

EXCHANGE ACCESS FRAME RELAY SERVICE

A. GENERAL

Exchange Access Frame Relay Service (XA-FRS) is a medium-speed, connection-oriented packet-switched data service that allows for the interconnection of Local Area Networks (LANs) or other compatible customer equipment across a wide area. XA-FRS allows for the transfer of variable length frames (packets). Frames are relayed by virtual connections -- frames travel a fixed path through the network although bandwidth is not dedicated to each virtual connection.

B. REGULATIONS

1. Explanation of Terms

Data Link Connection Identifier (DLCI)

The DLCI specifies a connection (e.g., customer premises to Telephone Company switch or Telephone Company switch to interexchange carrier network). A PVC is comprised of two or more DLCIs.

Network-to-Network Interface (NNI) Port Connection

The Network-to-Network Interface (NNI), specifies how an XA-FRS switch sends and receives data from a Frame Relay interexchange carrier's or other customer's network.

The NNI Port Connection provides connection of a digital transmission facility, including 56 and 64 Kbps DDS, 1.536 Mbps, DS1, to Verizon XA-FRS Network.

56 Kbps NNI Port Connections are available only as dedicated connections to the XA-FRS network; i.e. the NNI Port Connection customer and the customer for the connecting UNI(s) must be one and the same. In addition, the number of PVCs on a single 56 Kbps NNI Port Connection cannot exceed 28, and the sum of the individual CIR values cannot exceed 56 Kbps.

Permanent Virtual Connections (PVCs)

A PVC is a logical channel from one Frame Relay port to another Frame Relay port. PVCs are end-to-end, bi-directional channels that are established and disestablished via the service order process.

User Network Interface (UNI) Access Connections

The User Network Interface (UNI) is a standard interface used to connect the end user to the Verizon XA-FRS Network. It receives the data frame from the customer's Local Area Network or other CPE devices and verifies that the DLCI is valid before relaying the frame to the destination end point.

The UNI Access Connection consists of either a 56 Kbps, 64 Kbps, or a 1.536 Mbps digital facility from the customer premises to the XA-FRS network and the appropriate port interface connection.

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B. REGULATIONS (Cont'd)

2. This service, comprised of two Interfaces, a User Network Interface (UNI), and a Network-to-Network Interface (NNI), allows XA-FRS compatible customer premises equipment (CPE) to originate or terminate interexchange services. All UNI access facilities must be in conformance with American National Standards Institute (ANSI) standards T1.606-1990, T1.606 Addendum 1-1991, T1.606a-1992, T1.617, Annex D-1992. All NNI access facilities must be in conformance with ANSI standards T1.606b-1993 and Bellcore Technical Reference TR-TSV061370, Issued: November 20, 2000 November 11, 1996 May 1993.
3. XA-FRS provides high speed throughput over digital facilities at speeds of 56 Kbps, 64 Kbps or 1.536 Mbps. Physical access to the Verizon Frame Relay network is provided via a UNI Access Connection or a NNI Port Connection and a digital transmission facility. A 56 Kbps DDS or a DS1-rated channel termination from Section 7, Special Access, may be used as the NNI transport link. All DS1 transport must be equipped with B8ZS capability and Extended Super Frame (ESF).

4. Maintenance Windows

Network maintenance and network upgrades for XA-FRS are performed during the hours of 11:00 p.m. and 8:00 a.m. At times, during the hours of maintenance activity, it will be necessary to place a customer's service in an inactive (out-of-service) condition. The amount of time that this scheduled out-of-service condition will exist is called a "maintenance window". The Company will provide to the customer notice twenty-five (25) business days prior to the maintenance window. Maintenance window activity could be scheduled for consecutive days.

5. XA-FRS is generally available and is ordered through the access service order process. The Access Order Service Date Interval for XA-FRS is negotiated as specified in Section 5.

6. Optional UNI Features

Additional PVCs per UNI

This feature provides the assignment of additional Data Link Connection Identifiers (DLCIs). When any two DLCIs are mapped together, a PVC is created. The customer shall pay for each additional PVC after the initial one.

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B. REGULATIONS (Cont'd)

6. Optional UNI Features (Cont'd)

Committed Information Rate

Committed Information Rate (CIR) is a feature that provides the customer with a mechanism for prioritizing data on a per PVC basis across a given UNI. A Committed Information Rate allows a sustained throughput at a chosen rate without having any frames designated "discard eligible" under normal operating conditions.

Customer Network Management

Customer Network Management (CNM), where available, provides the end-user customer with the ability to pull statistical analysis reports about their respective network as it traverses the telco data network. This capability is provided as a "read only" capability. A customer may not manipulate any network configuration within the telco network. This feature includes the PVC required to manage the network.

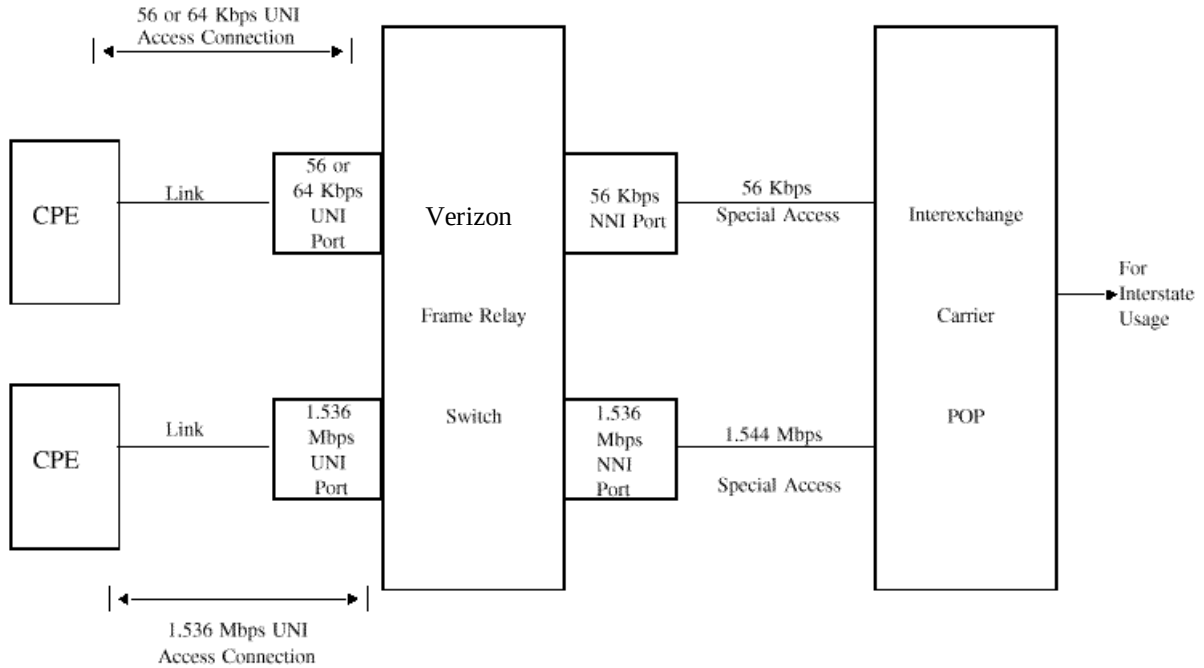
Group Addressing

This feature allows a customer to send a single data unit across established PVCs to several intended recipients. The recipients are identified by an assignment of a group address used as the destination for the Frame Relay data unit. The DLCI assigned is now a group address.

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B. REGULATIONS (Cont'd)

7. The following diagram depicts a generic view of the components of XA-FRS Service and the manner in which the components are combined to provide a complete XA-FRS connection.



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C. RATES

1. Rate Regulations

a. Termination Charges: Month-to-Month and Term Pricing Plans (TPPs)

The minimum service period for XA-FRS is one month.

Term Pricing Plans are subject to early termination liability. For the 3-year TPP, the customer is liable for 100 percent of the monthly charges offset by 1/36th for each month in service. For the 5-year Term Pricing Plan, termination liability is the difference between the 3-year TPP monthly rate for 36 months and the actual number of months the plan has been in effect multiplied by the monthly rate for the 5-year TPP.

Termination liability does not apply when "portability" requirements are met. Portability is the replacement of a TPP service with another service for the balance of the plan period. Portability requirements are as follows:

- (1) The replacement UNI Access Connection must be of the same type and speed, and must not already be in a XA-FRS TPP.
- (2) The orders to accomplish the replacement are placed with the Telephone Company at the same time with due dates within 90 days of each other, and are related by a Related Purchase Order Number (RPON).
- (3) The quantities associated with the replacement are equal to or greater than the disconnected service(s).

Customers may at any time convert from an existing commitment period to a new term pricing plan of equal or greater length without termination liability.

If rates increase, during the plan period, the customer may discontinue service without termination liability.

b. Nonrecurring Charges

A nonrecurring charge applies for each installation of certain XA-FRS rate elements. This charge also applies whenever the facility associated with the rate element is moved, changed or rearranged. The charge is not applicable when a customer converts from one term plan to another and there is no physical change in the service facility.

The UNI Access Connection nonrecurring charge for a Month-to-Month service is subject to refund, if the customer converts to a Term Pricing Plan within the first six months of service and a waiver of the nonrecurring installation charge for the Term Pricing Plan was in effect at the time the Month-to-Month service was installed. No credit is given for time-in-service while the customer was on the Month-to-Month plan.

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C. RATES (Cont'd)

1. Rate Regulations

c. Administrative Charge

An administrative charge will be applied whenever a change is made to a customer's Frame Relay configuration (including changes to existing group addressing), at the customer's request. Such changes are defined as those rearrangements necessary to add, delete, or rearrange the customer's configuration, including changes to a customer's selected carrier. Although multiple changes may be caused by such actions, only one administrative charge will apply.

d. Term Pricing Plans

The XA-FRS UNI Access Connection is also provided for extended commitment periods in a 3 to 5-year Term Pricing Plan (TPP).

Customers may add UNI Access Connections to an existing TPP within the initial 12 months. Otherwise, additional UNI Access Connections will be in a separate and new term pricing plan.

Upon expiration of a TPP, the prevailing rates will apply.

ACCESS SERVICE TARIFF
P.S.C.-Md.-No. 217

Verizon Maryland LLC

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C. RATES (Cont'd)

2. Rates and Charges	<u>Nonrecurring Charge</u>	<u>Per Month</u>	<u>USOC</u>
3. UNI Access Connection			
Month-to-Month			
56 Kbps	\$ 875.00	\$175.00	NLZ5X
64 Kbps	875.00	175.00	NLZYX
1.536 Mbps	1,000.00	435.00	NLZ8X
4. NNI Port Connection			
56 Kbps.....	230.00	60.00	NNL5X
1.536 Mbps.....	285.00	220.00	NNL8X
5. Optional UNI Features			
Additional PVC, each.....	25.00	-	L7NAX
Committed Information Rates			
0/8/16/28/32 Kbps	12.00	5.00	R3TG2
56/64 Kbps	12.00	2.00	R3TA1
128 Kbps	12.00	4.00	R3TB1
192 Kbps	12.00	7.00	R3TC1
256 Kbps	12.00	9.00	R3TD1
384 Kbps	12.00	12.00	R3TE1
512 Kbps	12.00	25.00	R3TF1
768 Kbps	12.00	28.00	R3TH1
Customer Network Management.....	50.00	5.00	NM6XX
Group Address.....	35.00	-	G4A
6. Administrative Charge.....	35.00	-	NRBFR
7. UNI Access Connection Term Pricing Plans			
(1) 3-year TPP			
56 Kbps	875.00	160.00	NLZ53
64 Kbps	875.00	160.00	NLZY3
1.536 Mbps	1,000.00	400.00	NLZ83
(2) 5-year TPP			
56 Kbps	875.00	150.00	NLZ55
64 Kbps	875.00	150.00	NLZY5
1.536 Mbps	1,000.00	380.00	NLZ85

