nodes as set forth under regulations for Determining Transport Mileage, 19.3.4 following.

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.3 Monthly Recurring Rates (Cont'd)

(E) Monthly Recurring Rates for Optional Features, BSEs and Functions

(1) Central Office Multiplexing BSE

A monthly recurring rate is applicable on a per multiplexer basis. Multiplexer additions are permitted anytime throughout the Minimum or Optional Renewal Period, subject to the regulations set forth in 19.3.9 following. The monthly recurring rate for a multiplexer is set forth in Section 19.4 following.

(2) SecureNet Interconnection of High Capacity DS1 Service

A monthly recurring rate is applicable for the interconnection of each DTL in a given STN arrangement with High Capacity Service equipped with the SecureNet Hub Redundancy feature as set forth in 7.3.10(E)(6)(a) (Hub Redundancy) preceding. The monthly recurring rate is set forth in Section 19.4 following.

(3) STN Interconnection with SecureNet Equipped MegaLink Custom Service

A monthly recurring rate is applicable for the interconnection of each DTL in a given STN arrangement with MegaLink Custom Service equipped with the SecureNet Serving Wire Center and Facility Redundancy feature as set forth in 20.2.2(B) (Serving Wire Center and Facility Redundancy) following. The monthly recurring rate is set forth in Section 20.5.3(D) following.

(4) SONET-based Interface Options

A monthly recurring rate is applicable for Interface Options, bandwidths other than 44.736 Mbps which is standard for STN service. SONET-based Interface Options are available in DS-1, EC-1, OC3, OC3c, OC12, and OC12c bandwidths. The recurring rate is applicable on a per access node, per interface basis and are set forth in Section 19.4 following and is applicable in addition to all other STN recurring rates (e.g. Basic Configuration, Additional Access Nodes, Additional DTLs, etc.)

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.4 Determining Transport Mileage

The mileage to be used to determine the monthly rate for Transport is calculated based on the sum of the airline distance between customer designated Access nodes in a given STN service arrangement and rounded to the next higher mile. The Telephone Company will provide the customer with the ring topology and airline distances between the Access Nodes associated with the requested STN service arrangement. The Telephone Company will utilize the V&H coordinates method, as set forth in the National Exchange Carrier Association, Inc. Tariff F.C.C. No. 4.

19.3.5 STN Minimum Period

STN is provided for a Minimum Period of 36 or 60 months, at the customer's option. Minimum period regulations are contained in Section 2.5.4 (Minimum Periods).

19.3.6 Recast of Minimum Period

When a customer elects to recast (i.e., change) an STN Minimum period and no physical work is required, the nonrecurring charges as set forth in 19.3.2 preceding will not apply.

When a customer elects to recast an STN Minimum Period and physical work is required, only the applicable nonrecurring charges for the work being done will apply.

Nonrecurring charges as set forth in Section 5 (Ordering for Access Service) preceding which may be associated with ordering STN will apply.

19.3.7 Moves

(A) Moves within a Customer's Premises

A move involves a change in the physical location of the Point of Termination on the customer's premises.

Such moves will be treated as an extension of STN facilities. Extension of STN facilities will be provided, at the customer's request, on a time-sensitive charge basis. The labor rates which apply are as set forth in Section 13.4 (Rates and Charges) preceding. There will be no change in Minimum Period requirements.

(B) Moves of STN Access Nodes

Moves of STN Access Nodes will be provided, at the customer's request, on a time-sensitive charge basis. The charge will not exceed the subsequent nonrecurring charge for an Additional Access Node, as specified in Section 19.4, for the specific STN Volume Option being modified. The labor rates which apply are as set forth in Section 13.4, (Rates and Charges) preceding. No change in billing period is required.

Termination charges will not apply to moves of STN Access Nodes.

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.8 Additions of Service

(a) Service Established After August 29, 1993

The customer may elect to add service at any time subsequent to the initial installation of STN. All appropriate rate elements apply.

Subsequent service additions are for a given STN arrangement and are coterminous with the Minimum Period and are subject to all applicable STN terms and conditions.

(b) Service Established Prior to and including August 29, 1993

The customer may elect to add DTLs, Access Nodes and Multiplexers at any time subsequent to the initial installation of STN. The monthly recurring rate for each such subsequent addition is determined by the application of the appropriate annual multiplier set forth in Table A, following, to the rate in effect at the time the service is initially established.

TABLE A

<u>Minimum or Optional Renewal Period Months</u>	<u>36 Month Multiplier</u>	<u>60 Month Multiplier</u>
0	1.00	1.00
1 - 12	1.10	1.03
13 - 24	1.15	1.06
25 - 36	1.20	1.10
37 - 48	1.25	1.15
49 - 60	1.25	1.20
61 - Above	1.25	1.25

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.8 Additions of Service (Cont'd)

(b) Service Established Prior to and including August 29, 1993 (Cont'd)

EXAMPLE:

The customer elects to add one Additional DTL, one Additional Access Node and one Multiplexer in the 37th month of a 60 month Minimum Period. The monthly billing in effect for the initial establishment of the STN is \$11,896.

To determine the monthly rate for the subsequent addition of the DTLs, Access Node and multiplexers

		<u>Multiplier</u>	
1 Additional DTL (Basic Configuration)	\$3,965.00	x 1.15	= \$ 4,559.75
1 Additional DTL (Additional Access Node)	1,243.00	x 1.15	=
1,429.45			
1 Additional Access Node	3,730.00	x 1.15	=
4,289.50			
1 Multiplexer	887.50	x 1.15	=
	<u>1,020.62</u>		
		TOTAL	
	\$11,299.32		

Total billing for the STN arrangement in this example would be calculated as follows:

$$\$11,896.00 + \$11,299.32 = \$23,195.32$$

Subsequent service additions are for a given STN arrangement and are coterminous with the Minimum Period and are subject to all applicable STN terms and conditions.

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.9 Optional Renewal Periods

Upon completion of a 36 or 60 month term, Minimum Period the customer may elect to:

1. Sign a new 36 or 60 month STN agreement; or
2. Annually renew the STN for up to five (5) one-year periods; or
3. Terminate STN under provisions in Section 19.3.15 following; or
4. Continue on a month-to-month arrangement at the last month's charges as set forth in 19.4 following.

If the customer elects to annually renew, the monthly recurring charges for each of the Optional Renewal Periods will be the customer's monthly recurring charges at the conclusion of the immediately preceding Minimum Period or Optional Renewal Period and modified by the following table:

Optional Renewal Year	Multiplier
1	.90
2	.95
3	.95
4	.95
5	.95

*EXAMPLE*

Assume the customer has a monthly recurring charge of \$42,670.50 and elects to renew for a one-year period for each of the next two consecutive years. The monthly recurring charge in this example would be calculated as follows:

Year

1	$\$42,670.50 \times .90 = \$38,403.45$
2	$\$38,403.45 \times .95 = \$36,483.27$
3	$36,483.27 \times .95 = \$34,659.11$
4	$\$34,659.11 \times .95 = \$32,926.15$
5	$\$32,926.15 \times .95 = \$32,279.84$

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.10 Upgrades

There are two types of Upgrades available for STN customers. Volume Option Upgrades and Minimum Period Upgrades as follows:

(A) Volume Option Upgrades

The STN customer may choose to upgrade a particular STN by increasing to a higher Volume Option configuration (e.g., from V.O. 6 to V.O. 12 or V.O. 12 to V.O. 24, etc.). Charges for this type of upgrade will be dependent on whether the customer, for a particular STN to be upgraded, has added sufficient Additional DTLs to reach the upgrade crossover as defined in the following table.

TABLE C

Exiting STN Volume Option	---Upgrade Crossover (Total DTLs)----					
	VO3	VO6	VO12	VO24	VO36	VO48
3	-	5	9	20	24	30
6	-	-	9	20	24	30
12	-	-	-	20	24	30
24	-	-	-	-	30	30
36	-	-	-	-	-	42
48	-	-	-	-	-	-

If the STN customer has reached the Upgrade Crossover, (as specified on Table C), the upgrade may be done without termination liability or nonrecurring charges, except for the Access Order Charge as set forth in Section 5.4. If the STN customer has not reached the Upgrade Crossover, the upgrade may still be ordered; however, the customer will be subject to nonrecurring charges, in addition to the Access Order Charge, on a time-sensitive basis with no termination charges provided conditions are met as set forth in 19.3.15(A) (1) (e). The charges for this upgrade will not exceed the nonrecurring charge applicable to the target Volume Option Basic Configuration (the higher Volume Option which is being upgraded to). Labor rates for the time-sensitive charges are set forth in Section 13.4 (Rates and Charges) preceding.

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.10 Upgrades (Cont'd)

(B) Minimum Period Upgrades

The STN customer may choose to upgrade a particular STN 36 Month Minimum Period to a 60 Month Minimum Period.

The only charge for the upgrade will be the normal Access Order charge as specified in Section 5.4. No termination liability will be applied to this upgrade provided conditions are met as set forth in Section 19.3.15(A) (1) (e).

19.3.11 Shared Use

Shared Use is the provision of Switched Access over STN. The service will be ordered, provided and rated as STN; the nonrecurring charge(s) for STN will apply at the time of installation. Rating as STN will continue until such time as, at the election of the STN customer, a portion of the available STN capacity is used to provide Switched Access Service. In these cases the STN customer and the Switched Access Service customer may be different. When the STN customer is not the same as the Switched Access customer, all STN charges and Switched Transport charges (including Switched Transport features charges) will be billed to the customer who initially ordered the STN service. All other Switched Access charges will be separately billed to the customer who initially ordered the Switched Access service.

As each individual voice grade equivalent channel is activated for Switched Access, STN monthly charges for Basic Configuration, Additional Access Nodes, Additional DTLs, Transport, Multiplexers and Sonet-based Interface Options will be reduced as described below. The customer must place an order for each individual Switched Access Service utilizing the Shared Use facilities and specify the appropriate channel assignment. While the customer may designate any percentage of STN for Shared Use, credit will only be applied up to 50% of the voice grade equivalent capacity provided in conjunction with the STN.

Following are two examples of how Shared Use will apply to STN. Both examples assume the same basic network and associated charges:

1 Basic Configuration (DTL Volume Option 3)	\$12,745.00
2 Additional Access Nodes	\$7,994.00
2 Additional DTLs (Basic Configuration)	\$8,496.00
2 Additional DTLs (Additional Access Nodes)	\$5,328.00
5 Multiplexers	\$4,687.50
Transport (20 Miles)	\$3,420.00

TOTAL \$42,670.50



19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.11 Shared Use (Cont'd)

EXAMPLE 1:

The customer designates 150 STN voice grade equivalent channels for use as Switched Access transport. Since the number of Switched Access channels is less than 50% of the total voice grade equivalent capacity for STN, full Shared Use credit will apply and is calculated via the following formula:

$$\frac{150}{3,360} \times \$42,670.50 = \$1,904.93$$

Total monthly billing for STN in this example would be calculated as follows:

$$\$42,670.50 - \$1,904.93 = \$40,765.57$$

EXAMPLE 2:

The customer designates 1,700 STN voice grade equivalent channels for use with Switched Access. Because the number of requested channels in this case exceeds 50% of the total voice grade equivalent capacity for this example, the applicable credit is calculated as follows:

$$\frac{1,680}{3,360} \times \$42,670.50 = \$21,335.25$$

Total billing for STN in this example would be calculated as follows:

$$\$42,670.50 - \$21,335.25 = \$21,335.25$$

Switched Access Service rates and charges as set forth in Section 6.9 (Rates and Charges) preceding will apply for each channel of the Shared Use facility that is used to provide Switched Access Service.

19.3.12 Assignment Control

Assignment control of STN Multiplexing arrangements will be maintained by the customer.

19.3.13 Special Access Surcharge

Regulations for the Special Access Surcharge apply for all jurisdictionally interstate special access facilities as set forth in Section 7.2.5 (Surcharge for Special Access Service) preceding.

19.3.14 Message Station Equipment Recovery Charge

Regulations for the Message Station Equipment Recovery Charge apply as set forth in Section 7.2.17 (Message Station Equipment Recovery Charge) preceding.

19.3.15 Termination Options

(A) Complete Termination

No termination liability charge applies for complete termination.

(B) Partial Termination

No termination liability charge applies for partial termination.

19. Self-healing Transport Network (Cont'd)

19.3 Rate Regulations (Cont'd)

19.3.16 Transitioning from Other Access Services to STN

The customer may, at any time, move other Telephone Company Access Services to an STN service. Charges for the transition will be the nonrecurring charges for the installation of the new STN rate elements as listed in Section 19.4 (Rates and Charges) following, created by the transition. No other charges, such as SFMs (previously known as Rollovers), will be applicable to such transitions. Termination charges, if applicable for the Access Services being transitioned from, will be governed by the relevant Telephone Company tariff sections for the services in questions.

19.3.17 DTL Portability

STN customers have the ability to move (portability) certain DTLs, as specified following, to any other STN within the Telephone Company jurisdictional area without incurring termination liabilities, provided certain conditions are met:

- (1) This portability applies only to STNs of Volume Options 12 and above. This Volume Option limitation applies to both the source STN - STN from which the DTL will be moved, to the target STN - the STN to which the DTL will be moved (e.g., a DTL from a Volume Option 12 STN may not be moved to a Volume Option 6 STN).
- (2) Portability applies only to those DTLs purchased above and beyond the Basic Configuration, i.e., Additional DTLs.
- (3) Portability applies only if the number of months remaining in the target STN's Minimum Period are equal to or greater than the months remaining in the source STN's Minimum Period (e.g., a DTL from an STN with 24 months remaining in the Minimum Period may not be moved to an STN with only 10 months remaining in the Minimum Period).

Under STN Portability the customer's total monthly charges associated with each STN involved in the move (source STN and target STN) will be modified to reflect the higher or lower quantity of DTL's resulting after the move. Due to the restrictions as noted above, no STN total monthly charge will be reduced below that of the Basic Configuration for that particular STN Volume Option.

Charges for the DTL Portability will be the same as the existing NAP Rearrangement charge as listed in Section 19.4 (Rates and Charges) following.