DATA PRODUCT REFERENCE AND PRICING GUIDEBOOK

SECTION 11 – DESCRIPTION OF SPECIALIZED INTERNATIONAL COMMUNICATIONS SERVICES

11.1   International Frame Relay Service (IFRS)

[1]This service is no longer available to new Customers or to existing Customers at new locations effective   N
September 11, 2002.   N

    11.1.1   Description

        (A)   This Service is a packet data service, accessible at speeds from 64 Kbps to 1.536 Mbps, which provides Customers with a capability to connect locations via PVCs for data transmission. Customers may subscribe to term plans for one, two, three , or five years for UNI ports. IFRS will be offered with one end point in the U.S. and the other end point in a foreign country/area. Service is offered using a full-circuit international PVC between a U.S. NNI port and a foreign port in conjunction with foreign carriers. IFRS to a foreign country/area not listed in this Guidebook may be arranged by the Company on an ICB.

        (B)   This Service, composed of three components, allows Customer-compatible applications and/or equipment to connect to the IFRS network. The three components are Access, UNI Ports, and PVCs.

            .1   The Access to the IFRS network is through E1, DS1, or fractional Access Lines, and is provided by a Local Access Provider,

            .2   The UNI Port options allow connectivity to the IFRS network.

            .3   PVCs provide a connection between two Ports on the network.. Multiple virtual connections can be established over a single digital transmission facility and single port.. PVCs are defined by DLCIs which identify address information and route the framed data. Local Access and Frame Relay Ports can be shared with traffic to multiple far end designations.

        (C)   The DLCIs are established at the time of Service subscription at Customer specified end points making a PVC. The IFRS network will only transmit data between authorized DLCIs. Each PVC has a pre-assigned CIR and an allowable Burst Rate. This provides Bandwidth sharing and Bandwidth on demand capabilities.

        (D)   At Service subscription, the CIR and the Burst Rate must be specified for each PVC ordered.

        (E)   The installation interval for IFRS will be negotiated on an ICB.   Expedited installation intervals may be available in some countries.

        (F)   For Service availability in foreign locations, see Section 13.2.1 of this Guidebook.

        (G)   Unless otherwise indicated in this Guidebook, IFRS is available to Business Customers that sign a term plan agreement for UNI Ports for a minimum of one (1) year. Term plans are also available for two (2) year. three (3) year and five (5) year commitments.

    11.1.2   Access

        (A)   Access to IFRS can be made using the following method provided by a Local Access Provider:

        DS1 digital access (including subrate DS1 access options).

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SECTION 11 – DESCRIPTION OF SPECIALIZED INTERNATIONAL COMMUNICATIONS SERVICES

11.1   International Frame Relay Service (IFRS) (continued)

[1]This service is no longer available to new Customers or to existing Customers at new locations effective   N
September 11, 2002.   N

       11.1.2   Access

          (B)   For each access facility used, one Port is required for access to IFRS. For each Port used, the speed selected must be equal to or greater than the sum of the CIRs for all PVCs connected to the port.

             .1   No individual CIR can be greater than the access speed (for both non-oversubscribed and oversubscribed).

             .2   For non-oversubscribed Service, the sum of the CIRs can not be greater than the access speed.

             .3   For oversubscription Service, the sum of CIRs can not be greater than twice the access speed.

          (C)   When the Customer interconnects to Company-provided FRS/IFRS via Local Access, whether provided by the Company or another vendor, the transmission speed for the Local Access and the connecting UNI Port must be the same.

          (D)   Access gateways may be utilized under certain conditions to interconnect the Company FRS/IFRS network with other U.S. frame relay service providers where available.

       11.1.3   International Full Circuit Permanent Virtual Circuits

          (A)   An International PVC is a logical Customer-dedicated communications path defined between two access Ports, one in the U.S, and the other in a foreign country. Each PVC is assigned a CIR which is the average minimum data rate the network will allocate to the PVC under normal operating conditions. The data transmission rate for a PVC can be greater than the CIR when excess capacity is available on the Port and on the network. When this excess capacity exists, a data rate above the CIR may be achieved up to the access Port capacity. Data sent across a virtual connection in excess of that connection's CIR and within provisioned burst rate parameters will be marked by the network as being discard eligible. In the event of network congestion, data marked discard eligible will be delivered only if the instantaneous demand for output on an access port is equal to or less than the capacity of the queue for that access port.

          (B)   International PVCs are offered in two way, symmetrical configurations only.

          (C)   Each PVC is subject to a minimum charge equal to the charge for one month's service.

          (D)   PVCs connecting US ports to international ports will require domestic PVCs in addition to international PVCs. Domestic PVC rates can be found in Section 6.2.2 Section 6.2.3 and Section 6.1.3 of this Guidebook.

       11.1.4   Basic Features

          (A)   Customers predefine the locations/lines authorized to exchange data. The Company and Customer use this information to assign and administer the DLCIs and PVCs.

          (B)   The CIR and Burst Rate will be negotiated with each Customer at the time the Customer subscribes to the Company's Service. These rates will be based on Port termination speeds and the number of PVCs per Port ordered by the Customer.

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11.1   International Frame Relay Service (IFRS) (continued)

[1]This service is no longer available to new Customers or to existing Customers at new locations effective   N
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   11.1.5   Application of Rates and Charges

      (A)   U.S. Port Charges

         .1   Non-recurring Charges

              A non-recurring charge will be assessed for installation, change, and/or expedited
              Service Orders. See Sections 5, 6 and 7 of this Guidebook for an explanation of
              when these charges apply.

         .2   Monthly Recurring Charges

              The monthly recurring charges apply per Port. The charges are determined based
              upon the Port speed. The monthly recurring rates may vary according to the length
              of term plan agreement.

      (B)   International PVC Charges

         .1   NRC

              A NRC will be assessed for installation, change, and/or expedited Service order.
              See Section 2.14 of this Guidebook for an explanation of when these charges
              apply.

         .2   MRC

              A MRC applies per Kbps increment of fraction thereof limited by the type of
              access and data transmission rate.

      (C)   U. S. Local Access

              When the Company acts as the Customer's agent for obtaining Local Access from the
              Customer Premises to a UNI Port in the U.S., the Local Access charges will be billed on
              a pass-through basis.

              When the Customer requests the access coordination function and local channel, all
              components of the end-to-end service between Customer's Premises will begin service on
              the same date, unless otherwise specified by the Customer. Service dates are independent
              of each other when the Customer does not obtain the access coordination function offered
              by the Company.

      (D)   Foreign UNI Port and Foreign Local Access

              When the Company acts as the Customer's agent for obtaining a UNI Port and Local
              Access in a foreign country, the UNI Port and Local Access charges from the foreign
              carrier will be billed to the Customer on a pass-through basis.

              When the Customer requests the access coordination function, the foreign UNI Port and
              foreign local channel, all components of the end-to-end service between Customer's
              Premises will begin service on the same date, unless otherwise specified by the
              Customer. Service dates are independent of each other when the Customer does not
              obtain the foreign UNI Port, foreign local access and access coordination function offered
              by the Company.

DATA PRODUCT REFERENCE AND PRICING GUIDEBOOK

SECTION 11 – DESCRIPTION OF SPECIALIZED INTERNATIONAL COMMUNICATIONS SERVICES

11.1   International Frame Relay Service (IFRS) (continued)

[1]This service is no longer available to new Customers or to existing Customers at new locations effective   N
September 11, 2002.   N

      11.1.5   Application of Rates and Charges (continued)

          (E)   Access Gateway

              .1   NRC

                  A NRC charge will be assessed for installation, change, and/or expedited Service Orders. See Section 2.14 of this Guidebook for an explanation of when these charges apply.

              .2   MRC

                  The MRC apply per access gateway. The charges are determined based upon the cumulative CIR per Customer site that the Customer has terminating on the access gateway.

          (F)   Volume Incentive Plan (VIP)

              The International Data elements are not eligible for VIP discounts. See Section 5.1 of this Guidebook for information regarding the Domestic Data elements VIP eligibility. See Section 5.2 of this Guidebook for information regarding VIP eligibility for PremierSERV[SM] Frame Relay or PremierSERV[SM] ATM or other Data elements.

          (G)   International Runaway Frame Price Plan, also known as International Essential Frame Price Plan

              .1   This price plan is available to Customers purchasing SBC International Frame Relay Service between January 5, 2004 and April 2, 2004. The International Runaway Frame Price Plan (also known as the International Essential Frame Price Plan) is extended to December 31, 2004. To qualify for this Plan, Customers must:

                  .a   Have or purchase SBC International Frame Relay Service, by either:

                      .i   Purchasing new SBC International Frame Relay Service, or

                      .ii   Have existing SBC International Frame Relay Service on a Term Plan Agreement that will expire in 90 days or less. Early termination charges will be waived for these agreements when Customer purchases under the International Runaway Frame Price Plan.

                  .b   Customer must sign a new 2, 3 or 5 year Term Plan Agreement;

                  .c   Customer must certify that Customer is purchasing or has interstate PremierSERV[SM] Frame Relay Service as a bundled port and access service from SBC Long Distance.

              .2   NRC

                  NRCs associated with International Runaway Frame foreign UNI ports and International PVCs are waived under this offering. NRCs will also be waived for existing Customers that upgrade their Service to a higher bandwidth level. International PVC CIR must be 50% of port speed. Only standard SBC International Frame Relay Service foreign UNI ports and International PVCs are eligible to receive this discount.

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SECTION 11 – DESCRIPTION OF SPECIALIZED INTERNATIONAL COMMUNICATIONS SERVICES

11.1   International Frame Relay Service (IFRS) (continued)

[1]This service is no longer available to new Customers or to existing Customers at new locations effective September 11, 2002.   N
                                                                                                         N

      11.1.5   Application of Rates and Charges (continued)

           (G)   (continued)

               .3   MRC

Customers meeting the requirements set forth in G.1 above, will qualify for a 15% discount on foreign UNI ports and International PVCs.

               .4   Foreign Local Access

The International Runaway Frame Price Plan is not applicable to the foreign local access portion of the Service.

               .5   Order Deadlines

All contracts must be signed by April 2, 2004. All orders must be submitted by April 12, 2004 to qualify for the International Runaway Frame Price Plan, aka International Essential Frame Price Plan.

Under the new December 31, 2004 end date, all contracts must be signed by December 31, 2004. All orders must be submitted by January 15, 2005.

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SECTION 11 – DESCRIPTION OF SPECIALIZED INTERNATIONAL COMMUNICATIONS SERVICES

11.1   International Frame Relay Service (IFRS) (continued)

[1]This service is no longer available to new Customers or to existing Customers at new locations effective September 11, 2002.

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11.1.6   Quality Standards

(A)   IFRS complies with both the ITU and ANSI standards.

(B)   Service Level Agreements (SLA) for countries other than Mexico.

The following table defines the SLA metrics and credits to be refunded to the Customer when the data metrics specified exceed the specified values for International Frame Relay:

Frame Relay SLA Metric	International Frame Relay SLA	IFR Credits
LATENCY The Average monthly time for a 100 byte diagnostic packet to transit the International Frame Relay Backbone network to travel from a specific origin to a specific destination and back again (roundtrip), under normal operating conditions and during a specific period of a calendar month. Specially generated delay measurement packets on PVCs dedicated to service level monitoring are used to measure Latency. The measurement frequency is 5 minutes. This does not include the local loop.	99.95% edge-to-edge on port basis to 45 countries. 99.5% to Costa Rica, Egypt and Poland. The local loop is not included.	SBC will credit the customer for the prorated charges for 1/30th of the IFR monthly Port and or PVC charges for each cumulative hour of downtime. A trouble ticket must be opened within 72 hours of the outage.
Frame Delivery Ration (FDR) The effectiveness o f the Network's ability to transport an offered Frame Relay load on a PVC. The FDR is the ratio of successful frame receptions to attempted frame transmissions within the CIR of a PVC.	99.9% edge-to-edge. Does not include the local loop.	If the FDR is less than 99.9%, then a credit of 5% of the MRC for the PVC. The credit is based on 5% of the MRC for the PVC. Calendar average monthly network PVC throughput for FDR shall equal or exceed 99.9%.
Mean Time To Repair Problem Resolution: An Out of Service problem is defined as a problem during which normal customer data communications is interrupted. Examples are network backbone port or network access circuit malfunctions that prevent customer data communications.	An objective of 4 hours per occurrence on a calendar monthly average for Port and PVC only, excludes local loop.	For locations that are within 30 miles of an Infonet backbone network node site, repair will be provided in less than 4 hours from the time the trouble ticket is opened. No credit is provided if the 4 hour metric is not met.
Not Covered If the Foreign location is served through an international NNI port configuration, the SLAs do not apply. Outages due to scheduled maintenance during standard maintenance windows or unscheduled network maintenance or upgrades.	Maintenance may be rescheduled as needed. Outages due to unscheduled network upgrades.	

(C)   SLA's to Mexico are available on an ICB basis only.

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SECTION 11 – DESCRIPTION OF SPECIALIZED INTERNATIONAL COMMUNICATIONS SERVICES

11.1   International Frame Relay Service (IFRS) (continued)

[1]This service is no longer available to new Customers or to existing Customers at new locations effective   N
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11.1.6   Quality Standards (continued)

(D)   International SLA Terms and Conditions:

.1   Customer is responsible for notifying Company and requesting a SLA credit when a specific SLA is below the guaranteed level within the calendar month when the failure occurred.

.2   Customer must request a SLA credit within 21 days from the end of the calendar month when the SLA failure occurred.

.3   Network Availability, Latency & FDR are measured edge-to-edge over calendar month period and do not include the local loop. Network Availability is measured as an average per port.

.4   International Frame Relay service must originate in the United States.

.5   Locations in Mexico are excluded from all International SLAs.

.6   Latency, FDR, & Network Availability measure performance of the combined international and domestic PVCs referenced in Section 5 of this Guidebook.

.7   The following will be excluded from any determination of Frame Delivery Ratio, Latency and Network Availability and Time to Repair:

.a   Force major events;

.b   Data lost during Company's scheduled maintenance window or unscheduled maintenance windows;

.c   Data exceeding the subscribed Committed Information Rate (CIR) for Frame Relay;

.d   Failures attributed to facilities or equipment provided by another party or the Customer or inaccurate network specifications requested by Customer;

.e   Failures attributed to unauthorized use of Service, negligence or willful misconduct by the Customer;

.f   Access link failures.

.g   Frames marked discard eligible are excluded for Latency and Frame Delivery Rate SLA guarantees.

.h   Customer "no access" time as defined below:

.i   Customer not available;

.j   Coordinated Vendor meeting;

.k   Abeyance on Customer request;

.l   After hours testing because no Customer daytime release;

.m   Tickets referred to another party;

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SECTION 11 – DESCRIPTION OF SPECIALIZED INTERNATIONAL COMMUNICATIONS SERVICES

11.1   International Frame Relay Service (IFRS) (continued)

[1]This service is no longer available to new Customers or to existing Customers at new locations effective September 11, 2002.

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11.1.6   Quality Standards (continued)

(D)   (continued)

.7   (continued)

Unless the Customer has canceled Service, the service level credit will be accomplished by a credit on a subsequent bill for Service. The service level credits will appear on the Customer's bill no later than the two (2) billing cycles following the restoral of the interruption of Service. If the Customer has canceled Service, the credit will be applied to the last invoice and only the excess over the amount due will be refunded to the Customer. In no event will the total of the service level credit and the service outage credit exceed the monthly recurring charge for the Port(s) or applicable PVC(s).

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11.1   International Frame Relay Service (IFRS) (continued)

[1]This service is no longer available to new Customers or to existing Customers at new locations effective September 11, 2002.

N
N

11.1.6   Quality Standards (continued)

(E)   Latency SLA guarantees by Country and City:

Country	City	Total Latency
NORTH AMERICA		
CANADA	Calgary	254
	Montreal	221
	Toronto	214
	Vancouver	251
Puerto Rico	San Juan	336
SOUTH AMERICA		
Argentina	Buenos Aires	446
Bolivia	La Paz	456
BRAZIL	Rio de Janeiro	410
	Sao Paulo	401
Chile	Santiago	409
Columbia	Bogota	338
Costa Rica	San Jose	304
Ecuador	Quito	425
Peru	Lima	350
Venezuela	Caracas	328
SOUTH PACIFIC		
AUSTRALIA	Melbourne	382
	Sydney	354
New Zealand	Auckland	391
ASIA		
China	Beijing	428
	Shanghai	420
Hong Kong	Hong Kong	384
Indonesia	Jakarta	448
JAPAN	Osaka	343
	Tokyo	313
Korea	Korea	376
Malaysia	Kuala Lampur	451
Philippines	Manila	505
Singapore	Singapore	425
Taiwan	Taipei	436
Thailand	Bangkok	486

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11.1   International Frame Relay Service (IFRS) (continued)

[1]This service is no longer available to new Customers or to existing Customers at new locations effective September 11, 2002.

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N

11.1.6   Quality Standards (continued)

(E)   Latency SLA guarantees by Country and City (continued)

Country	City	Total Latency
EUROPE		
Austria	Vienna	311
Belgium	Brussels	305
Czech Republic	Prague	316
Denmark	Copenhagen	316
Estonia	Tallinn	383
Finland	Helsinki	344
	Turku	ICB
FRANCE	Lyon	307
	Paris	287
GERMANY	Berlin	310
	Dusseldorf	300
	Frankfurt	288
	Hamburg	311
	Munich	316
Greece	Athens	380
Hungary	Budapest	332
Ireland	Dublin	290
ITALY	Milan	308
	Rome	348
Luxembourg	Luxembourg	304
NETHERLANDS	Amsterdam	296
	Amstelveen	296
Norway	Oslo	338
Poland	Warsaw	382
Portugal	Lisbon	326
Romania	Bucharest	ICB
Russia	Moscow	382
SPAIN	Barcelona	343
	Madrid	326
SWEDEN	Malmo	360
	Stockholm	332
SWITZERLAND	Bern	318
	Geneva	323
	Lausanne	331
	Zurich	312
Turkey	Istanbul	ICB

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11.1   International Frame Relay Service (IFRS) (continued)

[1]This service is no longer available to new Customers or to existing Customers at new locations effective September 11, 2002.

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11.1.6   Quality Standards (continued)

(E)   Latency SLA guarantees by Country and City (continued)

Country	City	Total Latency
UNITED KINGDOM	Docklands	272
	London	272
MIDDLE EAST		
Israel	Tel Aviv	391
Egypt	Cairo	368
AFRICA		
South Africa	Johannesburg	491

11.1.7   Availability

Unless otherwise indicated in this Guidebook, all International Frame Relay Services are available to the following foreign countries:

Argentina	Estonia	Kazakhstan	Puerto Rico
Australia	Finland	Korea (South)	Romania
Austria	France	La Reunion	Russia
Azerbaijan	French Guyana	Latvia	Singapore
Belgium	Georgia	Lithuania	Slovak Republic
Bolivia	Germany	Luxembourg	South Africa
Brazil	Greece	Malaysia	Spain
Bulgaria	Guadeloupe	Martinique	Sri Lanka
Canada	Guatemala	Mexico	Sweden
Chile	Honduras	Netherlands	Switzerland
China	Hong Kong	New Zealand	Taiwan
Colombia	Hungary	Nicaragua	Thailand
Costa Rica	India	Norway	Turkey
Czech Republic	Indonesia	Panama	Ukraine
Denmark	Ireland	Peru	United Kingdom
Ecuador	Israel	Philippines	Uruguay
Egypt	Italy	Poland	Uzbekistan
El Salvador	Japan	Portugal	Venezuela

Service to other countries not mentioned in the list may be negotiated on an Individual Case Basis.

11.1.8   Reserved for future use.

11.2   International ATM (IATM)

[1]This service is no longer available to new Customers or to existing Customers at new locations effective September 11, 2002.

IATM Service is a high-speed, packet switched transport service that combines disparate applications and provides for an ATM network using a common network access device and a physical network connection. IATM will be offered with one end point in the U.S. and the other end point in a foreign country/area. IATM Service can allow management of a single network that is easier and less expensive than managing multiple networks. IATM Service uses multiple connections over a single line and reduces the number of required physical interfaces .

IATM is available to qualifying customers for networks that include sites in certain select countries. Pricing is available on an ICB basis.