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November 14, 2006

Ms. Beth W. Salak, Director  
Division of Competitive Markets and Enforcement  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Dear Ms. Salak:

Attached are new tariff pages filed to become part of the Verizon Florida Inc. General Services Tariff.

See attachment A for impacted tariff pages.

The purpose of this filing is to add Service Level Agreements to the Transparent LAN Service section and to make some administrative changes to the Subject Index.

If you require additional information, please call Carlton Ball at (813) 483-2529.

Sincerely,  
David M. Christian  
Vice President  
Regulatory Affairs Florida

DMC:sv  
Attachments

Attachment A

**Verizon Florida Inc.  
Facilities for Intrastate Access**

Section 1

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Section 16 Advanced Communications Networks

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## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS)

(M) (T)

(A) Definitions

In addition to the Definitions set forth in General Regulations, Section 2.6, the following definitions apply:

Domain: A Virtual Local Area Network (VLAN) or a collection of circuits that belong to one closed user group.

Megabit Per Second (Mbps): The speed where data is being transferred in the network, where one Megabit Per Second equals to the transfer rate of 1 million bits of data in 1 second.

Nanometers (nm): Wavelength frequency equivalent to 1 billionth of a meter.

(B) Service Description

Transparent LAN Service (TLS) is a high speed data service which uses a shared fiber network to allow for the interconnection of Local Area Networks (LANs) across selected metropolitan areas. TLS delivers an interface of 10 Mbps, 100 Mbps and 1000 Mbps from the Customer's LANs to the shared network.

TLS creates a network with the ability to function as a shared public network. TLS protects data privacy by using specialized screening software that permits subscribers to access only their data.

TLS is available in two service types: Ethernet Multipoint Service (EMS) or Ethernet Relay Service (ERS). The customer must select either (EMS) or (ERS) as the service type for each domain.

## (1) Ethernet Multipoint Service

Ethernet Multipoint Service (EMS) is a connection-less Ethernet TLS service that allows connectivity among multiple customer designated locations within a LATA.

With the EMS service type, Ethernet TLS protects data privacy by using closed user groups (CUGs), also known as virtual LANs. CUGs or virtual LANs are used to provide traffic separation, privacy and security between customers on the shared switch and backbone. An EMS domain is comprised of any number of access lines designated by the customer to be included in a closed user group (CUG) or virtual LAN. EMS provides multipoint-to-multipoint connectivity among all of the customer's access lines within a given domain. TLS may be used to access shared networks. In such cases, subscribers in a CUG can only access their own data.

## (2) Ethernet Relay Service

Ethernet Relay Service (ERS) is a connection-oriented Ethernet TLS service that allows for point-to-point connectivity between customer designated locations within a LATA.

With the ERS TLS service type, each Ethernet Virtual Circuit (EVC) establishes a virtual LAN or CUG. An ERS domain is comprised of any number of virtual LANs designated by the customer to be included in the ERS Standard domain. ERS provides point-to-point connectivity between pairs of customer's access lines, Internet virtual circuits and shared network virtual circuits within a given domain.

A customer may have more than one domain within a LATA, but connections between domains are not permitted. TLS may be used to access shared networks. In such cases, subscribers in a CUG can only access their own data.

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16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS)

(B) Service Description (Continued)

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(2) Ethernet Relay Service (Continued)

Four EVC service classes are available for use with ERS service type:

- (a) ERS Standard (ERS-Std) and ERS Basic(ERS-B): designed for customer applications that do not require a Committed Information Rate (CIR) or low delay, where CIR = 0 and Excess Information Rate (EIR) = # of Mbps of the selected ERS-Std/ERS-B EVC service class.
- (b) ERS-Priority Data (ERS-PD): designed for customer applications which do not require low delay, but require a CIR, where CIR = # of Mbps of the selected ERS-PD EVC service class and EIR = # of Mbps of the selected ERS-PD EVC service class.
- (c) ERS Real Time (ERS-RT): designed for customer applications which require a CIR and low delay for some portion of their traffic, where CIR = # of Mbps of the selected ERS-RT EVC service class and EIR = 0.
- (d) An ERS EVC can include up to three service classes (ERS-B, ERS-PD and ERS-RT) as described above within each EVC. The customer will be required to identify the Basic, PD and RT Class of Service Ethernet frames by one of the following choices: setting the VLAN Class of Service (CoS) ID (for 802.1q tagged Ethernet Frames), or setting the DiffServ Code Point (DSCP) (for tagged or untagged Ethernet frames) or setting the VLAN ID (for tagged or untagged Ethernet frames), appropriately.

(C) Conditions

- (1) A TLS network will be limited to central offices in a specific geographic location. Customers gain access to the shared TLS network via a switch, node or other Telephone Company equipment delivering service through a shared fiber path or network infra-structure and deployed in the Customer's serving central office (TLS equipped central office) or deployed in leased space near the Customer's location. At subscription, the Customer has an option of selecting standard access lines at speeds of 10 Mbps, 100 Mbps or 1000 Mbps.
- (2) TLS is available to Customers whose serving central office is a TLS equipped central office and is located within the maximum allowable range of the serving central office. The maximum allowable range is determined by the dB loss rate where the actual distance between the TLS equipped serving wire center and the Customer's location will vary based on the specifics of the facility used in each serving arrangement.
- (3) If the Customer's serving central office is not a TLS equipped central office, the Customer may obtain service by paying the Interoffice Mileage charge (from the customer's serving central office and the nearest TLS equipped central office) in addition to TLS access charges. The dB loss cannot exceed the maximum allowable range, as specified in regulation above.

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16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS)

(C) Conditions (Continued)

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(4) Provision of Service

The TLS service will consist of:

- a. Network Interface Device (NID) at the Customer's premises to terminate the fiber pair or other optical transport.
- b. Optical Transport from the Customer's premises to the serving central office.
- c. Network Management including fault monitoring and diagnostics, performance and network configuration applications and manual monitoring when necessary.
- d. User Network Interface (UNI) Port with Access Line Connection

UNI Port with Access Line Connections, which are available at 10 Mbps, 100 Mbps and 1000 Mbps, provide connectivity between the customer premises and the serving wire center. UNI Port with Access Line connections are available as either EMS or ERS. Connectivity can be established only between or among UNI Port with Access Line Connections of the same service type.

- e. Ethernet TLS Ethernet Virtual Circuit (EVC), where applicable.

An Ethernet TLS EVC provides point-to-point Ethernet connectivity between two UNIs, between a UNI and a shared network EVC or between a UNI and an Internet VC. Ethernet TLS EVCs are only available with ERS. The ERS Standard Ethernet TLS EVCs are designed for customer applications that do not require bandwidth or delay guarantees. ERS Standard provides no performance guarantees.

- f. Interoffice Mileage, where applicable.
- g. Optional Features

Customer Service Management (CSM)

(5) Availability of Service

TLS will be provided seven days a week, 24 hours a day, from central offices equipped to provide this service.

ERS service, including Premier Access Lines and ERS-Std, ERS-B, ERS-PD, ERS-RT EVCs, as defined in section (B)(2), will only be available from Central Offices equipped to support ERS service.

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16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLC) Continued

(C) Conditions (Continued)

(6) Connections

The network interface is the LAN interface on the TLS equipment at the Customer's premises. The Customer is responsible for any inside wire required in connecting the LAN to the TLS equipment.

The Customer is also responsible for installation, operation and maintenance of any Customer-provided equipment.

The Company has the service responsibility up to and including the network interface.

(7) Limitations

The Customer's location must be within the maximum allowable range of the TLS equipped central office, as defined in (C)(2).

(8) Maintenance Window

To meet the Customers' requirements, occasional network upgrades must be performed. These network upgrades are needed to provide improved performance and new features. Generally these upgrades will be performed between the hours of 11 PM and 6 AM. Network upgrades are planned to provide Customers reasonable and timely notification in order to minimize any impact on the Customers' service.

(9) Technical Specifications

The technical specifications for TLS are delineated in IEEE802.3-2000.

(10) Transmission Mode

The transmission mode supported is dependent on the access rate. The supported transmission mode for 10 Mbps access is half-duplex and full duplex. Full duplex 10 Mbps access is available only where conditions and facilities permit. The supported transmission mode for 100 Mbps and 1000 Mbps access is full duplex.

(11) TLS is available where facilities and conditions permit. Special construction charges may apply.

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16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLC) Continued

(D) Service Level Agreements (SLA)

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Service Level Agreements (SLA) provide TLS Customers with Service Response Credits (SRC) applied to their Verizon Florida telephone bill if the Company fails to meet certain operational and network thresholds. SLAs are available at no additional charge or fee to the Customer.

A Customer is eligible for the SLA SRC given the Customer adheres to the conditions stated within this section. The SLA specifies performance criteria against which actual performance for TLS will be compared on a monthly basis.

The TLS SLA includes the following measurements:

Operational SLAs

- Mean Time to Repair (MTTR)
- Network Availability

Network Performance SLAs

- Ethernet Virtual Circuit (EVC) Class of Service (CoS) Performance
  - Data Delivery Ratio (DDR)
  - Round Trip Delay (RTD)
  - Jitter

The SLA SRC will apply to the following TLS elements:

- UNI Port with Access Line Connection
- Ethernet Virtual Circuit (EVC) Bandwidth

To receive SRCs on eligible rate elements, the Customer must have the eligible rate elements listed in its initial subscription based on the established customer of record, or have ordered the eligible rate elements subsequent to its initial subscription. The Company reserves the right to change, alter or discontinue the optional SRC plan at its discretion.

All service performance and provisioning measurements are conducted using the Company monitoring systems and procedures. The Company may change these systems and procedures at its sole discretion. In performing measurements of overall Mean Time To Repair (MTTR) and Network Availability, the Company shall include data measured throughout the territories covered by this tariff.

To receive credit, the Company must receive from the Customer a written request for credit within thirty (30) calendar days of the end of the monitoring period that the SRC is referencing. The Customer's request for credit must be submitted to the appropriate Company entity (office or interface) in a manner prescribed by Company. The request must include a list of all impacted circuit/connection identification numbers and the type of SRC requested for each circuit/connection. The SRC monitoring period is based on a calendar month.

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## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLC) Continued(D) Service Level Agreements (SLA) (Cont'd)(1) Operational Service Level Agreements (SLAs)(a) Mean Time to Repair (MTTR)

MTTR is the average mean time for the Company to repair Customer reported interruptions for service that is within the Company's network. A TLS service is interrupted when it becomes unusable to the Customer because of a failure of a facility component within the Company's network that is used to furnish service under this tariff.

MTTR Measurement

Under the MTTR SLA, the Company will measure the average Time to Repair (TTR) for Customer-reported interruptions in the services with respect to TLS Access Lines. To be measured under this SLA, the Customer must report any interruption to a Company-designated entity for the opening of a trouble ticket. The TTR is measured from the date and time a trouble ticket is opened by the Company and the date and time when such ticket is closed by the Company. In measuring the TTR, any stop clock time or adjusted duration time associated with the trouble shall be subtracted from such measurement. For purposes of this measurement, stop clock time refers to

1. periods when the Customer testing is occurring;
2. periods when the Company is awaiting the Customers authorization to commence work on a TLS Access Line;
3. periods when the Company is denied access to the Customers premises or facilities as necessary to diagnose, repair or test
4. periods following a repair of a TLS Access line when the ticket is held open by the Customer to ensure the trouble is resolved and
5. any time period during which any of the listed occurrences existed, as set forth in Section (D)(4) SLA Exclusions following.

The SLA shall not apply to cases of trouble where no trouble was found or repeated cases of trouble for the same interruption. The MTTR SLA shall be measured on a calendar month basis and shall be calculated by adding the TTR for all interruptions and dividing that sum by the total number of trouble tickets opened for interruptions for the Customer during that month.

MTTR SRCs

If the MTTR is greater than four (4) hours over the calendar month, then 50% of the one month TLS Access Line monthly charge shall be given as a MTTR SRC for those Access Lines which have been out of service for longer than four (4) hours and have been reported by the Customer via a trouble ticket to the Company. The MTTR SRC credit excludes and is not applicable to scheduled maintenance, scheduled downtimes or delays resulting from an event of force majeure.

## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLC) Continued(D) Service Level Agreements (SLA) (Cont'd)(1) Operational Service Level Agreements (SLAs) (Cont'd)(b) Network Availability

Network Availability refers to the percentage of time during a calendar month that the TLS is available for use by the Customer.

Network Availability Measurement

The Company threshold for Network Availability is 99.90%. Network Availability is calculated on a per TLS Port Connection basis as follows:

$$\frac{(24 \times \text{Number of Days in Month} \times \text{Number of TLS Port Connections}) - (\text{Number of Hours Out of Service during Month})}{(24 \times \text{Number of Days in Month} \times \text{Number of TLS Port Connections})}$$

The Company will not round up the calculation to reach the 99.90% threshold. This SLA is only available for outages reported by the Customer via a trouble ticket to the Company.

Network Availability SRCs

If the overall Network Availability measurement is less than the threshold of 99.90% for a calendar month, the Company will provide a credit equal to ten percent (10%) of the associated monthly charge for an individual TLS port connection that did not meet such threshold during such a calendar month.

(2) Network Performance SLAs

Network Performance SLA applies to all Customers subscribing to an EVC Class of Service (CoS) within a local network consisting of the following types:

- Real Time EVC bandwidth CoS, and
- Priority Data EVC bandwidth CoS.

The performance SLA is hierarchical in nature and statistically-based, conformance is determined on a Met or Missed basis, first on a per-hour basis and then on a per-month conformance basis.

Per-Hour Conformance - For each hour in the month, a determination is made as to whether the performance objectives are 'Met' for the CoS attributes related to the CoS instance on a given EVC. For a given Hour (e.g., H1), the overall performance objective is 'Met' if the performance objectives for each of the Data Delivery Ratio (DDR), Round Trip Delay (RTD), and Jitter, attributes are 'Met'. If any of the attribute objectives are 'Missed', then the overall performance objective for Hour (H1) is determined to be 'Missed'.

Per-Month Conformance - For the month, a determination is made as to the percentage of hours that the overall performance objective is 'Met'. So, for a given Month (e.g., M1), the monthly performance guarantee is 'Met' if the % of hours 'Met' for the month meet or exceed the monthly objective.

## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLC) Continued(D) Service Level Agreements (SLA) (Cont'd)(2) Network Performance SLAs (Cont'd)

EVC Class of Service Network Performance SLA shall be based on the following Ethernet frame traffic criteria:

(a) Data Delivery Ratio (DDR)

DDR is defined as the ratio of service frames successfully received from the network relative to the number of service frames offered to the network. The DDR definition is restricted to service frames that are compliant to the subscribed Committed Information Rate (CIR) profile. Interruptions caused by MTTR activity shall be excluded from the measurement of DDR.

Real Time EVC Bandwidth - Data Delivery Ratio

The Company threshold for Data Delivery Ratio is 99.5% in a calendar month.

Real Time EVC Bandwidth - Data Delivery SRCs

If the overall Data Delivery measurement does not meet the per month conformance then the Company shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

Priority Data EVC Bandwidth - Data Delivery Ratio

The Company threshold for Data Delivery Ratio is 99% in a calendar month.

Priority Data EVC Bandwidth - Data Delivery SRCs

If the overall Data Delivery measurement does not meet the per month conformance then the Company shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

(b) Round Trip Delay (RTD)

RTD is defined as the time (in milliseconds) it takes for a service frame to be sent from one UNI to another UNI and back again (includes link insertion delays, propagation delays and queuing delays in the network). The RTD calculation includes only the time the packet is in the network, i.e., the processing time spent in devices attached to the UNI are factored out of the definition. The RTD definition is restricted to service frames that are compliant to the subscribed CIR profile.

Real Time EVC Bandwidth - Delay Measurement

The Company threshold for Delay is 20 milliseconds.

## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLC) Continued(D) Service Level Agreements (SLA) (Cont'd)(2) Network Performance SLAs (Cont'd)(b) Round Trip Delay (RTD) (Cont'd)Real Time EVC Bandwidth - Delay SRCs

If the overall delay measurement does not meet the per month conformance then the Company shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

Priority Data EVC Bandwidth - Delay Measurement

The Company threshold for Delay is 50 milliseconds.

Priority Data EVC Bandwidth - Delay SRCs

If the overall delay measurement does not meet the per month conformance then the Company shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

(c) Jitter

Jitter is defined as the variance in frame delay (in milliseconds) between two service frames as measured at the ingress and egress UNIs. The jitter definition is restricted service frames that are compliant to the subscribed CIR profile.

Real Time EVC Bandwidth - Jitter Measurement

The Company threshold for Delay is 5 milliseconds.

Real Time EVC Bandwidth - Jitter SRC

If the overall jitter measurement does not meet the per month conformance then the Company shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

(3) Validation for Operational and Network Performance SLAs(a) Customer Validation

Operational SLAs:

The Customer must submit in writing a list of all rate elements, impacted circuit/connection identification numbers and the type of SRC requested for each circuit/connection. The written request for credit must be submitted to the appropriate Company entity in the manner prescribed by the Company.

## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLC) Continued(D) Service Level Agreements (SLA) (Cont'd)(3) Validation for Operational and Network Performance SLAs (Cont'd)(a) Customer Validation (Cont'd)

## Network Performance SLAs:

The Customer must request SRCs for Network Performance SLAs and may submit in support of such request its own measurements made by industry-standard network performance measuring equipment. Such equipment shall be subject to prior approval by the Company and be capable of the following:

For the DDR SLA, the equipment must be capable of determining the number of actual packets sent and successfully received between two (2) Customer locations.

For the RTD SLA, the equipment must be capable of measuring the transmission of a series of 128-byte time-stamped packets to a measurement system from one Customer location to another Customer location. The measurement systems must be time-synchronized by using a network based timing source that uses Greenwich Mean Time (GMT).

For the Jitter SLA, the equipment must be capable of measuring the transmission of a series of at least fifty (50), 128-byte time stamped packets at a fixed interval between each packet from one Customer location to a measurement system at another Customer location. The measurement systems must be time-synchronized by using a network based timing source that uses Greenwich Mean Time (GMT).

All equipment must be capable of measuring from edge to edge (Customer Premises Equipment (CPE) to CPE) and to make the measurement every five (5) minutes per hour for four (4) hours total per day, for a total of two-hundred and forty (240) measures per day. In order to be considered, such measurements must include at least seven consecutive days' worth of measurements for four (4) hours per day.

(b) Company Validation

The Company will research and validate the Customer-submitted SRC in accordance with its own procedures and systems. The Company may, at its discretion, use either the Customer-provided data or its own measurement data (or above mentioned formulas) to evaluate and assess whether SRCs are warranted.

## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLC) Continued(D) Service Level Agreements (SLA) (Cont'd)(4) SLA Exclusions

SLAs do not apply to the extent that any of the following reasons prevented the Company from meeting such SLAs:

- (a) The acts of the Customer or other party authorized by the Customer to use the TLS circuit/connection, including but not limited to Customer's negligence, Customer's refusal to grant the Company reasonable access to its premises for testing/repair, Customer's refusal to release the TLS circuit/connection for testing and/or repair, Customer's maintenance activities or its rearrangement of the TLS circuit/connection or where the Customer has exceeded the purchased EVC bandwidth;
- (b) Subsequent reports (i.e., additional Customer inquiries) while the trouble is pending;
- (c) Service troubles closed due to the Customer's action;
- (d) Service troubles repaired by the Company prior to its receipt of a trouble report;
- (e) Service trouble caused by the Customer's CPE or facilities on its side of the demarcation point or any power, equipment, service or systems not provided by the Company;
- (f) An Interruption related to the provisioning of a new TLS Access Line or Access Lines in service for less than a month;
- (g) Scheduled maintenance and downtimes;
- (h) Unavailability of network monitoring or management equipment or reporting;
- (i) Any other reason outside the control of the Company.



## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLC) Continued(D) Service Level Agreements (SLA) (Cont'd)(5) Limitation on SRCs

The combined total of an SRCs applied to the Customer's TLS service for a calendar month must meet the following conditions:

- (a) For any calendar year, the total SRCs shall not exceed ten percent (10%) of the total annual revenue of the prior calendar year billed to the Customer for qualifying service elements, or \$200,000 per Customer, whichever is less. For any calendar year in which the Customer had less than twelve (12) full months of revenue for qualifying service elements in the prior calendar year, the SRCs may not exceed \$20,000 per Customer for TLS Network.
- (b) To receive an SRC, the Customer must request such SRC in writing within thirty (30) calendar days of the end of the monitoring period of the referenced SRC. The request must include a list of all impacted EVC identification numbers and the type of SRC requested for each EVC.

## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (Continued)(E) Application of Rates and Charges

(T)

(1) The following rate elements are applicable to TLS:

- UNI Port with Access Line Connection
  - Standard Access Line
  - Protected Access Line
  - Premier Access Line
  - EMS
- Ethernet Virtual Circuit (EVC)
- Interoffice Mileage
- Domain/LAN Extension Equipment Changes
- Optional Features
  - Customer Service Management (CSM)

(a) UNI Port and Access Line

## 1. Standard Access Line

A monthly rate applies on a per line basis, based on the speed of the access connection (i.e., 10, Mbps, 100 Mbps or 1000 Mbps). The Standard Access Line is offered on a month to month basis, or as a three-year or five-year Term Payment Plan. A nonrecurring charge applies to the installation of the TLS Access Line provided on a month-to-month basis.

## 2. Protected Access Line (available for EMS Service type only)

Protected Access Lines are provisioned as a survivable service with an alternate fiber pair between the central office and the customer premises. Protected Access Line allows the Company to detect and recover a failure and move the customer's data to an alternate fiber pair in approximately one second in most instances. Both fiber pairs must be served by the same central office and must have the same access speed. The second fiber pair will be routed over a diverse fiber path when possible. A monthly rate applies on a per line basis, based on the speed of the access connection (i.e., 100 Mbps, 1000 Mbps). A nonrecurring charge will apply to the installation of a Protected Access Line provided on a month-to-month basis.

## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (Continued)(E) Application of Rates and Charges (Continued)

(T)

(1) The following rate elements are applicable to TLS: (Continued)

(a) UNI Port and Access Line (Continued)

3. Premier Access Line

A monthly rate applies on a per-line basis, based on the speed of the access line (i.e., 100 MBPS or 1000 MBPS). A Premier Access Line must be purchased in conjunction with some combination of ERS-B, ERS-PD, and/or ERS-RT EVC service classes, which are described in section B.1. The Premier Access Line is offered on a month-to-month basis or as a 3 Year or 5 Year Term Plan. A nonrecurring charge applies to the installation of the UNI provided on a month-to-month basis. A customer can not mix Premier UNI Ports with any other UNI port type.

The percentage of each Premier Access Line UNIs allowed for EVC bandwidth is limited, where connections must comply with each of the following threshold requirements :

ERS-B less than or = 500% of UNI Speed  
 ERS-PD less than or = 100% of UNI Speed  
 ERS-RT less than or = 50% of UNI Speed  
 ERS-PD + ERS-RT less than or = 100% of UNI Speed  
 ERS-B + ERS-PD + ERS-RT less than or = 600% of UNI Speed

## 4. EMS Real Time (EMS-RT) Access Line

A monthly rate applies on a per-line basis, based on the speed of the access connection (i.e., 100 MBPS or 1000 MBPS). This enhanced service class configures a fixed portion of the UNI to be configured for Real Time Traffic, where each 100 MBPS UNI has CIR = 2 MBPS with EIR = 0 with each 1000 MBPS UNI has CIR = 10 MBPS with EIR = 0. The remainder of the UNI can be used for CIR = 0 and EIR = 0 traffic. The EMS-RT Access Line is offered on a month-to-month basis or as a 3 Year or 5 Year Term Plan. A nonrecurring charge applies to the installation of the EMS-RT Access Line provided on a month-to-month basis. A customer can not mix an EMS-RT Access Line with the ERS Service type, but may mix EMS-RT Access Line with EMS Access Lines.

16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (Continued)

(E) Application of Rates and Charges (Continued)

(T)

(1) The following rate elements are applicable to TLS: (Continued)

b. Ethernet Virtual Circuit (EVC)

For customers who order the Standard Access Line, a monthly rate will apply on a per EVC bandwidth basis. ERS Standard is the only EVC class available with the Standard Access Line. The EVC bandwidth must be equal to the bandwidth of the lowest speed of the end points it is connecting. ERS Standard EVCs are purchased on a month-to-month basis. A non-recurring setup charge will apply per ERS Standard EVC.

For customers who order the Premier Access Line, a monthly rate will apply on a service class and EVC bandwidth basis. Premier Access Line customers have the choice of combining ERS-Basic, ERS-Priority Data, and/or ERS-Real Time bandwidth on an EVC. A non-recurring setup charge will apply per ERS EVC. EVCs are purchased on a month-to-month basis. A customer may have more than one service class on the EVC, but will only pay one EVC non-recurring setup charge.

The number of EVCs permitted on each Standard Access Line and/or Premier Access Line are limited as follows :

- 10 Mbps less than or = 2 EVCs
- 100 Mbps less than or = 10 EVCs
- 1000 Mbps less than or = 75 EVCs.

ERS EVC bandwidth is limited to a maximum Mbps per Service Class per EVC, and must comply with each of the following maximum limits :

<u>EVC Service Class</u>	<u>100 Mbps UNI Max/EVC</u>	<u>1000 Mbps UNI Max/EVC</u>
ERS-B	100 Mbps	1000 Mbps
ERS-PD	50 Mbps	500 Mbps
ERS-RT	50 Mbps	100 Mbps

(c) Interoffice Mileage

The Interoffice Mileage charge is based on the Per Mile charge multiplied by the distance between the Customer's serving central office and the nearest TLS equipped central office (a central office equipped with a switch, node, or other Telephone company equipment capable of delivering service, via a shared fiber path or network infra-structure). This interoffice distance is measured in airline miles, based upon latitude and longitude of each central office. The mileage measurement is calculated as specified by NECA Tariff FCC No. 4. The mileage rate applies on a per mile basis. This charge applies in addition to the applicable rates and charges for the TLS Access Line.

(d) Domain/LAN Extension Equipment Changes

Customer requests for changes in Domains and replacement of LAN extension equipment will be charged a nonrecurring charge per location per change.

## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (Continued)(E) Application of Rates and Charges (Continued)

(T)

## (1) The following rate elements are applicable to TLS: (Continued)

## (e) Optional Features

## (1) Customer Service Management (CSM)

Customer Service Management (CSM) is an optional feature that provides customers with web-based reports. These reports give the customer the ability to extract "read-only" network traffic information regarding their networks thereby allowing customers to monitor and manage their network performance. CSM is provided per customer Domain/VLAN.

CSM will be provided where conditions and facilities permit.

The Company reserves the right to temporarily interrupt CSM for maintenance, software upgrades, and in emergency situations.

A monthly rate and a nonrecurring charge apply for each CSM arrangement. The customer will be charged on a per Domain/VLAN basis. The nonrecurring charge applies in addition to all other applicable service charges.

## (2) Minimum Period

The minimum period for TLS under the month-to-month plan is nine months. The regulations applicable to TLS provided under a Term Payment Plan are specified in (D)(5).

## (3) Term Payment Plans

The TLS Access Line is offered under a Term Payment Plan.

## (4) Moves, Changes and Upgrades

When Customer requests a move or relocation of a Standard Access Line, Protected Access Line, Premier Access Line or EMS Real Time Access Line to a different address and/or building, the move or relocation will be treated as a termination of the existing service and the establishment of a new service for the application of all charges.

When the Customer requests an upgrade in service speed, or change in service type, at an existing address, the upgrade in service speed/change in service type will be treated as a termination of the existing service and the establishment of a new service for the application of all charges.

Customer requests for changes in Domains and replacement of LAN extension equipment will be charged a nonrecurring charge per location per change.

## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (Continued)(E) Application of Rates and Charges (Continued)

(T)

## (5) Termination Liability

In the event TLS is terminated by the Customer prior to completion of the current term commitment period, the Customer shall be liable for an early termination charge, except as noted below. The amount of the early termination charge will be 25% of the monthly recurring charge(s) (MRC) for the remainder of the term.

Early termination charges will apply only to those rate elements under a term commitment period. If tariff rates for the service are increased during the term period, exclusive of any increase due to local, state or federal fees, taxes or surcharges, the Customer may terminate the service without incurring an early termination charge.

Prior to the end of the term commitment period, the Customer may select one of the following options, to be effective at the end of the term:

- Renew term commitment,
- Commit to a new term period,
- Arrange for a change of service, or
- Arrange for termination of the service

In the event the Customer does not select one of the above options, the Customer will be converted to the shortest-term period available under tariff (i.e., month-to-month, etc.) for the same service, and will be subject to the applicable term commitment, if any, unless the Customer terminates the service within sixty (60) days of the conversion date. Early termination charges will not be assessed under the following circumstances:

- Customer moves existing service either to a new location within the same address and/or same building (inside move) or to a new location(outside move) and maintains that service for the remainder of the term;
- Customer attempts to move the existing service to a new location within the Company's service area, but the service is unavailable;
- Customer renegotiates a new term commitment plan for the same service before the current term commitment expires and the value of the new term commitment is equal to or greater than the remaining value of the current term commitment; or
- Customer changes to another service or upgrades service to a higher speed or capacity under a term commitment, provided the following conditions are met:
  - The value of the new term commitment is equal to or greater than the remaining value of the current term commitment,
  - The Company provides the new service via tariff or on an individual case basis (ICB), and
  - The order to discontinue the existing service and the order for the new or upgraded service are received by the Company at the same time.

16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS) (Continued)

(F) Rates and Charges (T)

	<u>Nonrecurring Charge<sup>1</sup></u>	<u>Monthly Rate</u>
(1) Standard Access Line, per line		
Month to Month Plan		
10 Mbps		
Half duplex	\$ 1,300.00	\$ 1,200.00
Full duplex	1,300.00	1,200.00
100 Mbps	1,300.00	2,400.00
1000 Mbps	1,300.00	4,000.00
Three Year Plan		
10 Mbps		
Half duplex	N/A	1,000.00
Full duplex	N/A	1,000.00
100 Mbps	N/A	2,000.00
1000 Mbps	N/A	3,500.00
Five Year Plan		
10 Mbps		
Half duplex	N/A	900.00
Full duplex	N/A	900.00
100 Mbps	N/A	1,800.00
1000 Mbps	N/A	3,200.00
(2) Protected Access Line, per line		
Month to Month Plan		
100 Mbps	1,300.00	3,600.00
1000 Mbps	1,300.00	6,000.00
Three Year Plan		
100 Mbps	N/A	3,000.00
1000 Mbps	N/A	5,200.00
Five Year Plan		
100 Mbps	N/A	2,700.00
1000 Mbps	N/A	4,800.00

<sup>1</sup> Applies in lieu of service charges found elsewhere in this Tariff or other Company Tariffs.

16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS) (Continued)

(F) Rates and Charges (Continued)

(T)

	<u>Nonrecurring Charge</u>	<u>Monthly Rate</u>
(3) Premier Access Line		
Month to Month Plan		
100 Mbps	\$ 1,300.00	\$ 1,200.00
1000 Mbps	1,300.00	2,400.00
Three Year Plan		
100 Mbps	N/A	1,000.00
1000 Mbps	N/A	2,000.00
Five Year Plan		
100 Mbps	N/A	900.00
1000 Mbps	N/A	1,800.00
(4) EMS – Real Time Access Line		
Month to Month Plan		
100 Mbps	1,300.00	2,500.00
1000 Mbps	1,300.00	4,500.00
Three Year Plan		
100 Mbps	N/A	2,100.00
1000 Mbps	N/A	4,000.00
Five Year Plan		
100 Mbps	N/A	1,900.00
1000 Mbps	N/A	3,700.00



## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS) (Continued)(F) Rates and Charges (Continued)

(T)

	<u>Nonrecurring Charge</u>	<u>Monthly Rate</u>
(5) ERS Ethernet Virtual Circuit (EVC)		
a. ERS EVC Setup, per EVC	\$ 200.00	N/A
b. ERS EVC Standard (ERS-Std), per EVC		
10 Mbps	N/A	\$ 50.00
100 Mbps	N/A	100.00
1000 Mbps	N/A	200.00
c. ERS EVC Basic (ERS-B) Bandwidth, per Class		
1 Mbps	N/A	15.00
2 Mbps	N/A	30.00
3 Mbps	N/A	45.00
4 Mbps	N/A	60.00
5 Mbps	N/A	75.00
6 Mbps	N/A	90.00
7 Mbps	N/A	105.00
8 Mbps	N/A	120.00
9 Mbps	N/A	135.00
10 Mbps	N/A	150.00
20 Mbps	N/A	300.00
30 Mbps	N/A	450.00
40 Mbps	N/A	600.00
50 Mbps	N/A	750.00
60 Mbps	N/A	850.00
70 Mbps	N/A	950.00
80 Mbps	N/A	1,050.00
90 Mbps	N/A	1,150.00
100 Mbps	N/A	1,250.00
200 Mbps	N/A	1,350.00
300 Mbps	N/A	1,450.00
400 Mbps	N/A	1,550.00
500 Mbps	N/A	1,650.00
600 Mbps	N/A	1,740.00
700 Mbps	N/A	1,830.00
800 Mbps	N/A	1,920.00
900 Mbps	N/A	2,010.00
1000 Mbps	N/A	2,100.00

## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS) (Continued)(F) Rates and Charges (Continued)

(T)

	<u>Nonrecurring Charge</u>	<u>Monthly Rate</u>
(5) ERS Ethernet Virtual Circuit (EVC) (Continued)		
d. ERS EVC Priority Data (ERS-PD) Bandwidth, per Class		
1 Mbps	N/A	\$ 40.00
2 Mbps	N/A	80.00
3 Mbps	N/A	120.00
4 Mbps	N/A	160.00
5 Mbps	N/A	200.00
6 Mbps	N/A	220.00
7 Mbps	N/A	240.00
8 Mbps	N/A	260.00
9 Mbps	N/A	280.00
10 Mbps	N/A	300.00
20 Mbps	N/A	600.00
30 Mbps	N/A	900.00
40 Mbps	N/A	1,200.00
50 Mbps	N/A	1,500.00
60 Mbps	N/A	1,720.00
70 Mbps	N/A	1,940.00
80 Mbps	N/A	2,100.00
90 Mbps	N/A	2,300.00
100 Mbps	N/A	2,500.00
200 Mbps	N/A	2,700.00
300 Mbps	N/A	2,900.00
400 Mbps	N/A	3,100.00
500 Mbps	N/A	3,300.00

16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS) (Continued)

(F) Rates and Charges (Continued)

(T)

	<u>Nonrecurring Charge</u>	<u>Monthly Rate</u>
(5) ERS Ethernet Virtual Circuit (EVC) (Continued)		
e. ERS EVCReal Time (ERS-RT) Bandwidth, per Class		
1 Mbps	N/A	\$ 120.00
2 Mbps	N/A	240.00
3 Mbps	N/A	360.00
4 Mbps	N/A	480.00
5 Mbps	N/A	600.00
6 Mbps	N/A	660.00
7 Mbps	N/A	720.00
8 Mbps	N/A	780.00
9 Mbps	N/A	840.00
10 Mbps	N/A	900.00
20 Mbps	N/A	1,175.00
30 Mbps	N/A	1,450.00
40 Mbps	N/A	1,725.00
50 Mbps	N/A	2,000.00
60 Mbps	N/A	2,200.00
70 Mbps	N/A	2,400.00
80 Mbps	N/A	2,600.00
90 Mbps	N/A	2,800.00
100 Mbps	N/A	3,000.00

16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS) (Continued)

(F) Rates and Charges (Continued)

(T)

	<u>Nonrecurring Charge<sup>1</sup></u>	<u>Monthly Rate</u>
(3) Interoffice Mileage, per line <sup>2</sup>		
Per Mile	N/A	\$100.00
(4) TLS Domain/LAN, per location Extension Equipment Changes per change	\$ 400.00	N/A
(5) Optional Features		
(a) Customer Service Management (CSM) Per Domain/VLAN	350.00	150.00

<sup>1</sup> Applies in lieu of service charges found elsewhere in this Tariff or other Company Tariffs.

<sup>2</sup> Applies in addition to applicable rates and charges for TLS Access Line.

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## 16. ADVANCED COMMUNICATIONS NETWORKS

16.43 Transparent LAN Service (TLS)

(M) (T)

(A) Definitions

In addition to the Definitions set forth in General Regulations, Section 2.6, the following definitions apply:

Domain: A Virtual Local Area Network (VLAN) or a collection of circuits that belong to one closed user group.

Megabit Per Second (Mbps): The speed where data is being transferred in the network, where one Megabit Per Second equals to the transfer rate of 1 million bits of data in 1 second.

Nanometers (nm): Wavelength frequency equivalent to 1 billionth of a meter.

(B) Service Description

Transparent LAN Service (TLS) is a high speed data service which uses a shared fiber network to allow for the interconnection of Local Area Networks (LANs) across selected metropolitan areas. TLS delivers an interface of 10 Mbps, 100 Mbps and 1000 Mbps from the Customer's LANs to the shared network.

TLS creates a network with the ability to function as a shared public network. TLS protects data privacy by using specialized screening software that permits subscribers to access only their data.

TLS is available in two service types: Ethernet Multipoint Service (EMS) or Ethernet Relay Service (ERS). The customer must select either (EMS) or (ERS) as the service type for each domain.

(1) Ethernet Multipoint Service

Ethernet Multipoint Service (EMS) is a connection-less Ethernet TLS service that allows connectivity among multiple customer designated locations within a LATA.

With the EMS service type, Ethernet TLS protects data privacy by using closed user groups (CUGs), also known as virtual LANs. CUGs or virtual LANs are used to provide traffic separation, privacy and security between customers on the shared switch and backbone. An EMS domain is comprised of any number of access lines designated by the customer to be included in a closed user group (CUG) or virtual LAN. EMS provides multipoint-to-multipoint connectivity among all of the customer's access lines within a given domain. TLS may be used to access shared networks. In such cases, subscribers in a CUG can only access their own data.

(2) Ethernet Relay Service

Ethernet Relay Service (ERS) is a connection-oriented Ethernet TLS service that allows for point-to-point connectivity between customer designated locations within a LATA.

With the ERS TLS service type, each Ethernet Virtual Circuit (EVC) establishes a virtual LAN or CUG. An ERS domain is comprised of any number of virtual LANs designated by the customer to be included in the ERS Standard domain. ERS provides point-to-point connectivity between pairs of customer's access lines, Internet virtual circuits and shared network virtual circuits within a given domain.

A customer may have more than one domain within a LATA, but connections between domains are not permitted. TLS may be used to access shared networks. In such cases, subscribers in a CUG can only access their own data.

(M)

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## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS)(A) Definitions

In addition to the Definitions set forth in General Regulations, Section 2.6, the following definitions apply:

Domain: A Virtual Local Area Network (VLAN) or a collection of circuits that belong to one closed user group.

Megabit Per Second (Mbps): The speed where data is being transferred in the network, where one Megabit Per Second equals to the transfer rate of 1 million bits of data in 1 second.

Nanometers (nm): Wavelength frequency equivalent to 1 billionth of a meter.

(B) Service Description

Transparent LAN Service (TLS) is a high-speed data service which uses a shared fiber network to allow for the interconnection of Local Area Networks (LANs) across selected metropolitan areas. TLS delivers an interface of 10 Mbps, 100 Mbps and 1000 Mbps from the Customer's LANs to the shared network.

TLS creates a network with the ability to function as a shared public network. TLS protects data privacy by using specialized screening software that permits subscribers to access only their data.

TLS is available in two service types: Ethernet Multipoint Service (EMS) or Ethernet Relay Service (ERS). The customer must select either (EMS) or (ERS) as the service type for each domain.

(1) Ethernet Multipoint Service

Ethernet Multipoint Service (EMS) is a connection-less Ethernet TLS service that allows connectivity among multiple customer-designated locations within a LATA.

With the EMS service type, Ethernet TLS protects data privacy by using closed user groups (CUGs), also known as virtual LANs. CUGs or virtual LANs are used to provide traffic separation, privacy and security between customers on the shared switch and backbone. An EMS domain is comprised of any number of access lines designated by the customer to be included in a closed user group (CUG) or virtual LAN. EMS provides multipoint to multipoint connectivity among all of the customer's access lines within a given domain. TLS may be used to access shared networks. In such cases, subscribers in a CUG can only access their own data.

(2) Ethernet Relay Service

Ethernet Relay Service (ERS) is a connection-oriented Ethernet TLS service that allows for point-to-point connectivity between customer-designated locations within a LATA.

With the ERS-TLS service type, each Ethernet Virtual Circuit (EVC) establishes a virtual LAN or CUG. An ERS domain is comprised of any number of virtual LANs designated by the customer to be included in the ERS Standard domain. ERS provides point-to-point connectivity between pairs of customer's access lines, Internet virtual circuits and shared network virtual circuits within a given domain.

A customer may have more than one domain within a LATA, but connections between domains are not permitted. TLS may be used to access shared networks. In such cases, subscribers in a CUG can only access their own data.

(B) Service Description (Continued)(2) Ethernet Relay Service (Continued)

Four EVC service classes are available for use with ERS service type:

(a) ERS Standard (ERS-Std) and ERS Basic(ERS-B): designed for customer applications that do not require a Committed Information Rate (CIR) or low delay, where CIR = 0 and Excess Information Rate (EIR) = # of Mbps of the selected ERS-Std/ERS-B EVC service class.

(b) ERS-Priority Data (ERS-PD): designed for customer applications which do not require low delay, but require a CIR, where CIR = # of Mbps of the selected ERS-PD EVC service class and EIR = # of Mbps of the selected ERS-PD EVC service class.

(c) ERS Real Time (ERS-RT): designed for customer applications which require a CIR and low delay for some portion of their traffic, where CIR = # of Mbps of the selected ERS-RT EVC service class and EIR = 0.

(d) An ERS EVC can include up to three service classes (ERS-B, ERS-PD and ERS-RT) as described above within each EVC. The customer will be required to identify the Basic, PD and RT Class of Service Ethernet frames by one of the following choices: setting the VLAN Class of Service (CoS) ID (for 802.1q tagged Ethernet Frames), or setting the DiffServ Code Point (DSCP) (for tagged or untagged Ethernet frames) or setting the VLAN ID (for tagged or untagged Ethernet frames), appropriately.

(C) Conditions

(1) A TLS network will be limited to central offices in a specific geographic location. Customers gain access to the shared TLS network via a switch, node or other Telephone Company equipment delivering service through a shared fiber path or network infra-structure and deployed in the Customer's serving central office (TLS equipped central office) or deployed in leased space near the Customer's location. At subscription, the Customer has an option of selecting standard access lines at speeds of 10 Mbps, 100 Mbps or 1000 Mbps.

(2) TLS is available to Customers whose serving central office is a TLS equipped central office and is located within the maximum allowable range of the serving central office. The maximum allowable range is determined by the dB loss rate where the actual distance between the TLS equipped serving wire center and the Customer's location will vary based on the specifics of the facility used in each serving arrangement.

(3) If the Customer's serving central office is not a TLS equipped central office, the Customer may obtain service by paying the Interoffice Mileage charge (from the customer's serving central office and the nearest TLS equipped central office) in addition to TLS access charges. The dB loss cannot exceed the maximum allowable range, as specified in regulation above.

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16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS)

~~(B)~~ Service Description (Continued)

~~(2)~~ Ethernet Relay Service (Continued)

Four EVC service classes are available for use with ERS service type:

- ~~(a)~~ ERS Standard (ERS Std) and ERS-Basic (ERS-B): designed for customer applications that do not require a Committed Information Rate (CIR) or low delay, where CIR = 0 and Excess Information Rate (EIR) = # of Mbps of the selected ERS Std/ERS-B EVC service class.
- ~~(b)~~ ERS Priority Data (ERS-PD): designed for customer applications which do not require low delay, but require a CIR, where CIR = # of Mbps of the selected ERS-PD EVC service class and EIR = # of Mbps of the selected ERS-PD EVC service class.
- ~~(c)~~ ERS Real-Time (ERS-RT): designed for customer applications which require a CIR and low delay for some portion of their traffic, where CIR = # of Mbps of the selected ERS-RT EVC service class and EIR = 0.
- ~~(d)~~ An ERS EVC can include up to three service classes (ERS-B, ERS-PD and ERS-RT) as described above within each EVC. The customer will be required to identify the Basic, PD and RT Class of Service Ethernet frames by one of the following choices: setting the VLAN Class of Service (CoS) ID (for 802.1q tagged Ethernet Frames), or setting the DiffServ Code Point (DSCP) (for tagged or untagged Ethernet frames) or setting the VLAN ID (for tagged or untagged Ethernet frames), appropriately.

~~(C)~~ Conditions

- ~~(1)~~ A TLS network will be limited to central offices in a specific geographic location. Customers gain access to the shared TLS network via a switch, node or other Telephone Company equipment delivering service through a shared fiber path or network infrastructure and deployed in the Customer's serving central office (TLS equipped central office) or deployed in leased space near the Customer's location. At subscription, the Customer has an option of selecting standard access lines at speeds of 10 Mbps, 100 Mbps or 1000 Mbps.
- ~~(2)~~ TLS is available to Customers whose serving central office is a TLS equipped central office and is located within the maximum allowable range of the serving central office. The maximum allowable range is determined by the dB loss rate where the actual distance between the TLS equipped serving wire center and the Customer's location will vary based on the specifics of the facility used in each serving arrangement.
- ~~(3)~~ If the Customer's serving central office is not a TLS equipped central office, the Customer may obtain service by paying the Interoffice Mileage charge (from the customer's serving central office and the nearest TLS equipped central office) in addition to TLS access charges. The dB loss cannot exceed the maximum allowable range, as specified in regulation above.

~~(C)~~ Conditions (Continued)

~~(4)~~ Provision of Service

The TLS service will consist of:

- a. Network Interface Device (NID) at the Customer's premises to terminate the fiber pair or other optical transport.
- b. Optical Transport from the Customer's premises to the serving central office.
- c. Network Management including fault monitoring and diagnostics, performance and network configuration applications and manual monitoring when necessary.
- d. User Network Interface (UNI) Port with Access Line Connection

UNI Port with Access Line Connections, which are available at 10 Mbps, 100 Mbps and 1000 Mbps, provide connectivity between the customer premises and the serving wire center. UNI Port with Access Line connections are available as either EMS or ERS. Connectivity can be established only between or among UNI Port with Access Line Connections of the same service type.

- e. Ethernet TLS Ethernet Virtual Circuit (EVC), where applicable.

An Ethernet TLS EVC provides point-to-point Ethernet connectivity between two UNIs, between a UNI and a shared network EVC or between a UNI and an Internet VC. Ethernet TLS EVCs are only available with ERS. The ERS Standard Ethernet TLS EVCs are designed for customer applications that do not require bandwidth or delay guarantees. ERS Standard provides no performance guarantees.

- f. Interoffice Mileage, where applicable.
- g. Optional Features

Customer Service Management (CSM)

~~(5)~~ Availability of Service

TLS will be provided seven days a week, 24 hours a day, from central offices equipped to provide this service.

ERS service, including Premier Access Lines and ERS-Std, ERS-B, ERS-PD, ERS-RT EVCs, as defined in section (B)(2), will only be available from Central Offices equipped to support ERS service.

(M) Material moved to Page 2.

(M<sup>1</sup>) Material transferred from Page 4.

## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLC) Continued(C) Conditions (Continued)

- (4) Provision of Service  
The TLS service will consist of:
- a. Network Interface Device (NID) at the Customer's premises to terminate the fiber pair or other optical transport.
  - b. Optical Transport from the Customer's premises to the serving central office.
  - c. Network Management including fault monitoring and diagnostics, performance and network configuration applications and manual monitoring when necessary.
  - d. User Network Interface (UNI) Port with Access Line Connection  
UNI Port with Access Line Connections, which are available at 10 Mbps, 100 Mbps and 1000 Mbps, provide connectivity between the customer premises and the serving wire center. UNI Port with Access Line connections are available as either EMS or ERS. Connectivity can be established only between or among UNI Port with Access Line Connections of the same service type.
  - e. Ethernet TLS Ethernet Virtual Circuit (EVC), where applicable.  
An Ethernet TLS EVC provides point-to-point Ethernet connectivity between two UNIs, between a UNI and a shared network EVC or between a UNI and an Internet VC. Ethernet TLS EVCs are only available with ERS. The ERS Standard Ethernet TLS EVCs are designed for customer applications that do not require bandwidth or delay guarantees. ERS Standard provides no performance guarantees.
  - f. Interoffice Mileage, where applicable.
  - g. Optional Features
- Customer Service Management (CSM)
- (5) Availability of Service  
TLS will be provided seven days a week, 24 hours a day, from central offices equipped to provide this service.  
ERS service, including Premier Access Lines and ERS Std, ERS-B, ERS-PD, ERS-RT EVCs, as defined in section (B)(2), will only be available from Central Offices equipped to support ERS service.

(6) Connections

The network interface is the LAN interface on the TLS equipment at the Customer's premises. The Customer is responsible for any inside wire required in connecting the LAN to the TLS equipment.

The Customer is also responsible for installation, operation and maintenance of any Customer-provided equipment.

The Company has the service responsibility up to and including the network interface.

(7) Limitations

The Customer's location must be within the maximum allowable range of the TLS equipped central office, as defined in (C)(2).

(8) Maintenance Window

To meet the Customers' requirements, occasional network upgrades must be performed. These network upgrades are needed to provide improved performance and new features. Generally these upgrades will be performed between the hours of 11 PM and 6 AM. Network upgrades are planned to provide Customers reasonable and timely notification in order to minimize any impact on the Customers' service.

(9) Technical Specifications

The technical specifications for TLS are delineated in IEEE802.3-2000.

(10) Transmission Mode

The transmission mode supported is dependent on the access rate. The supported transmission mode for 10 Mbps access is half-duplex and full duplex. Full duplex 10 Mbps access is available only where conditions and facilities permit. The supported transmission mode for 100 Mbps and 1000 Mbps access is full duplex.

(11) TLS is available where facilities and conditions permit. Special construction charges may apply.

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## 16. ADVANCED COMMUNICATIONS NETWORKS

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### 16.3 Transparent LAN Service (TLC) Continued)

#### (D) Service Level Agreements (SLA) (Cont'd)

##### (1) Operational Service Level Agreements (SLAs)

##### (a) Mean Time to Repair (MTTR)

MTTR is the average mean time for the Company to repair Customer reported interruptions for service that is within the Company's network. A TLS service is interrupted when it becomes unusable to the Customer because of a failure of a facility component within the Company's network that is used to furnish service under this tariff.

##### MTTR Measurement

Under the MTTR SLA, the Company will measure the average Time to Repair (TTR) for Customer-reported interruptions in the services with respect to TLS Access Lines. To be measured under this SLA, the Customer must report any interruption to a Company-designated entity for the opening of a trouble ticket. The TTR is measured from the date and time a trouble ticket is opened by the Company and the date and time when such ticket is closed by the Company. In measuring the TTR, any stop clock time or adjusted duration time associated with the trouble shall be subtracted from such measurement. For purposes of this measurement, stop clock time refers to

1. periods when the Customer testing is occurring;
2. periods when the Company is awaiting the Customers authorization to commence work on a TLS Access Line;
3. periods when the Company is denied access to the Customers premises or facilities as necessary to diagnose, repair or test
4. periods following a repair of a TLS Access line when the ticket is held open by the Customer to ensure the trouble is resolved and
5. any time period during which any of the listed occurrences existed, as set forth in Section (D)(4)SLA Exclusions following.

The SLA shall not apply to cases of trouble where no trouble was found or repeated cases of trouble for the same interruption. The MTTR SLA shall be measured on a calendar month basis and shall be calculated by adding the TTR for all interruptions and dividing that sum by the total number of trouble tickets opened for interruptions for the Customer during that month.

##### MTTR SRCs

If the MTTR is greater than four (4) hours over the calendar month, then 50% of the one month TLS Access Line monthly charge shall be given as a MTTR SRC for those Access Lines which have been out of service for longer than four (4) hours and have been reported by the Customer via a trouble ticket to the Company. The MTTR SRC credit excludes and is not applicable to scheduled maintenance, scheduled downtimes or delays resulting from an event of force majeure.

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## 16. ADVANCED COMMUNICATIONS NETWORKS

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### 16.3 Transparent LAN Service (TLC) Continued

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#### (D) Service Level Agreements (SLA) (Cont'd)

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##### (1) Operational Service Level Agreements (SLAs) (Cont'd)

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##### (b) Network Availability

Network Availability refers to the percentage of time during a calendar month that the TLS is available for use by the Customer.

##### Network Availability Measurement

The Company threshold for Network Availability is 99.90%. Network Availability is calculated on a per TLS Port Connection basis as follows:

$$\frac{(24 \times \text{Number of Days in Month} \times \text{Number of TLS Port Connections}) - (\text{Number of Hours Out of Service during Month})}{(24 \times \text{Number of Days in Month} \times \text{Number of TLS Port Connections})}$$

The Company will not round up the calculation to reach the 99.90% threshold. This SLA is only available for outages reported by the Customer via a trouble ticket to the Company.

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##### Network Availability SRCs

If the overall Network Availability measurement is less than the threshold of 99.90% for a calendar month, the Company will provide a credit equal to ten percent (10%) of the associated monthly charge for an individual TLS port connection that did not meet such threshold during such a calendar month.

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##### (2) Network Performance SLAs

Network Performance SLA applies to all Customers subscribing to an EVC Class of Service (CoS) within a local network consisting of the following types:

- Real Time EVC bandwidth CoS, and
- Priority Data EVC bandwidth CoS.

The performance SLA is hierarchical in nature and statistically-based, conformance is determined on a Met or Missed basis, first on a per-hour basis and then on a per-month conformance basis.

Per-Hour Conformance - For each hour in the month, a determination is made as to whether the performance objectives are 'Met' for the CoS attributes related to the CoS instance on a given EVC. For a given Hour (e.g., H1), the overall performance objective is 'Met' if the performance objectives for each of the Data Delivery Ratio (DDR), Round Trip Delay (RTD), and Jitter, attributes are 'Met'. If any of the attribute objectives are 'Missed', then the overall performance objective for Hour (H1) is determined to be 'Missed'.

Per-Month Conformance - For the month, a determination is made as to the percentage of hours that the overall performance objective is 'Met'. So, for a given Month (e.g., M1), the monthly performance guarantee is 'Met' if the % of hours 'Met' for the month meet or exceed the monthly objective.

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## 16. ADVANCED COMMUNICATIONS NETWORKS

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### 16.3 Transparent LAN Service (TLC) Continued

#### (D) Service Level Agreements (SLA) (Cont'd)

##### (2) Network Performance SLAs (Cont'd)

EVC Class of Service Network Performance SLA shall be based on the following Ethernet frame traffic criteria:

##### (a) Data Delivery Ratio (DDR)

DDR is defined as the ratio of service frames successfully received from the network relative to the number of service frames offered to the network. The DDR definition is restricted to service frames that are compliant to the subscribed Committed Information Rate (CIR) profile. Interruptions caused by MTTR activity shall be excluded from the measurement of DDR.

##### Real Time EVC Bandwidth - Data Delivery Ratio

The Company threshold for Data Delivery Ratio is 99.5% in a calendar month.

##### Real Time EVC Bandwidth - Data Delivery SRCs

If the overall Data Delivery measurement does not meet the per month conformance then the Company shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

##### Priority Data EVC Bandwidth - Data Delivery Ratio

The Company threshold for Data Delivery Ratio is 99% in a calendar month.

##### Priority Data EVC Bandwidth - Data Delivery SRCs

If the overall Data Delivery measurement does not meet the per month conformance then the Company shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

##### (b) Round Trip Delay (RTD)

RTD is defined as the time (in milliseconds) it takes for a service frame to be sent from one UNI to another UNI and back again (includes link insertion delays, propagation delays and queuing delays in the network). The RTD calculation includes only the time the packet is in the network, i.e., the processing time spent in devices attached to the UNI are factored out of the definition. The RTD definition is restricted to service frames that are compliant to the subscribed CIR profile.

##### Real Time EVC Bandwidth - Delay Measurement

The Company threshold for Delay is 20 milliseconds.

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## 16. ADVANCED COMMUNICATIONS NETWORKS

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### 16.3 Transparent LAN Service (TLC) Continued

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#### (D) Service Level Agreements (SLA) (Cont'd)

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##### (2) Network Performance SLAs (Cont'd)

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##### (b) Round Trip Delay (RTD) (Cont'd)

###### Real Time EVC Bandwidth - Delay SRCs

If the overall delay measurement does not meet the per month conformance then the Company shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

###### Priority Data EVC Bandwidth - Delay Measurement

The Company threshold for Delay is 50 milliseconds.

###### Priority Data EVC Bandwidth - Delay SRCs

If the overall delay measurement does not meet the per month conformance then the Company shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

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##### (c) Jitter

Jitter is defined as the variance in frame delay (in milliseconds) between two service frames as measured at the ingress and egress UNIs. The jitter definition is restricted service frames that are compliant to the subscribed CIR profile.

###### Real Time EVC Bandwidth - Jitter Measurement

The Company threshold for Delay is 5 milliseconds.

###### Real Time EVC Bandwidth - Jitter SRC

If the overall jitter measurement does not meet the per month conformance then the Company shall provide an SRC equal to ten percent (10%) of the monthly charge for any individual EVC that did not meet such threshold during such calendar month.

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##### (3) Validation for Operational and Network Performance SLAs

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##### (a) Customer Validation

###### Operational SLAs:

The Customer must submit in writing a list of all rate elements, impacted circuit/connection identification numbers and the type of SRC requested for each circuit/connection. The written request for credit must be submitted to the appropriate Company entity in the manner prescribed by the Company.



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## 16. ADVANCED COMMUNICATIONS NETWORKS

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### 16.3 Transparent LAN Service (TLC) Continued

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#### (D) Service Level Agreements (SLA) (Cont'd)

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##### (3) Validation for Operational and Network Performance SLAs (Cont'd)

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###### (a) Customer Validation Cont'd

###### Network Performance SLAs:

The Customer must request SRCs for Network Performance SLAs and may submit in support of such request its own measurements made by industry-standard network performance measuring equipment. Such equipment shall be subject to prior approval by the Company and be capable of the following:

For the DDR SLA, the equipment must be capable of determining the number of actual packets sent and successfully received between two (2) Customer locations.

For the RTD SLA, the equipment must be capable of measuring the transmission of a series of 128-byte time-stamped packets to a measurement system from one Customer location to another Customer location. The measurement systems must be time-synchronized by using a network based timing source that uses Greenwich Mean Time (GMT).

For the Jitter SLA, the equipment must be capable of measuring the transmission of a series of at least fifty (50), 128-byte time stamped packets at a fixed interval between each packet from one Customer location to a measurement system at another Customer location. The measurement systems must be time-synchronized by using a network based timing source that uses Greenwich Mean Time (GMT).

All equipment must be capable of measuring from edge to edge (Customer Premises Equipment (CPE) to CPE) and to make the measurement every five (5) minutes per hour for four (4) hours total per day, for a total of two-hundred and forty (240) measures per day. In order to be considered, such measurements must include at least seven consecutive days' worth of measurements for four (4) hours per day.

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###### (b) Company Validation

The Company will research and validate the Customer-submitted SRC in accordance with its own procedures and systems. The Company may, at its discretion, use either the Customer-provided data or its own measurement data (or above mentioned formulas) to evaluate and assess whether SRCs are warranted.

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**16. ADVANCED COMMUNICATIONS NETWORKS**

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**16.3 Transparent LAN Service (TLC) Continued)**(D) Service Level Agreements (SLA) (Cont'd)(4) SLA Exclusions

SLAs do not apply to the extent that any of the following reasons prevented the Company from meeting such SLAs:

- (a) The acts of the Customer or other party authorized by the Customer to use the TLS circuit/connection, including but not limited to Customer's negligence, Customer's refusal to grant the Company reasonable access to its premises for testing/repair, Customer's refusal to release the TLS circuit/connection for testing and/or repair, Customer's maintenance activities or its rearrangement of the TLS circuit/connection or where the Customer has exceeded the purchased EVC bandwidth;
  - (b) Subsequent reports (i.e., additional Customer inquiries) while the trouble is pending;
  - (c) Service troubles closed due to the Customer's action;
  - (d) Service troubles repaired by the Company prior to its receipt of a trouble report;
  - (e) Service trouble caused by the Customer's CPE or facilities on its side of the demarcation point or any power, equipment, service or systems not provided by the Company;
  - (f) An Interruption related to the provisioning of a new TLS Access Line or Access Lines in service for less than a month;
  - (g) Scheduled maintenance and downtimes;
  - (h) Unavailability of network monitoring or management equipment or reporting;
  - (i) Any other reason outside the control of the Company.
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16. ADVANCED COMMUNICATIONS NETWORKS16.3 Transparent LAN Service (TLC) Continued)(D) Service Level Agreements (SLA) (Cont'd)(5) Limitation on SRCs

The combined total of an SRCs applied to the Customer's TLS service for a calendar month must meet the following conditions:

- (a) For any calendar year, the total SRCs shall not exceed ten percent (10%) of the total annual revenue of the prior calendar year billed to the Customer for qualifying service elements, or \$200,000 per Customer, whichever is less. For any calendar year in which the Customer had less than twelve (12) full months of revenue for qualifying service elements in the prior calendar year, the SRCs may not exceed \$20,000 per Customer for TLS Network.
- (b) To receive an SRC, the Customer must request such SRC in writing within thirty (30) calendar days of the end of the monitoring period of the referenced SRC. The request must include a list of all impacted EVC identification numbers and the type of SRC requested for each EVC.

## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (Continued)~~(E)~~ Application of Rates and Charges

(I)

(1) The following rate elements are applicable to TLS:

- UNI Port with Access Line Connection
  - Standard Access Line
  - Protected Access Line
  - Premier Access Line
  - EMS
- Ethernet Virtual Circuit (EVC)
- Interoffice Mileage
- Domain/LAN Extension Equipment Changes
- Optional Features
  - Customer Service Management (CSM)

(a) UNI Port and Access Line

## 1. Standard Access Line

A monthly rate applies on a per line basis, based on the speed of the access connection (i.e., 10, Mbps, 100 Mbps or 1000 Mbps). The Standard Access Line is offered on a month to month basis, or as a three-year or five-year Term Payment Plan. A nonrecurring charge applies to the installation of the TLS Access Line provided on a month-to-month basis.

## 2. Protected Access Line (available for EMS Service type only)

Protected Access Lines are provisioned as a survivable service with an alternate fiber pair between the central office and the customer premises. Protected Access Line allows the Company to detect and recover a failure and move the customer's data to an alternate fiber pair in approximately one second in most instances. Both fiber pairs must be served by the same central office and must have the same access speed. The second fiber pair will be routed over a diverse fiber path when possible. A monthly rate applies on a per line basis, based on the speed of the access connection (i.e., 100 Mbps, 1000 Mbps). A nonrecurring charge will apply to the installation of a Protected Access Line provided on a month-to-month basis.

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## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (Continued)(E) Application of Rates and Charges (Continued)

(T)

(1) The following rate elements are applicable to TLS: (Continued)

(a) UNI Port and Access Line (Continued)

3. Premier Access Line

A monthly rate applies on a per-line basis, based on the speed of the access line (i.e., 100 MBPS or 1000 MBPS). A Premier Access Line must be purchased in conjunction with some combination of ERS-B, ERS-PD, and/or ERS-RT EVC service classes, which are described in section B.1. The Premier Access Line is offered on a month-to-month basis or as a 3 Year or 5 Year Term Plan. A nonrecurring charge applies to the installation of the UNI provided on a month-to-month basis. A customer can not mix Premier UNI Ports with any other UNI port type.

The percentage of each Premier Access Line UNIs allowed for EVC bandwidth is limited, where connections must comply with each of the following threshold requirements :

ERS-B less than or = 500% of UNI Speed  
ERS-PD less than or = 100% of UNI Speed  
ERS-RT less than or = 50% of UNI Speed  
ERS-PD + ERS-RT less than or = 100% of UNI Speed  
ERS-B + ERS-PD + ERS-RT less than or = 600% of UNI Speed

4. EMS Real Time (EMS-RT) Access Line

A monthly rate applies on a per-line basis, based on the speed of the access connection (i.e., 100 MBPS or 1000 MBPS). This enhanced service class configures a fixed portion of the UNI to be configured for Real Time Traffic, where each 100 MBPS UNI has CIR = 2 MBPS with EIR = 0 with each 1000 MBPS UNI has CIR = 10 MBPS with EIR = 0. The remainder of the UNI can be used for CIR = 0 and EIR = 0 traffic. The EMS-RT Access Line is offered on a month-to-month basis or as a 3 Year or 5 Year Term Plan. A nonrecurring charge applies to the installation of the EMS-RT Access Line provided on a month-to-month basis. A customer can not mix an EMS-RT Access Line with the ERS Service type, but may mix EMS-RT Access Line with EMS Access Lines.

16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (Continued)

(E) Application of Rates and Charges (Continued)

(T)

(1) The following rate elements are applicable to TLS: (Continued)

b. Ethernet Virtual Circuit (EVC)

For customers who order the Standard Access Line, a monthly rate will apply on a per EVC bandwidth basis. ERS Standard is the only EVC class available with the Standard Access Line. The EVC bandwidth must be equal to the bandwidth of the lowest speed of the end points it is connecting. ERS Standard EVCs are purchased on a month-to-month basis. A non-recurring setup charge will apply per ERS Standard EVC.

For customers who order the Premier Access Line, a monthly rate will apply on a service class and EVC bandwidth basis. Premier Access Line customers have the choice of combining ERS-Basic, ERS-Priority Data, and/or ERS-Real Time bandwidth on an EVC. A non-recurring setup charge will apply per ERS EVC. EVCs are purchased on a month-to-month basis. A customer may have more than one service class on the EVC, but will only pay one EVC non-recurring setup charge.

The number of EVCs permitted on each Standard Access Line and/or Premier Access Line are limited as follows :

- 10 Mbps less than or = 2 EVCs
- 100 Mbps less than or = 10 EVCs
- 1000 Mbps less than or = 75 EVCs.

ERS EVC bandwidth is limited to a maximum Mbps per Service Class per EVC, and must comply with each of the following maximum limits :

<u>EVC Service Class</u>	<u>100 Mbps UNI Max/EVC</u>	<u>1000 Mbps UNI Max/EVC</u>
ERS-B	100 Mbps	1000 Mbps
ERS-PD	50 Mbps	500 Mbps
ERS-RT	50 Mbps	100 Mbps

(c) Interoffice Mileage

The Interoffice Mileage charge is based on the Per Mile charge multiplied by the distance between the Customer's serving central office and the nearest TLS equipped central office (a central office equipped with a switch, node, or other Telephone company equipment capable of delivering service, via a shared fiber path or network infra-structure). This interoffice distance is measured in airline miles, based upon latitude and longitude of each central office. The mileage measurement is calculated as specified by NECA Tariff FCC No. 4. The mileage rate applies on a per mile basis. This charge applies in addition to the applicable rates and charges for the TLS Access Line.

(d) Domain/LAN Extension Equipment Changes

Customer requests for changes in Domains and replacement of LAN extension equipment will be charged a nonrecurring charge per location per change.

## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (Continued)(E) Application of Rates and Charges (Continued)

(I)

(1) The following rate elements are applicable to TLS: (Continued)

(e) Optional Features

(1) Customer Service Management (CSM)

Customer Service Management (CSM) is an optional feature that provides customers with web-based reports. These reports give the customer the ability to extract "read-only" network traffic information regarding their networks thereby allowing customers to monitor and manage their network performance. CSM is provided per customer Domain/VLAN.

CSM will be provided where conditions and facilities permit.

The Company reserves the right to temporarily interrupt CSM for maintenance, software upgrades, and in emergency situations.

A monthly rate and a nonrecurring charge apply for each CSM arrangement. The customer will be charged on a per Domain/VLAN basis. The nonrecurring charge applies in addition to all other applicable service charges.

(2) Minimum Period

The minimum period for TLS under the month-to-month plan is nine months. The regulations applicable to TLS provided under a Term Payment Plan are specified in (D)(5).

(3) Term Payment Plans

The TLS Access Line is offered under a Term Payment Plan.

(4) Moves, Changes and Upgrades

When Customer requests a move or relocation of a Standard Access Line, Protected Access Line, Premier Access Line or EMS Real Time Access Line to a different address and/or building, the move or relocation will be treated as a termination of the existing service and the establishment of a new service for the application of all charges.

When the Customer requests an upgrade in service speed, or change in service type, at an existing address, the upgrade in service speed/change in service type will be treated as a termination of the existing service and the establishment of a new service for the application of all charges.

Customer requests for changes in Domains and replacement of LAN extension equipment will be charged a nonrecurring charge per location per change.

## 16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (Continued)(E) Application of Rates and Charges (Continued)

(I)

## (5) Termination Liability

In the event TLS is terminated by the Customer prior to completion of the current term commitment period, the Customer shall be liable for an early termination charge, except as noted below. The amount of the early termination charge will be 25% of the monthly recurring charge(s) (MRC) for the remainder of the term.

Early termination charges will apply only to those rate elements under a term commitment period. If tariff rates for the service are increased during the term period, exclusive of any increase due to local, state or federal fees, taxes or surcharges, the Customer may terminate the service without incurring an early termination charge.

Prior to the end of the term commitment period, the Customer may select one of the following options, to be effective at the end of the term:

- Renew term commitment,
- Commit to a new term period,
- Arrange for a change of service, or
- Arrange for termination of the service

In the event the Customer does not select one of the above options, the Customer will be converted to the shortest-term period available under tariff (i.e., month-to-month, etc.) for the same service, and will be subject to the applicable term commitment, if any, unless the Customer terminates the service within sixty (60) days of the conversion date. Early termination charges will not be assessed under the following circumstances:

- Customer moves existing service either to a new location within the same address and/or same building (inside move) or to a new location(outside move) and maintains that service for the remainder of the term;
- Customer attempts to move the existing service to a new location within the Company's service area, but the service is unavailable;
- Customer renegotiates a new term commitment plan for the same service before the current term commitment expires and the value of the new term commitment is equal to or greater than the remaining value of the current term commitment; or
- Customer changes to another service or upgrades service to a higher speed or capacity under a term commitment, provided the following conditions are met:
  - The value of the new term commitment is equal to or greater than the remaining value of the current term commitment,
  - The Company provides the new service via tariff or on an individual case basis (ICB), and
  - The order to discontinue the existing service and the order for the new or upgraded service are received by the Company at the same time.



16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS) (Continued)

(F) Rates and Charges

(T)

	<u>Nonrecurring Charge<sup>1</sup></u>	<u>Monthly Rate</u>
(1) Standard Access Line, per line		
Month to Month Plan		
10 Mbps		
Half duplex	\$ 1,300.00	\$ 1,200.00
Full duplex	1,300.00	1,200.00
100 Mbps	1,300.00	2,400.00
1000 Mbps	1,300.00	4,000.00
Three Year Plan		
10 Mbps		
Half duplex	N/A	1,000.00
Full duplex	N/A	1,000.00
100 Mbps	N/A	2,000.00
1000 Mbps	N/A	3,500.00
Five Year Plan		
10 Mbps		
Half duplex	N/A	900.00
Full duplex	N/A	900.00
100 Mbps	N/A	1,800.00
1000 Mbps	N/A	3,200.00
(2) Protected Access Line, per line		
Month to Month Plan		
100 Mbps	1,300.00	3,600.00
1000 Mbps	1,300.00	6,000.00
Three Year Plan		
100 Mbps	N/A	3,000.00
1000 Mbps	N/A	5,200.00
Five Year Plan		
100 Mbps	N/A	2,700.00
1000 Mbps	N/A	4,800.00

<sup>1</sup> Applies in lieu of service charges found elsewhere in this Tariff or other Company Tariffs.

16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS) (Continued)

(F) Rates and Charges (Continued)

(I)

	<u>Nonrecurring Charge</u>	<u>Monthly Rate</u>
(3) Premier Access Line		
Month to Month Plan		
100 Mbps	\$ 1,300.00	\$ 1,200.00
1000 Mbps	1,300.00	2,400.00
Three Year Plan		
100 Mbps	N/A	1,000.00
1000 Mbps	N/A	2,000.00
Five Year Plan		
100 Mbps	N/A	900.00
1000 Mbps	N/A	1,800.00
(4) EMS – Real Time Access Line		
Month to Month Plan		
100 Mbps	1,300.00	2,500.00
1000 Mbps	1,300.00	4,500.00
Three Year Plan		
100 Mbps	N/A	2,100.00
1000 Mbps	N/A	4,000.00
Five Year Plan		
100 Mbps	N/A	1,900.00
1000 Mbps	N/A	3,700.00

16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS) (Continued)

~~(F)~~ Rates and Charges (Continued)

(I)

	<u>Nonrecurring Charge</u>	<u>Monthly Rate</u>
(5) ERS Ethernet Virtual Circuit (EVC)		
a. ERS EVC Setup, per EVC	\$ 200.00	N/A
b. ERS EVC Standard (ERS-Std), per EVC		
10 Mbps	N/A	\$ 50.00
100 Mbps	N/A	100.00
1000 Mbps	N/A	200.00
c. ERS EVC Basic (ERS-B) Bandwidth, per Class		
1 Mbps	N/A	15.00
2 Mbps	N/A	30.00
3 Mbps	N/A	45.00
4 Mbps	N/A	60.00
5 Mbps	N/A	75.00
6 Mbps	N/A	90.00
7 Mbps	N/A	105.00
8 Mbps	N/A	120.00
9 Mbps	N/A	135.00
10 Mbps	N/A	150.00
20 Mbps	N/A	300.00
30 Mbps	N/A	450.00
40 Mbps	N/A	600.00
50 Mbps	N/A	750.00
60 Mbps	N/A	850.00
70 Mbps	N/A	950.00
80 Mbps	N/A	1,050.00
90 Mbps	N/A	1,150.00
100 Mbps	N/A	1,250.00
200 Mbps	N/A	1,350.00
300 Mbps	N/A	1,450.00
400 Mbps	N/A	1,550.00
500 Mbps	N/A	1,650.00
600 Mbps	N/A	1,740.00
700 Mbps	N/A	1,830.00
800 Mbps	N/A	1,920.00
900 Mbps	N/A	2,010.00
1000 Mbps	N/A	2,100.00

16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS) (Continued)

~~(F)~~ Rates and Charges (Continued)

(T)

	<u>Nonrecurring Charge</u>	<u>Monthly Rate</u>
(5) ERS Ethernet Virtual Circuit (EVC) (Continued)		
d. ERS EVC Priority Data (ERS-PD) Bandwidth, per Class		
1 Mbps	N/A	\$ 40.00
2 Mbps	N/A	80.00
3 Mbps	N/A	120.00
4 Mbps	N/A	160.00
5 Mbps	N/A	200.00
6 Mbps	N/A	220.00
7 Mbps	N/A	240.00
8 Mbps	N/A	260.00
9 Mbps	N/A	280.00
10 Mbps	N/A	300.00
20 Mbps	N/A	600.00
30 Mbps	N/A	900.00
40 Mbps	N/A	1,200.00
50 Mbps	N/A	1,500.00
60 Mbps	N/A	1,720.00
70 Mbps	N/A	1,940.00
80 Mbps	N/A	2,100.00
90 Mbps	N/A	2,300.00
100 Mbps	N/A	2,500.00
200 Mbps	N/A	2,700.00
300 Mbps	N/A	2,900.00
400 Mbps	N/A	3,100.00
500 Mbps	N/A	3,300.00

16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS) (Continued)

(FE) Rates and Charges (Continued)

(T)

	<u>Nonrecurring Charge</u>	<u>Monthly Rate</u>
(5) ERS Ethernet Virtual Circuit (EVC) (Continued)		
e. ERS EVCReal Time (ERS-RT) Bandwidth, per Class		
1 Mbps	N/A	\$ 120.00
2 Mbps	N/A	240.00
3 Mbps	N/A	360.00
4 Mbps	N/A	480.00
5 Mbps	N/A	600.00
6 Mbps	N/A	660.00
7 Mbps	N/A	720.00
8 Mbps	N/A	780.00
9 Mbps	N/A	840.00
10 Mbps	N/A	900.00
20 Mbps	N/A	1,175.00
30 Mbps	N/A	1,450.00
40 Mbps	N/A	1,725.00
50 Mbps	N/A	2,000.00
60 Mbps	N/A	2,200.00
70 Mbps	N/A	2,400.00
80 Mbps	N/A	2,600.00
90 Mbps	N/A	2,800.00
100 Mbps	N/A	3,000.00

16. ADVANCED COMMUNICATIONS NETWORKS

16.3 Transparent LAN Service (TLS) (Continued)

~~(E)~~ Rates and Charges (Continued)

(I)

	<u>Nonrecurring Charge<sup>1</sup></u>	<u>Monthly Rate</u>
(3) Interoffice Mileage, per line <sup>2</sup>		
Per Mile	N/A	\$100.00
(4) TLS Domain/LAN, per location Extension Equipment Changes per change	\$ 400.00	N/A
(5) Optional Features		
(a) Customer Service Management (CSM) Per Domain/VLAN	350.00	150.00

<sup>1</sup> Applies in lieu of service charges found elsewhere in this Tariff or other Company Tariffs.

<sup>2</sup> Applies in addition to applicable rates and charges for TLS Access Line.

~~(M) Material moved from Page 6.~~