### 3.1 General

This section provides a general overview of the private line services available in this tariff. It includes a description of the two major classifications of private line services and the categories and components of service available under each classification. More detailed descriptions and specific rate information are located within the section of this tariff that applies to a given category of service.

Centrex and private line services will be made available to customers in a non-discriminatory manner. Rates for Centrex and local exchange dedicated access private line non-switched services will be determined on an Individual Case Basis ("ICB"). ICB rates will be structured to recover the Company's cost of providing the service and will be available to the Commission Staff upon request on a proprietary basis. ICB rates will not be used for switched services.

3.2 Private Line Service Classification

There are two major classifications of private line service, (1) interoffice private line service, and (2) private line local channel service.

3.2.1 Interoffice Private Line Service

An interoffice private line service connects two or more designated CNT central offices.

3.2.2 Private Line Local Channel Service

A private line local channel service connects customer premises to customer premises or to a designated CNT central office.

3.3 Interoffice Private Line Service Categories

There are several categories of interoffice private line service. Each service category has its own technical characteristics and specifications, and most are further subdivided into speeds or types of transmission. Following is a brief description of each service category. Each category of service is available only within and/or between specified CNT central offices.

3.3.1 T1.5 Services

Provides service for the transmission of large volumes of communications at 1.544 mbps.



- 3.3 Interoffice Private Line Service Categories (Cont'd)
- 3.3.2 T45 Services

Provides service for the transmission of 44.736 Mbps digital signals.

3.4 Private Line Local Channel Service Categories

There are several categories of local channel services. Each category has its own technical characteristics and specifications, and most are further subdivided into speeds or types of transmission. Following is a brief description of each local channel service category.

3.4.1 1.544 Mbps Local Channel Services

Provides services for the transmission of large volumes of communications at 1.544 Mbps.

3.4.2 Voice Grade Local Channel Services

Provides services for the transmission of analog signals within an approximate bandwidth of 300 to 3000 Hz.

3.4.3 T45 Local Channel Services

Provides services for the transmission of large volumes of communications at 44.736 Mbps.



3.5 Interoffice Private Line Service Components

An interoffice private line service is comprised of components which include interoffice channels, office connections, channel options, and office functions.

3.5.1 Interoffice Channel (IOC)

An IOC is a channel between two designated CNT central offices.

#### 3.5.2 Office Connections

An office connection provides the physical interconnection at a designated CNT central office between an interoffice channel, an office function, a local channel obtained from the Private Line Local Channel sections of this Tariff, or other access. When other access is connected to an CNT service and the customer wishes CNT to perform the functions of access design, ordering, installation, coordination, preservice testing and service turn-up, trouble sectionalization, and restoration coordination, the Access Coordination Function furnished under the Private Line Local Channel sections of this Tariff provides those functions. When the Access Coordination Function is ordered, CNT will design the service based upon standard engineering considerations. When other access is connected to an CNT service and the customer wishes CNT to perform only the function of physical connection of the access to a service component at an CNT central office, an office connection only is employed. In such cases, CNT makes or implies no warranty that the assembly will operate properly or that transmission will be satisfactory. An office connection is also employed to connect service components within a designated CNT central office, for example:

an IOC to: a local channel or other access, or an office function

a local channel to: another local channel or other access, or an office function

an office function to: another office function other access to: an office function

Office connections apply for each two components interconnected at a designated CNT central office.

### 3.5.3 Channel Options

Channel options are features which can be added to an Interoffice Channel to change or to augment its transmission characteristics. Typical channel options are signaling and data conditioning.

#### 3.5.4 Office Functions

Office functions are optional functions performed at CNT central offices which enable customers to increase the efficiency or usefulness of their service. They include switching arrangements, transfer arrangements, and alternate use arrangements. Office functions are connected with channels or other office functions by office connections.

ISSUED: January 12, 2007

Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442

EFFECTIVE: February 26, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission

**Filed** Missouri Public Service Commission

### 3.6 Local Channel Service Components

A private line local channel service is comprised of components which include local channels, bridged channels, interbridge channels, access coordination functions, channel options, miscellaneous functions, and miscellaneous equipment items.

### 3.6.1 Local Channel

A local channel is a channel between customer premises, or between customer premises and a designated CNT central office.

#### 3.6.2 Bridged Channel

A bridged channel is a channel between (1) a designated CNT central office and a Local Exchange Company bridge or (2) a customer's premises and a Local Exchange Company bridge. Bridged channels are available on Voice Grade Local Channel Services.

### 3.6.3 Interbridge Channel

An interbridge channel is a channel between two Local Exchange Company bridges located in different wire centers. Interbridge channels are available on Voice Grade Local Channel Services only.

#### 3.6.4 Access Coordination Function

The access coordination function provides for the design, ordering, installation coordination, preservice testing and service turn-up, trouble sectionalization, and restoration coordination on a channel provided by CNT under this tariff or an equivalent channel provided by the customer. In addition the access coordination function is available on Feature Group A and B Switched Access service channels.

## 3.6.5 Channel Options

Channel options are features which can be added to a local channel to change or to augment its transmission characteristics. Typical channel options are signaling and data conditioning.

### 3.6.6 Miscellaneous Functions

Miscellaneous functions are optional functions performed at designated CNT central offices which enable a customer to increase the efficiency or usefulness of a service. The only miscellaneous function currently available is bridging for Digital Data Local Channel Service.

### 3.6.7 Miscellaneous Equipment Items

Miscellaneous equipment items are optional items and arrangements which may be ordered on a local channel service (see Miscellaneous Functions and Arrangements, within this tariff).

Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442

EFFECTIVE: February 26, 2007



#### 4.1 General

The rate mileage for an Interoffice Channel is the airline distance measured between two CNT central offices. To determine the rate mileage for the Interoffice Channel, first determine the appropriate designated CNT central offices as follows.

### 4.1.1 Determining CNT Central Offices

The appropriate designated CNT central office used to price a private line service is determined by (1) the LATA(s) in which the private line service is desired, (2) the category of private line service to be provided, and (3) the designated CNT central offices when certain office functions are involved.

- A. Determining the CNT Central Offices within a LATA If the customer does not specify an CNT central office, CNT will determine the CNT central office(s) for a LATA, using the telephone number of a customer's premises and the type of service to be provided as follows:
- 1. Refer to the National Exchange Carrier Association (NECA) Tariff F.C.C., look up 215-214, and find its wire center listing and LATA number.

Wire center information is listed in the NECA tariff by state, by locality. The appropriate wire center within a locality (i.e., the serving wire center) and the LATA number for that wire center are determined by looking up the area code and the first three digits (e.g., 215-214) of the telephone number which normally serves the customer's premises.

Example: The wire center for 215-214 is Philadelphia. The LATA number is 228.



**Filed** Missouri Public Service Commission

- 4.1 General (Cont'd)
- 4.1.1 Determining CNT Central Offices (Cont'd)
- A. (Cont'd)
- 2. The CNT central office used to determine the mileage for an IOC will be the one which is nearest to the customer's premises. If two CNT central offices are measured equidistant from the customer's premises using rounded mileage, the central office to be used is the one which is the nearest using unrounded mileage. If there is only one central office in a LATA for a category of private line service, no choice is necessary.
- 3. Once all of the appropriate central offices have been determined, calculate the airline distance between the central offices (see Calculation of Airline Mileage, within this tariff). The result will be the IOC rate mileage(s).



- 4.1 General (Cont'd)
- 4.1.2 Calculation of Airline Mileage

Airline mileage between V&H coordinates is calculated as set forth below. Following is an example of how mileage is calculated.

- A. After determining the V&H coordinates of the designated CNT central offices for a private line service as described within this tariff preceding, calculate the mileage between the V&H coordinates as follows:
- 1. Example:

Pittsburgh	(V) 5619	(H) 2184
Philadelphia	(V) 5242	(H) 1459

2. Obtain the difference between the V coordinates. Then obtain the difference between the H coordinates. (The difference is always obtained by subtracting the smaller coordinate from the larger.)

	V	н
	5616	2184
	<u>-5242</u>	<u>- 1459</u>
Difference	377	725

3. Square each difference.

377 X 377 = 142129 725 X 725 = 525625

4. Add the squares of the two differences.

142129 + 525625 = 667754



- 4.1 General (Cont'd)
- 4.1.2 Calculation of Airline Mileage (Cont'd)
- A. (Cont'd)

5. Divide the sum of the squares by 10. (Round any fraction obtained to the next higher whole number.)

667754/10 = 66775.4 Rounded = 66776

6. Take the square root of the result obtained in 5. The result is the airline miles of the IOC. (Any fractional miles are rounded to the next higher whole number.)

Square root of 66776 = 258.41 IOC airline mileage (Rounded) = 259 miles

4.2 Two-Point Mileage Measurement

The rate mileage for the IOC on a two-point private line service is the airline distance measured between two designated CNT central offices.

4.3 Multipoint Mileage Measurement

The rate mileage for the IOC(s) on a private line service with three or more designated CNT central offices is the combination of the individual airline mileages measured between each pair of designated CNT central offices which produces the lowest total mileage charge when all of the designated CNT central offices are connected together.

The charges for the airline mileages between each pair of designated CNT central offices are calculated separately and then summed. The actual routing of the private line service may vary from the priced configuration.

Exceptions to this method of measurement may apply in those cases when the customer specifies the sequence in which the IOCs are connected (see Exceptions to Interoffice Channel Mileage Measurements, within this tariff).

Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442

EFFECTIVE: February 26, 2007



4.4 Exceptions to Interoffice Channel Mileage Measurements

In certain cases there are exceptions to the way IOC mileage measurements are determined. This section describes those exceptions.

#### 4.4.1 Customer Specifies the IOC Routing of a Multipoint Service

This exception applies to multipoint services where the designated CNT central offices or customer terminations are connected together in the sequence specified by the customer.

The total rate mileage is the combination of individual two point airline distances measured between the designated CNT central offices based on the sequence requested by the customer.

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



## 5. LOCAL CHANNEL MILEAGE MEASUREMENT

## 5.1 General

The rate mileages for two-point and multipoint local channel services are determined as set forth herein.

#### 5.1.1 Two-Point Local Channel Service Mileage Measurement

When a two-point local channel service is furnished and two wire center areas are involved, the rate mileage is the airline distance measured as follows:

The rate mileage for a local channel between two customer premises is measured using the V&H coordinates of the serving wire centers of the customer premises.

The rate mileage for a local channel between a designated CNT central office and a customer's premises is measured using the V&H coordinates of the serving wire centers of the designated CNT central office and the customer's premises. The appropriate CNT central office to use as a pricing point is determined as set forth in A. following.

A. Determining the Pricing Central Office

The customer may specify a particular CNT central office within a LATA (i.e., customer specified routing). In such cases, the local channel will be physically routed and priced to the designated CNT central office specified by the customer. If the customer does not make such a specification, CNT will use the serving wire center of the customer's premises and the service category of the local channel service to be provided to determine the pricing central office for a customer's premises, as follows:

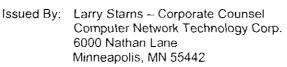
1. The serving wire center and LATA number for the customer's premises are determined by referring to NECA Tariff F.C.C. Wire center information is listed in the NECA tariff by state, by locality. The appropriate wire center within a locality (i.e., the serving wire center) and the V&H coordinates for that wire center are determined by looking up the area code and the first three digits (e.g., 215-977) of the telephone number which normally serves the customer's premises.

CANCELLED

XD-2007-0476

February 16, 2008 Missouri Public

Service Commission



EFFECTIVE: February 26, 2007

**Filed** Missouri Public Service Commission

#### 5. LOCAL CHANNEL MILEAGE MEASUREMENT

- 5.1 General (Cont'd)
- 5.1.1 Two-Point Local Channel Service Mileage Measurement (Cont'd)
- A. Determining the Pricing Central Office (Cont'd)
- 2. If there is only one CNT central office in a LATA for a category of service, that central office is the pricing central office to which mileage is measured. If there are two or more CNT central offices in a LATA for a given category of service, the designated CNT central office used to determine mileage will be the one nearest to the customer's premises. Determine which central office is the pricing central office by calculating the airline distance using the V&H coordinates of the serving wire centers of the customer's premises and each designated CNT central office (see Calculation of Airline Mileage, within this tariff). If two CNT central offices are measured equidistant from the customer's premises using rounded mileage, the central office to be used is the one which is the nearest using unrounded mileage.
- 5.1.2 Multipoint Local Channel Service Mileage Measurement

When a multipoint local channel utilizes bridged and interbridge channels (i.e., LEC bridging), the rate mileage for the bridged, or interbridge channel(s) is the airline distance measured in accordance with the physical routing of the service and is determined as follows:

The rate mileage for a bridged channel is measured using (1) the V&H coordinates of the serving wire centers of the customer's premises or CNT central office, as appropriate, and (2) the V&H coordinates of the serving wire center of the Local Exchange company bridge.

The rate mileage for an interbridge channel is measured using the V&H coordinates of the wire centers of the Local Exchange Company bridges.

In all cases above, the airline mileage is determined as set forth within this tariff.



P.S.C. Mo. Tariff No. 1 SECTION 6 ORIGINAL PAGE 1

6. RESERVED FOR FUTURE USE

-----

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



P.S.C. Mo. Tariff No. 1 SECTION 6 ORIGINAL PAGE 2

6. RESERVED FOR FUTURE USE

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



## 7.1 General

A T1.5 Service provides for the transmission of 1.544 Mbps digital signals over terrestrial channels.

## 7.1.1 Description

T1.5 SERVICES are configured by furnishing office functions or by combining components to connect two designated CNT central offices. T1.5 Services are furnished on a two-point basis only.

## 7.1.2 Reserved for Future Use

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442

EFFECTIVE: February 26, 2007

**Filed** Missouri Public Service Commission

- 7.1 General (Cont'd)
- 7.1.3 Regulations

In addition to the Regulations in Section 2, preceding, the following apply.

A. Availability of a T1.5 Service

T1.5 Services are available from designated CNT central offices. T1.5 Services may not be available in every LATA.

B. Connection of other Access

If the connection provides the capability to transmit signals with encoded analog content via the T1.5 Service to the telecommunications network, it must comply with the minimum protection criteria.

CANCELLED

XD-2007-0476

February 16, 2008

Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442

EFFECTIVE: February 26, 2007

**Filed** Missouri Public Service Commission

- 7.1 General (Cont'd)
- 7.1.3 Regulations (Cont'd)
- D. Installation Charge Waiver

Installation charges will be waived for the Access Connection, Function Connection and the Local Channel and Access Coordination Function for Customers who order new Terrestrial 1.544 Mbps Local Channel Services with IOC, used in conjunction with T1.5 Local Channel Services.

In order for a Customer to qualify for the waived installation charges when ordering a new Terrestrial 1.544 Mbps Local Channel Service, the Terrestrial 1.544 Local Channel Service must be ordered with a Terrestrial 1.544 IOC to a minimum of one new IOC at speeds of 128 kbps and above or to a minimum of two new IOCs at speeds of between 56kbps and 64 kbps and the IOCs must be ordered simultaneously with the new Terrestrial 1.544 Mbps Local Channel Service.

Excluded from the installation charge waiver are:

Replacement of existing service with a service of the same type and speed; and

Additions to and/or rearrangements to existing services.

A Customer who discontinues service prior to 12 full months will be billed for the waived charges.

However, a Customer may discontinue service without liability for waived charges to: (1) replace a service with Frame Relay Service (2) replace a Voice Grade Local Channel Service with a digital service or (3) replace a digital service with a new digital service of a higher speed.



EFFECTIVE: February 26, 2007

- 7.1 General (Cont'd)
- 7.1.4 Minimum Payment Period

Except as noted within this tariff, the minimum payment period for all T1.5 Service components is one month.

7.1.5 Notice of Termination

The notice of termination for the IOC component of an T1.5 Service is 30 calendar days. Recurring charges apply for a period of 30 calendar days from the date CNT receives the termination notice or until the requested termination date, whichever is later. During this period, the charges will continue to apply whether or not the customer continues to use the service. For purposes of calculating the termination charges for customers subscribing to a fixed rate plan, the customer's current fixed rate will apply until the expiration date of the fixed rate plan and conventional monthly rates will apply thereafter.

The notice of termination for all other T1.5 Service components is 30 calendar days.

7.1.6 Cancellation Charge

A cancellation charge will apply, per component, for service orders canceled by the customer on or after the SID.

Refer to Price List for Cancellation Charge Schedule - T1.5.

The applicable charge is based on the last scheduled critical date reached in the service order process. For example, for an order involving an IOC and two office connections that is canceled after the SID but prior to the DLRD, cancellation charges listed under the "SID" column for the IOC and each of the two office connections apply.

EFFECTIVE: February 26, 2007



## 7.1 General (Cont'd)

7.1.7. One-, two-, three-, four- and five-year Discounted Fixed Rate IOC Plans

One-, two-, three-, four-, and five-year discounted fixed rate plans are available as alternatives to conventional monthly rates for the IOC component of T1.5 Service. Customers may, at any time prior to the start of service, select any of the available rate plans (monthly, or discounted one, two, three, four and five-year). If a fixed rate plan is selected, the recurring monthly charge (consisting of a fixed and a mileage-based component) will be the fixed rate in effect on the date the customer orders the fixed rate plan. If the customer changes rate plans prior to the start of service, it will not constitute the cancellation of an order, and cancellation charges as described within this tariff.

Under the discounted fixed rate plan, the percentage discount off of the rates under the monthly rate plan will be fixed throughout the commitment period. If the rates under the monthly rate plan change during the commitment period, the discount will be taken off of the lower rate.

- A. Termination of a Fixed Rate IOC Plan without Liability The customer may terminate a T1.5 IOC furnished under a fixed rate plan prior to the expiration of the applicable term without liability under any of the following conditions:
- 1. If tariff revisions increase the applicable fixed rate before the applicable term expires, without the customer's written consent.
- 2. If the fixed rates are reduced before the applicable term expires and the customer enters a new agreement at the lower rates. The expiration date of the new plan must be on or after the expiration date of the unexpired term.
- 3. The customer enters into a replacement plan for other CNT services which have an equal or greater revenue commitment, provided the expiration date of the new plan is on or after the expiration date of the unexpired plan.



### 7.1 General (Cont'd)

- 7.1.7. One-, two-, three-, four- and five-year Discounted Fixed Rate IOC Plans (Cont'd)
- B. Termination of a Fixed Rate IOC Plan with Liability Termination of a service furnished under a fixed rate plan for reasons other than stated in A. above, prior to the expiration of the application term, will result in customer liability as specified below:
- 1. For service terminated prior to the completion of the first year of service, the customer is liable for 100 percent of the total monthly charges for the unexpired portion of the first year of service plus 50 percent of the total monthly charges for the remaining portion of the applicable term.
- 2. For service terminated after the completion of the first year of service and more than three months prior to the expiration date of the fixed rate plan, the customer is liable for 50 percent of the total monthly charges for the unexpired portion of the applicable term. For service terminated within three months of the expiration date of the fixed rate plan, Notice of Termination provisions as specified within this tariff.

Payment of the total amounts owed by the customer under this regulation are due within thirty days of the date service is terminated.

C. Expiration and Renewal of a Fixed Rate IOC Plan - Upon expiration of a fixed rate plan, the customer has the option to obtain the same IOC under a new fixed rate plan or to obtain service under the monthly rate plan.

The customer may renew service under a new fixed rate plan by notifying CNTT in writing anytime prior to the expiration of the current fixed rate plan.

To continue the same service under monthly rates, no action is required on the part of the customer. Upon expiration of a fixed rate plan, and unless notification to the contrary is received, the customer's service will automatically be continued at rates specified under the monthly rate plan in effect at that time. In this case, the customer will be considered to have satisfied the three-month minimum period.

Notice of Termination provisions, as specified preceding, apply if the customer elects not to renew service.

ISSUED: January 12, 2007

Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442

EFFECTIVE: February 26, 2007

**Filed** Missouri Public Service Commission

- 7.2 Service Components and Rates
- 7.2.1 Interoffice Channel (IOC)

An Interoffice Channel is a channel between two designated CNT central offices, points of connection, or a combination thereof.

A. Monthly Rates

The monthly per channel charge is mileage sensitive and includes two rates. The fixed rate applies to the channel itself, and a mileage rate applies to each airline mile of the Interoffice Channel. Refer to Price List.

B. Discounted Fixed Rate Plans

Discounted Fixed Rate Plans are available as alternatives to conventional monthly rates.

Refer to Price List for Minimum Term Discounts.

C. Calculation of Charges

To calculate the monthly recurring charge for each Interoffice Channel, first determine the airline mileage of the channel (see Calculation of Airline Mileage, within this tariff). Using the rate schedule which corresponds to the applicable rate plan, multiply the total calculated airline miles by the appropriate mileage rate. To this figure add the corresponding fixed rate. The sum of the mileage charge and the fixed charge is the total recurring monthly charge for the IOC.

Example 1 (Monthly Plan):

The IOC airline mileage is 258 miles for a service provided under a monthly plan.

258 X Mileage Rate (\$7.00)	= \$1,806.00
Add the Fixed rate	+ \$ <u>1,200.00</u>
Monthly Charge	\$3,006.00

Example 2 (Discounted Fixed Rate Plan):

The IOC airline mileage is 258 miles for a service provided under a five-year fixed rate plan.

258 X Mileage Rate (\$7.00)	= \$1,806.00
Add the Fixed rate	+ \$ <u>1,200.00</u>
Monthly Charge	\$3,006.00

The total non-discounted monthly charge is \$3,006.00. The Discounted Fixed Rate Plan discount of 24% is applied to the total monthly charge.

Total Monthly Charge	= \$3,006.00
Discount (24% of \$3,006.00)	= <u>\$  721.44</u>
Monthly Charge After Discount	= \$2,284.56

- 7.2 Service Components and Rates (Cont'd)
- 7.2.2 Office Connections
- A. Access Connection

An access connection provides the function, at a designated CNT central office, of connecting Local Channels, other access, or a CNT enhanced service to an IOC, office function, another Local bChannel, or other access. One access connection applies for each Local Channel, other access, or CNT enhanced service connected.

Refer to Price List.

B. Function Connection

A function connection provides the function, at the designated CNT central office, of connecting an office function to an IOC or another office function.

Refer to Price List.

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



## COMPUTER NETWORK TECHNOLOGY CORPORATION

P.S.C. Mo. Tariff No. 1 SECTION 7 ORIGINAL PAGE 9

## 7. T1.5 SERVICES-INTEROFFICE

- 7.2 Service Components and Rates (Cont'd)
- 7.2.3 Channel Options

Channel options are features added to a channel to change or augment its transmission characteristics.

## A. Enhanced Diversity Routing

Under this option, two or more T1.5 IOCs are furnished entirely over physically and electrically separated transmission paths, such that a failure at one geographic location will not cause the loss of both paths. The Enhanced Diversity Routing (EDR) is offered where separate facilities are available, subject to routing or performance constraints resulting from the diverse routing and made known to the customer prior to ordering. If complete EDR is not available when ordered, or if it becomes unavailable at a later date due to network rearrangements, EDR may be furnished on a partial basis only at the customer's request. The customer will be advised before partial EDR is provided and may cancel or discontinue the EDR option if the partial EDR is not acceptable. No cancellation charge will apply if the facilities are not available or the customer does not accept the partial EDR. When EDR is ordered, an installation charge and a monthly charge apply for each IOC in an IOC relationship pair on which EDR is provided, i.e., IOC No. 1 is diverse from IOC No. 2.

Example 1: The customer has four IOCs and specifies that IOC No. 1 and IOC No. 2 be diversely routed. The relationship pair is 1 & 2. Two EDR monthly and installation charges apply, one for each IOC in the relationship pair. EDR charges will not apply to IOC Nos. 3 and 4.

Example 2: The customer has four IOCs and specifies that IOC Nos. 1 and 2 be diversely routed from IOC Nos. 3 and 4. The IOC relationship pairs are 1 & 3, 2 & 4, 1 & 4, 2 & 3. Eight EDR monthly and installation charges apply, one for each IOC in the relationship pair.

Example 3: The customer has three IOCs and specifies that each of the IOCs be diversely routed. The IOC relationship pairs are 1 & 2, 1 & 3, 2 & 3. Six EDR monthly and installation charges apply, one for each IOC in the relationship pair.

Example 4: The customer has two IOCs and specifies that IOC No. 1 be diversely routed from IOC No. 2. Central Office B is the only T1.5 POP in the LATA; Customer requests partial enhanced diversity routing. The IOC relationship pair is 1 & 2. Two EDR monthly and installation charges apply, one for each IOC in the relationship pair.

Refer to Price List

ISSUED: January 12, 2007

CANCELLED

XD-2007-0476 February 16, 2008 Missouri Public

Service Commission

Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442

EFFECTIVE: February 26, 2007

**Filed** Missouri Public Service Commission

- 7.2 Service Components and Rates (Cont'd)
- 7.2.3 Channel Options (Cont'd)
- B. Clear Channel Capability

This option provides a customer with the capability to transmit DSO (64 Kbps) or DS1 (1.544 Mbps) signals with more than 15 consecutive zeros in a transmission. B8ZS (bipolar eight zero substitution) is the only coding technique acceptable for use with T1.5 Service to provide 64 Kbps clear channel capability.

Compatible Customer Premises equipment is required with this option. This equipment must be capable of transmitting and receiving B8ZS coding and must conform to extended superframe format.

An order for the Clear Channel Capability option must be placed coincidentally with the customer's order for T1.5 Service. This option is subject to availability and may not be available in all locations. There is no charge for this option on a T1.5 Interoffice Channel. The Local Channel rates are on an individual case basis.

Refer to Price List.

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission



## COMPUTER NETWORK TECHNOLOGY CORPORATION

- -- --

# 7. T1.5 SERVICES-INTEROFFICE

- 7.2 Service Components and Rates (Cont'd)
- 7.2.4 Office Functions
- A. Transfer Arrangement

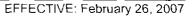
This transfer arrangement enables a customer to transfer a DS1 channel between two other DS1 channels.

An office connection is required for each DS1 channel connected to this arrangement.

A key-activated control channel is required to operate the transfer arrangement. The control channel must be provided from the designated CNT central office to the control location of the customer. The key and channel must be provided by the customer. The control channel will require an office connection.

Refer to Price List.

Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442





- 7.2 Service Components and Rates (Cont'd)
- 7.2.4 Office Functions (Cont'd)
- B. DS1 Switch Port

This office function provides electronic cross connection of DS0 Channels to provide Customer Controlled Reconfiguration.

Customer Controlled Reconfiguration - Customer Controlled Reconfiguration permits the Customer to electronically rearrange DSO channels between DS1 channels. This can be done between all of a Customer's DS1 channels terminating in the same designated CNT central office. Customer Controlled Reconfiguration requires one DS1 Switch Port for each of the office connections. In addition, Customer Controlled Reconfiguration requires Customer-provided terminal equipment and private line service or a dial-up service to send the customer's instructions to the network control center.

Refer to Price List.

Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



- 7.2 Service Components and Rates (Cont'd)
- 7.2.4 Office Functions (Cont'd)
- C. Access Protection Capability

This office function provides protection against failure of a local channel or other access. Protection is furnished through the use of a switching arrangement that automatically switches to a spare channel when the working channel fails. The spare channel is not included and must be ordered separately. This office function also requires compatible equipment to be provided by the customer at its premises.

Refer to Price List.

ISSUED: January 12, 2007

Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442

EFFECTIVE: February 26, 2007

**Filed** Missouri Public Service Commission

# COMPUTER NETWORK TECHNOLOGY CORPORATION

## 8. 1.544 Mbps LOCAL CHANNEL SERVICES

### 8.1 General

The 1.544 Mbps Local Channel Services provides for the transmission of 1.544 Mbps digital signals over terrestrial channels. Two types of Terrestrial T1.5 Local channels are provided – Intrastate/InterLATA and Intrastate/IntraLATA.

#### 8.1.1 Description

An 1.544 Mbps Local Channel Service is capable of simultaneous two-way transmission of serial, bipolar, return-to-zero isochronous digital signals at a transmission speed of 1.544 Mbps on a two-point basis only.

The customer is responsible for providing channel service unit functionality at each local channel service termination on a customer's premises.

1.544 Mbps Local Channel Services use a framed DS1 signal format (D4 or ESF). Customers are required to select either D4 format or where available, the Extended Superframe (ESF).

Intrastate/InterLATA Terrestrial T1.5 Local Channel Service is furnished: (1) between a Customer's premises and a designated CNT central office in the same LATA to connect that premises to InterLATA IOC, or (2) solely as an access coordination function.

Intrastate/IntraLATA Terrestrial T1.5 Local Channel Service is furnished: (1) between two Customer premises in the same LATA, or (2) between a Customer's premises and a designated CNT central office in the same LATA to connect that premises to IntraLATA IOC or another Intrastate/IntraLATA Local Channel.

### 8.1.2 Signals at the Interface

All signals generated by customer equipment and presented to the interface must meet certain signal and format constraints. Some of these constraints are listed below.

A. Signal and Format Constraints for Framed DS1 Signals

Data Rate: 1.544 Mbps +/- 75 bps.

Consecutive Zeros: No more than 15 consecutive zeros may be generated.

Pulse Density: At least three pulses in any 24 bit interval.

F Bit Position: This framing constraint permits the use of every 193rd bit position for framing, error detection, signaling, and the transmission of other network control information.

EFFECTIVE: February 26, 2007



-----

- 8.1 General (Cont'd)
- 8.1.3 Regulations

In addition to the Regulations in Section 2, preceding, the following apply.

A. Availability of a Local Channel Service

1.544 Mbps Local Channel Services may not be available in every LATA or from each LEC wire center.

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442

**Filed** Missouri Public Service Commission

8.1 General (Cont'd)

-----

- 8.1.3 Regulations (Cont'd)
- B. Connection of Channel Service Unit Functionality

The customer is responsible for providing channel service unit functionality at each termination of a local channel service on a customer's premises.

In the event that a trouble indication exists which necessitates a visit of a repair person to a customer's premises because of the absence of a loop-back in the customer's equipment, a Maintenance of Service Charge will apply (see Maintenance of Service Charge, within this tariff).

The connection of channel service unit functionality to 1.544 Mbps Local Channel Services shall be in accordance with Part 68 of the FCC's Rules and Regulations (Registration Program).

C. Installation Charge Waiver

Installation charges will be waived for Terrestrial 1.544 Mbps Local Channel Services including the Access Coordination Function for Customers who order a new Terrestrial 1.544 with IOC or CNT Interoffice Digital Service Spectrum (CIDSS) with IOC used in conjunction with Terrestrial 1.544 Mbps Local Channel Service.

In order for a Customer to qualify for the waived installation charges, the Terrestrial 1.544 Local Channel Service must be ordered with a Terrestrial 1.544 IOC to a minimum of one new CIDSS IOC at speeds of 128 kbps and above or to a minimum of two new CIDSS IOCs at speeds of between 56 kbps and 64 kbps and the IOCs must be ordered simultaneously with the new Terrestrial 1.544 Mbps Local Channel Service.

Excluded from the installation charge waivers are:

Replacement of existing service with a service of the same type and speed; and

Additions to and/or rearrangements to existing services.

A Customer who discontinues service prior to 12 full months will be billed for the waived charges.

However, a Customer may discontinue service without liability for waived charges as specified within this tariff.

ISSUED: January 12, 2007



### 8.1 General (Cont'd)

#### 8.1.4 Minimum Payment Period

The minimum payment period for a T1.5 Local Channel service or component is one month.

### 8.1.5 Notice of Termination

The Notice of Termination for a 1.544 Mbps Local Channel Service or component is 30 calendar days. Recurring charges apply for a period of 30 calendar days from the date CNT receives the termination notice or until the requested termination date, whichever is later. During this period, the charges will continue to apply whether or not the customer continues to use the local channel service component.

#### 8.1.6 Cancellation Charge

As specified in within this tariff, a cancellation charge will apply for service orders canceled by the customer on or after the SID.

Refer to the Price List for the Cancellation Charge Schedule - 1.544 Mbps Local Channel Services.

The applicable charge is based on the last scheduled critical date reached in the service order process. For example, for an order which is canceled after the DLRD but prior to the RID, a charge as listed under DLRD column will apply for each access coordination function. In addition, if a local channel has been ordered, a charge equal to 19% of the installation charge for each local channel involved will also apply.



### 8.2 1.544 Mbps Local Channel Service Rates

The rates applicable to 1.544 Mbps Local Channel Services are as set forth herein.

8.2.1 Local Channels

CNT will provide 1.544 Mbps Local Channels on an individual case basis at rates based on the price for such local channels as established by Local Exchange Company tariffs. These rates will include recurring and nonrecurring charges and may include termination charges.

Refer to Price List.

8.2.2 Access Coordination Function

An access coordination function is required for each local channel provided by CNT or for each access channel provided by the customer for which CNT provides access coordination.

Refer to Price List.

8.2.3 Channel Options

The following channel options are available for use with 1.544 Mbps Local Channel Services:

A. Special Routing

A 1.544 Mbps Local Channel Service is normally furnished using facilities selected by CNT. However, special routing options are available where the required components are available. If complete special routing is not available when ordered, or if it becomes unavailable at a later date due to network rearrangements, special routing may only be furnished on a partial basis. The customer will be advised before partial special routing is provided and may cancel or discontinue the special routing if the partial special routing is not acceptable. No cancellation charge will apply in such case. Diversity is the only special routing option available for 1.544 Mbps Local Channel Services.

1. Diversity

Two or more 1.544 Mbps Local Channel Services may be furnished partially or entirely over not more than two physically separated routes, subject to availability of facilities. Diversity is furnished for a portion of the local channel or for the entire local channel depending on the facilities available. If there are more than two local channels, the local channels are divided into two groups and furnished partially or entirely over two physically separated routes.

Charges will be developed and filed on an individual case basis.

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



## COMPUTER NETWORK TECHNOLOGY CORPORATION

### 9. T45 SERVICES-INTEROFFICE

# 9.1 General

T45 Services provide for the transmission of 44.736 Mbps digital signals.

T45 Services use a framed DS3 signal format. When used to carry Multiplexed DS1 Channels, the signal carried within the framed DS3 format must contain Formatted DS1 channels, to a maximum of 28.

### 9.1.1 Description

T45 Services are configured by combining service components at designated CNT central offices. T45 Interoffice Channels are furnished on a two-point basis only.

9.1.2 Reserved for Future Use

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



### 9.1 General (Cont'd)

9.1.3 Regulations

In addition to the Regulations in Section 2 preceding, the following apply.

A. Availability of T45 Services

T45 Services are available from the designated CNT central offices. T45 Services may not be available in every LATA.

9.1.4 Minimum Payment Period

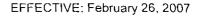
Except for IOCs provided under an optional fixed rate plan, the minimum payment period for all T45 Service components is one month.

The minimum payment period for IOCs furnished under an optional fixed rate plan depends upon the conditions under which the customer discontinues service.

9.1.5 Notice of Termination

The Notice of Termination for all T45 Service components is one month. Recurring charges will apply for a period of one month from the date CNT receives the termination notice or until the requested termination date, whichever period is longer. These charges will apply during this period whether or not the customer continues to use the service. For purposes of calculating the termination charge for customers subscribing to a fixed rate plan, the customer's current fixed rate will apply until the expiration date of the fixed rate plan and conventional monthly rates will apply thereafter.

Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442





#### 9.2 Service Components and Rates

The components of a T45 Service are Interoffice Channels, Office Connections, and Office Functions.

9.2.1 Interoffice Channel (IOC)

A T45 Interoffice Channel is a channel between two designated CNT central offices, points of connection, or a combination thereof, on digital fiber optic network or on terrestrial digital facilities at the discretion of the customer when fiber optic facilities are not available. The IOC monthly recurring charge comprises two elements. A fixed element applies per channel and a mileage element applies per airline mile of the IOC.

A. Rates

The IOC monthly recurring charge comprises two elements. A fixed element applies per channel and a mileage element applies per airline mile of the IOC. The cost and price levels are developed on a case-by-case basis.

Refer to Price List.

- 9.2.2 Office Connections
- A. Access Connection

An Access Connection provides the function, at a designated CNT central office, of connecting Local Channels, other access, or a CNT enhanced service to an IOC, office function, another Local Channel, other access, a CNT enhanced service or a CNT service as specified within this tariff. One access connection applies for each Local Channel, other access or CNT enhanced service connected.

Refer to Price List.

B. Function Connection

A function connection provides the function, at a designated CNT central office, of connecting an office function to an IOC, another office function, or a CNT service as specified within this tariff, or of connecting an IOC to a CNT service as specified within this tariff.

Refer to Price List.

CANCELLED

XD-2007-0476 February 16, 2008

Missouri Public Service Commission



### COMPUTER NETWORK TECHNOLOGY CORPORATION

## 9. T45 SERVICES-INTEROFFICE

#### 9.2 Service Components and Rates (Cont'd)

#### 9.2.3 Channel Options

Channel options are features added to a channel to change or augment its transmission characteristics.

### **CNT Enhanced Diversity Routing**

Under this option, two or more T45 IOCs are furnished entirely over physically and electrically separated transmission paths, such that a failure at one geographic location will not cause the loss of both paths. The CNT Enhanced Diversity Routing (CEDR) is offered where separate facilities are available, subject to routing or performance constraints resulting from the diverse routing and made known to the customer prior to ordering. If complete CEDR is not available when ordered, or if it becomes unavailable at a later date due to network rearrangements, CEDR may be furnished on a partial basis only at the customer's request. The customer will be advised before partial CEDR is provided and may cancel or discontinue the CEDR option if the partial CEDR is not acceptable. No cancellation charge will apply if the facilities are not available or the customer does not accept the partial CEDR. When CEDR is ordered, an installation charge and a monthly charge apply for each IOC in an IOC relationship pair on which CEDR is provided, i.e., IOC No. 1 is diverse from IOC No. 2.

Example 1: The customer has four IOCs and specifies that IOC No. 1 and IOC No. 2 be diversely routed. The relationship pair is 1 & 2. Two CEDR monthly and installation charges apply, one for each IOC in the relationship pair. CEDR charges will not apply to IOC Nos. 3 and 4.

Example 2: The customer has four IOCs and specifies that IOC Nos. 1 and 2 be diversely routed from IOC Nos. 3 and 4. The IOC relationship pairs are 1 & 3, 2 & 4, 1 & 4, 2 & 3. Eight CEDR monthly and installation charges apply, one for each IOC in the relationship pair.

Example 3: The customer has three IOCs and specifies that each of the IOCs be diversely routed. The IOC relationship pairs are 1 & 2, 1 & 3, 2 & 3. Six CEDR monthly and installation charges apply, one for each IOC in the relationship pair.

Example 4: The customer has two IOCs and specifies that IOC No. 1 be diversely routed from IOC No. 2. Central Office B is the only T45 POP in the LATA; customer requests partial enhanced diversity routing. The IOC relationship pair is 1 & 2. Two CEDR monthly and installation charges apply, one for each IOC in the relationship pair.

Refer to Price List.

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



- 9.2 Service Components and Rates (Cont'd)
- 9.2.4 Office Functions
- A. CNT Network Protection Capability (CNPC)

This office function provides protection against failure for an Interoffice Channel (IOC). Protection is furnished through the use of a switching arrangement that automatically switches to a separately routed, terrestrial digital protection channel when the working channels fails. The Protection Channel and the switching arrangement are provided when CNPC is ordered.

CNPC is offered where facilities are available. If CNPC for the entire facility is not available when ordered, or becomes unavailable due to network arrangements, CNPC may, at the customer's request, only be furnished on a partial basis. The customer will be advised before partial CNPC is provided and may cancel or discontinue the CNPC if partial CNPC is not acceptable. No cancellation charge will apply if the facilities are not available or the customer does not accept the partial CNPC.

Refer to Price List.

### A. Access Protection Capability

This office function provides protection against failure of a Local Channel or other access. Protection is furnished through the use of a switching arrangement that automatically switches to a spare channel when the working channel fails. The spare channel is not included and must be ordered separately. This office function also requires compatible equipment to be provided by the Customer at its premises.

Refer to Price List.

ISSUED: January 12, 2007



#### 10.1 General

A T45 Mbps Local Channel Service provides for the transmission of 44.736 Mbps digital signals.

T45 Mbps Local Channel Services use a framed DS3 signal format. When used to carry Multiplexed DS1 Channels the signal carried within the framed DS3 format must contain Extended Superframe formatted DS1 channels, to a maximum of 28.

#### 10.1.1 Description

A T45 Mbps Local Channel Service provides a digital channel for the two-way simultaneous transmission of signals at the DS3 rate of 44.736 Mbps.

A T45 Mbps Local Channel Service is suitable for the transmission of voice, data (including CNT Interoffice Digital Service Spectrum) or any other application required by the customer which utilizes digital signals within the specified transmission parameters of the local channel.

A T45 Mbps Local Channel service may be furnished (1) between two customer premises in the same LATA, or (2) solely as an Access Coordination Function.

Intrastate/InterLATA T45 Mbps Local channel Service si provided: (1) between a Customer's premises and a designated CNT central office in the same LATA to connect that premises to InterLATA IOC, or (2) solely as an Access Coordination Function.

Intrastate/IntraLATA T45 Mbps Local Channel Service is provided: (1) between two customer premises in the same LATA, or (2) between a Customer's premises and a designated CNT central office in the same LATA to connect that premises to IntraLATA IOC or another Intrastate/IntraLATA Local Channel at the designated Central Office.



#### 10.1 General (Cont'd)

#### 10.1.2 Regulations

In addition to the regulations in Section 2 preceding, the following apply.

### A. Availability of a Local Channel Service

T45 Mbps Local Channel Services are available from the designated CNT central offices. T45 Mbps Local Channel Services may not be available in every LATA.

#### 10.1.3 Minimum Payment Period

The minimum payment period for a T45 Mbps Access Coordination Function shall be one month, unless otherwise indicated within this tariff. The minimum payment period for a Local Channel is as indicated within this tariff.

#### 10.1.4 Fixed Term Plans

When service is provided for a fixed term, as indicated in within this tariff, the rates for service will not be subject to CNT initiated increases during the service period. These rates will be changed pursuant to any order of the state regulatory commission, or any other applicable governmental regulatory authority affecting this tariff or the rates of the underlying access supplier.



Service Commission

#### 10.1 General (Cont'd)

## 10.1.5 Notice of Termination

Except for services provided under a fixed term plan, the Notice of Termination for T45 Mbps Local Channel Services is one month. Recurring charges will apply for a period of one month from the date CNT receives the termination notice or until the termination date, whichever period is longer. For services provided under a fixed term plan, termination provisions are specified within this tariff.

#### 10.1.6 Fixed Term Plan Termination

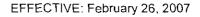
If the customer terminates service prior to the end of the term specified within this tariff, the customer is responsible for full payment based on the number of months remaining on the term times the monthly rate in effect on the date service is terminated, plus any unpaid installation charges. This payment is due within thirty days of the date of service termination.

CNT will collect all charges and reimburse the customer for any difference between the amount paid by the customer and any lesser liability payable by CNT to the underlying access supplier.

#### 10.1.7 Cancellation Charge

As specified within this tariff preceding the cancellation charge for T45 Mbps Local Channel Service orders canceled after the start of installation will be equal to an estimate of the net costs incurred in each installation not to exceed the charges for the minimum payment period.

Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission



10.2 T45 Mbps Local Channel Service Rates

The rates applicable to T45 Mbps Local Channel Services are as follows.

10.2.1 Local Channels

The rates for the local channel component of a T45 Mbps Local Channel Service are established on an individual case basis and are as specified in the Price List.

10.2.2 Access Coordination Function (ACF)

An Access Coordination Function is required for each local channel provided under this tariff or for each access channel provided by the Customer for which CNT provides access coordination. The rates for Access Coordination Functions are established on an individual case basis, as specified in the Price List.

10.2.3 Special Access Surcharge

In addition to the rates set forth within this tariff, a Special Access Surcharge applies to each voice grade equivalent channel, derived from a T45 Mbps Local Channel Service which is terminated at a PBX or equivalent device capable of interconnecting the derived channel with the local exchange network. The rates are established on an individual case basis, as specified in the Price List.

10.2.4 Customer Access Selection Charge (CASC)

When a Customer orders a Terrestrial 45 Mbps Local Channel Service and requests an access provider other than the one selected by CNT, and CNT provisions the local channel service with the access provider requested by the Customer, a monthly recurring CASC applies in addition to the price of the local channel service. The monthly recurring CASC does not count toward revenue commitments and is not eligible for discounts.

Refer to Price List.

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



# 11. ASYNCHRONOUS TRANSFER MODE

### 11.1 General

Asynchronous Transfer Mode (ATM) is a fast-packet based switching and transport technology that can support data applications over a single physical access link. This high-speed service utilizes digital access facilities and high performance ATM switches to allow for the efficient transfer of data between various customer locations.

### 11.1.1 Description

Asynchronous Transfer Mode is a dedicated-connection switching technology that organizes digital data into 53-byte cell units and transmits them over a physical medium using digital signal technology. Individually, a cell is processed asynchronously relative to other related cells and is queued before being multiplexed over the transmission path.

### 11.1.2 Regulations

In addition to the Regulations in Section 2, preceding, the following apply.

- A. Availability These Services are available from designated CNT central offices, and may not be available in every LATA.
- B. Connection to Other Services

Other access at various speeds may be connected to a designated CNT Central Office.

11.1.3 Minimum Payment Period

The minimum payment period for all ATM components shall be 12 months.

11.1.4 Notice of Termination

The Notice of Termination for ATM is one month. Recurring charges will apply for a period of one month from the date CNT receives the termination notice or until the requested termination date, whichever period is longer. These charges apply during this period whether or not the Customer continues to use the service.

11.1.5 Cancellation Charge

As specified within this tariff the cancellation charge for individual case basis orders canceled after the start of installation will be equal to an estimate of the net costs incurred in each installation not to exceed the charges for the minimum payment period.

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



# 11. ASYNCHRONOUS TRANSFER MODE

11.2 Service Components and Rates

The components of ATM are Interoffice Channel and Local Channel

11.2.1 Interoffice Channel

An Interoffice Channel is a channel between two designated CNT central offices, points of connection, or a combination thereof.

Rates are as specified in the Price List

11.2.2 Local Channel

A Local Channel is a channel between a designated CNT central office to a customer's premises.

Rates are as specified in the Price List

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



COMPUTER NETWORK TECHNOLOGY CORPORATION

P.S.C. Mo. Tariff No. 1 SECTION 12 ORIGINAL PAGE 1

12. RESERVED FOR FUTURE USE

. . . . . . . . . . . .

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442

**Filed** Missouri Public Service Commission

# COMPUTER NETWORK TECHNOLOGY CORPORATION

P.S.C. Mo. Tariff No. 1 SECTION 13 ORIGINAL PAGE 1

----

13. RESERVED FOR FUTURE USE

- -

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



#### 14.1 General

A Voice Grade Local Channel Service provides for the transmission of analog signals within a frequency bandwidth of approximately 300 to 3000 Hz. Two types of Voice Grade Local Channels are provided – Intrastate/InterLATA and Intrastate/IntraLATA.

#### 14.1.1 Description

A Voice Grade Local Channel Service is suitable for transmission in one direction (one-way) or transmission in two directions (two-way) of voice, data or any other application required by the customer which utilizes analog signals within the specified transmission parameters of the local channel. The application required by the customer is accommodated via a technical specifications package.

A Voice Grade Local Channel Service is provided (1) between one or more customer premises and a designated CNT central office, or (2) solely as an access coordination function(s).

A t the customer's request, CNT will provide service to multiple customer premises within a LATA through the use of a bridge(s) located at a Local Exchange Company central office(s). However, if CNT determines that it is unable to meet service design and technical performance criteria in the configuration requested, the customer will be advised and given the opportunity to cancel or change the order. In such cases, no charge will apply for the cancellation or change in the customer's order.

Intrastate/InterLATA Voice Grade Local Channel Service is provided: (1) between one or more Customer's premises and designated CNT central office in the same LATA for connection to InterLATA IOC, or (2) solely as an access coordination function(s).

Intrastate/IntraLATA Voice Grade Local Channel Service is provided: (1) between two Customer premises in the same LATA, or (2) between a Customer's premises and a designated CNT central office in the same LATA to connect that premises to IntraLATA IOC or another Intrastate/IntraLATA Local Channel at the Central Office.

Examples of technical considerations are:

generally data circuits will not perform satisfactorily with more than two interbridge circuit links in tandem.

CNT's ability to test and restore circuits is diminished when bridging occurs outside its central offices. This is particularly severe when bridges are connected in tandem outside its central offices.

When CNT bridging is employed to provide a multipoint local channel service, the local channel is billed via the local channel offering set forth within this tariff.

When LEC bridging is employed to provide a multipoint local channel service, the local channel is configured in accordance with the specifications set forth within this tariff and is billed via the bridged and interbridge channel offerings set forth within this tariff.

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



- 14.1 General (Cont'd)
- 14.1.2 Regulations

In addition to the regulations in Section 2, preceding, the following apply.

A. Availability of a Local Channel Service

Voice Grade Local Channel Services are not available from designated CNT central offices In addition, the Local Exchange Company central offices at which bridging is available are listed in the Local Exchange Company Tariffs.

B. Installation Charge Waiver

Installation charges will be waived for Voice Grade Local Channel Services including the Access Coordination Function and Voice Grade Local Channel C and D Type Data Conditioning for Customers who order a new CNT Interoffice Digital Service Spectrum (CIDSS) with IOC used in conjunction with Voice Grade Local Channel Service.

Excluded from the installation charge waiver are:

IOC or Local Channel signaling capability;

Replacement of existing service with a service of the same type and speed; and

Additions to and/or rearrangements to existing services.

A Customer who discontinues service prior to 12 full months will be billed for the waived charges. However, a Customer may discontinue service without liability for waived charges as specified within this tariff.



#### 14.1 General (Cont'd)

#### 14.1.3 LEC Bridging Arrangements

A bridging arrangement in a Local Exchange Company central office provides the capability to connect two (2) or more customer locations with an Interoffice Channel. These multipoint channels are configured according to the following specifications and are billed via the bridged and interbridge channel offerings set forth within this tariff.

Each bridging arrangement has a capacity of six (6) ports. At least three (3) ports on each bridging arrangement must be utilized by a bridged channel or an interbridge channel.

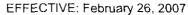
Generally, a maximum of three (3) bridging arrangements is permitted per interoffice channel and all interconnected interoffice channels and local channels. However, in order to meet design requirements for particular configurations, the maximum number of bridging arrangements may be lower.

Local Exchange Company central offices at which bridging arrangements are available are listed in Local Exchange Company tariffs. Bridging arrangements are provided subject to availability of LEC facilities.

#### 14.1.4 Minimum Payment Period

The minimum payment period for a Voice Grade Local Channel or component is one month.

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442





14.1 General (Cont'd)

#### 14.1.5 Notice of Termination

The Notice of Termination for a Voice Grade Local Channel or component is 15 calendar days. Recurring charges apply for a period of 15 calendar days from the date CNT receives the termination notice or until the requested termination date, whichever is later. During this period, the charges will continue to apply whether or not the customer continues to use the local channel or component.

# 14.1.6 Cancellation Charge

As specified within this tariff, cancellation charges will apply for service orders canceled by the customer on or after the SID.

Refer to Price List for the Cancellation Charge Schedule - Voice Grade.

The applicable charge is based on the last scheduled critical date reached in the service order process. For example, for an order which is canceled after the DLRD but prior to the RID, a charge for each access coordination function, and each local channel, bridged channel and interbridged channel as indicated under the column entitled "DLRD" will apply. Where a percentage is indicated, that percentage is applied to the minimum payment period recurring charge for the cost of the channel.

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



14.2 Voice Grade Local Channel Service Rates

The rates applicable to Voice Grade Local Channel Services are as set forth herein.

14.2.1 Local Channels

The rates for local channels apply for two-point Local channel services and multi-point channels bridged at the Central Office only and are as specified in the Price List.

#### 14.2.2 Bridged Channels

The rates for bridged channels apply on LEC bridged multipoint local channel services only and apply for the channel between a LEC bridge and a designated CNT central office or customer's premises. The rates for bridged channels are as specified in the Price List.

14.2.3 Interbridge Channels

The rates for interbridge channels apply on LEC bridged multipoint local channel services only and apply for the channel connecting two LEC bridges. The rates for interbridged channels are as specified in the Price List.



- 14.2 Voice Grade Local Channel Service Rates (Cont'd)
- 14.2.4 Access Coordination Function

An access coordination function is required for:

each two-point local channel provided by CNT,

each customer premises termination (excluding Local Exchange Company bridge terminations) on a multipoint local channel provided by CNT,

each two-point access channel provided by the customer for which CNT provides access coordination, or

each customer premises termination (excluding Local Exchange Company bridge terminations) on a multipoint access channel provided by the customer for which CNT provides access coordination.

Refer to Price List.

#### 14.2.5 Special Access Surcharge

In addition to the rates set forth within this tariff, a Special Access Surcharge applies to each termination of a Voice Grade Local Channel Service which is terminated in a PBX or equivalent device capable of interconnecting the channel with the local exchange network. For additional information regarding the application of the Special Access Surcharge, refer to the regulations set forth within this tariff.

Refer to Price List.

ISSUED: January 12, 2007

Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442

EFFECTIVE: February 26, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission

**Filed** Missouri Public Service Commission

- 14.2 Voice Grade Local Channel Service Rates (Cont'd)
- 14.2.6 Channel Options

The following channel options are available for use with Voice Grade Local Channel Services.

A. Conditioning

Conditioning provides more specific transmission characteristics for Voice Grade Local Channel Services. For two-point local channel services the parameters apply to each local channel. For multipoint local channel services, the parameters apply between two communicating points.

1. C-Type Conditioning

This conditioning is for the additional control of attenuation distortion and envelope delay distortion. The rates for C-Type Conditioning apply per point (CNT central office or customer's premises) arranged on a local channel service. Only one kind of C-Type Conditioning may be applied to a local channel. Rates are as specified in the Price List.

2. D-Type Conditioning

The rates for D-Type conditioning apply per point (CNT central office or customer's premise) arranged on a local channel service and are as specified in the Price List.

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



- 14.2 Voice Grade Local Channel Service Rates (Cont'd)
- 14.2.6 Channel Options (Cont'd)
- B. Signaling

Signaling is the process by which one location alerts another location on the same channel or network that it wishes to communicate.

The signaling arrangements available permit signals generated by other equipment at a location to be transmitted over a local channel service. They do not include the capability to initiate or receive those signals.

The signaling arrangement to be used on a local channel service is dependent on the type of equipment connected to the local channel service, the function of the channel (e.g., off-premises station, foreign exchange, tie trunk) and the manner in which the customer wants the signal process to operate (e.g., ringdown, dial).

### 1. Loop Start Loop Signaling

Loop start loop signaling is used for off-premises stations, trunk to station tie lines, and other channels which are terminated in switching equipment at one end and other terminal equipment (e.g., in a handset) at the other end. The interface with the switching equipment is referred to as the open end and the interface with the station is referred to as the closed end.

This signaling arrangement is designed to pass an open loop (idle condition) or closed loop (seized condition) from the station to the switching equipment. It will transmit dial pulse or multifrequency pulsing signals from the station to the switching equipment and dial tone and 20 Hertz ringing from the switching equipment to the station.

### 2. Ground Start Loop Signaling

This signaling arrangement is used for channels that interface with central office switching equipment on the open end and PBX on the closed end to provide a PBX to central office trunk.

In the operation of this arrangement the closed end provides a closed loop and momentary ground for the ring conductor as a seizure. The open end provides a ground on the tip and battery on the ring as a seizure. This arrangement will transmit dial tone and 20 Hertz ringing from the open end to the closed end, and will transmit dial pulses or multifrequency pulsing address signals from the closed end to the open end.

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



- 14.2 Voice Grade Local Channel Service Rates (Cont'd)
- 14.2.6 Channel Options (Cont'd)
- 3. E&M Signaling Interface

This signaling arrangement is used for registered or grandfathered switching equipment tie trunks and is available as Type I, II, or III E&M Signaling.

4. Two-Point Automatic Ringdown Signaling Arrangements Loop Closure Interface

In this signaling arrangement, the calling station activates 20 Hertz ringing by providing a tip to ring conductor short as an offhook signal. The 20 Hertz ringing operates a bell or relay at the distant station. Loop Closure interface is used for handset, key set, switchboard, and console terminations.

5. Manual Signaling Arrangements for Two-Point Or Multipoint Local Channel Services 20 Hertz Interface

In this signaling arrangement the calling station transmits 20 Hertz ringing activated by the operation of a key or a button. The 20 Hertz ringing activates a bell or relay at the distant station. In the multipoint local channel service application, all stations receive the ring from the calling location.

6. Manual Signaling Arrangement with Code Selection for Multipoint Local Channel Services

This signaling arrangement is similar to the manual signaling arrangement for two-point local channels except that the calling station can select a single distant station or group of stations by keying one of nine predetermined codes. Only the station or stations called will respond to the ringing current.

I



- 14.2 Voice Grade Local Channel Service Rates (Cont'd)
- 14.2.6 Channel Options (Cont'd)
- B. Signaling (Cont'd)
- 7. Loop Reverse Battery

This signaling arrangement changes the signaling state when the battery and ground on the tip and ring are reversed. This arrangement is typically used on PBX and Centrex tie trunks.

8. Signal Range Extension

Signal Range Extension is required when a local channel service (arranged for loop start dial signaling) is used as an off-premises station. There are three types:

Type A is furnished for use with Class A PBX (or similar) station ports capable of operation over loops with resistance in the range of 0-199 ohms.

Type B is furnished for use with Class B PBX (or similar) station ports capable of operation over loops with resistance in the range of 200-899 ohms.

Type C is furnished for use with Class C PBX (or similar) station ports capable of operation over loops with resistance in the range of 900 ohms or more.

The rates for signaling apply per point (CNT central office or customer's premises) arranged on a local channel service and are as specified in the Price List.

C. Special Routing

A Voice Grade Local Channel is normally furnished using facilities selected by CNT. Various special routing options are available for Voice Grade Local Channels. These special routing options have associated charges in addition to other applicable charges. If complete special routing is not available when ordered, or if it becomes unavailable at a later date due to network rearrangements, special routing may only be furnished on a compromised basis. The customer will be advised before partial special routing is not acceptable. No cancellation charge will apply in such cases. The customer options for special routing follow. Special routing is furnished subject to the availability of facilities.

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



- 14.2 Voice Grade Local Channel Service Rates (Cont'd)
- 14.2.6 Channel Options (Cont'd)
- C. Special Routing (Cont'd)
- 1. Diversity

Two or more local channels are furnished partially or entirely over not more than two physically separated routes, subject to availability of facilities. Diversity is furnished for any portion of the local channel or in its entirety. If there are more than two local channels, the local channels are divided into two groups and furnished partially or entirely over two physically separated routes. Charges will be developed and filed on an individual case basis, as specified in the Price List.

2. Avoidance

A local channel is furnished over a facility that avoids a specified geographic location. Avoidance is offered subject to availability of alternate route facilities. Charges will be developed and filed on an individual case basis, as specified in the Price List.

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442



# COMPUTER NETWORK TECHNOLOGY CORPORATION

\_\_\_\_\_

P.S.C. Mo. Tariff No. 1 SECTION 14 ORIGINAL PAGE 12

# 14. VOICE GRADE LOCAL CHANNEL SERVICES

14.3 Reserved for Future Use

----

---- - --

l

i

i.

ISSUED: January 12, 2007

CANCELLED XD-2007-0476 February 16, 2008 Missouri Public Service Commission

i

Issued By: Larry Starns – Corporate Counsel Computer Network Technology Corp. 6000 Nathan Lane Minneapolis, MN 55442

**Filed** Missouri Public Service Commission