



Frame Relay Service Product Guide (Product Guide)

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FRAME RELAY SERVICE

I. GENERAL

A. Service Overview

1. Verizon Frame Relay Service (**FRS** or the **Service**) is a data communications service that provides for data connectivity (up to the DS3 level) between and among widely distributed End User locations. Verizon provides this connectivity via Permanent Virtual Connections on Verizon's switching platform. The data is divided into variable sized packets called frames and each frame is sent separately through the network. At their destination, these frames are reassembled.
2. FRS consists of two interfaces:
 - User Network Interface (**UNI**)
 - Network-to-Network Interface (**NNI**)

These interfaces allow Frame Relay compatible CPE to originate or terminate inter-exchange services.

3. Frame Relay connectivity is provided via Permanent Virtual Connections (**PVCs**) that are implemented over access facilities and switches, in each case dedicated to the Customer, but provided over a shared network. A PVC is a logical channel from one Frame Relay port to another Frame Relay port. In the State of Virginia, a PVC can also be provided as a logical channel between a Frame Relay UNI port provided in certain locations in the Verizon Virginia Inc. operating territory and a Frame Relay UNI/NNI port provided in certain locations in the Verizon South Inc. operating territory. PVCs are bi-directional channels that are established and dis-established via the service order process.
 - a. Frame Relay standard specifies an address field called the Data Link Connection Identifier (**DLCI**). The DLCI is a 10-bit field of the address field that identifies data links and their service parameters. The DLCI specifies a connection (e.g., Customer designated Premises to Verizon's switch or Verizon's switch to IC's network). A PVC is comprised of two or more DLCIs. The Customer is expected to specify the DLCI and PVC CIR (as discussed following) capacity for each PVC ordered. The Customer may request that Verizon assign DLCIs

B. Acronyms and Definitions

Central Office (CO): a Verizon office or building in which local loops serving a Customer designated Premises in a locality are connected to each other or to a Verizon optical network at such office or building.

Customer(s): any individual, partnership, association, joint-stock company, trust, corporation, or governmental entity or other entity which subscribes to the Services or other arrangements offered under this Product Guide, including both Interexchange Carriers (ICs) and End Users.

Customer Premises Equipment (CPE): terminal equipment connected to Verizon's network and residing on the Customer designated Premises.

End User: any Customer of an interstate or foreign telecommunications service that is not a carrier, except that a carrier other than a telephone company shall be deemed to be an "End User" when such carrier uses a telecommunications service for administrative purposes and a person or entity that offers telecommunications services exclusively as a reseller shall be deemed to be an "End User" if all resale transmission offered by such reseller originate on the premises of such reseller.

Facilities: telecommunications cables and equipment owned and utilized by Verizon in the provision of Service. For Collocation, the term Facilities denotes telecommunications cables and equipment owned/leased and used solely by the Customer in connection with its multiplexing node.

Local Access and Transport Area (LATA): a geographic area established for the provision and administration of communications service. It encompasses one or more designated exchanges, which are grouped to serve common social, economic and other purposes.

Logical Channel: a communications path that allows simultaneous transmission of sequenced data packets or cells through the network.

Packet: a continuous sequence of information, usually in binary form, which is switched through a packet network as an integral unit. A packet may include Customer data, transmission or routing information and error control information.

Premises: a building, a portion of a building in a multitenant building, or buildings on continuous property (except Railroad Right-of-Way, etc.) not separated by a public highway. Premises does not include Collocation arrangements.

Service Date: the date that a Service has been installed, tested and made available to the Customer. A confirmed Access Service Request (ASR) is generally required to establish a Service Date.

Serving Wire Center: the first Verizon Wire Center to which Facilities are connected on the terminating path of a call proceeding from the Customer designated Premises to the terminating end office.

II. SERVICE COMPONENTS

A. Components

1. UNI Port with Access Connection

- a. **UNI Port with Access Connection** is a dedicated Facility that connects the Customer designated Premises via a standard interface to the 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. UNI Port with Access Connections consist of a 1.536 Mbps or 44.736 Mbps digital Facility from a Customer designated Premises to the FRS switch and the appropriate port interface connection. The UNI Port with Access Connection can also connect a Customer's Collocated Interconnection arrangement as described in Section 19.2 of Tariff FCC No. 1, Expanded Interconnection arrangement as described in Section 28.1 of Tariff FCC No. 11, Expanded Interconnection Service as specified in Section 17 of Tariffs FCC No. 14 and 16, or state tariffs, as applicable (**Collocation**) to the FRS switch and the appropriate port interface connection.
- b. UNI Port with Access Connection also includes the transport from a Customer's Serving Wire Center to a Verizon FRS switch, when required. The effective bandwidth is 256 kbps, 384 kbps, 512 kbps, 768 kbps, 1.536 Mbps, 4 Mbps, 6 Mbps, 10 Mbps, 22 Mbps and 44.736 Mbps.
- c. Additional UNI Port with Access Connections, referred to as **Backup UNI Port with Access Connections** (as discussed following), may be ordered for disaster recovery of one or multiple UNI Port with Access Connections.

2. Private NNI Port Only Connection

- a. **Private NNI Port Only Connection** is an interface for connecting two FRS switches and includes elements such as bi-directional polling to assist network providers with gaining information on the status of the networks being connected. A Private NNI Port Only Connection is for the exclusive use of a Customer on a private network basis only.
- b. The Private NNI Port Only Connection specifies how an FRS switch sends and receives data from a Customer's FRS network.
- c. The Private NNI Port Only Connection provides connection of a digital Facility (384 kbps/DS1 (North Operating Territories only), 384 Kbps/FT1 (West Operating Territories only), 1.536 Mbps/DS1 and 44.736 Mbps/DS3) and Collocation cross connects to a Verizon FRS switch.

Customer may access Private NNI Port Only Connections via the types of Verizon-provided digital access Facilities listed in the following table. The regulations, rates and charges for the specific type of access service apply as specified in The Verizon Telephone Companies Tariffs FCC

Nos. 1, 11, 14 or 16. The access Facilities rates and charges are in addition to the rates and charges for FRS.

Service Component	Access Facility	Applicable Tariff
Private NNI Port Only Connection	DS1 channel termination	Tariff FCC No. 1 or Tariff FCC No. 11
	DS3 channel termination	
	FT1	Tariff FCC No. 14 or Tariff FCC No. 16
	DS1 Special Access Line (SAL)	
	DS3 SAL	

3. Committed Information Rate

- a. **PVCs** are the end-to-end Logical Channels defined in software tables that connect UNI Ports with Access Connection and Private NNI Port Only Connections in [the] Verizon FRS network as requested by the Customer. In order to establish a PVC, Committed Information Rate, Burst Excess and at least two DLCIs must be specified.
- b. **Burst Excess (Be)** is the maximum amount of additional data, measured in bits, that Verizon will attempt to handle, network conditions permitting. The maximum value for the Be will be the lower of the two port speeds connected by the PVC segment. For example, if Customer designated Premises A has a 256 Kbps port and Customer designated Premises B has a 44.736 Mbps port, the maximum allowable Be for the PVC linking these two locations is 256 Kbps.

The actual throughput of Customer traffic cannot exceed the bandwidth of the access connection and the port speed. Since multiple PVCs may be defined on one physical port, it is possible for the cumulative CIRs to exceed the physical bandwidth of that port. This is referred to as over-subscription and when this occurs, there can be no guarantee that the bandwidth defined for any PVC will be available at a given time.

- c. **Committed Information Rate (CIR)** provides the Customer with a mechanism for prioritizing data on a per PVC basis and must be specified by the Customer for each new PVC request. A CIR allows a sustained throughput at the chosen rate. CIR can not be billed against a Private NNI Port Only Connection. CIR is the maximum information rate at which Customer's traffic will be admitted to the FRS network without being designated eligible for discard. No PVC can have a CIR bit rate greater than the lower of the two port speeds connected by the PVC segment.
 - 1. The Customer is required to specify either a Standard CIR per PVC or a Frame Relay Service to Asynchronous Transfer Mode Cell Relay Service Interworking (**FRASI**) CIR per PVC. The following rates are available for Standard and FRASI CIR: 4 kbps, 8 kbps, 16 kbps, 28 kbps, 32 kbps, 42 kbps, 48 kbps, 64 kbps, 96 kbps, 128

kbps, 192 kbps, 256 kbps, 288 kbps, 384 kbps, 512 kbps, 576 kbps, 768 kbps, 1.152 Mbps, 1.536 Mbps, and 2 Mbps through 22 Mbps.

- a. **Standard CIR** provides Customer with a mechanism for prioritizing data on a per PVC basis across a given UNI.
- b. **FRASI CIR** enables the creation of a PVC that traverses both a Frame Relay switch and an Asynchronous Transfer Mode switch. FRASI CIR permits PVC paths to be established between FRS and ATM when interworking is available.

The Customer must specify which UNI Port with Access Connection the Standard PVC CIR will be billed against. FRASI CIR will be billed against the Frame Relay Service. CIR cannot be billed against a Private NNI Port Only Connection. In the State of Virginia, when a PVC is provided between a Frame Relay UNI Port with Access Connection provided in the Verizon Virginia Inc. operating territory and a Frame Relay UNI Port with Access Connection provided in the Verizon South Inc. operating territory, PVC CIR rates will be billed against both port connections ordered.

4. Optional Features and Functions

- a. **Additional PVCs Per UNI Port with Access Connection** provides the assignment of additional DLCIs. When any two DLCIs are mapped together, a PVC is created. Additional PVCs Per UNI Port with Access Connection are provided subject to the availability of Facilities.
- b. **Backup UNI Port with Access Connection** 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 Port with Access Connection** is terminated at the primary Customer host location and in normal operation services PVCs between the primary host location and various Customer remote locations. A second UNI Port with Access Connection, which is designated by the Customer as a Backup UNI Port with Access Connection, is installed and terminated at the Customer's backup host location. During normal operations, no PVCs are mapped to the Backup UNI Port with Access Connection. The Customer is required to purchase both UNI Ports with Access Connection.

1. A Customer ordering a Backup UNI Port with Access Connection is responsible for the following:
 - Determining network configuration before and after activation of Backup UNI Port with Access Connection.
 - Providing Verizon with the appropriate information required for joint development of the Backup UNI Port with Access Connection database.

- Maintaining its own port configurations and router tables (for seamless changes from the Primary UNI Port with Access Connection to the Backup UNI Port with Access Connection, the Customer must use the same addressing scheme on routers connected to the primary and backup sites)
2. A Backup UNI Port with Access Connection, which may serve as a backup to one or more Primary UNI Ports with Access Connection, can be utilized to back up only one Primary UNI Port with Access Connection at a time. A Backup UNI Port with Access Connection must be the same or greater port speed than the Primary UNI Port(s) with Access Connection.
 3. In the event of failure of a Primary UNI Port with Access Connection, or host location, the Customer must contact Verizon to request that the Primary UNI Port with Access Connection be remapped to the Backup UNI Port with Access Connection in order to activate the Backup UNI Port with Access Connection.
 4. Upon the restoral of the Primary UNI Port with Access Connection, the Customer must contact Verizon to request that the Backup UNI Port with Access Connection be remapped back to the Primary UNI Port with Access Connection.
- c. **Premier PVC** is a feature that enables Customers to assign a higher priority of service to Customer-specified PVCs. Premier PVC is suitable for PVCs carrying delay-sensitive, loss-intolerant data. Premier PVC is offered with both Standard CIR and FRASI CIR as an option in the North and South Operating Territories and is standard in the West Operating Territories.
 - d. **Interzone Transport** (West Operating Territories only) provides the mapping of a Frame Relay Intrazone PVC across one or more Frame Relay zone boundaries within a state. Interzone Transport is an optional feature available with Standard PVC CIR. Frame Relay Zones are specified in Section (IV)(A)(3) following.

B. Reserved

III. TECHNICAL

A. Technical Specifications

1. All UNI Port with Access Connections 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 Telcordia Technical Reference TR-TSV061370, Issued: May 1993.
2. Technical specifications are subject to change in accordance with changes adopted by standards-setting industry bodies. Such updates to technical

specifications, as they occur, shall be automatically incorporated without the requirement to amend this Product Guide.

B. Reserved

IV. TERMS AND CONDITIONS

A. Deployment and Availability

1. FRS offered pursuant to this Product Guide is offered as a jurisdictionally interstate service (i.e., the traffic is more than ten percent (10%) interstate in nature). If the Service is not jurisdictionally interstate, then Customer shall inform Verizon of the same and shall purchase such services (if available and offered by Verizon) pursuant to the applicable arrangement offered by Verizon (e.g., tariff or contract).
2. FRS is currently available in the operating territories of the following Verizon Operating Telephone Companies:

North Operating Territories:

Verizon New England Inc. – Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

Verizon New York Inc. – Connecticut, New York (including NY-NJ Corridor)

South Operating Territories:

Verizon Delaware LLC – Delaware

Verizon Maryland Inc. – Maryland

Verizon New Jersey Inc. – New Jersey (including NY-NJ Corridor and NJ-PA Corridor)

Verizon Pennsylvania Inc. – Pennsylvania (including NJ-PA Corridor)

Verizon Virginia Inc. – Virginia

Verizon Washington, DC Inc. – District of Columbia

Verizon West Virginia Inc. – West Virginia

West Operating Territories:

Contel of the South Inc. – Indiana, Michigan

Verizon California Inc. – Arizona, California, Nevada

Verizon Florida LLC – Florida

Verizon North Inc. – Illinois, Indiana, Michigan, Ohio, Pennsylvania, Wisconsin

Verizon Northwest Inc. – Idaho, Oregon, Washington

Verizon South Inc. – Illinois, North Carolina, South Carolina, Virginia

Verizon Southwest Inc. – Texas

3. In the above operating territories, FRS is available in Verizon specified Central Offices where Facilities and conditions permit. Where suitable Facilities and equipment are not sufficient or do not exist to provide FRS, Verizon may provide the Service subject to additional special construction, if any. If Customer agrees to the special construction charges, the Parties shall either enter into a separate agreement for such special construction, or enter into an amendment to an existing agreement, as mutually agreed to by the Parties.

4. Zones (West Operating Territories only)

Zones		
State	Zone	Office Name
California	Los Angeles	Covina
		Lancaster
		Long Beach
		Ontario
		Oxnard
		Perris
		Redondo Beach
		San Bernardino
		Santa Monica
		Sepulveda
		Thousand Oaks
		Victorville
	Whittier	
	Mantecca*	Mantecca
	Novato*	Los Gatos
Novato		
Palm Springs	Palm Springs	
Santa Barbara/Santa Maria	Santa Barbara	
	Santa Maria	
Taft*	Taft	
Florida	Tampa*	Clearwater
		Lakeland
		Sarasota
		St. Petersburg
		Sulphur Springs
		Tampa East
		Tampa Main
		Tampa Westside
Idaho	Coeur D'Alene*	Coeur D'Alene
		Moscow

Zones		
State	Zone	Office Name
Illinois	Freeport	Freeport
	Carbondale	Carbondale
		Marion
	Dekalb	Dekalb
	Bloomington	Bloomington
	Princeton	Princeton
	Jacksonville	Jacksonville
	Olney	Olney
	Macoumb	Macoumb
	Rantoul	Rantoul
Terra Haute	Terre Haute	
Indiana	Jasper	Jasper
	Elkhart	Elkhart
		Portage
	Fort Wayne	Fort Wayne
	Seymour	Seymour
	Richmond	Richmond
Terre Haute	Terre Haute	
Michigan	Adrian/Richmond	Adrian
		Richmond
	Alma/Alpena	Alma
		Alpena
	Muskegon	Muskegon
Grand Ledge	Grand Ledge	
Nevada	Gardnerville*	Gardnerville

Zones		
State	Zone	Office Name
North Carolina	Durham*	Durham Holt
		Durham Maine
		Durham Parkwood
		Durham Watts
	Monroe*	Monroe
	Sylva*	Marion
		Sylva
Weaverville		
Ohio	Athens/Marion	Athens
		Cambridge
		Marion
		Portsmouth
	Medina	Medina
		New Philadelphia
	Norwalk	Bowling Green
		Norwalk
		Sylvania McCord
	Oberlin	Oberlin
	Oxford	Oxford
	Troy/Wilmington	Troy
Wilmington		
Oregon	Coos Bay	Coos Bay
	Beaverton	Beaverton
		Gresham
		La Grande
		Silverton

Zones		
State	Zone	Office Name
Pennsylvania	Erie*	Edinboro
		Erie
	Johnstown*	Johnstown
	York*	Hershey
York		
South Carolina	Myrtle Beach*	Myrtle Beach
	Sumter*	Sumter
Texas	Baytown*	Baytown
		Dickinson
		League City
	College Station*	Bryan
		College Station
	Georgetown*	Georgetown
	Irving*	Garland
		Irving
Lewisville		
Plano		
Virginia	Amherst*	Amherst
	Chancellor*	Chancellor
	Great Bridge*	Great Bridge
	Harrisonburg*	Harrisonburg
	Manassas*	Manassas
		Warsaw
	Tazewell*	Richlands
		Tazewell
Warsaw*	Emporia	
	Warsaw	

Zones		
State	Zone	Office Name
Washington	Everett/Redmond	Bothell
		Everett
		Mt. Vernon
		Redmond
	Kennewick/Wenatchee	Kennewick
		Wenatchee
Wisconsin	Wausau	Wausau
	Sun Prairie	Sun Prairie
	Plymouth	Plymouth

* Interzone transport optional feature not available

5. Verizon's intervals for FRS are outlined in the following table.

Service Request for	Quantity	Applicable Operating Territory	Due Date Interval
UNI Port with Access Connection – DS1	1	East	9 days if Facilities are currently available (includes check for availability of Facilities)
			Negotiated if Facilities not currently available
		West	12 days if Facilities are currently available (includes check for availability of Facilities)
			Negotiated if Facilities not currently available
	2 or more	East and West	Negotiated
UNI Port with Access Connection – DS3	1	East and West	12 days if Facilities are currently available (includes check for availability of Facilities)
			Negotiated if Facilities not currently available
	2 or more		Negotiated

Private NNI Port Only Connection	1	East	9 days if Facilities are currently available (includes check for availability of Facilities)
			Negotiated if Facilities not currently available
	West	12 days if Facilities are currently available (includes check for availability of Facilities)	
		Negotiated if Facilities not currently available	
2 or more	East and West	Negotiated	

- a. All intervals are business days and are calculated from a full business day after Verizon receives an accurate and complete ASR from the Customer prior to the cutoff time. Cutoff time for receipt of an accurate and complete ASR is 5 PM ET. The intervals set forth below do not include any time period where Customer's service request is not received by Verizon via a Verizon-authorized and mechanized ASR format.
 - b. Negotiated intervals apply in the following circumstances: (1) all Service requests for quantities to which the standard interval does not apply, as specified preceding; (2) when Customer requests special handling (e.g., expedite); or (3) where suitable Facilities are not available. The negotiated interval will be determined by internal Verizon groups and communicated to the Customer.
 - c. The standard intervals set forth preceding represent the **minimum** period between receipt by Verizon of an accurate and complete ASR from Customer and provisioning of the Service by Verizon. If Customer requests a Service Date that is earlier than the standard interval for the Service set forth above, then Customer shall be responsible for any charges or fees (including any Expedite Charges) assessed by Verizon. These standard intervals are Verizon's guidelines that Verizon will attempt to meet on a consistent basis; however, except as otherwise specified in Section (IV)(H)(3) following, Verizon makes no guaranty or warranty that the Service will be provisioned in accordance with these standard intervals.
 - d. Multiple ASRs for the same Service which are submitted within a seventy-two (72) hour period will be subject to a negotiated interval.
6. Verizon may discontinue the Service with no less than a 30-day written notice provided to the Customer. On and subsequent to the effective date of the Service discontinuance, Customer will no longer be able to purchase or order any new Service. However, Customer can move or change its existing Service as long as such activity does not result in a new Commitment Period.

Customer can retain the Service until the expiration date of the term plan. Upon expiration of the term plan, Customer must convert the Service to another service provided by Verizon or disconnect the Service, but in no event shall the Customer have less than six (6) months from the effective date of Service discontinuance to convert the Service to a different service provided by Verizon or to disconnect the Service.

7. Verizon may grandfather the Service with no less than a 30-day written notice provided to the Customer. On and subsequent to the effective date of the grandfathering of the Service, Customer will no longer be able to purchase or order any new Service. However, Customer can move or change the existing Service as long as such activity does not result in a new Commitment Period. Customer can retain the existing Service until the term plan expiration and as specified in Section (V)(C) following.

- B. Reserved
- C. Reserved
- D. Reserved
- E. Responsibilities of the Parties

FRS is ordered via ASR.

Customer must provide the necessary CPE device capable of interfacing with Verizon's FRS. Each CPE device must conform to the technical specifications set forth in Section (III) preceding.

FRS is supported by Verizon's single point of contact National Fast Packet Fulfillment Center that provides continuous support for FRS 24 hours per day, seven days per week (24 x 7) with the ability to manage all Verizon-provided FRS Services as a single network.

At no additional charge, Verizon will at Customer's request, cooperatively test the Service at the time of installation. Acceptance tests will include tests for the parameters applicable to the Service as specified in the ASR for Service.

- F. Reserved
- G. Service Interruptions

1. **Service Interruption** is defined as a condition which renders the Service unusable to Customer solely as a result of failure of a facility or equipment within the Verizon network that is used to furnish Service under this Product Guide. Verizon reserves the right to determine when the Service is unusable based on its internal procedures. A Service Interruption period starts when Verizon is notified by Customer that the Service is inoperative. Notification must be in a manner and format designated by Verizon.

2. Subject to Section (IV)(G)(4) following, Customer is eligible to receive certain credits (**Credit Allowance**) (as set forth in more detail below) on an affected Service if such Service experiences a Service Interruption:
3. If the Service experiences a Service Interruption of at least four (4) hours, the affected Service will receive a Credit Allowance for the affected rate element(s) computed as follows:
 - a. Credit is computed by multiplying the monthly rate for the affected rate element(s) of the Service by the ratio that the number of hours in the period of Service Interruption bears to seven hundred twenty (720) hours. For the purpose of this computation, each month shall be considered to have seven hundred twenty (720) hours. The credit shall be based upon the monthly recurring charge for the affected rate element(s) of the Service for the month during which the Service Interruption occurred.
 - b. Each Service Interruption is considered separately for the purposes of establishing Credit Allowance. No credit shall be given for a Service Interruption of less than four (4) hours. The credit for a single month's billing period shall not exceed the monthly recurring charge for the affected rate element(s) of the Service.
4. Credit Allowance will not apply.
 - a. When the Customer fails to report the Service Interruption to Verizon; or
 - b. When the Service Interruption was caused in whole or in part by the act or omission of the Customer or a party authorized by the Customer to use the Service;
 - c. When the Service Interruption was due to the failure of power, equipment, service, or systems provided by the Customer or persons other than Verizon; or
 - d. For any period in which Verizon is not afforded access to the Premises where the Service is terminated; or
 - e. 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; or
 - f. For any period of scheduled maintenance or scheduled downtime where the Customer has received prior notification from Verizon; or
 - g. When Service Interruptions occur or continue because of the failure of the Customer to authorize the replacement of any element of special construction; or
 - h. For periods when the Customer elects not to release the Service for testing and/or repair; or
 - i. For any Service Interruption or a group of Service Interruptions, resulting from a common cause, for amounts less than five (5) dollars; or
 - j. For Service Interruptions, failures or delays due to a Force Majeure Event.

H. Reserved

I. Maintenance Window

To meet Customer 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 8 AM. Network upgrades are planned to provide Customer reasonable and timely notification in order to minimize any impact on Customer's Service.

J. Reserved

K. Reserved

L. Grandfathered Features/Functionality

1. Additional Logical Channels are limited to existing Services as of July 29, 2004 (North Operating Territories). No new Additional Logical Channels are allowed after said date. Each **Additional Logical Channel** is associated with a specific network address and includes connection to another Logical Channel on an access connection in order to form a PVC. Logical Channel Customers placing orders for moves or changes to existing UNI Facilities, or placing orders for new UNI Facilities must purchase CIR for the PVC between ports. However, Customers who renew a term plan, commit to a new term, or have a term plan that expires may retain the Logical Channels and are not required to purchase CIR for the PVC between ports.
2. **Committed Information Rate Optional Feature** is limited to existing Services as of July 29, 2004 (North Operating Territories), October 2, 2003 (South Operating Territories except for Verizon New Jersey Inc.) and October 23, 2004 for Verizon New Jersey Inc.. CIR is now available only as a chargeable basic service component of FRS.

V. **APPLICATION OF RATES AND CHARGES**

A. Rate Structure

1. UNI Port with Access Connection

A monthly rate applies per UNI Port with Access Connection, based on the bandwidth (i.e., DS1, DS3) of the access connection. Clear channel capability, as necessary, is included at no additional charge. A nonrecurring charge applies for each installation of UNI Port with Access Connection.

2. Private NNI Port Only Connection

A monthly rate applies per Private NNI Port Only Connection. A nonrecurring charge applies for each installation of Private NNI Port Only Connection.

3. PVC CIR

A monthly rate, based on CIR capacity, applies for each PVC CIR requested by Customer. When both UNIs are purchased in accordance with this Product

Guide, the CIR is provided and billed for in accordance with this Product Guide. When one UNI is purchased in accordance with this Product Guide, and another lower bandwidth UNI is purchased in accordance with the applicable Tariff, the CIR is provided and billed for in accordance with the applicable Tariff.

4. Optional Features and Functions

Nonrecurring charges do not apply when optional features are ordered in conjunction with the initial installation of the associated UNI Port with Access Connection. When ordered subsequent to the initial installation of the associated UNI Port with Access Connection, nonrecurring charges apply.

a. Backup UNI Port with Access Connection

1. A nonrecurring charge applies, per Backup UNI Port with Access Connection, per occurrence, when a Customer requests an activation of the Backup UNI Port with Access Connection.
2. There is no charge for deactivation of Backup UNI Port with Access Connection.

b. Interzone Transport (West Operating Territories only)

A monthly rate applies, based upon CIR capacity, for each PVC ordered that traverses one or more frame relay zone boundaries within a state. The Frame Relay zones are listed in Section (IV)(A) preceding. This charge is in addition to the Standard PVC CIR rate element.

5. Grandfathered Features/Functionality

a. Additional Logical Channels

A monthly rate applies, per Logical Channel, per Port. Such monthly rate varies subject to the following tiers: 1st through 4th Additional Logical Channel, 5th through 9th Additional Logical Channel, 10th Additional Logical Channel and over.

b. CIR Optional Feature

A monthly rate, based on CIR capacity, applies for each in-service PVC CIR Optional Feature.

B. Term Plans

FRS is available for term plans of one (1) year, three (3) years and five (5) years (**Commitment Periods**).

C. Extension and Renewal of Commitment Period

1. Prior to the end of the Commitment Period, the Customer may select one of the following options, to be effective at the end of the Commitment Period:
 - Renew for the same Commitment Period;
 - Commit to a new Commitment Period of shorter or longer duration; or
 - Discontinue Service.
2. In the event Customer does not select one of the above options, or in the event Section (IV)(A)(7) has been triggered, at the end of the Commitment Period, Customer will be automatically renewed to the same length Commitment Period for the same Service until the earliest to occur of the date (a) the Customer cancels the Service, (b) Verizon discontinues the Service as specified in Section (IV)(A)(6) preceding, or (c) subject to (IV)(A)(6) preceding, a valid order for a new term plan is accepted by Verizon from Customer. Customer may cancel Service within sixty (60) days of such renewal without termination liability.

D. Additional Charges

1. Expedite Charge

An Expedite Charge will apply when a Customer requests a Service Date that is earlier than the standard interval Service Date for the Service ordered.

The request for an earlier Service Date may be received from the Customer prior to the issuance of an access order, or after the access order has been issued but prior to the Service Date.

Verizon maintains exclusive right to accept or deny the request to expedite. If, upon reviewing availability of equipment and scheduled work load, Verizon agrees to provide Service on an expedited basis and the Customer accepts this proposal, an Expedite Charge will apply.

If Verizon is subsequently unable to meet an agreed upon expedited Service Date, then the Expedite Charge will not apply.

In the event that Verizon provides Service on an expedited basis by Customer request and the Customer then delays Service, an additional Service Date Change Charge beyond that specified in Section (V)(D)(9) following will be applied.

In the event that the Customer cancels an expedite request, the Expedite Charge will be added to the Cancellation Charge.

An Expedite Charge will not be applied to orders expedited for Verizon reasons.

The Expedite Charge will be billed in addition to the nonrecurring charge applicable to the Service and will be applied on a per order per occurrence basis.

2. Administrative Change

For Customers who purchase CIR, an Administrative Charge will be applied on a per order basis whenever a change is made to Customer's Frame Relay configuration at Customer's request that does not result in a physical change in the Service Facility. Such changes are defined as those rearrangements necessary to add, delete, or rearrange Customer's configuration, including changes to Customer's selected carrier.

3. Moves and Changes

A move involves a physical change in the UNI or NNI of the Service. When the move is to a new location within the same building or to a different building, a nonrecurring charge for the move will apply. There will be no change in the Minimum Period requirement, and termination liability does not apply.

4. Reserved

5. Order Cancellation

- a. Customer may cancel an order for the installation of Service at any time prior to notification by Verizon that Service is available for Customer's use or prior to the Service Date, whichever is later. The cancellation date is the date Verizon receives an order from the Customer canceling the order.
- b. If Customer or Customer's end user (i) does not accept, or is unable to accept an FRS Service within thirty (30) calendar days after the original Service Date; or (ii) fails to negotiate within thirty (30) calendar days after the original Service Date a new Service Date that is within thirty (30) calendar days after the original Service Date, the order will be cancelled on the thirty-first (31st) calendar day after the original Service Date without any action required by Customer. Cancellation charges will apply.
- c. When Customer cancels an order in whole or in part for FRS prior to the installation of FRS, cancellation charges will apply on a per circuit basis (**Cancellation Charges**).

6. Termination Liability

- a. FRS is subject to termination liability if Service is disconnected prior to the end of the Commitment Period. Termination liability charges are calculated as follows:
 1. If the disconnection occurs during the first year of the Commitment Period, termination liability is equal to the Minimum Period obligation, or one hundred percent (100%) of the monthly recurring

rates for the unexpired portion of the first year, plus twenty-five percent (25%) of the monthly recurring rates for the remainder of the Commitment Period.

2. If the disconnection occurs after the first year of Commitment Period, termination liability is calculated at twenty-five percent (25%) of the monthly recurring rates from the date of disconnection through the remainder of the Commitment Period.

b. Termination liability will not apply in each of the following situations:

1. When the Commitment Period of the Service is changed to an equal or a longer Commitment Period. There will be no change in the Minimum Period requirement.
2. Customer moves existing Service to a new location and maintains that Service for the remainder of the Commitment Period. There will be no change in the Minimum Period requirement.
3. When an FRS is changed to an FRS of a higher speed, and such FRS has an equal or longer Commitment Period than the existing FRS. The Customer remains responsible for satisfying any outstanding Minimum Period obligations.

7. Minimum Period

FRS has a Minimum Period of one (1) year. If FRS is disconnected during the Minimum Period, Customer shall pay to Verizon one hundred percent (100%) of the monthly recurring rates from the date of disconnection through the Minimum Period.

8. Reserved

9. Service Date Change Charge

Service Dates for the installation of new Services or rearrangements of existing Services may be changed, but the new Service Date may not exceed the original Service Date by more than thirty (30) calendar days. When, for any reason, the Customer indicates that Service cannot be accepted for a period within thirty (30) calendar days of the Service Date, and Verizon accordingly delays the start of Service, a Service Date Change Charge will apply.