

GENERAL TARIFF

DIGITAL NETWORK SERVICES

1. SWITCH 56 DATA SERVICE

1.01 GENERAL

- (a) Switch 56 Data Service Provides customers with digital end to end connectivity through the switched network service by using the access components of a local access line and a digital data service unit.
- (b) The Switch 56 Data Service functions when the serving address is between 4.0 cable kilometres using 26 gauge cable and 5.5 cable kilometres using 22 or 19 gauge from the Central Office switch. Beyond this distance, a special assembly is required.
- (c) The Switch 56 Data Service Feature provides for digital call completion at speeds of up to 56 kilobits per second and allows the company to offer enhanced and intelligent switched high speed digital applications such as Group IV fax machine transmission, video conferencing, high speed Personal Computer file transfer and medical imagery transfer.
- (d) The Switch 56 Data Service Unit is a proprietary standalone unit located at the customer premises that interfaces the network to perform network signalling, call supervision, functions and activates test functions as specified by network commands.

The Switch 56 Data Service Unit terminates on a 6-position teledapt connection arrangement, eliminating the need for costly special data cables.

- (e) The Switch 56 Data Service is offered on a monthly tariff rental basis.

1.02 RATES AND CHARGES

- (a) The following monthly recurring rates and service charges provide for the appropriate Switch 56 Data Service components.

USOC	DESCRIPTION	MRC	SC
DSF	Switch 56 Data Service Feature	\$40.00	MESC
DSU56	Switch 56 Data Service Unit	\$55.00	\$130.00

2. T1 DIGITAL SERVICE

2.01 GENERAL

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- (a) T1 Digital Service is furnished for the digital transmission of information at 1.544 MBPS between two points in the same exchange or between exchanges.
- (b) The T1 Digital Service has a maximum route distance of 12,000 feet or 3,658 metres. Beyond this distance, a special assembly is required to provide digital service.
- (c) The Company determines the serving areas within which it will provide service. The service is provided at the Company's discretion within a serving area. Multi-point and multi-drop configurations are not available.
- (d) The T1 Digital Service is offered on a monthly basis.
- (e) The T1 Digital Service may be connected to customer provided or Company provided terminal equipment located at the customer's premises.
- (f) The service consists of the T1 Digital Service Facility, which allows 1.544 MBPS transmission between the Company's Central Office and the customer premises.

2.02 RATES AND CHARGES

- (a) The following monthly recurring rates and service charges provide for the appropriate T1 Digital Service components

USOC	Description	MRC	SC
T1DS	T1 Digital Switch Facility	\$240	\$25/hour + materials
T1DSL	T1 Links	\$60	MESC

3. DIGITAL NETWORK ACCESS SERVICES

3.01 GENERAL

- a) Digital Network Access (DNA) Service is furnished where facilities are available for the digital transmission of information from the customer's premises to the Central Office.
- b) There are four types of DNA Service connections. The service consists of three types:
  - i) Type 1 which provides DNA Service at speeds of 2.4, 4.8, 9.6, 19.2, 56.0 Kbps
  - ii) Type 2 which provides DNA Service at speeds of 1.544 Mbps, and
  - iii) Type 3 which provides DNA Service at 44.736 Mbps.
  - iv) Type 4 which provides Ethernet DNA Service at 10/100/1000 Mbps.

3.02 DESCRIPTION

- a) Type 1 DNA (DS-0) is comprised of two components:

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- i) Access - Provides the appropriate digital facilities to connect station equipment to the Central Office
  - ii) Link - Provides the Central Office equipment required to connect an access to network service at the Central Office. The link is to be billed when the Company's facilities are used.
- b) Type 2 DNA (DS-1) is comprised of four components:
- i) Access - Provides the appropriate digital facilities to connect station equipment to the serving Central Office in Cochrane.
  - ii) Link - Provides the Central Office equipment required to connect an access to network service to the Central Office and connects an access to an access.
  - iii) Channelizing Feature - Enables a Type 2 DNA (DS-1) to be connected to Type 1 DNA channels.
  - iv) Station - Multiplex or terminal equipment at the customer's premises up to the demarcation point. The customer is responsible for providing station equipment, but may obtain Channel Service Unit (CSU) /Data Service Unit (DSU) from the Company.
- c) Type 3 DNA (DS-3) is comprised of three components:
- i) Access - Provides the appropriate digital facilities to connect station equipment to the Central Office.
  - ii) Link - Provides the Central Office equipment required to connect: A Type 3 DNA to network service at the Central Office and a Type 3 DNA to an access.
  - iii) Channelizing Feature - Enables a Type 3 DNA to be connected to Type 2 DNA channels.
- d) Type 4 DNA (10/100/1000 mbps) is comprised of three components:
- i) Access - Provides the appropriate Ethernet digital facility to connect a customer to the Central Office. The access provides a port for CPE connection in accordance with IEEE 802.3 standard.
  - ii) Link - Provides the Central Office equipment required to connect a Type 4 DNA to a port for connection to a network service at the Central Office.
  - iii) Network Paths - An "intra-exchange" network path is established between a company remote

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wire centre where a Type 4 DNA terminates and the central office. A Network Path supports "dedicated" Ethernet connectivity within the CTS core network.

3.03

CONDITION

- a) The DSU may be provided by the customer or the unit may be provided by the company under the terms and conditions provided in Section 850
- b) Only one Link charge applies per circuit.
- c) A service charge applies to change the operating speed of a Digital Network Access whenever the transmission speed is less than 1.544 Mbps. The channelization service charge applies to the service charges associated with changes to the PUC Private Plan Service Extension Feature.
- d) The service charge for the access portion also applies whenever an existing Digital Network Access is reconfigured to accommodate a change in terminating equipment (MTU, Multiplexing Terminating Unit and DSU, Digital Switching Unit)
- e) A Channelizing Feature charge applies whenever a Type 2 DNA or Channel is connected to Type 1 DNA Channels, or when a Type 3 DNA or Channel is connected to Type 2 DNA Channels. The charge is in addition to the Link charge. The use of this feature results in a service charge to activate and interconnect unused Type 1 DNA capacity within a Type 2 DNA or Channel, or Type 2 DNA capacity within a Type 3 DNA or Channel.
- f) Any utility services, which use Type 2 DNA, can subscribe to the Channelizing Feature of Type 3 DNA but these accesses must be in a separate Type 3 DNA than other competitive applications. Any discounts are also treated separately.

Definition: Utility services are non-competitive access services which can only be offered by the company.

- g) Type 2 and 3 DNA is provided on a monthly rental or 1, 2, 3, 4, or 5 year contract basis. Type 4 DNA is provided on a 1,3 or 5 year contract basis.
- h) Central Office Type 3 DNA Channelizing Feature is available only on a monthly rental basis.

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- i) Central Office Type 3 DNA customers located in non-serving areas pay additional expenses incurred or Special Assembly rates.
- j) The rates for "first" and "additional" Type 2 DNA or Type 3 DNA apply when the Type 3 DNA accesses originate from the same customer premises.
- k) Termination charges will be reduced or waived if the customer re-contracts for another dedicated access service within the Company's operating territory.
- l) Termination charges apply if the service is terminated prior to the end of the contract.
- m) Termination charges on the original contract will be waived, if the committed revenues under the new contract(s) are equal to or greater than those remaining under the original contract(s)
- n) The waiver of termination charges will apply if the Contracted Type 2 DNA:
  - i) is reconfigured between one of PUC Private Route/PUC Private Stream, and/or PUC Frame Relay; or
  - ii) is removed to another address within the installation order interval for the Company.
- o) Where suitable facilities do not exist, construction charges may apply for access arrangements.

3.04

RATES AND CHARGES

	MRC	S/C	USOC
Type 1 DNA	\$60.00	\$300.00 (see Note 2)	XJA8Z
Change of Operating Speed	n/a	\$150.00	XJB8Z
Type 2 DNA Initial 4	\$600.00	\$1,400	XJCT3
Over 4	\$600.00	(see Note 2)	XJDT2
Max each 28	\$12,000.00		XJET3
Unservd Areas	(see Note 1)		
Type 3 DNA Initial each	\$3,540.00	\$4,000	XMAT3
Additional Each	\$2,125.00	(see Note 2)	XMBT3
Unservd Areas	(See Note 1)		
Unservd Areas	(see Note 1)	\$4,000 (see Note 3)	(See Note 1)

Note 1: Regular rates apply in addition to expenses incurred or a Special Assembly Tariff.

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Note 2: A distance limitation of 18,000 feet exists over copper facilities, where fibre facilities already exist, the Company, at its discretion, will make a determination of availability. A construction charge may be required where facilities are not available.

Note 3: Where fibre facilities already exist the Company at its discretion will make a determination of availability. A construction charge may be required where facilities are not available.

Digital Network Access is also available on a contract basis at the following rates and charges:

Digital Network Access - Contract Basis

MONTHLY RENTAL PER CUSTOMER LOCATIONS											
Type 2 DNA	1 Year		2 Years		3 Years		4 Years		5 Years		S/C
Initial 4	\$500	XJFT3	\$480	XJIT3	\$460	XJLT3	\$445	XJOT3	\$430	XJRT3	
Over 4	\$290	XJGT3	\$275	XJJT3	\$260	XJMT3	\$240	XJPT3	\$215	XJST3	\$700
Max each 28	\$6640	XJHT3	\$6320	XJKT3	\$6000	XJNT3	\$5620	XJQT3	\$5160	XJTT3	
Unserviced Areas	Regular Rates apply, plus any add'l expenses incurred on Special Assembly Tariff										

MONTHLY RENTAL PER CUSTOMER LOCATIONS											
Type 3 DNA	1 Year		2 Years		3 Years		4 Years		5 Years		S/C
First	\$2950	XMCT3	\$2850	XMET3	\$2750	XMGT3	\$2650	XMIT3	\$2500	XMKT3	
Additional	\$1770	XMDT3	\$1710	XMFT3	\$1650	XMHT3	\$1590	XMJT3	\$1500	XMLT32	\$2000
Unserviced Areas	Regular Rates apply, plus any add'l expenses incurred on Special Assembly Tariff										

Link - Each	MRC	S/C	USOC
Type 1 DNA	\$60	N/A	XYA8W
Type 2 DNA	\$60	N/A	XYB8A
Type 3 DNA	\$100	N/A	XYC8W
Type 4 DNA	\$100	N/A	XYG8W

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Intra-Exchange Channel - each	MRC	S/C	USOC
Type 1 DNA	\$20	N/A	XYD8W
Type 2 DNA	\$240	N/A	XYE8A
Type 3 DNA	\$1000	N/A	XYF8W
Type 4 DNA -Network Path- Dedicated 10 Mbps	\$140	N/A	XYH8W

Station Equipment	MRC	S/C	USOC
Type 1 DNA data unit each	\$40	\$100	XYG8W
Type 2 Channel Service Unit/Data Service Unit			
- single port each	\$110	\$100	XYH8W
- dual port each	\$150	\$100	XYI8W

Channelizing Feature Minimum Contract Period													
Type 3			1 Year		2 Year		3 Year		4 Year		5 Year		S/C
DNA	MRC	USOC	MRC	USOC	MRC	USOC	MRC	USOC	MRC	USOC	MRC	USOC	
Customer Premises	\$1205	XPC8W	\$1005	XPD8W	\$970	XPE8W	\$935	XPF8W	\$900	XPG8W	\$850	XPH8W	\$500 see Note 4
Central Office	\$500	XPB8W	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$500 see Note 4
Type 2 DNA per C.O.	\$90	XPA8W	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$125

Note 4: This Service Charge is for the initial application of the Channelizing Feature on a Type 3 DNA. To activate Type 2 DNA channels for subsequent applications on the same Type 3 DNA, the Service Charge is \$100 (USOC XPK8W) per Type 2 DNA, up to a maximum of \$500 per feature.

Type 4 Ethernet DNA	1 Year		3 Year		5 Year		S/C
Speed (1/2 or full duplex)	MRC	USOC	MRC	USOC	MRC	USOC	
10 mbps	\$670	X2BT4	\$610	X2CT4	\$550	X2DT4	\$1500
100 mbps	\$700	X3BT4	\$640	X3CT4	\$580	X3DT4	\$1500

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1000 mbps	\$980	X4BT4	\$890	X4CT4	\$800	X4DT4	\$2500
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Note 1: Where fibre facilities already exists the Company at its discretion will make a determination of availability. A construction charge may be required where facilities are not available.

Note 2: Type 4 DNA provides a customer premise and Central Office Ethernet Access port in accordance with IEEE 802.3 Ethernet standards.

Note 3: CPE is not included.

Note 4: Ethernet Access Changes after the initial installation will be subject to the following rates:

<u>Service Item</u>	<u>Service Charge</u>
Duplex mode change	\$200
Access speed change	\$300
Move of Customer Premise Access Equipment	\$300
Configuration changes VLAN's Virtual circuits	\$300