

NATIONAL EXCHANGE CARRIER ASSOCIATION, INC.
REVISIONS TO TARIFF F.C.C. NO. 5
ASYNCHRONOUS TRANSFER MODE -CELL RELAY ACCESS SERVICE (ATM-CRS)
DIGITAL SUBSCRIBER LINE (DSL) ACCESS SERVICES
Transmittal No. 1020
MARCH 17, 2004

1: INTRODUCTION

The National Exchange Carrier Association, Inc. (NECA) proposes to modify its Tariff F.C.C. No. 5 to reduce monthly rates on several Asynchronous Transfer Mode – Cell Relay Access Service (ATM-CRS) port speeds, introduce a new ATM-CRS port option that allows the transmission of Internet Protocol (IP) packets over ATM – CRS Access Service, introduce a new discount level for Digital Subscriber Line (DSL) Access Services purchased under the Discount Pricing Arrangement (DPA) and modifies existing DSL regulations to allow for the use of any technology used in the provisioning of local exchange access loop facilities to provide DSL Access Services.

This filing is being made at the request of NECA tariff participants seeking to offer advanced communications services in their rural telecommunications markets based on fiber transport, DSL and packet switched ATM capabilities. This filing is expected to help companies serve rural demand for advanced communications capabilities with a wider choice of available broadband technology options.

2: BACKGROUND

DSL access service is being widely deployed by NECA members with 814¹ tariff participants now offering the service. The strong growth represents a 46% increase in Traffic Sensitive tariff participants that are deploying advanced services compared to 2001. This strong growth is resulting in lower than anticipated unit cost due to improved utilization of network equipment. Vendor prices

¹ “NECA’s 2003 Access Market Survey – Fulfilling the Digital Dream” available online at: http://www.neca.org/source/NECA_155_1152.asp.

for broadband access equipment also continue to decline with a variety of equipment platforms that can be easily scaled for small to mid size rural markets. Traffic Sensitive tariff participants are also making use of a wide variety of shared high-speed packet transport equipment to route broadband traffic on their networks that can be used to allow customers to send Ethernet or IP packets through the ILECs' ATM - CRS Service networks. These high-speed packet transport networks use temporary shared circuits called "virtual circuits" that route high-speed broadband services at very low costs compared to special access. There is also an increased interest in use of wireless and fiber optics in loop transmission systems, which are becoming attractive low cost alternative to new copper loops that can offer high bandwidth over greater distances compared to copper. Current fiber technology provides for distances up to 20 kilometers, or 12.5 miles.

3: PROPOSED TARIFF REVISIONS

Asynchronous Transfer Mode – Cell Relay Access Service (ATM – CRS)

- A. Reduce Ethernet and optical speed ATM – CRS UNI and NNI monthly port rates. The reductions in rates are being made to more closely align ATM - CRS Port rates with ATM - CRS Port costs. Since the initial introduction of ATM – CRS Access Service², actual deployments of packet switching have occurred more rapidly and at significantly lower costs than anticipated in the initial tariff filing.
- B. Introduce a new non-chargeable ATM - CRS port optional function that enables the transmission of IP packets across the ATM – CRS network interface. With the proliferation and dominance of Ethernet interfaces within customer premises equipment, equipment and networking vendors are incorporating the IP protocol suite for a variety of new advanced services. Additionally, new multimedia applications can be most efficiently transported across rural packet networks, such as the NECA ATM-CRS and DSL networks, using IP and ATM switches and routers. NECA proposes this new IP optional function to enable customers to make use of these functionalities across the ATM-CRS packet network.

² See National Exchange Carrier Association, Inc. Tariff F.C.C. No. 5, Transmittal No. 930 filed March 19, 2002 effective April 2, 2002.

Asymmetric and Symmetric Digital Subscriber Line (ADSL and SDSL) Access Service

- A. Modify the existing DSL Discount Pricing Arrangement to add a new higher volume discount step for voice-data and data-only services. A new level of discount will provide a more attractive pricing option to DPA customers and more closely align the monthly per line rate with the costs per port in single wire center study areas.
- B. Modify regulations to permit use of a wider choice of access technologies that can be used to provide DSL Access Service. Rural companies are beginning to deploy alternative transport and loop technology (including fiber and radio) as part of their ongoing local exchange network upgrade requirements. In many new deployments and network upgrades requiring the replacement of cable, the costs of deploying fiber are comparable to copper. In many instances, fiber is less expensive where the transport distance is great. This proposed tariff filing to modify NECA's Tariff F.C.C. No. 5 regulations to eliminate the copper only loop requirement is designed to allow for use of any technology to provide DSL Access Service by rural ILECs over their local distribution facilities. Since NECA's DSL Access Service is based on the copper-based industry standard, companies offering service using alternative technologies will need to be listed in Section 8.1.6 of the tariff as an ADSL exception company. The tariff provisions for SDSL Access Service do not specify any particular industry standard, therefore, exception listing is not necessary for companies deploying non-copper based SDSL service.

4: PROPOSED RATES AND CHARGES

1. Reduce the ATM - CRS UNI and NNI port charges

This tariff filing proposes to reduce Ethernet and optical speed ATM - CRS NNI and UNI port monthly rates to reflect updated costs and increased use of high-speed connections to connect the telephone company's access network and a network customer. Rates are adjusted to more closely reflect the actual costs of providing service. Nonrecurring charges for all port speeds remain unchanged.

	Current	Proposed
Port Speed		
10 Mbps Ethernet	\$1,200.00	\$555.00
100 Mbps Ethernet	\$4,500.00	\$790.00
1 Gbps Ethernet	\$15,000.00	\$2,700.00
155.52 Mbps	\$4,100.00	\$3,100.00
622.08 Mbps	\$8,100.00	\$4,500.00

2. Introduce a new ATM-CRS Port Optional Function for Internet Protocol (IP)

This filing introduces a non-chargeable ATM – CRS port optional function. When installed simultaneously with an ATM – CRS port, there is no additional nonrecurring or monthly charge for the optional IP functionality. When a customer requests a change to an existing ATM – CRS port to add or delete the IP optional function, an Access Order Charge applies.

3. Add a new discount step to the DSL Discount Pricing Arrangement for ADSL and SDSL Services

This tariff filing adds a new discount step to the DSL Discount Pricing Arrangement (DPA).

Nonrecurring charges for all services remain unchanged.

Term Plan Charge	New Option	
Per Wire Center	\$ 250.00	
	1 Year	3 Year
	Option 3	Option 3
ADSL		
Voice-Data Option	\$ 20.95	\$ 18.95
Data-Only Option	\$ 45.95	\$ 43.95
SDSL		
Voice-Data Option		
- 768 Kbps	\$ 20.95	\$ 18.95
Data-Only Option		
- 144 kbps	\$ 54.00	\$ 52.00
- 768 kbps	\$ 83.00	\$ 81.00
- 2 Mbps	\$ 148.00	\$ 125.00
- 4 Mbps	\$ 295.00	\$ 248.00

5: COST AND DEMAND DEVELOPMENT

Cost Support

This section describes the methodology used in determining interstate costs for ATM - CRS ports and DSL Discount Pricing Arrangement Pricing Option 3. To determine these costs, NECA issued a data request to member companies that are listed in the DSL section of NECA's Tariff F.C.C. No. 5. In addition, NECA worked with ATM equipment vendors to get additional equipment cost data.

ATM - CRS UNI and NNI Port Charges

For ATM - CRS Port charges, data collection participants supplied NECA with the total number of ports by port speed and total investments for the ATM equipment at the DSL Access Service Connection Point. The total investments included Engineered, Furnished, and Installed (EF&I) costs. Using the vendor supplied information, a cost index was developed to convert different port speeds to DS1 port equivalents. The total investment costs were then allocated to different port speeds using the cost index, resulting in an estimate of average investment per port.

Average investments per port were converted to monthly direct costs by applying an annual direct cost factor (as derived in Volume 5, Exhibit 7 of the 2003 Annual Filing) and dividing by 12. These costs include maintenance, income taxes, depreciation, and a rate of return of 11.25% on investment.

Exhibit 1 displays the average investment per port, and monthly cost for OC3, OC12, and 10/100/1000 Mbps Ethernet ATM ports.

The revenue impact for the proposed rates for ATM - CRS Ports is computed as current recurring revenue minus the proposed recurring revenue using ATM - CRS ports demand in 2003 Annual Filing, Volume 5, Exhibit 10.

Exhibit 2 displays average monthly demand for ATM - CRS Ports from the 2003 Annual Filing³, Volume 5, Exhibit 10, priced out at current rates and proposed rates. The revenue impact is for the remaining three months of the current test period.

ADSL and SDSL Discount Pricing Arrangement Pricing Option 3

The unit costs for ADSL/SDSL Voice-Data/Data-Only services are from NECA's 2003 Annual Filing, Volume 5, Exhibit 9.

Exhibit 3 displays unit costs and proposed rates for the new DSL Pricing Option 3.

The revenue impact of the proposed rates for the remaining three months of the current test period is expected to be de minimis, as migration to the new option will be negligible during this period.

³ See National Exchange Carrier Association, Inc. Tariff F.C.C. No. 5, Transmittal No. 988 filed June 16, 2003, effective July 1, 2003 ("2003 Annual Filing").

Total Revenue Impact

As shown in the calculation of the tariff rate index in Exhibit 4, the annualized revenue impact of the proposed rate changes is less than 1%, and is therefore considered to be de minimis.

March 17, 2004 NECA ACCESS CHARGE FILING
ATM USER-TO-NETWORK INTERFACE AND NETWORK-TO-NETWORK INTERFACE
INVESTMENTS AND COSTS PER PORT

EXHIBIT 1

LINE NO.	DESCRIPTION	AVERAGE ¹ INVESTMENT PER PORT (A)	DIRECT ² COST FACTOR (B)	ANNUAL DIRECT COST (C) = A * B	MONTHLY COST (D) = C / 12
1	OC 3 Port	\$127,101	0.19375	\$24,626	\$2,052.17
2	OC 12 Port	\$141,359	0.19375	\$27,388	\$2,282.33
Ethernet Port					
3	10 Mbps Base F	\$19,292	0.19375	\$3,738	\$311.50
4	100 Mbps Base F	\$20,731	0.19375	\$4,017	\$334.75
5	1000 Mbps Base X	\$62,123	0.19375	\$12,036	\$1,003.00

1. Data collected in NECA DSL Cost Study January 2004

2. 2003 Annual Filing Volume 5, Exhibit 7

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ATM - CRS PORTS PROPOSED RATES, DEMAND, AND REVENUE IMPACT

EXHIBIT 2

LINE NO.	ITEM	AVERAGE MONTHLY DEMAND¹ (A)	CURRENT RATE (B)	CURRENT MONTHLY REVENUE (C) = A * B	PROPOSED RATE (D)	PROPOSED MONTHLY REVENUE (E) = A * D
1	OC 3 Port	14	\$4,100	\$57,400	\$3,100	\$43,400
2	OC 12 Port	3	\$8,100	\$24,300	\$4,500	\$13,500
	Ethernet Port					
3	10 Base F	12	\$1,200	\$14,400	\$555	\$6,660
4	100 Base F	14	\$4,500	\$63,000	\$790	\$11,060
5	1000 Base X	4	\$15,000	\$60,000	\$2,700	\$10,800
6	Total			\$219,100		\$85,420
7	Port Recurring Revenue Impact for April 1 - June 30, 2004 [(Col. C - Col. E)*3]					\$401,040
8	Annualized Revenue Impact					\$1,604,160

1. 2003 Annual Filing, Volume 5, Ex 10, WP 6

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ADSL, SDSL VOICE-DATA & DATA-ONLY DISCOUNTED PRICING ARRANGEMENT
UNIT COSTS AND PROPOSED RATES

EXHIBIT 3

Type of DSL Service	Unit Cost ¹	Proposed Rate
DSL DPA 1 YEAR TERM PRICING OPTION 3 - \$250		
ADSL Voice-Data	\$15.89	\$20.95
ADSL Data-Only	\$42.75	\$45.95
SDSL 768 Kbps Voice-Data	\$14.52	\$20.95
SDSL 144 Kbps Data-Only	\$37.27	\$54.00
SDSL 768 Kbps Data-Only	\$41.38	\$83.00
SDSL 2 Mbps Data-Only	\$71.28	\$148.00
SDSL 4 Mbps Data-Only	\$91.00	\$295.00
DSL DPA 3 YEAR TERM PRICING OPTION 3 - \$250		
ADSL Voice-Data	\$15.89	\$18.95
ADSL Data-Only	\$42.75	\$43.95
SDSL 768 Kbps Voice-Data	\$14.52	\$18.95
SDSL 144 Kbps Data-Only	\$37.27	\$52.00
SDSL 768 Kbps Data-Only	\$41.38	\$81.00
SDSL 2 Mbps Data-Only	\$71.28	\$125.00
SDSL 4 Mbps Data-Only	\$91.00	\$248.00

1. Source: 2003 Annual Filing Volume 5, Exhibit 9, WP 7

EXHIBIT 4**MARCH 17, 2004 NECA ACCESS CHARGE FILING
CALCULATION OF THE TARIFF RATE INDEX**

1. ANNUAL REVENUE AT DECEMBER 2003 RATES	\$383,059,508
2. ANNUALIZED REVENUE IMPACT (Exhibit 2)	\$1,604,160
3. ANNUAL REVENUE AT PROPOSED RATES	\$381,455,348
4. RATE CHANGE RATIO (= (Line 3 / Line 1) -1)	-0.004188
5. Tariff Rate Index (= 1/(1+Line4))	1.004205