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May 20, 2004

Ms. Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, Rhode Island 02888

Dear Ms. Massaro:

We are filing, herewith, for effect June 19, 2004, tariff material consisting of:

RI PUC No. 15

Part/Section	Revision of Page(s)	Original of Page(s)
D/1	3.1 and 3.2	N/A

Verizon Rhode Island ("Verizon RI") is offering an additional service option for Frame Relay Service. The new service option is the provision of Frame Relay to ATM Interworking (FRASI). FRASI is a network service option that ties together or "interworks" two transport protocols, Frame Relay and Asynchronous Transfer Mode (ATM). FRASI allows the two protocols to interwork in a manner that is transparent to the end users.

Because the cost of offering the FRASI option is deminimus, there are no rates associated with FRASI.

Verizon certifies that the rates for ATM with the provision of the FRASI service option are not less than the Long-run Incremental Cost of providing the service.

If you have any questions regarding this filing, please contact Frances O'Neill-Cunha of my staff at 401 525-3560.

Enclosed are an original and nine copies of the tariff material. Please return a copy of this letter with your stamp of receipt.

Respectfully submitted,

Theresa L. O'Brien

Attachments

Verizon Rhode Island

Tariff Filing Support Package

Frame Relay to ATM Interworking
Additional Service Option

May 2004

Frame Relay to ATM Interworking

Contents **Section**

Frame Relay to ATM Interworking

Section 1

Service Description

The purpose of this filing is to enhance Verizon Rhode Island's ("Verizon RI") current offering of Frame Relay Service ("FRS") by introducing a Permanent Virtual Circuit (PCV) Committed Information Rate (CIR) Service Option – Frame Relay to ATM Service Interworking (FRASI). Frame Relay to ATM Service Interworking will be available with Standard and Multi-jurisdictional PVC CIRs at no additional charge.

FRASI is a network service offering that ties together or "interworks" two transport protocols, Frame Relay and Asynchronous Transfer Mode (ATM). The Interworking Function (IWF) is specialized software residing logically between the FR and ATM networks. The IWF can be physically located at the edge of the Frame Relay network, in a Frame Relay switch or at the edge of the ATM network, in an ATM switch. The actual location of the IWF will vary according to the vendor and type of equipment deployed in Verizon's network.

An illustrative architecture is displayed below:

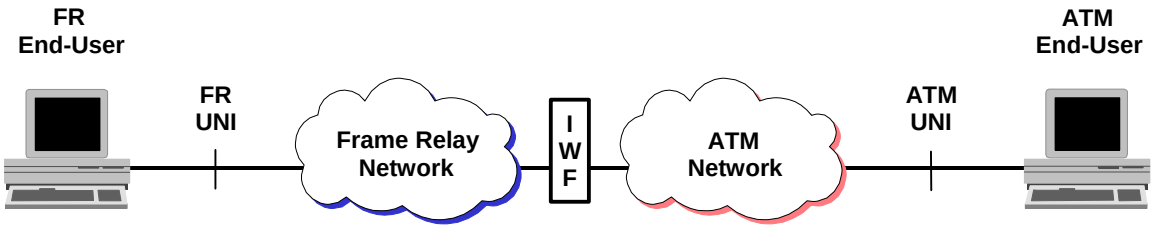

Figure 0-1: Generalized FRASI Service Architecture

A key aspect of the FRASI service is that the Frame Relay end user has no knowledge that the other end of the connection is an ATM end user, and the ATM end user has no knowledge that the other end of the connection is a Frame Relay end user. In other words, the FRASI functionality is invisible to each of the end users. For a connection progressing in the Frame Relay-to-ATM direction, the Frame Relay protocol is terminated at the IWF within the network and converted to the ATM protocol. The Frame Relay user is aware only of the Frame Relay protocol and the ATM user is aware only of the ATM protocol. The same is true in the opposite direction where the ATM protocol is terminated at the IWF and converted to the Frame Relay protocol. Data connectivity is provided via Permanent Virtual Circuit ("PVC") connections implemented over access facilities utilizing a switch dedicated to high-speed data services.

Section 2

Rationale for Filing

Large business customers are demanding the flexibility to interconnect their fast-packet networks to meet their ever increasing communications requirements. FRASI meets these demands by allowing PVCs to interwork between the Frame Relay and ATM networks in a manner that is transparent to the customer.

Because the cost of providing FRASI is deminimus, there are no associated rates. Verizon certifies that the cost of offering Frame Relay Service with the FRASI service option is not less than the Long-run Incremental Cost of providing the service.

1. Advanced Data Services
1.3 Frame Relay

1.3.2	Service Components	
B.	**Port Only Connections —** UNIs and NNIs are also provisioned as a Port Only Connection. UNI Port Only Connection provides a Frame Relay Network connection based on the port connection speeds of 56 Kbps, 384 Kbps, 1.536 Mbps, 4 Mbps, 6 Mbps, 10 Mbps, 22 Mbps, and 44.736 Mbps. NNI Port Only Connection provides a Frame Relay Network connection based on the port connection speeds of 384 Kbps, 1.536 Mbps and 44.736 Mbps. The Frame Relay port speed will be consistent with the channel speed of the access channel. Each port can accommodate multiple PVCs. UNI Port Only and NNI Port Only Connections are available on a month-to-month, one-year, three-year and five-year term.	
1.	Customers may access Port Only Connections via Telephone Company-provided digital access facilities. The associated regulations, rates and charges under the appropriate Telephone Company Tariff shall apply in addition to the regulations, rates and charges associated with FRS.	
C.	**Permanent Virtual Circuit (PVC) Committed Information Rate (CIR) —** provides a mechanism to prioritize applications on a per-PVC basis over a Frame Relay UNI. This feature allows all users to maintain the capability to transfer data within their CIR on a non-sequential, high-priority basis without potential packet data discard due to network congestion.	(T)
1.	The following types of PVC CIR are available:	(T) (X)
a.	Standard - A Standard PVC is a logical channel path between intrastate Frame Relay ports or an intrastate Frame Relay port and an intrastate ATM port.	(T)(C)(X) (C)(X)
b.	Multi-jurisdictional – A Multi-jurisdictional PVC is a logical channel path between an interstate Frame Relay port and an intrastate Frame Relay port or between a Frame Relay port and an ATM port, one being an interstate port and the other an intrastate port. A Multi-jurisdictional PVC falls under federal jurisdiction and the PVC CIR rates, rules and regulations from the Verizon Telephone Companies FCC Tariff No. 20 are applicable.	(N) (N)
2.	The maximum CIR allowed is determined by the lower of the two port speeds connected by the PVC. The maximum CIR allowed for port speeds at 1.536 Mbps and below is 75% of the lower of the two port speeds. For port speeds above 1.536 Mbps to 44.7136 Mbps, the maximum CIR allowed is 50% of the lower of the two port speeds.	(T)(X) (X)
3.	Frame Relay to ATM Service Interworking provides for the conversion of Frame Relay packets to ATM cells and the conversion of ATM cells to Frame Relay Packets. Frame Relay to ATM Service Interworking is available with Standard and Multi-jurisdictional PVC CIR at no additional charge.	(N) (N)
D.	**Optional Features and Functions —** These provide the Customer with additional capabilities for interaction with the FRS packet network.	(T)
1.	Additional Logical Channels allow 56 Kbps, 384 Kbps and 1.536 Mbps Customers to simultaneously operate multiple channels on a single port. The maximum additional logical channels available for 56 Kbps or 384 Kbps UNI Port With Access Line is 199 and the maximum additional logical channels available for 1.536 Mbps UNI Port With Access Line is 991. Each additional logical channel must be associated with a specific network address.	
a.	Effective September 17, 2003, the Logical Channels optional feature is no longer available to new customers. Moves, additions, or changes are not permitted.	

1. Advanced Data Services
1.3 Frame Relay

1.3.2	Service Components (Cont'd)	
2.	Backup UNI service is a disaster avoidance and disaster recovery feature that consists of a Primary UNI and a Backup UNI, and incorporates PVC remapping capabilities of the Frame Relay network. The Primary UNI is terminated at the primary Customer host location and in normal operation serves PVCs between the primary host location and various Customer remote locations. A second UNI, which is designated by the Customer as a Backup UNI, is installed and terminated at the customer's Backup host location. During normal operations no PVCs are mapped to the Backup UNI. The Customer will be required to purchase both UNIs. In the event of a Primary UNI, primary digital access line or, Customer primary host location failure, the predefined PVC configuration can be remapped to the Backup UNI at the Customer's request. Upon restoral of the Primary UNI service the Customer must contact the Company to initiate remapping of PVCs from the Backup UNI back to the Primary UNI. A Backup UNI, which may serve as a Backup to one or more Primary UNIs, can only Backup one Primary UNI at a time. A Backup UNI must be the same port speed or greater than the Primary UNI(s).	(T)
a.	A Customer ordering Backup UNI service is responsible for the following:	
1.	Determining network configuration before and after the activation of Backup UNI service.	
2.	Providing the Company with the appropriate information required for joint development of the Backup UNI database.	