1. Advanced Data Services
1.1 Terminology

1.1.1	Definitions of Terms and Abbreviations
A.	**ACCESS LINE—** A local channel for voice, data, or video communications which connects the Customer's location to a location of Verizon or its underlying carrier or service provider.
B.	**ADDITIONAL LOGICAL CHANNELS—** Additional communications channels on a given Network Address allowing the Customer to establish permanent virtual circuits between multiple locations and maintain a high degree of flexibility in configuring the network.
C.	**BURSTING** – Bursting is the ability to temporarily exceed CIR--the average rate you can send data through the Frame Relay network. The Verizon Frame Relay Service allows you to send two times CIR into the Frame Relay network in one second. For example, if your UNI's access circuit is 10 Mbps and your PVC's Committed Information Rate (CIR) is 5 Mbps, then you could send 10 Mbps into the network over that PVC in one second, with additional data being discarded.
D.	**COMMITTED INFORMATION RATE (CIR)** – A feature that provides Customers with a mechanism for prioritizing data on a per Permanent Virtual Circuit (PVC) basis across a given User Network Interface (UNI). A CIR allows a sustained throughput at a chosen rate without having any frames designated "discard eligible" under normal operating conditions.
E.	**DEDICATED ACCESS—** A dedicated communications channel that terminates on a switch facility provided by Verizon or Verizon's underlying carrier or service provider
F.	**DS0** – Transmission bandwidth capable of supporting digital bit rates of up to 56 kilobits per second (KBPS).
G.	**DS1 PORT CONNECTION** - An interface on the Frame Relay network which terminates a Customer's 1.536 megabits per second (Mbps) circuit.
H.	**DS3 PORT CONNECTION -** An interface on the Frame Relay network which terminates a Customer's 44.736 megabits per second (Mbps) circuit.
I.	**GROOMING—** Allows the connection of up to 24 DS0 channels, or one or more Fractional DS1 channels to a single DS1 channel. Grooming also allows the connection of up to 28 DS1 channels to a single DS3 channel.
J.	**HUB—** Verizon designated serving wire center which is equipped to provide private line service.
K.	**Local Access and Transport Area (LATA)**—A geographic area established by Verizon for the administration of communications service. A LATA encompasses designated exchanges, which are grouped to service common social, economic and other purposes.
L.	**LOGICAL CHANNEL[1]—** A communications channel that allows transmission of sequenced data packets through one network. One logical channel comes standard with one 56 Kbps, 384 Kbps, and 1.536 Mbps Frame Relay UNI Port Access Line.

Note 1: Effective September 17, 2003, this service is no longer available to new customers. Moves, additions, or changes are not permitted.

1. Advanced Data Services
1.1 Terminology

1.1.1	Definitions of Terms and Abbreviations
M.	**NETWORK MAP—** The complete configuration of the Customer's frame relay subscriber network access lines and permanent virtual circuits, as defined by the interconnectivity of network addresses and logical channels.
N.	**NETWORK ADDRESS—** The numeric characters representing the origination or destination point (i.e., the UNI Port With Access Line) for each dedicated circuit accessing the Frame Relay network. The Network Address is numbered in number format. One Network Address comes standard with one UNI Port With Access Line.
O.	**NETWORK-TO-NETWORK INTERFACE (NNI)-** The NNI port configuration is used for connecting two networks for bi-directional messaging.
P.	**PERMANENT VIRTUAL CIRCUITS (PVC)—** Are the electronic equivalent of a private line between two points.
Q.	**PORT CONNECTION –** The point of entry into a public Frame Relay Network service.
R.	**USER TO NETWORK INTERFACE (UNI)** – A standard interface used to connect the end user to the Frame Relay Service network. It receives the data frame from the Customer's Local Area Network (LAN) or other Customer Provided Equipment (CPE) devices and verifies that the Data Link Connection Identifier (DLCI) is valid before relaying the frame to the destination end point. The DLCI is a Frame Relay term defining a 10-bit field of the address field, and it identifies data links and their service parameters.

1. Advanced Data Services
1.2 Application of Rates

1.2.1	Availability of Service
A.	Any telecommunications services provided under this Product Guide at retail to the Customers who are not telecommunications carriers are available at wholesale rates to telecommunications carriers pursuant to 47 U.S.C. §251(c)(4) of the Telecommunications Act of 1996.

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1.3 Reserved for Future Use

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1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.1	Definitions
	In addition to the General Definitions set forth in the Product Guide, Section 1.1, the following definitions apply:
A.	**Committed Information Rate (CIR):** This parameter defines the rate that the Customer can expect to achieve on a particular Ethernet Virtual Circuit (EVC). CIR is specified in bits per second**.**
B.	**Domain:** Closed User Groups, also known as Virtual Local Area Networks (VLANs), which are used to provide traffic separation, privacy and security between customers on the shared switch and backbone. Users in a group can only access their own data.
C.	**Excess Information Rate (EIR):** This parameter defines the rate beyond the CIR that the customer can expect to achieve on a particular EVC. EIR is specified in bits per second.
D.	**Gigabits Per Second (Gbps):** The speed at which data is transferred through the network, where one Gigabit Per Second equals the transfer rate of one (1) billion bits of data in one (1) second.
E.	**Megabit Per Second (Mbps.):** The speed at which data is transferred through the network, where one Megabit Per Second equals the transfer rate of one (1) million bits of data in one (1) second.
F.	**Nanometers (nm):** Wavelength frequency equivalent to 1 billionth of a meter.

1.4.2	Service Descriptions
A.	Transparent LAN Service (TLS) is a high speed data service that uses a shared optical transport network to allow for the interconnection of Local Area Networks (LANs) across selected metropolitan areas in the same Local Access Transport Area (LATA). TLS delivers high speed data service to the interface at speeds of 10 Mbps, 100 Mbps, 1000 Mbps, or 10 Gbps 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.
B.	Jurisdictional Treatment - It is the nature of the traffic over the facility that determines the jurisdiction under Federal Communications Commission (FCC) regulations, not merely the physical endpoints of the facility over which service is delivered. Traffic is intrastate when it begins and ends in the same state. Traffic is interstate when it begins in one state and ends in a different state. Internet traffic is interstate as well. When ordering an intrastate TLS service, the customer must certify that traffic over the TLS facility will be intrastate, as defined below. The customer must also agree to notify Verizon within thirty (30) days if the Jurisdictional Treatment changes, and, if such certification is incorrect, the customer will be responsible for any unbilled surcharges and applicable fees. If the customer does not certify that the traffic meets the "Intrastate" definition below, Verizon may treat the service as interstate for regulatory jurisdictional purposes and charge applicable interstate surcharges. • Interstate is when interstate traffic amounts to more than 10% of the total traffic on the facility. • Intrastate is when interstate traffic amounts to 10% or less of the total traffic on the facility.

1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.2	Service Descriptions
C.	TLS is available as two service types: Ethernet Multipoint Service (EMS) or Ethernet Relay Service (ERS) Standard. The Customer must select either EMS or ERS Standard as the service type for each domain:
1.	**Ethernet Multipoint Service (EMS)** is a connection-less Ethernet TLS service that allows connectivity among multiple Customer-designated locations within a LATA.
	With EMS, 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 among 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 (ERS) Standard** is a connection-oriented Ethernet TLS service that allows for point-to-point connectivity between Customer-designated locations within a LATA.
	With ERS, an 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 the Customer's access lines, and shared network services 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 access only their own data.
	With ERS service type, an Ethernet Virtual Private – Local Area Network (EVP-LAN) can be established with EVP-LAN EVCs. An EVP-LAN is a multipoint Virtual LAN comprised of a CUG of two or more EVCs. EVP-LAN EVCs are designated by the Customer within an ERS Premier domain.
a.	Six EVC service classes are available for use with ERS:
	ERS Standard (ERS-STD): This service class is available with ERS – Standard UNI Port With Access Line Connections at 10, 100 and 1000 Mbps. ERS Standard is designed for Customer applications that do not require a Committed Information Rate (CIR) or low delay, where CIR equals 0 and Excess Information Rate (EIR) equals the number of Mbps of the selected ERS-Standard EVC service class.
	ERS Basic (ERS-B) and EVP-LAN Basic (EVPLAN-B): ERS-B and EVPLAN-B are designed for customer applications that do not require a CIR or low delay, where the CIR equals 0 and EIR equals the number of Mbps of the selected ERS-B EVC or EVPLAN-B service class.
	ERS Priority Data (ERS-PD): ERS-PD is designed for Customer applications which do not require low delay, but require a CIR, where the CIR and EIR equal the number of Mbps of the selected ERS-PD EVC service class.
	ERS Real Time (ERS-RT) and EVP-LAN Real Time (EVPLAN-RT): ERS-RT is designed for Customer applications which require a CIR and low delay for some portion of their traffic, where CIR equals the number of Mbps of the selected ERS-RT or EVPLAN-RT EVC service class and EIR equals 0. EVPLAN-RT is not available for 10Gbps UNI speed.

1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.2	Service Descriptions
a.	**(Cont'd)**
	An ERS EVC can include up to three service classes (ERS-B, ERS-PD and ERS-RT) as described above within each EVC. An EVP-LAN EVC can include one service class (either EVPLAN-B or EVPLAN-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).

1.4.3	Regulations
A.	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 Verizon 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), deployed in leased space near the Customer's location. At subscription, the Customer has an option of selecting access lines at speeds of 10 Mbps, 100 Mbps, 1000 Mbps, or 10 Gbps.
B.	TLS is available to Customers whose serving central office is a TLS-equipped central office and is located within the maximum allowable fiber range of the serving central office. The maximum allowable fiber 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 transport facility used in each serving arrangement.
C.	If the Customer's serving central office is not a TLS-equipped central office, the Customer may obtain service by paying the Interoffice Mileage in addition to the TLS access line. The db loss cannot exceed the maximum allowable range, as specified in regulation above.
D.	**Provision of Service**: TLS service consists of the following components:
1.	Network Interface Device (NID) at the Customer's premises to terminate the fiber pair or other optical transport.
2.	Optical Transport from the Customer's premises to the serving central office.
3.	Network Management including fault monitoring and diagnostics, performance and network configuration applications and manual monitoring when necessary.
4.	User Network Interface (UNI) Port With Access Line Connection.
5.	Ethernet TLS Ethernet Virtual Circuit (Ethernet TLS EVC), where applicable.
6.	Interoffice Mileage, where applicable.
E.	**Availability of Service –** TLS is provided seven days a week, 24 hours a day, from central offices equipped to provide this service. ERS Service, including Premier Access Lines as defined in Section 1.4.4.A.1.b. and ERS-Std, ERS-B, ERS-PD, ERS-RT, EVPLAN-B, and EVPLAN-RT EVCs, as defined in Section 1.4.2.B.2, will only be available from Central Offices equipped to support ERS service.

1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.3	Regulations
F.	The standard Customer connectivity model for UNI Port with Access includes direct fiber or existing transport facilities between the Customer's location and the TLS-equipped central office. The customer may select to have their UNI Port with Access provisioned over an optical transport system. If so, the customer must choose one of the following UNI Port with Access arrangements:
1.	Protected Non-Diverse – Customer connectivity is provisioned over an optical transport system with an alternate (not diverse) facility between the Customer's location and the TLS-equipped central office. The optical protected interoffice charge is applicable to 1000 Mbps speed when interoffice facilities are required.
2.	Protected Diverse **–** Customer connectivity is provisioned over an optical transport system with an alternate and diverse fiber path between the Customer's location and the TLS-equipped central office. The diverse fiber path does not include dual entrances at the premise and company wire centers. The customer may request dual entrance subject to special construction charges and availability of facilities. The optical protected interoffice charge is applicable to 1000 Mbps speed when interoffice facilities are required.
3.	Protected Private **–** Customer connectivity is provisioned over a dedicated private ring which the customer has already obtained from Verizon. At least one node of the private ring must be located in a TLS-equipped central office.
4.	When a customer elects to have TLS served from a remote Central Office (CO), because the serving CO is not TLS equipped, it is Customer's responsibility to monitor the status of TLS equipment availability in the serving CO and to decide whether or not to initiate a reroute of TLS facilities when local service is available. The charges to reroute service will be identical to a new installation.
G.	**Connections –** The network interface device (NID) is the LAN interface on the TLS equipment at the Customer's premises. The interfaces are as follows: 10 Mbps Ethernet RJ45, 100 Mbps Ethernet RJ45, 1000 Mbps or 10,000 Mbps Ethernet multi-mode optical connector. The Customer is responsible for any inside wiring required to connect the LAN to the TLS equipment.
1.	The Customer is also responsible for installation, operation and maintenance of any Customer-provided equipment.
2.	Verizon has the service responsibility up to and including the network interface device (NID).
H.	**Limitations –** The Customer's location must be within the maximum allowable range of the TLS-equipped central office.
I.	**Maintenance Window –** To meet the Customer's 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. When network upgrades are planned, Verizon will attempt to provide Customers reasonable and timely notification in order to minimize any impact on the Customer's service.
J.	**Technical Specification –** The technical specifications for TLS are delineated in IEEE802.3-2000.
K.	**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, 1000 Mbps or 10 Gbps access is full duplex.

1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.3	Regulations
L.	TLS is available where facilities and conditions permit. Special construction charges may apply.
M.	The associated regulations, rates and charges under the appropriate Verizon tariff or Product Guide shall apply in addition to the regulations, rates and charges associated with TLS.

1.4.4	Application of Rates and Charges
A.	The following rate elements are applicable to TLS:
1.	**UNI Port With Access Line Connection**
a.	**Standard Access Lines** (available for EMS Type Only) – A monthly rate applies on a per-line basis, based on the speed of the access connection (i.e., 10 Mbps, 100 Mbps, 1000 Mbps, or 10 Gbps). The Standard Access Lines are offered on a month-to-month basis, or as a three-year or five-year Term Commitment Plan. A nonrecurring charge applies to the installation of the Standard Access Lines provided on a month-to-month basis. Besides the standard connectivity model, Standard Access Line is offered with three other types of UNI Port with Access Line Connections, where facilities exist. 10 Gbps is not available for these Protected options. - Protected Non-Diverse - Protected Diverse - Protected Private

1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.4	Application of Rates and Charges
A.	**(Cont'd)**
b.	**Premier Access Line** – 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. Premier Access Lines are available at 10 Mbps, 100 Mbps, 1000 Mbps or 10 Gbps and provide connectivity between the Customer premises and the serving wire center. ERS – Premier UNI Port With Access Line Connection requires some combination of ERS-B, ERS-PD, ERS-RT, EVPLAN-B and/or EVPLAN-RT EVCs service classes, as described in Section 1.4.2.B.2, in order to establish point-to-point connectivity among the Customer's access lines. A Customer cannot mix ERS-Premier UNI ports with any other UNI 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 is less than or equal to 500% of UNI Speed; and ERS-PD is less than or equal to 100% of UNI Speed; and ERS-RT is less than or equal to 100% of UNI Speed; and ERS-PD, ERS-RT and EVPLAN-RT is less than or equal to 100% of UNI Speed; and ERS-B and ERS-PD, ERS-RT and EVPLAN-B is less than or equal to 500% of UNI Speed. EVPLAN-B is less than or equal to 20 Gbps of EVP-LAN CUG. EVPLAN-RT is less than or equal to 1 Gbps of EVP-LAN CUG. Besides the standard connectivity model, Premier Access Line is offered with three other types of UNI Port with Access Line Connections, where facilities exist. - Protected Non-Diverse - Protected Diverse - Protected Private

1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.4 Application of Rates and Charges

A. (Cont'd)

c. **EMS – Real Time (EMS-RT) Access Line** – 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 monthly rate applies on a per-line basis, based on the speed of the access connection (i.e., 100 Mbps 1000 Mbps or 10 Gbps). This enhanced service class configures a fixed portion of the UNI to be configured for Real Time Traffic, where each 100 Mbps UNI has a Committed Information Rate (CIR) equal to 5 Mbps and an Excess Information Rate (EIR) equal to 0 and where each 1000 Mbps UNI has CIR equal to 20 MBPS and EIR equal to 0, and with each 10 Gbps UNI has CIR = 50 Mbps with EIR = 0. The remainder of the UNI can be used for CIR equal to 0 with EIR equal to 0 traffic. A Customer cannot mix an EMS-RT Access Line with the ERS Service type, but may mix an EMS-RT Access Line with EMS Access Lines. Besides the standard connectivity model, EMS – Real Time Access Line is offered with three other types of UNI Port with Access Line Connections, where facilities exist. 10 Gbps is not available for these Protected options.

- Protected Non-Diverse
- Protected Diverse
- Protected Private

2. **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 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 or combining EVPLAN-Basic and EVPLAN-Real Time bandwidth on an EVC. A non-recurring 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 ERS – Standard UNI Port With Access Line Connection and/or ERS Premier UNI Port With Access Line Connection is limited as follows:

10 Mbps	=	5 EVCs
100 Mbps	=	No more than 16 EVCs
1000 Mbps	=	No more than 250 EVCs
10 Gbps	=	No more than 750 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:

EVC Service Class	10 Mbp UNI Max/EVC	100 Mbp UNI Max/EVC	100 Mbp UNI Max/EVC	10 Gbps UNI Max/EVC
ERS-B (or) EVPLAN-B	10 Mbps	100 Mbps	1000 Mbps	1000 Mbps
ERS-PD	10 Mbps	100 Mbps	500 Mbps	500 Mbps
ERS-RT	10 Mbps	100 Mbps	100 Mbps	100 Mbps
EVPLAN-RT	10 Mbps	50 Mbps	50 Mbps	N/A

1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.4	Application of Rates and Charges
A.	**(Cont'd)**
3.	**Interoffice Mileage –** The Interoffice Mileage charge is based on the Per Mile charge multiplied by the distance between the Customer serving central office and the nearest TLS-equipped central office (a central office equipped with a switch, node or other Verizon equipment capable of delivering service via a shared fiber path or network infra-structure). This interoffice distance is measured in airline miles based upon the latitude and longitude of each central office. The mileage measurement is calculated in accordance with the then current terms as set forth in the 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 UNI Port with Access Line. Optical protected mileage interoffice transport is available for the 1000M UNI speed. The protected transport option for 10/100 Mbps, Protected Non-Diverse and Protected Diverse, UNI speeds include optical protected interoffice transport when needed.
4.	**Domain/LAN Extension Equipment Changes –** Customer requests for changes in EMS Domains and replacement of LAN extension equipment will be charged a non-recurring charge per location per change.
B.	**Minimum Period –** The minimum subscription period for TLS under the month-to-month plan is nine months. For example, if the customer discontinues the service in the seventh month, the customer will be billed the full monthly rate for the remaining two months. After the nine month minimum period, the TLS can be cancelled without termination liability with thirty days advance notice.
C.	**Term Payment Plans** – The TLS UNI Port with Access Lines are offered under a three (3) year or five (5) year Term Payment Plan. The regulations applicable to TLS provided under a Term Payment Plan are specified in 1.4.5 following.
D.	**Moves, Changes and Upgrades** – When the Customer requests a move or relocation of a Standard Access Line, Premier Access Line, or EMS Real Time Access Line to a different address and/or different 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. The imposition of Termination Liability, if any, shall be determined as specified in 1.4.5. 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. The imposition of Termination Liability, if any, shall be determined as specified in 1.4.5.D.4. Customer requests for changes in Domains and replacement of LAN extension equipment will be charged a nonrecurring charge per location, per change.

1.4.5	Termination Liability
A.	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. For example: 25% X MRC X # of Lines X Remainder of Term = Termination Charge

1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.5	Termination Liability
1.	Early termination charges will apply only to those rate elements under a term commitment period. If any 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.
B.	**End of Term Options -** Prior to the end of the term plan, the Customer may select one of the following options, to be effective at the end of the term:
1.	Renew term plan
2.	Commit to a new term plan
3.	Arrange for a change of service, or
4.	Arrange for termination of the service.
C.	In the event the Customer does not select one of the above options, the Customer will be converted to applicable month to month rates, for the same service.
D.	Early termination charges will not be assessed under the following circumstances:
1.	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;
2.	Customer attempts to move the existing service to a new location within the Company's service area, but the service is unavailable;
3.	Customer renegotiates a new term commitment plan for the same service before the current term commitment plan expires and the value of the new term plan is equal to or greater than the remaining value of the current term plan
4.	Customer changes to another service or service type and/or upgrades service to a higher speed or capacity under a term commitment plan, provided the following conditions are met:
a.	The monetary value of the service under the new term commitment plan is equal to or greater than the remaining value of the service under the current term commitment plan,
b.	Verizon provides the new service via tariff, Product Guide or on an individual case basis (ICB) and,
c.	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.

1.4.6	Interruption of Service
A.	**Interruption of Service** - For any complete failure of service which continues for more than 24 hours, credit will be applied according to Part A, Section 1.4.5.

1.4.7	Service Level Agreements (SLA)
A.	Service Level Agreements (SLA) provide TLS Customers with Service Response Credits (SRC) applied to their Verizon Rhode Island telephone bill if Verizon 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 an SLA SRC if the Customer adheres to the conditions stated within this Product Guide. The SLA specifies performance criteria against which actual performance for TLS is compared on a monthly basis.

1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.7	Service Level Agreements (SLA)
B.	The TLS SLAs include the following measurements:
1.	Operational SLAs
a.	**Mean Time to Repair (MTTR)** is the average mean time for Verizon to repair Customer-reported interruptions of service that are within the Verizon's network. A TLS service is interrupted when it becomes unusable to the Customer because of a failure of a facility component within Verizon's network that is used to furnish service under this Product Guide. **Measurement —** Verizon will measure the average Time to Repair (TTR) for Customer-reported interruptions of TLS Access Lines. To be measured under this SLA, the Customer must report any interruption to a Verizon-designated entity for the opening of a trouble ticket. The TTR is measured from the date and time a trouble ticket is opened by Verizon and the date and time when the ticket is closed by Verizon. In measuring the TTR, any stop clock time or adjusted duration time associated with the trouble shall be subtracted from the measurement. For purposes of this measurement, stop clock time refers to: - periods when Customer testing is occurring; - periods when Verizon is awaiting the Customer's authorization to commence work on a TLS Access Line; - periods when Verizon is denied access to the Customer's premises or facilities as necessary to diagnose, repair or test - 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 - any time period during which any of the above occurrences existed as listed in section 1.4.7.C - **SLA Exclusions.** The SLA shall not apply to cases of trouble where no trouble was found or repeated reporting of 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. **SRCs —** If the MTTR is greater than four (4) hours during the calendar month, then 50% of the one-month TLS Access Line monthly charge will be given as an 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 Verizon. The MTTR SRC credit excludes and is not applicable to scheduled maintenance, scheduled downtimes or delays resulting from an event of force majeure.

1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.7 Service Level Agreements (SLA)	
B.	**(Cont'd)**
b.	**Network Availability** is the percentage of time during a calendar month that the TLS is available for use by the Customer. **Measurements —** Verizon threshold for Network Availability is 99.90%. Network Availability is calculated on a per-TLS Port Connection basis as follows: - ((24 X Number of Days in Month X Number of TLS Port Connections) – (Number of Hours Out of Service during Month))/(24 X Number of Days in Month X Number of TLS Port Connections). - Verizon will not round up the calculation to reach the 99.90% threshold. This SLA is available only for outages reported by the Customer via a trouble ticket to Verizon. **SRCs —** If the overall Network Availability measurement is less than the threshold of 99.90% for a calendar month, Verizon will provide a credit equal to ten percent (10%) of the associated monthly charge for any individual TLS port connection that did not meet the threshold during the month.
2.	Network Performance SLAs applies to all Customers subscribing to an EVC Class of Service (CoS) within a local network consisting of the following types: - ERS Real Time EVC bandwidth CoS, and - ERS Priority Data EVC bandwidth CoS - All other EVCs do not qualify for Network Performance SLAs including EVP-LAN EVCs 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 is 'Missed', then the overall performance objective per 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'. For a given Month (e.g., M1), the monthly performance guarantee is 'Met' if the % of hours 'Met' for the month meets or exceeds the monthly objective. EVC Class of Service Network Performance SLA shall be based on the following Ethernet frame traffic criteria:

1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.7 Service Level Agreements (SLA)

2. (Cont'd)

Data Delivery Ratio (DDR) is 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 conform to the subscribed Committed Information Rate (CIR) profile. Interruptions caused by MTTR activity shall be excluded from the measurement of DDR. The following chart details the Data Delivery Ratio SRCs:

	Data Delivery Ratio	Data Delivery SRCs
Real Time EVC Bandwidth	Verizon threshold for Data Delivery Ratio is 99.5% in a calendar month.	If the overall Data Delivery measurement does not meet the per-month conformance, then the Verizon 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	Verizon threshold for Data Delivery Ratio is 99% in a calendar month.	

Round Trip Delay (RTD) is 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 conform to the subscribed CIR profile. The following chart details the Round Trip Delay SRCs:

	Delay Measurement	Delay SRCs
Real Time EVC Bandwidth	Verizon threshold for Delay is 20 milliseconds.	If the overall delay measurement does not meet the per-month conformance, then Verizon 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	Verizon threshold for Delay is 50 milliseconds.	

1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.7 Service Level Agreements (SLA)

2. (Cont'd)

Jitter is the variance in frame delay (in milliseconds) between two service frames as measured at the ingress and egress UNIs. The jitter definition is to restricted service frames that conform to the subscribed CIR profile. The following chart details the Jitter SRCs:

	Jitter Measurement	Jitter SRCs
Real Time EVC Bandwidth	Verizon threshold for Delay is 5 milliseconds.	If the overall jitter measurement does not meet the per-month conformance, then Verizon 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. The SLA SRC applies to the following TLS elements:

- UNI Port with Access Line Connection
- Ethernet Virtual Circuit (EVC) Bandwidth, excluding EVP-LAN EVCs

C. **SLA Exclusions —** SLAs do not apply to the extent that any of the following reasons prevented Verizon from meeting the SLAs:

1. 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, the Customer's refusal to grant Verizon reasonable access to the premises for testing/repair, the Customer's refusal to release the TLS circuit/connection for testing and/or repair, the Customer's maintenance activities or rearrangement of the TLS circuit/connection, or if the Customer has exceeded the purchased EVC bandwidth;

2. Subsequent reports (i.e., additional Customer inquiries) while the trouble is pending;

3. Service troubles closed due to the Customer's action;

4. Service troubles repaired by Verizon prior to the receipt of a trouble report;

5. Service trouble caused by the Customer's CPE or facilities on the Customer's side of the demarcation point or any power, equipment, service or systems not provided by Verizon;

6. An Interruption related to the provisioning of a new TLS Access Line or Access Lines in service for less than a month;

7. Scheduled maintenance and downtimes;

8. Unavailability of network monitoring or management equipment or reporting;

9. Any other reason outside the control of Verizon.

1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.7	Service Level Agreements (SLA)
D.	**Limitation on SRCs —** The combined total of any SRCs applied to the Customer's TLS service for a calendar month must meet the following conditions:
1.	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 per TLS Network.
a.	To receive an SRC, the Customer must request the SRC in writing within thirty (30) calendar days of the end of the monitoring period of the requested SRC. The request must include a list of all impacted EVC identification numbers and the type of SRC requested for each EVC.

1.4.8	Responsibility of the Customer
A.	To receive SRCs, the Customer must have the eligible rate elements listed in the initial subscription based on the established customer of record, or have ordered the eligible rate elements subsequent to the initial subscription. Verizon reserves the right to change, alter or discontinue the optional SRC plan at its discretion.
1.	To receive credit, Verizon 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.
B.	**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 Verizon entity in the manner prescribed by Verizon.
C.	**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. The equipment shall be subject to prior approval by Verizon and be capable of the following:
1.	**DDR SLA —** the equipment must be capable of determining the number of actual packets sent and successfully received between two (2) Customer locations.
2.	**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).

1. Advanced Data Services
1.4 Transparent LAN Service (TLS)

1.4.8	Responsibility of the Customer
C.	(Cont'd)
3.	**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).
D.	All equipment must be capable of measuring from edge to edge (Customer Premises Equipment (CPE) to CPE) and of making 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, the measurements must include at least seven consecutive days' worth of measurements for four (4) hours per day.

1.4.9	Responsibility of Verizon
A.	All service performance and provisioning measurements are conducted using Verizon monitoring systems and procedures. Verizon may change these systems and procedures at its sole discretion.
B.	Verizon will research and validate the Customer-submitted SRC in accordance with its own procedures and systems. Verizon may, at its discretion, use either the Customer-provided data or its own measurement data (or as described in 1.4.8.D) to evaluate and assess whether SRCs are warranted.

1. Advanced Data Services
1.5. Reserved for Future Use

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1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.1 Definitions

Add/Drop Multiplexing (ADM) – a multiplexing function that allows lower level signals to be added or dropped from an optical carrier channel.

EDSS Port (Port) – an EDSS rate element that denotes the interface at which a channelized or lower speed service terminates or originates at an EDSS node.

High–Speed Interface – an EDSS rate element on a partial ring service that allows high-speed connection of the Company's facilities to the facilities of the customer or of a third party. High-speed connection is provided at a location that is mutually agreed upon by Verizon and the customer.

Optical Carrier Rate (OC #) – a SONET transmission signal/speed, line rate, or service. The rates are in multiples of an OC1, which is equivalent to an Synchronous Transport Signal (STS1) Level (51.84 Mbps), SONET's basic rate:

OC(#) Rate	Bandwidth Capacity
3	155.52 Mbps
12	622.08 Mbps
48	2.488 Gbps
192	9.952 Gbps

Optical Carrier Rate Concatenated (OC#c) – a clear channel SONET transmission using only one framing format. Generally, an OC3 signal provides three Synchronous Transport Signal (STS1) frame formats with 3 overheads for a total capacity of 2268 bytes per Synchronous Payload Envelope (SPE) frame; in an OC3c signal, one STS3c frame format is used with one overhead, increasing the total payload capacity to 2340 bytes per SPE frame.

OC12+3, OC48+3,OC192+3,OC192+12,and OC192+48 – designations for nodes in ring-on-ring designs; the higher speed ADM is part of the true ring, and the lower speed ADM is connected for the purpose of mapping lower speed services onto the STS1s of the OC12, OC48 or OC192.

Node – an Enhanced Dedicated SONET – Service rate element and a designation of either a customer location or Central Office on a SONET ring that has ADM capability. It is also the address of where a channelized (lower speed) service originates or terminates on a ring.

Synchronous Optical NETwork: (SONET) – a standard for the transmission of high capacity bandwidth over optical facilities. This synchronous transmission platform utilizes a modular multiplexing approach. Because of the large bandwidth, some of the payload is used to monitor, protect, manage and improve the transmission of the signal.

Synchronous Transport Signal Level (STS1) – a 51.84 Mbps signal that is the electrical equivalent of the OC1 or a DS3 with additional Mbps devoted to SONET overhead information. An STS1 can carry a DS3 or 28 DS1s when specifically formatted (mapped). These DS1s may be accessed off-ring using the DS3 to DS1 multiplexing optional service or via a DS3 Transmux port.

Transmuxing – the function of an EDSS DS3 Transmux port that performs a DS3 to DS1 conversion at an EDSS Node. The DS3 to DS1 conversion allows a single EDSS DS3 Transmux port to be associated with up to twenty-eight (28) Virtual Tributary VT1.5 mapped EDSS DS1 ports. Transmuxing within the EDSS network retains DS1 visibility allowing for proactive maintenance capability of DS1 signals.

Virtual Tributary (VT) – a SONET structure designed for transport of sub-STS1 payloads. A DS1 is mapped into the SONET format using a VT1.5 as a packaging mechanism that is internal to the SONET signal.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

Rates and charges for services explained herein are contained in Part F, Section 4.

1.6.2	Description
A.	Verizon's Enhanced Dedicated SONET Service is an optical high capacity service provided using SONET-based technology. EDSS is provided on SONET facilities except where a service is extended on an "off-net" facility. EDSS provides the customer a dedicated high capacity customized network. The network is in a ring architecture or topology that assures greater survivability and can be arranged as a full ring, a partial ring, or a ring-on-ring topology that provides connectivity to multiple customer locations.
1.	A full ring must have a minimum of three nodes with at least one of the nodes located in a Verizon Central Office (CO) and one located at a customer premises. The fiber path is such that when traversing the ring, the starting node and the end node are the same.
2.	A partial ring must have a minimum of two nodes with at least one of the nodes located in a CO and one located at a customer premises. The customer premises node can be substituted with a high-speed interface if the customer circuits that are provisioned on the partial ring are connected in a CO. The fiber path is such that when traversing the ring, the starting node and the end node are different.
3.	A ring-on-ring arrangement which is a full ring riding over a larger full ring. The lower speed ring must have a minimum of two nodes with at least one of the nodes located at a customer premises.
B.	EDSS is an alternative to basic High Capacity point-to-point service between multiple customer locations. Monthly rate elements include ports, nodes, mileage and high-speed interfaces (certain partial ring configurations only). When a DS1 service is provided between a DS1 port on an OC3 EDSS CO node and a channel of a multiplexed 44.736 Mbps or groomed NES DS3 facility, a ThruPath Connection nonrecurring charge applies. ThruPath connections at service levels less than, or greater than, DS1 are prohibited with EDSS.

1.6.3	Technical Specifications
A.	Technical specifications are delineated in the following publications:
1.	Telcordia Document GR-253-CORE; Issue 2, December 1995; Revision 1, December 1997 " Synchronous Optical Network (SONET) Transport Systems: Common Generic Criteria;"
2.	Telcordia Document GR-1374-CORE; Issue 1, December 1994; "SONET Inter-Carrier Interface Physical Layer Generic Criteria for Carriers;"
3.	American National Standard, ANSI T1.105-1995; "Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats;"
4.	Telcordia Document GR-1377-CORE; Issue 5, December 1998; "SONET OC192 Transport System Generic Criteria;"
5.	American National Standard, ANSI X3.802.3, Telecommunications and information exchange between systems-Local and Metropolitan Areas Networks-Specific Requirements-Part 3, Released 1998; and,
6.	American National Standard, ANSI X3.802.3z, Supplement to Standard for Information Technology-Local and Metropolitan Area Networks, Part 3, Released 1998.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.4	Regulations
A.	**Provision of Service**
1.	**All Rings**
a.	When a customer premises node is located in the same building as a CO node, there may be less diversity between the two nodes.
b.	When a customer transmits STS1, Internet Protocol or Ethernet signals, the mapping feature must be employed.
c.	Ethernet services are provided on a point-to-point basis between two suitably equipped EDSS nodes.
d.	Extended Superframe Format (ESF) is required on all DS1 circuits.
e.	EDSS is designed to function normally with transmissions of less than 20 miles, or with transmissions through up to 5 COs. Generally, a transmission of 20 or more miles or a transmission through 6 or more COs will be subject to loss of signal integrity. Additional nodes may be added to maintain signal integrity.
f.	The customer specifies the ring capacity in terms of optical carrier rates. EDSS is available in capacities of OC3, OC12, OC48 and OC192. Lower speed channel services are provided between nodes via ports.
g.	EDSS is deployed upon customer request, and is available based on negotiated intervals. Where suitable SONET facilities are not available, Special Construction rates and charges may apply.
h.	The customer must provide, at no cost to Verizon, suitable and secure space, suitable environmental conditions**,** and uninterrupted power supply, building entrance facilities, and conduit for placement of the facilities and network equipment at its locations as necessary to provide the service.
i.	One or more lower speed node(s) may subtend a higher speed node (e.g., an OC12 node may subtend an OC192 node). Rates and charges apply for both the higher speed node and for each subtending lower speed node provided. Additionally, the applicable port charge will apply to drop the lower speed channel that connects the higher speed node to the subtending lower speed node.
2.	**Partial Ring**
	When EDSS is provided in a partial ring configuration, the following applies:
a.	The customer must provide Verizon with its fiber optic facility requirements (i.e., whether it will use single mode fiber or multi-mode fiber) prior to Verizon ordering the necessary SONET network equipment to provide the requested service. The customer may utilize its own fiber optic facilities or the facilities of a third party.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.4	Regulations
A.	**Continued**
b.	When ordering lower speed channels that originate at and terminate to nodes that are not within the partial ring provided by Verizon, the customer must provide Verizon with a copy of the order the customer placed with the third party provider, to insure technical compatibility for mapping channels between the service provided by Verizon and the service provided by the third party. A Channel Mapping nonrecurring charge will apply for each channel mapped from Verizon provided partial ring to the service provided by the third party. Channel mapping charges do not apply when ordering channels that originate at and terminate to nodes on Verizon's portion of the partial ring.
c.	Connection to Partial Ring Service: Verizon's network design will define the optical parameters at the connection locations. Verizon is responsible for the optical parameters of the high-speed optical signal at the location where its facilities are connected to the facilities of the customer or of the third party. Verizon bears no responsibility for the optical parameters beyond its location (i.e., in the facilities of the customer or of the third party). The customer or third party is responsible for engineering its portion of the jointly provided ring. Connection to EDSS partial ring service is limited to high-speed fiber connection of Verizon backbone network fiber optic facilities and the fiber optic facilities of the customer or of a third party. Partial ring service may only be connected to (1) another partial ring provided by Verizon or (2) suitable ring facilities provided by the customer or third party. The portion of the ring provided by the customer or third party must use vendor equipment that matches the equipment used by Verizon and must maintain the same vintage in software release as Verizon. Upon written notice by Verizon, the customer or third party will have sixty (60) days in which to complete the change out of any software release deployed by Verizon. Connection to EDSS partial ring services may be at the customer premises via a node or at a mutually agreed upon location via a high-speed interface. Connection to other Verizon services may not occur at the mutually agreed upon high-speed interface. Such location will be designated as a customer premises for the purpose of administering the general regulations set forth in this Product Guide.
3.	**Ring-on-Ring** When EDSS is provided in a ring-on-ring design, the following applies:
a.	The lower speed ring must have a minimum of two nodes located at the customer premises or one node at the customer premises and one node at the CO.
b.	Verizon must provide the lower speed nodes.
c.	Each lower speed node must subtend off of its corresponding higher speed node.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.4	Regulations
A.	Continued
4.	**Subtending Rings**
	The customer may interconnect two (2) or more full rings in a subtending ring configuration subject to the following:
a.	One (1) of the EDSS full rings must be designated by the customer as the main ring from which the other EDSS full ring(s) will subtend. The main ring must be of equal or greater capacity than each EDSS full ring that subtends the main ring. For example, a main ring that is an OC12 EDSS can have an OC3 and/or OC12 subtending ring but can not have an OC48 subtending ring. The number of rings that can subtend a main ring may be limited by the type and capacity of the nodes and port configuration specific to the customer's overall EDSS service configuration. Changes in month-to-month billed ports are treated as disconnects and subsequent installations.
b.	Interconnection between the main ring and the subtending ring requires a port node. A port node provides high speed interconnection between an enhanced node on the main ring and the high speed facilities of the subtending ring. Each subtending ring requires one port node where the subtending ring is interconnected to an enhanced node on the main ring. Interconnection between the main ring and a subtending ring may occur at a customer designated premises or within a wire center where such nodes are located. A maximum of two (2) interconnection points with the main ring are allowed per subtending ring.
c.	Only EDSS full rings that utilize suitably equipped enhanced nodes can be arranged in subtending ring configurations. Subtending ring configurations are not available on EDSS full rings utilizing nodes that are not enhanced. EDSS partial rings may not be arranged in subtending ring configurations.
d.	Each ring in a subtending ring configuration must be arranged as a unidirectional path switched ring (UPSR) and must use enhanced nodes. Bidirectional line switched rings (BLSR) may not be arranged in subtending ring configurations.
e.	Where two (2) points of interconnection between the subtending ring and the main ring are provided, circuits originating on the main ring may be mapped to the subtending ring, and circuits originating on the subtending ring may be mapped to the main ring. Channels mapped across the two (2) interconnecting nodes are subject to Dual Node Cross-connect Channel Mapping charges as described in 1.6.4.A.4.l following.
f.	The main ring and any subtending rings associated with the main ring must individually meet the minimum requirement of three (3) nodes, except that only one (1) node for the entire service configuration must be located in a Verizon wire center. For example, if the main ring has one (1) node located in a Verizon wire center and two (2) nodes located at customer designated premises, the subtending ring(s) need not have a node that is located in a Verizon wire center.
i.	When determining if the minimum number of nodes on a subtending ring has been met, the port node providing interconnection to the main ring is included in the count.
ii.	When determining if the minimum number of nodes on a subtending ring has been met, the enhanced node on the main ring that interconnects with the subtending ring is not included in the count.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.4 Regulations

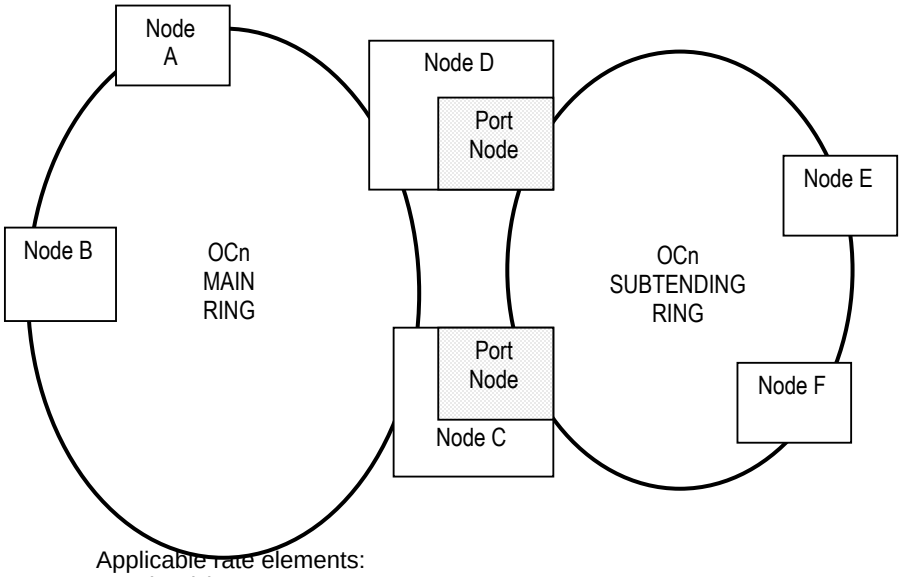
A. Continued

g. Each subtending ring may interconnect with only one (1) main ring.

h. Subtending ring configurations may be established using new EDSS full rings, existing EDSS full rings, or a combination of new and existing EDSS full rings.

i. All EDSS rings in the same subtending ring configuration must be billed to the same customer of record.

j. An example of a subtending ring configuration with two (2) points of interconnection to the main ring is diagrammed below:



Applicable rate elements:
- Nodes (6)
- Port Node (2)
- Mileage for circumference of Main Ring
- Mileage for circumference of Subtending Ring

k. Lower speed services provided over EDSS must ingress at a node on either ring (the main ring or the subtending ring) and egress at a node on either ring (the subtending ring or the main ring). A single port charge applies at the point of ingress and a single port charge applies at the point of egress, unless the ingress and/or egress occurs via an asymmetrical port facility in which case a separate port charge will not apply for each such ingress or egress.

l. At the customer's option, a lower level service may interconnect the main and one (1) or more of the subtending ring(s) through two (2) separate points of interconnection with each subtending ring. In this case, a single Dual Node Cross-connect Charge applies per lower level service provided across the interconnecting port nodes, regardless of the number of subtending rings involved. The Dual Node Cross-connect Charge does not apply when a lower level service interconnects the main and subtending ring(s) through a single point of interconnection.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.4 Regulations

A. Continued

m. In the event that the customer elects to make a subtending ring an independent full EDSS, the independent full EDSS ring must meet all of the requirements for an EDSS full ring as set forth in 1.6.4.A.1 preceding. This may require an additional node in order to satisfy the minimum node requirement for a single, independent ring. Verizon must provide the lower speed nodes.

n. The customer must provide, at no cost to Verizon, suitable and secure space, suitable environmental conditions**,** a uninterrupted power supply, building entrance facilities, and conduit for placement of the facilities and network equipment at its locations as necessary to provide the service.

o. The customer will be billed additional charges for any charges levied on Verizon for space and power required to place ADMs on the Verizon's side of the network interface.

5. Port Types

a. The type of ports that are supported on a node may limit the maximum number of ports that are provided on that node. Accepted port speeds are as follows:

Enhanced Nodes =	OC3	OC12	OC48	OC192
DS1 Ports	X	X	X	X
DS3 Ports	X	X	X	X
DS3 Transmux Ports	X	X	X	X
STS1 Ports	X	X	X	X
OC3 Ports		X	X	X
OC3c Ports		X	X	X
OC12 Ports			X	X
OC12c Ports			X	X
OC48 Ports				X
OC48c Ports				X
Ethernet Ports				
GigE-1 Ports		X	X	X
GigE-3 Ports		X	X	X
GigE-6 Ports		X	X	X
GigE-9 Ports		X	X	X
GigE-12 Ports			X	X
GigE-24 Ports			X	X

b. Changes in month-to-month ports are treated as disconnects and subsequent installations.

c. When high capacity services are provided between two EDSS rings, the associated ports must be symmetrical (e.g., DS1 Port to DS1 Port, DS3 Port to DS3 Port).

d. When a lower capacity service is dropped from an EDSS, the associated ports will be billed to the lower capacity service. Lower capacity services may not be dropped at locations utilizing a high-speed interface.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.4 Regulations

A. Continued

e. Ports may be ordered in a symmetrical arrangement (e.g., DS3 Port to DS3 Port), an asymmetrical arrangement (e.g., OC12 Port to DS3 Port) or in certain transmuxing arrangements as specified following. Ethernet ports may be ordered only in symmetrical arrangements. Ports are not provided where a high-speed interface is utilized.

f. Port nodes allow interconnection between two (2) full EDSS rings. One (1) of the rings will be designated as the main ring and the other ring is designated as a subtending ring. Subtending rings are described in 1.6.4.A.4.

g. When transmuxing arrangements are ordered in symmetrical or asymmetrical port combinations, the following conditions apply:

- A DS1 port associated with a DS3 Transmux port may not coexist as a separate DS1 port with the same EDSS node.
- An end-to-end DS1 service provided over EDSS may not be associated with more than one DS3 Transmux port.
- DS3 Transmux ports are available at premises nodes or at CO nodes.
- The higher speed port of an asymmetrical port combination will be mapped based on the speed of the connecting service and port.

h. For all other asymmetrical port combinations, the following conditions apply:

- The higher speed port will be mapped based on the speed of the connecting service and port. The higher speed port is referred to as a Stub Hub Port in the arrangement.
- The Stub Hub Port is available only at a premises node.
- Stub Hub Ports are not provided on partial ring configurations.
- The lower speed port(s) can be provided at customer premises and CO nodes.

i. Asymmetrical ports are available in the following combinations:

APF Asymmetrical Port	Ring Capacity	Node Speed	Rate Combinations
OC3 EDSS Ring	OC3 - OC3	STS1	STS1– DS3 STS1 – DS1
OC12 EDSS Ring	OC12 - OC12	OC3	OC3 – STS1 OC3 – DS3 OC3 – DS1 OC3 – GigE3 OC3 – GigE1
OC48 EDSS Ring	OC48 - OC48	OC12	OC12 – OC3 OC12 – OC3c OC12 – STS1 OC12 – DS3 OC12 – DS1 OC3 – GigE12* OC3 – GigE9* OC3 – GigE6* OC3 – GigE3* OC3 – GigE1*

* For Ethernet (GigE) port options, the associated Ethernet Service must be SONET mapped.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.4 Regulations

A. Continued

APF Asymmetrical Port	Ring Capacity	Node Speed	Rate Combinations
OC48 EDSS Ring	OC48 - OC48	OC3	OC3 – STS1 OC3 – DS3 OC3 – DS1 OC3 – GigE3* OC3 – GigE1*
OC192 EDSS Ring	OC192 - OC192	OC48	OC48– OC12 OC48 OC12c OC48 – OC3 OC48 – OC3c OC48 – STS1 OC48 – DS3 OC48 – DS1* OC48 – GigE24* OC48 – GigE12* OC48 GigE9* OC48 – GigE6* OC48 – GigE3* OC48 – GigE1*
		OC12	OC12 – OC3 OC12 – OC3c OC12 – STS1 OC12 – DS3 OC12 – DS1 OC3 – GigE12* OC3 – GigE9* OC3 – GigE6* OC3 – GigE3* OC3 – GigE1*
		OC3	OC3 – STS1 OC3 – DS3 OC3 – DS1 OC3 – GigE3* OC3 – GigE1*

* For Ethernet (GigE) port options, the associated Ethernet Service must be SONET mapped.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.4	Regulations
A.	**Continued**
6.	**Interfaces** EDSS is available only for the following interface combinations: DS1 – DS1 DS1 – STS1 DS3 – DS3 DS3 – DS1 STS1 – STS1 OC3 – STS1 OC3 – OC3 OC3 w/DS3 mapping – DS3 OC3 w/DS1 mapping – DS1 STS1 w/DS3 mapping – DS3 STS1 w/DS1 mapping – DS1 OC3c – OC3c OC12 – STS1, DS3, OC3, OC3c & OC12 OC12c – OC12c OC48 – STS1, DS3, OC3, OC3c, OC12, OC12c & OC48 OC48c – OC48c Gigabit Ethernet GigE1 – GigE1 (mapped as 1 STS1 channel) GigE3 – GigE3 (mapped as 3 STS1 channels or 1 STS3c channel) GigE6 – GigE6 (mapped as 6 STS1 channels or 1 STS6c channel) GigE9 – GigE9 (mapped as 9 STS1 channels or 1 STS9c channel) GigE12 – GigE12 (mapped as 12 STS1 channels or 1 STS12c channel) GigE24 – GigE24 (mapped as 24 STS1 channels or 1 STS24c channel)
7.	**Mileage**
a.	EDSS Mileage on a full ring is the total of airline distances between nodes rounded up to the nearest mile.
b.	EDSS Mileage on a partial ring is the total of airline distances between connection locations and each node on the partial ring. The total mileage is then rounded up to the nearest mile.
c.	The mileage rate is based on total ring capacity and not on individual services between nodes. For example, the mileage charge for a four-node OC3 ring with 5.1 miles between each node (20.4 total miles) would be calculated by multiplying the OC3 mileage rate by 21 miles. This mileage calculation applies regardless of the number of services (e.g., DS3s) on the ring.
d.	When EDSS is provided entirely or in part over a Verizon provided DWR ring service backbone network, EDSS channel mileage does not apply between the nodes.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.4	Regulations
B.	**Commitment Period**
1.	EDSS is available for 3, 5 and 7-year commitment periods, for ports, nodes, mileage, and high-speed interfaces. Ports are also available on a month-to-month basis. Ports and nodes added subsequent to the initial installation may be coterminous to the expiration date of the EDSS provided the addition is prior to the 21st month for a 3-year plan, prior to the 36th month for a 5-year plan, or prior to the 50th month for a 7-year plan. Ports and nodes added after the aforementioned periods require extending the commitment period for an additional year for a 3-year plan, an additional 2 years for a 5-year plan, or an additional 3 years for a 7-year plan. Ports in a month-to-month plan may be added at anytime. The added nodes must be at the same or lower speed as the existing nodes and port nodes.
2.	Monthly recurring rates apply for the ports, nodes, mileage, and high-speed interfaces. Once a term period expires, the prevailing rates of the current plan will continue until the customer cancels service or requests a new term plan.
3.	Nonrecurring charges for ports apply on a first and additional basis. To qualify as first and additional, the ports must be like-ports (e.g., 2 DS1 Ports) installed at the same node at the same time. Nonrecurring charges apply to the initial installation of ports purchased on a month-to-month basis and to the subsequent installations of all ports and nodes. For example, if a customer places an order for ten (10) GigE3 Ports at the same OC48 node, one First Nonrecurring Charge and nine Additional Nonrecurring Charges will apply for the GigE3 Ports. With the exception of Storage Interface Ports, the charge will vary based on whether the installation is in connection with the initial installation of the EDSS service or a subsequent installation of ports.
4.	With the exception of Storage Interface Ports, nonrecurring charges for EDSS ports purchased on a month-to-month plan at the initial installation of EDSS service apply on a first and additional basis.
5.	With the exception of Storage Interface Ports, nonrecurring charges for EDSS ports purchased under a term plan apply on a first and additional basis for each EDSS port that is ordered subsequent to the initial installation of EDSS Service.
6.	For Storage Interface Ports purchased on a month-to-month basis, nonrecurring charges apply to the installation of ports on a first and additional basis regardless of whether the installation of such Storage Interface Port is in connection with the initial or subsequent installation of EDSS. There is no NRC associated with term plans.
7.	Changes in Month-to-Month billed ports or changes in term plan billed port nodes, are treated as disconnects and subsequent installations for which subsequent nonrecurring charges apply.
8.	Nonrecurring charges for EDSS nodes apply to all nodes and port nodes installed subsequent to the initial installation of EDSS.
9.	A Channel Mapping nonrecurring charge as set forth in 1.6.4.B.10 following applies for each channel which Verizon must map over the partial ring. Channel mapping is required only on channels that originate at and terminate to devices that are not within the partial ring.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.4	Regulations
B.	(Cont'd)
10.	When a lower capacity service is dropped from an EDSS Ring, the associated ports will be billed to the lower capacity service. Lower capacity services may not be dropped at locations utilizing a pass-through interface. However, a Channel Mapping Charge will apply for each lower capacity service that originates at and terminates to devices that are not within the partial ring provided by Verizon. The Channel Mapping Charge is billed to the lower capacity service.
11.	When a lower capacity service is provided between two (2) separate asymmetrical port facilities (APF) on the same EDSS, Verizon must map the facility assignment on the first APF to the facility assignment on the second APF for which an Asymmetrical Port Mapping Nonrecurring Charge applies per lower capacity service mapped.
12.	Nonrecurring charges apply for the installation of an Optional Feature as described in 1.6.5.D.2. following.
13.	A single Dual Node Cross-connect Charge applies per lower level service provided across the interconnecting port nodes of a subtending ring(s) configuration, regardless of the number of subtending rings involved. Dual Node Cross-connect Charges as set forth in 4.4.1 apply for each channel which Verizon must cross-connect between the port nodes of the interconnecting ring(s).
14.	When a node is disconnected prior to the end of the commitment period, the node is subject to termination liability under 1.6.6. following.
15.	Where an Ethernet, Fibre Channel, or FICON signal is mapped to a SONET service, and that SONET service is provided in a symmetrical port arrangement, two (2) OCn ports apply (one where the mapped signal enters the ring and one where the mapped signal exits the ring).
16.	Where one or more Ethernet, Fibre Channel or FICON signals are mapped to a SONET service, and that SONET service utilizes an asymmetrical port combination (e.g., the signals enter the ring mapped to an OC12 SONET service and exit the ring via an OC48 port associated with an asymmetrical port facility), only one OCn port applies per mapped signal to enter the ring and the signal exits the ring over the asymmetrical port facility. The total number of such mapped Ethernet, Fibre Channel, or FICON signals that can be associated with the OCn Port of the asymmetrical port facility is limited by the STS1 capacity required to map each signal into the SONET service. For example, assume that an OC48 APF is ordered for which an OC48 port, OC48 mileage, and, when applicable, an OC48 Extension applies (an OC48 has a capacity of 48 STS1s). Further assume that 2 Verizon Optical Networking 600 Mbps Ethernet-to-SONET mapped services are ordered, each of which requires 6 STS1s when mapped into an OC12 SONET signal. In this example, the OC48 asymmetrical port arrangement would still have 36 available STS1s.
17.	Changes in Month-to-Month billed asymmetrical port facilities are treated as disconnects and subsequent installations.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.4	Regulations
C.	**Service Interruption**
1.	Credit Allowance Applies:
a.	EDSS is guaranteed service restoral within one minute in the event of a service interruption except as specified in 2 following. Any service interruption greater than one minute due solely to a Verizon facility failure will result in a credit allowance of 100% of the monthly rate for the applicable rate elements of the affected service, provided that the interruption is brought to the attention of Verizon within 10 days. The total credit allowance in any one billing period cannot exceed 100% of the customer's monthly rate for the affected rate elements, regardless of the number or length of service interruptions within a billing month
2.	A Credit Allowance Does Not Apply for:
a.	Service interruptions of less than one minute.
b.	Service interruptions caused by the negligence of the customer or authorized user.
c.	Service interruptions resulting from the failure of equipment or systems provided by the customer or authorized user.
d.	Service interruptions during any period in which Verizon is not afforded access to a premises for testing and/or repair of service.
e.	Service interruptions when the customer has released the service to Verizon for maintenance purposes, to make rearrangements, or for the implementation of an order for a change in the service during the time that was negotiated with the customer prior to the release of that service.
f.	Service interruptions which continue due to the failure of the customer to authorize replacement of any element of special construction. The period during which no credit allowance will be made begins on the seventh day after the customer receives Verizon's notification of the need for replacement and ends on the day after Verizon receives the customer's authorization for replacement.
g.	Service interruptions during periods when the customer elects not to release the service for testing and/or repair.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.5	Customer Service Management Optional Feature (CSM)
A.	CSM provides a customer with real-time information about the operational status of the customer's EDSS network. Three (3) Service Levels of support are offered for CSM. Each Service Level provides different functionalities to which the customer may gain access. These functionalities are described following and include access to real-time information about the customer's EDSS network and the ability to generate reports. When ordering CSM, the customer must specify one of the following three Service Levels.
1.	Level 1 - provides a network view of real-time detection and reporting of network alarm conditions within the customer's EDSS network.
2.	Level 2 - provides the same capabilities described in Level 1 along with the ability for the customer to generate basic network performance reports for the customer's EDSS network. The customer may also request network performance reports that are customized to meet specific needs.
3.	Level 3 support provides the same support described in Levels 1 and 2 along with the ability to reconfigure (re-map) the end points of lower level services riding the ring.
a.	Reconfiguration using CSM consists of re-mapping the end point of a primary circuit to its preplanned (backup) port location. The customer must specify a preplanned port location for each primary circuit installed. The preplanned port location is a backup location that is activated and de-activated when a primary circuit is reconfigured at the request of the customer via the CSM platform. Existing EDSS Port rates and nonrecurring subsequent installation EDSS Port rates are applicable to the preplanned port. A reconfiguration is limited to the mapping of one primary circuit to its assigned preplanned location. For each preplanned port location, a monthly recurring rate and a nonrecurring installation charge apply per port in accordance with Section 1.6.5.b. following.
b.	Verizon Performed Reconfiguration charge will apply when the customer requests that Verizon perform a reconfiguration of service on its behalf. This charge does not apply when a customer performs its own service reconfiguration.
1.	Reconfiguration is not permitted on services arranged in the following service configurations:
i.	Switched Access Service;
ii.	Service provided under a shared use arrangement;
iii.	Service associated with Centrex-CO or Primary Rate ISDN service; or,
iv.	Primary circuits for which the customer has not specified a preplanned backup location.
v.	Fibre Channel/FICON service.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.5	Customer Service Management Optional Feature (CSM)
B.	The type of nodes deployed within the EDSS network may limit reconfiguration of OC12/OC12c circuits within an OC48 EDSS. CSM is not available on partial ring configurations.
C.	When CSM is added to an existing ring, existing circuits that are being made reconfigurable will require that an Access Order be issued to designate the circuit as reconfigurable. Nonrecurring charges as set forth in Section 1.6.5.D following may apply. Verizon's ability to provide CSM on a particular ring may be limited by the overall configuration of that ring. Reconfiguration is limited to those circuits that originate and/or terminate on the ring (i.e., at locations served by a node on the ring) and utilize ports that are symmetrical. For circuits that originate or terminate off the ring (i.e., at locations not served by a node on the ring), the reconfiguration is limited to customer premises node locations on the ring.
D.	**Application of Rates and Charges -** CSM rates and charges are set forth in Part F., Section 4, unless noted otherwise. CSM rates and charges apply in addition to any applicable EDSS rates and charges. Unless otherwise indicated below, CSM rates and charges apply regardless of the Service Level selected by the customer.
1.	**Monthly Recurring Charges -** A CSM Service Level monthly recurring charge applies for each EDSS ring provided with CSM.
2.	**Nonrecurring Charges -** Apply as follows:
a.	A Node Setup charge applies for each node that is equipped with CSM at the time that CSM is initially established on the ring.
b.	An Add/Remove Node charge applies for each node that is subsequently added to, or removed from, a ring that has already been equipped to provide CSM.
c.	An Initial CSM Setup charge applies for establishment of the customer's initial CSM database partition. The initial CSM database partition includes setup for up to six (6) users.
d.	A Setup of Additional Users charge applies for the setup of up to six (6) additional users beyond those provided with the initial database setup when CSM is initially established on the ring.
e.	A Setup of Additional Partition or Change in CSM Service Level charge applies for the setup of an additional CSM database partition created for the same customer or to change from one CSM service level to another (e.g., change Service Level 1 to Service Level 2). Each additional CSM database provides for the setup of up to six (6) additional users.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.5	Customer Service Management Optional Feature (CSM)
D.	**(Continued)**
f.	A Consultation and Support charge applies for each thirty (30) minutes or fraction thereof that the customer requests Verizon consultation and support of its CSM network. This charge does not apply during initial setup of CSM on the ring.
g.	A Verizon Performed Reconfiguration charge applies for Service Level 3 customers only when the customer requests that Verizon perform a reconfiguration based on its pre-mapping instructions.
h.	A Preplanned Port charge applies for Service Level 3 customers only for each port associated with a preplanned location that is established during the initial establishment of CSM on the ring. The Preplanned Port NRC is the same as for the equivalent EDSS port serving as the primary location.
E.	**Terms and Conditions**
1.	The customer must utilize Internet web access to connect customer-provided terminal equipment to Verizon's CSM management system. Access to the Internet and any associated rates and charges are the responsibility of the customer. The customer is also responsible for obtaining communications software that is compatible with the software Verizon utilizes to provide CSM. Verizon will work with the customer to determine compatibility of communications software.
2.	CSM is provided only when Verizon provides all nodes on the ring.
3.	Subject to the restrictions set forth in Section 1.6.5.E.4. following, CSM is provided coincident with the installation of the associated EDSS ring, or it may be added to an existing ring.
4.	CSM Service Level is provided under a term plan of 3 years, 5 years, or 7 years, as described following.
a.	The duration of the term plan for a CSM Service Level must be the same duration as the term plan for the EDSS nodes provided with CSM. At the expiration of a 3-, 5-, or 7-year term plan for CSM Service Levels, the customer has the option of extending CSM Service Level with a coterminous end date as described in Section 1.6.5.E.4.b. following.
b.	The expiration date of each CSM Service Level added subsequent to the initial installation must be coterminous to the expiration date of the associated EDSS service, provided that the addition is prior to the 21st month for a 3-year plan, prior to the 36th month for a 5-year plan, or prior to the 50th month for a 7-year plan. A CSM added after the aforementioned periods requires extension of the commitment period for the associated EDSS service in accordance with Section 1.6.5.A. preceding. Such extension results in the establishment of a new plan that includes both the EDSS and the CSM under the same plan with the same expiration date.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.5	Customer Service Management Optional Feature (CSM)
E.	**(Continued)**
5.	With Service Level 2 support, the customer may retrieve certain basic reports containing performance-monitoring information on its EDSS network, as designated and provided by Verizon. Basic reports are available at no additional charge to the customer. The customer may also request that a report be customized to meet particular needs. Rates and charges for customized reports are provided on an Individual Case Basis (ICB). Reports are not provided with Level 1 support.
6.	CSM is subject to termination liability if CSM is removed prior to completion of the existing commitment period. The terms and conditions in Section 1.6.6. following, as applicable, apply to removal of CSM prior to completion of the existing commitment period.

1.6.6	Termination Liability
A.	Termination liability applies to EDSS service or an Optional Feature and is charged per rate element on all ports, nodes, mileage, high-speed interfaces and Optional Features, except month-to-month ports for which the one-month minimum service charge applies.
B.	Termination liability will apply when the customer cancels service prior to expiration of the selected term, unless the exception conditions described below are met. If the cancellation occurs within the first two years of the term, termination liability is equal to 100 percent of the monthly charges for the unexpired portion of the first two years of the term and 25 percent of the monthly charges for the remainder of the term. If the customer cancels after the first two years of service, then termination liability is equal to 25 percent of the monthly charges for the remainder of the term.
C.	EDSS service or an Optional Feature may be canceled without termination liability when cancellation of the service occurs within thirty (30) days of the effective date of a Verizon initiated rate increase of eight percent (8%) or more on any rate applicable to EDSS service.
D.	Termination liability will not apply on an EDSS service or Optional Feature if a customer changes to a longer term-commitment period, and the number of services or ports included in the new commitment period remains the same or increase.
E.	Termination liability will not apply to a customer upgrade (change to a higher capacity EDSS service) of an EDSS node or port, if all of the following conditions are met:
1.	A new Verizon commitment period commences with the upgrade.
2.	The new expiration date must extend beyond the discontinued plan date.
3.	The new EDSS service is provided at the same customer and/or Verizon location(s) as the discontinued service plan.
4.	Additional nodes and ports added at the time of the upgrade incur all applicable rates and charges.

1. Advanced Data Services
1.6 Enhanced Dedicated SONET Service (EDSS)

1.6.6	Termination Liability
F.	Customer can move a node from one location to another location without incurring termination liability providing that all of the following conditions are met:
1.	A new Verizon commitment period commences with the move.
2.	The new expiration date extends beyond the discontinued plan date.
3.	The customer accepts a temporary interruption of the existing service in order to establish the new service.
4.	The new service is ordered at the same time as the service order for the disconnection of the old service.
G.	For EDSS with a commitment period which was extended under 1.6.7 following, termination liability is calculated as the difference between the monthly rates for the highest commitment period that could have been satisfied prior to disconnection of the service or cancellation of the plan and the monthly rates for the extended commitment period for the period of time the service was in effect.
H.	Customers who wish to move or convert existing High Capacity services to an EDSS may do so without conversion charges (termination liability and installation charges) as long as the total capacity of service purchased by the customer does not decrease.

1.6.7	Extension of a Commitment Period
A.	For EDSS, the customer also has the option, within sixty (60) days prior to the expiration date for the customer's commitment period, to extend the customer's expiring term plan to a plan with a longer commitment period. The commitment period selected for the extended plan must be longer than the commitment period of the expiring plan as follows: ▪ An expiring 3-Year Term may be extended to either a 5-Year or 7-Year Term Plan. ▪ An expiring 5-Year Term may be extended to a 7-Year Term Plan.
B.	Time-in-service credit on the expiring plan will be granted and applied towards the new extended plan. For example, an expiring 3-Year term plan will allow for 3 years of time-in-service credit towards a 5-Year or 7-Year extended plan.
C.	The discount percentage associated with the extended plan will apply effective with the first bill date following expiration of the commitment period for the existing plan and will continue through the remainder of the commitment period associated with the extended plan. No adjustment for the increased discount percentage associated with the extended plan will be made to the monthly rates already billed on the expiring plan.

1. Advanced Data Services
1.7 SONET Point-to-Point Service

1.7.1	General	
A.	SONET Point-to-Point Service (SPTP) provides high speed, synchronous optical fiber-based, full duplex data transmission capabilities; SPTP is provisioned over Verizon's SONET network and provides customers with SONET based broadband transport with the following capabilities.	
	OC3, OC3c or STM – 1	Transmission services operating at the bit rate of 155.52 Mbps.
	OC12, OC12c	Transmission services operating at the bit rate of 622.08 Mbps.
	OC48, OC48c	Transmission services operating at the bit rate of 2.488 Gbps.

1.7.2	Service Description
A.	SPTP provides transport at the optical level between a customer's locations or between a customer's premises and a Verizon wire center, where it connects with another service of equal speed. SPTP is transported over a shared network infrastructure and remains optical throughout the path. Depending on the service rate (payloads consisting of 3, 12, or 48 separate Synchronous Transport Signals (STS1s) with OC3, 12, or 48), separate overheads are transported. SPTP service is also offered in a concatenated format (one single channel with one single overhead) at service rates of OC3c, OC12c, and OC48c. The same payload content is maintained throughout the service (i.e. if DS1s are mapped by the customer at one end, DS1s must be mapped at the other end of the service). SONET equipment is required throughout the circuit.
B.	The service is available on a month-to-month basis or as a 3-year or 5-year term pricing plan. A 12-month minimum billing period applies. Month-to-month, 3-year and 5-year term pricing plan rates are not fixed and will vary based upon the rates in effect in the Product Guide.
C.	Monthly rate elements consist of Local Distribution Channels and Channel Mileage, fixed and variable.
D.	The technical specifications for SPTP service are delineated in Technical Reference GR-253-CORE, Issue 3. When provided with Synchronous Transport Module (STM-1) transmission, the technical specifications are delineated in Technical References ITU G707, ITU G708 and ITU G709.
E.	SPTP services may be configured as follows: OC3 — 3 STS1 channels, each of which may consist of: - a DS3 that is STS1 mapped - up to 28 DS1s that are Virtual Tributary (VT) mapped - an STS1 channel without constraint to payload mapping OC3c — A single concatenated STS3c channel STM1 — Synchronous Digital Hierarchy (SDH) channel of 155.52 Mbps OC12 — 12 STS1 channels, each of which may consist of: - a DS3 that is STS1 mapped - up to 28 DS1s that are VT mapped - an STS1 channel without constraint to payload mapping

1. Advanced Data Services
1.7 SONET Point-to-Point Service

1.7.2	Service Description	
E.	(Cont'd)	
	OC12c	A single concatenated STS12c channel
	OC48	48 STS1 channels, each of which may consist of: - a DS3 that is STS1 mapped - up to 28 DS1s that are VT mapped - an STS1 channel without constraint to payload mapping; or 16 separate concatenated STS3c channels; or 4 separate concatenated STS12c channels; or any combination of the above configurations up to the total OC48 capacity
	OC48c	A single concatenated STS48c channel

1.7.3	Regulations
A.	All rate elements associated with an SPTP service that is provided on a point-to-point basis between customer designated premises must be in the same rate plan.
B.	When SPTP is ordered with STM transmission, both of the customer-designated premises must use STM transmission.
C.	SPTP is deployed upon customer request and is available based on negotiated installation intervals. Where suitable SONET facilities are not available, special construction rates and charges may apply.
D.	The customer must provide, at no cost to Verizon, suitable and secure space, suitable environmental conditions and uninterrupted power supply, building entrance facilities and conduit for placement of the facilities, and network equipment at its locations as necessary to provide the service.
E.	SPTP services provided on a month-to-month basis are subject to a one-year minimum service requirement. If service is disconnected during the first year, the minimum period charge is 100% of the monthly rate from the date of disconnection through the end of the first year.
F.	SPTP services provided under 3-year or 5-year term plans are subject to termination liability if service is disconnected prior to the end of the term plan.
G.	**Termination Liability**
1.	If the disconnect occurs during the first year of service, termination liability is calculated at 100% of the monthly charges for the unexpired portion of the first year, and at 15% of the monthly charges for the remainder of the term plan.
2.	If the disconnect occurs after the first year of service, termination liability is calculated at 15% of the monthly charges from the date of disconnection through the remainder of the term plan.

1. Advanced Data Services
1.7 SONET Point-to-Point Service

1.7.3	Regulations
G.	(Cont'd)
3.	Termination liability will not apply:
a.	When cancellation of the SPTP service occurs within thirty days of the effective date of a Verizon initiated rate increase and the customer's total monthly rate for the affected service increased by 8% or more;
b.	When the service is changed to a longer SPTP term plan;
c.	When the service is changed to an SPTP service of a higher bit rate with a new plan of equal or longer term; or,
d.	When the service is converted to Enhanced Dedicated SONET Service.
H.	**Expiration**– At the expiration of a 3-year or 5-year term plan, the rates for the expiring term plan will continue until the customer either cancels service or orders a new plan.
I.	A change in port or channel termination will be treated as a discontinuance of the existing service and an installation of a new service. All associated nonrecurring charges will apply for the new service. A new minimum period will be established for the new service. The customer will also be responsible for all outstanding minimum service period obligations associated with the disconnected service.
J.	**Credit Allowance**
1.	Any single service outage of four hours or more due solely to a Verizon facility failure will result in a credit of 100% of the monthly rate for the applicable rate elements affected, provided that the interruption is brought to the attention of Verizon within 10 days. The total credit allowance in any one billing period cannot exceed 100% of the customer's monthly rate for the affected rate elements, regardless of the number or length of service interruptions within a billing month.
2.	A credit allowance does not apply for:
a.	Service interruptions of less than four hours;
b.	Service interruptions caused by the negligence of the customer or authorized user;
c.	Service interruptions resulting from the failure of equipment or systems provided by the customer or authorized user;
d.	Service interruptions during any period in which the Verizon is not afforded access to premises for testing and/or repair of service;
e.	Service interruptions when the customer has released the service to the Verizon for maintenance purposes, to make rearrangements, or for the implementation of an order for a change in the service during the time that was negotiated with the customer prior to the release of that service;
f.	Service interruptions that continue due to the failure of the customer to authorize replacement of an element of special construction; or
g.	Service interruptions during periods when the customer elects not to release the service for testing and/or repair.

1. Advanced Data Services
1.7 SONET Point-to-Point Service

1.7.4	Application of Rates and Charges
A.	**Monthly Recurring Charges** – Apply to Local Distribution Channels (LDCs) and Channel Mileage (Fixed and Per Mile) rate elements.
1.	**Local Distribution Channels** – The LDC rate element combines the Channel Termination and port (protected or nonprotected) to provide the single LDC Charge. LDCs apply to that portion of the SONET Point-to-Point Service connecting two specific customer locations or connecting a customer location to the Verizon's serving wire center. Typically, an LDC is found at each end point.
2.	**Channel Mileage** –. The calculation of this charge is based on a fixed mileage component and per airline miles between two serving wire centers.
B.	**Nonrecurring Charges** – Apply to Local Distribution Channels LDCs only.