
B3. CHANNELS AND EQUIPMENT

CONTENTS

B3.1	Provision of Service	1	
B3.1.1	General	1	
B3.1.2	Application	1	
B3.1.3	Rate Categories	1	
B3.1.4	Service Configurations	3	
B3.1.5	Special Routing of IntraLATA Channels	4	
B3.2	Service Description	4	
B3.2.1	Reserved For Future Use	4	
B3.2.2	Voice Grade Service Series 2000 Channels	4	
B3.2.3	Reserved For Future Use	7	
B3.2.4	(DELETED)	8	
B3.3	Rate Terms and Conditions	9	(T)
B3.3.1	Types of Rates and Charges	9	
B3.3.2	Moves	10.1	
B3.3.3	Mileage Measurements	10.1.1	
B3.4	Rates and Charges	10.1.2	
B3.4.1	Local Channels	10.1.2	
B3.4.2	Non-Wire Center Connected Channels	10.1.2	
B3.4.3	Continuous Property Channels	10.1.3	
B3.4.4	Interoffice Channels	10.1.7	
B3.4.5	Optional Features and Functions	10.1.8	
B3.5	Classification and Rates - Multistation Arrangements	10.3	
B3.5.1	General	10.3	

B 3 . CHANNELS AND EQUIPMENT

B 3 . 1 Provision of Service

B 3 . 1 . 1 General

- A . Channel Services provided under the provisions of this Guidebook are offered for IntraLATA Services only. Services consisting of Local Channels, Interoffice Channels, and Optional Features and Functions are classified by series. The various series are sub-divided into different types and are described in terms of circuit characteristics and use. (T)
- B . Customers may order local channels which are designed to meet specific communications requirements. The customer is responsible for determining that his terminal equipment is compatible with the service provided by the Company.
- C . Where multi-point service is furnished, the local channels are bridged in the wire center.
- D . Dedicated circuits between the customer's interLATA Electronic Tandem Switching (ETS) function and the customer's other location(s) within the same LATA will be provided from this Guidebook. Where this service is provided by the Company as a feature of Centrex Type Services, the transport of traffic between the ETS function and the basic Centrex Type Services function may be performed by the Company's network switching facilities. (T)
- E . Channels requiring placement of new cable or wire facilities between two or more points on a customer's continuous property are no longer available effective January 1, 1987, see B 103.2. However, where spare channels are available in existing Company-Owned facilities on a customer's continuous property, such channels will be available for the customer's use, subject to the terms, conditions, and charges specified in Section B 103.

B 3 . 1 . 2 Application

The rates and charges specified herein apply for all IntraLATA Private Line services provided by the Company.

B 3 . 1 . 3 Rate Categories

- A . Following are the basic rate categories which apply to Private Line service.
 - 1 . Local Channels
 - a . A local channel provides for a communications path between the demarcation point at a customer premises and the serving wire center of that premises. One local channel charge applies per channel termination.
 - b . When channels extending between different premises are provided via dedicated cable facilities, a non-wire center connected channel charge applies in lieu of local channel charges.
 - c . The local channel provides the communication path for a service to the demarcation point(s). A demarcation point is the term used for the location where the regulated Company's facilities end and where the deregulated premises wiring begins. A network interface may be located at the point of demarcation. The customer is responsible for connections beyond the demarcation point. The demarcation point(s) will be provided as follows unless the building/property owner specifies a minimum point-of-entry:
 - (1) Single Story Single Customer - demarcation point per customer.
 - (2) Single Story Multiple Customer - demarcation point per customer.
 - (3) Multi-Story Single Customer - demarcation point per customer/story.
 - (4) Multi-Story Multiple Customer - demarcation point per customer/story.
 - 2 . Interoffice Channels

This rate category provides for the transmission facilities between serving wire centers associated with two customer premises, between serving wire centers associated with a customer premises and a Company hub, or between two Company hubs.

Interoffice mileage is measured in miles. A flat rate and a rate per mile applies. For the method of determining mileage, see B 3.3.3 A.

Note 1: The material appearing on this page is the result of a restructure of this section.

B3.CHANNELS AND EQUIPMENT

B3.1 Provision of Service (Cont'd)

B3.1.3 Rate Categories (Cont'd)

A. Following are the basic Categories which apply to Private Line service (Cont'd)

3. Non-Wire Center Connected Channels

Channels between different premises of the same or different customers may be provided in existing or new cable facilities. If new cable construction is required, recurring and nonrecurring charges will be determined via the Contract Service Arrangement process and will be based upon the total recurring and nonrecurring costs of the entire cable capacity provided.

See B3.4.2 for channel charges applicable when existing cable facilities are utilized for non-wire center connected channels

4. Continuous Property Channels

New channels between points on the same customer's continuous property are provided only where spare capacity is available in existing facilities.

A Continuous Property Channel consists of one pair (half duplex) or two pairs (full duplex) of metallic conductors with the physical and electrical transmission characteristics inherent to the existing facility. Equipment that is required to improve or alter the transmission characteristics of the channel is the responsibility of the customer and must be connected on the customer's side of the network interface. The customer may not access or alter a Continuous Property Channel in mid-span; nor install any equipment which results in harm to the facility or other channels within the cable or wire facility.

When twenty five or more half duplex channels are required between the same two points, the Company will consider a bulk provisioning arrangement whereby the subscriber can lease channels in multiples of twenty five channels. With bulk provisioning arrangements, no subsequent recurring or nonrecurring charges apply as channels are activated by the subscriber. Rates for bulk provisioning arrangements are determined on a Special Arrangement Basis, See Section B5.

Continuous Property Channels will be discontinued when associated cable facilities can no longer be economically maintained.

5. Intraexchange mileages for continuous property channels are determined as follows:

Continuous property channels are applicable between different buildings on same continuous property.

Such channels will also be applicable to multi-building complexes such as federal, county or municipal centers, airports, shopping centers, colleges and universities, hospitals, resort developments, industrial and business complexes whether or not intersected by a public thoroughfare provided the following conditions are met:

- a. The adjacent property segments created by the intersection of a public thoroughfare would be continuous in the absence of the thoroughfare.
- b. The channels must be provided on a direct basis (not routed via the Central Office) and are available only at the economic option of the Company.
- c. The cost of any supporting structure required for such channels will be borne by the customer unless the facilities carried by the supporting structure are predominantly used to provide exchange telephone service to members of the general telephone userbody.

Where channels are located on same continuous property the rates are based on the shortest airline distance between the buildings where the channels are terminated.

Regular guidebook charges apply for Intrasystem Continuous Property Channels as outlined in B3 following for those facilities in place as of December 31, 1986. New services, additions or transfers of service will be offered where spare capacity is available in existing cable facilities. Where existing facilities have been placed prior to January 1, 1987 under guidebook provisions which fully recovered the costs of such facilities as a nonrecurring charge, standard guidebook recurring and nonrecurring charges for the first one-tenth mile increment will continue to be applicable for every channel service utilized by the customer.

(T)

B3. CHANNELS AND EQUIPMENT¹

B3.1 Provision of Service (Cont'd)

B3.1.3 Rate Categories (Cont'd)

- A. Following are the basic Categories which apply to Private Line service (Cont'd)

5. (Cont'd)

Non-Intrasystem Channels, such as continuous property channels between the locations of different customers, continue to be available at the rates and charges specified in this section. (C)

Where channels are located on different premises and a portion of the channel includes facilities which are routed through more than one Company central office, the Interoffice channel mileage charge applies to the direct airline distance measured between the serving central offices only, except between central office which service common area.

When a private line is furnished over facilities which the Company elects to provide on a direct basis and is not routed through a central office, one two-point channel charge will apply. This arrangement is limited to channels not more than one airline mile in length.

Rates as specified in B3.2.1.C.3, B3.2.2.C.3 and B3.2.6.C.2 are applicable for the channel mileage between serving central offices of each pair of service points that are a part of multi-point service and are measured in accordance with 2. The Interoffice channel between the service points is considered the same as two point service for pricing purposes. (T)

4. Optional Features and Functions

This rate category provides for features and functions which may be added to a service to improve its quality or utility to meet specific communications requirements. These are not necessarily identifiable with specific equipment, but rather represent the end result in terms of the performance characteristics which may be obtained. This category includes a. and b. following:

a. Hub Functions

A hub is a Company designated wire center where bridging or multiplexing functions are performed i.e., connecting three or more customer premises in a multi-point arrangement or channelizing analog or digital services requiring a lower capacity or bandwidth.

b. Provides for such things as signaling, conditioning, transfer arrangements, protection switching, etc.

B3.1.4 Service Configurations

- A. There are two types of service configurations which can be provided. These are described as follows:

1. Two-Point Service

A two-point service connects two customer premises either directly through a serving wire center(s) or through a Company hub where additional functions are performed.

2. Multi-point Service

a. Multi-point service connects three or more customer premises through a Company hub.

b. There is no limitation on the number of mid-links available with multi-point service. However, when more than three mid-links are provided in tandem, the quality of the service may be degraded. A mid-link is a channel between hubs (i.e., bridging locations).

c. Voice Grade (Series 2000) Multi-point Channel services for data use have a limit of 6 two-wire facility type local channels or 20 four-wire facility type local channels when used with customer-provided station equipment. These units do not apply to Telemetry/Alarm Bridging Service (TABS).

d. Only certain types of service are available for multipoint applications. These are so designated in the service descriptions set forth in B3.2.² (T)

Note 1: The material appearing on this page is the result of a restructure of this section.

Note 2: The channels for use in multi-point arrangements are types 1204, 1205, 2230, 2435, 2463, and 2464.

B3. CHANNELS AND EQUIPMENT

(T)

B3.1 Provision of Service (Cont'd)

B3.1.5 Special Routing of IntraLATA Channels

- A. The private line services furnished in this *Guidebook* are provided over such routes as the Company may elect. (T)
- B. Special routing is involved where, in order to comply with requirements specified by the customer, the Company furnishes the private line service in a manner which includes one or both of the following conditions:
 - 1. Where two or more private lines must be furnished over different physical routes.
 - 2. Where a private line must be furnished on a route which avoids specified geographical locations.
- C. When special routing of services is furnished a customer, the rates will be determined on an individual case basis. (T)

B3.2 Service Descriptions

B3.2.1 Reserved For Future Use

B3.2.2 Voice Grade Service - Series 2000

- A. Series 2000 voice grade service provides for voice and/or data communications on a two point or multipoint basis for service 7 days per week, 24 hours per day, for a minimum period of one month. These channels may also be furnished on a link (partial channel) basis when connected to services such as FlexServ service, MegaLink channel service and/or LightGate service. Channels which provide Tie Line Service will not be furnished to connect a flat rate system with a message rate system. The transmission characteristics and various types of services furnished within this Series are described in B. and C. following. (T)
- B. Basic parameters and specifications for Series 2000 voice grade service are described for the end to end operation as follows:

Basic Parameters

Net Loss

Frequency Error

Frequency Response

300 - 3000 Hz

500 - 2500 Hz

Envelope Delay Distortion

800 - 2600 Hz

C-Notched Noise (with a
-13dBm0 1000 Hz Test Signal)

Impulse Noise

Phase Jitter

Non-Linear Distortion

2nd Order Distortion

3rd Order Distortion

For Speech Application

Local Channels used with terminal equipment: Limit as specified in the following Local Channel descriptions. Losses or gains present in CPE have not been included.

Plus or Minus 5 Hz

(Referenced to 1000 Hz Loss)

-3dB to + 12dB

-2dB to + 8dB

Not Controlled

Not Controlled

Not Controlled

Not Controlled

Not Controlled

Not Controlled

For Data Application

Plus or Minus 5 Hz

-3dB to + 12dB

-2dB to + 3dB

Less than 1750 Microseconds

Noise level 24dB below signal
level15 Counts in 15 minutes at a
threshold of 6dB below a -13dBm0
rms 1000 Hz Signal

10 degrees peak to peak

25dB below signal level

30dB below signal level

B3. CHANNELS AND EQUIPMENT

B3.2 Service Descriptions (Cont'd)

B3.2.2 Voice Grade Service - Series 2000 (Cont'd)

C. Transmission parameters for voice grade service are described following:

1. Type 2230 - A two-wire interface with effective two-wire facilities engineered for a 1004 Hz net loss of 0 to 10dB. Generally furnished for voice transmission - Private Line Telephone, Mobile Radio Telephone, or Supervisory Control Use. Multi-point service may be provided at charges specified in B3.4.4.A. following.
2. Type 2231 - A two-wire interface with two or four-wire facilities engineered for a 1004 Hz net loss of 0dB to 4.5dB. This is generally used for PBX (or similar system) main or extension station services. Signaling is required for this service.
3. Type 2432 - A two or four-wire interface with effective four-wire facilities engineered for tie line service use between PBX's or customer-provided communications systems. Signaling is required for this service.
4. Type 2434 - A two or four-wire interface for connection to the serving wire center where loop facilities are not required. This channel is suitable for tie line service (with E&M signaling) between Centrex or ESSX-1 Systems and may be connected with Type 2432 local channels. Signaling is required for this service.
5. Type 2435 - A four-wire interface with effective four-wire facilities engineered for a 1004 Hz net loss of 0 to 16db. Generally furnished for voice transmission. Multi-point service may be provided at charges specified in B3.4.4.A. following.
6. Type 2260 - A four-wire or two-wire interface with effective two-wire facilities engineered for a 1004 Hz net loss of 16dB. Generally used in the provision of low speed (1200 baud or less) half duplex data services.
 - Transmission data characteristics can only be met and guaranteed for the two-wire interface when the airline distance from the serving wire center to the customer's premises is one mile or less and the interoffice channel is not greater than 4 airline miles between serving wire centers. This restriction is waived where a customer's data set limits transmission power levels to 0.0dBm peak and -13dBm average power over a 3 second period.
 - In consideration of the decreasing supply of metallic facilities required to provide Local Channel (Type 2260), the Company does not hold itself in a position to make such facilities available now and in the future. In addition, if modernization programs dictate the replacement of existing metallic facilities with non-metallic facilities such as fiber optics, the Company will not be required to continue this service over metallic facilities. In consideration of the decreasing supply of metallic facilities, the Company will convert a customer's service requiring such facilities to a non-metallic Voice Grade Service and waive the nonrecurring charges associated with the change. This applies to customers where metallic facilities are being replaced with non-metallic facilities, or a customer may elect to make this change any time prior to a modernization program that would eliminate the availability of metallic facilities.
7. Type 2261 - A two-wire interface with effective two-wire facilities engineered for use in Telemetry/Alarm Bridging Service (TABS). (C)

B3. CHANNELS AND EQUIPMENT

B3.2 Service Descriptions (Cont'd)

B3.2.2 Voice Grade Service - Series 2000 (Cont'd)

- C. Transmission parameters for voice grade service are described following: (Cont'd)
8. Type 2462 - A four-wire interface with effective four-wire facilities engineered for use in Telemetry/Alarm Bridging Service (TABS). (C)
 9. Type 2463 - A four-wire interface with four-wire facilities engineered for a 1004 Hz net loss of 16dB. Generally used in the provision of analog data services. Multi-point service may be provided at charges specified in B3.4.4.A. following.
 10. Type 2464 - A two-wire interface with four-wire facilities engineered for a 1004 Hz net loss of 16dB. Generally used in the provision of analog data services. Multi-point service may be provided at charges specified in B3.4.4.A. following.
- D. Signaling Arrangements
1. Off Premises Stations
 - a. For use with PBX (or similar system) off-premises channels for terminal equipment. Signaling arrangements are furnished for grandfathered and registered PBX (or similar) systems in accordance with Part 68 of the FCC Rules and Regulations or for customer-provided communications systems not subject to Part 68 of the FCC Rules and Regulations.

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

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

Type C - Furnished for use with Class C PBX (or similar) system station ports capable of operation over loops with resistance in the range of 900 ohms or more.
 - b. For connections to registered or grandfathered PBX (or similar) system equipment, the customer must specify the equipment capability for use with Type A, B, or C Signaling Arrangements.
 2. Tie Lines
 - a. E&M signaling is provided for use with tie line channels with E&M signaling interfaces. Signaling Arrangements are furnished for grandfathered and registered PBX's in accordance with Part 68 of the FCC Rules and Regulations or for customer-provided communications systems not subject to Part 68 of the FCC Rules and Regulations.
 - An E&M Signaling Arrangement is required for each tie line termination, operating in a Dial Repeating mode, at a customer's premises with a registered PBX.
 - An E&M Signaling Arrangement is required for each tie line termination at a customer's premises with grandfathered PBX's when the tie line is arranged with an E&M signaling interface.
 - An E&M Signaling Arrangement is not required with Types 2432 and 2434 channels for additions to or for new installations of grandfathered PBX equipment when not arranged with an E&M signaling interface.
 - An E&M Signaling Arrangement is required for each Type 2432 or 2434 channel termination at a customer's premises with a customer-provided communications system not subject to Part 68 of the FCC Rules and Regulations when arranged with an E&M signaling interface.

B3. CHANNELS AND EQUIPMENT

B3.2 Service Descriptions (Cont'd)

B3.2.2 Voice Grade Service - Series 2000 (Cont'd)

E. Telemetry/Alarm Bridging Service (TABS)

1. Terms and conditions

- a. This Section contains the terms and conditions applicable for Telemetry/Alarm Bridging Service (TABS) (T)
- b. Except as otherwise specified following, the terms and conditions contained herein are in addition to the terms and conditions found in other sections of this Guidebook. (T)
- c. TABS requires the use of equipment as specified herein and Type 2261 or 2462 voice grade local channels described in C. preceding.
- d. Terminal equipment provided by the customer for use with TABS must meet specifications for such customer-provided equipment found in other sections of this Guidebook. (T)
- e. No more than 128 remote stations may be connected to a master station over an individual Split Band and Active Bridge.
- f. In Split Band and Active Bridging arrangements, secondary bridges must be directly connected to the primary bridge via mid-link channels. Secondary bridges cannot be connected through other secondary bridges to allow additional layers of tandeming.
- g. Secondary bridges, utilized in Split Band and Active Bridging arrangements, reduce the two-wire remote station capacity of the primary bridge. The initial secondary bridge reduces the primary bridge capacity by twelve two-wire remote station connections. Each subsequent secondary bridge reduces the primary bridge capacity by four additional two-wire remote station connections.
- h. Standard multi-point bridging charges as provided in other sections of this Guidebook are not applicable to TABS, except as provided in g. preceding. (T)
- i. Access over four-wire master station channels for Split Band and Active Bridging is provided using a Type 2462 local channel.
- j. Access over remote station channels is provided through a Type 2261 local channel and through the appropriate channel connection as contained in B3.4.4 A.1.c. following. Interconnection of remote stations located outside the serving wire center where the bridge to which they are to be connected is located will require interoffice channels at charges contained in B3.4.3. (T)
- k. Access over each four-wire mid-link channel for Split Band and Active Bridging is through voice grade interoffice channels at charges contained in B3.4.3. Additionally, mid-link channel connections are required as described in B3.4.4 A.1.c. following. (T)

2. Service Description

- a. Telemetry/Alarm Bridging Service is a multi-station, voice frequency, private line service designed to provide connections between a master station and a number of remote stations simultaneously. Direct transmission between remote stations is not intended. This service is intended for application in multi-point, voice frequency, data or tone signaling arrangements with transmission at rates up to 400 baud.
- b. TABS is provided in the following arrangement:
Split Band and Active Bridging - A bridging arrangement providing for a four-wire (master station or mid-link channel) frequency split common port and multiple two-wire (remote station) ports intended for application in multi-point, voice frequency, data or tone signaling arrangements. Two-way (polling) communication between the master station and each remote station is intended.

B3.2.3 Reserved For Future Use

B3. CHANNELS AND EQUIPMENT

B3.2 Service Descriptions (Cont'd)

B3.2.4 (DELETED)

B3.3 Rate Terms and Conditions

B3.3.1 Types of Rates and Charges

- A. The two types of rates and charges are monthly rates and nonrecurring charges and are described as follows: (M)
1. Monthly Rates (M)
Monthly rates are recurring charges that apply each month or fraction thereof that a service is provided. For billing purposes, each month is considered to have thirty days. (M)
 2. Nonrecurring Charges (M)
Nonrecurring Charges are one-time charges that apply for a specific work activity. The three types of nonrecurring charges that apply are installation of service, installation of features and functions and service arrangements. (M)
 - a. Installation of Service (M)
Nonrecurring charges apply for each service terminated at the customer's premises. For the installation of local channels when more than one of the same type of service, between the same locations, for the same customer is ordered and installed at the same time, one at each location is billed at the First Service Installed rate and the others are billed at the Additional Service Installed rate. (M)
The nonrecurring charges for the Installation of Services are set forth in B3.4 following as Nonrecurring Charges for the Local Channel and Interoffice Channel rate elements. (M)
Rates and charges for Network Interface Equipment are set forth in Section A14. of the General Exchange Guidebook. (M)
 - b. Nonrecurring charges apply for the installation of features and functions available with the various services. For some features and functions there is a lower charge if installed coincident with the service and a higher charge if installed subsequent to the service. The "initial" nonrecurring charge applies when the feature or function is installed at the same time as the service is installed. If the feature or function is installed after the service is established, then the "Subsequent" nonrecurring charge applies. (M)
 - c. Service Rearrangements (M)
 - (1) Service rearrangements are changes to existing (installed) services which do not result in either a change in the minimum period requirements or a change in the physical location of the point of termination at a customer premises. Changes which result in the establishment of new minimum period obligations are treated as disconnects and starts. Changes in the physical location of the point of termination are treated as moves and are described and charged for as set forth in B3.3.2 following. (M)
The charge to the customer for the service rearrangement is dependent on whether the change is administrative only in nature or involves actual physical change to the service. (M)
Administrative changes will be made without charge(s) to the customer. Such changes require the continued provision and billing of the Private Line Service to the same entity (i.e., customer remains responsible for all outstanding indebtedness for the service). Administrative changes are as follows: (M)
 - Change of customer name (i.e., the customer of record does not change but rather the customer of record changes name), (M)
 - Change of customer's premises address when the change of address is not a result of a physical relocation of equipment. (M)
 - Change in billing data (name, address or contact name or telephone number). (M)
 - Changes of jurisdiction, e.g. intraLATA to intrastate, intrastate to interstate, etc. (M)

B 3 . CHANNELS AND EQUIPMENT

B 3 . 3 Rate Terms and Conditions

(T)

B 3 . 3 . 1 Types of Rates and Charges

A . The two types of rates and charges are monthly rates and nonrecurring charges and are described as follows:

1. Monthly Rates

Monthly rates are recurring charges that apply each month or fraction thereof that a service is provided. For billing purposes, each month is considered to have thirty days.

2. Nonrecurring Charges

Nonrecurring Charges are one-time charges that apply for a specific work activity. The three types of nonrecurring charges that apply are installation of service, installation of features and functions and service arrangements.

a. Installation of Service

Nonrecurring charges apply for each service terminated at the customer's premises. For the installation of local channels when more than one of the same type of service, between the same locations, for the same customer is ordered and installed at the same time, one at each location is billed at the First Service Installed rate and the others are billed at the Additional Service Installed rate.

The nonrecurring charges for the Installation of Services are set forth in B 3 . 4 following as Nonrecurring Charges for the Local Channel and Interoffice Channel rate elements.

Rates and charges for Network Interface Equipment are set forth in Section A 14 . of the General Exchange Guidebook.

(T)

b. Nonrecurring charges apply for the installation of features and functions available with the various services. For some features and functions there is a lower charge if installed coincident with the service and a higher charge if installed subsequent to the service. The "initial" nonrecurring charge applies when the feature or function is installed at the same time as the service is installed. If the feature or function is installed after the service is established, then the "Subsequent" nonrecurring charge applies.

c. Service Rearrangements

(1) Service rearrangements are changes to existing (installed) services which do not result in either a change in the minimum period requirements or a change in the physical location of the point of termination at a customer premises. Changes which result in the establishment of new minimum period obligations are treated as disconnects and starts. Changes in the physical location of the point of termination are treated as moves and are described and charged for as set forth in B 3 . 3 . 2 following.

The charge to the customer for the service rearrangement is dependent on whether the change is administrative only in nature or involves actual physical change to the service.

B3.CHANNELS AND EQUIPMENT

B3.3 Rate Terms and Conditions (Cont'd)

(T)

B3.3.1 Types of Rates and Charges (Cont'd)

A. The two types of rates and charges are monthly rates and nonrecurring charges and are described as follows: (Cont'd)

2. Nonrecurring Charges (Cont'd)

c. Service Rearrangements (Cont'd)

(1) (Cont'd)

Administrative changes will be made without charge(s) to the customer. Such changes require the continued provision and billing of the Private Line Service to the same entity (i.e., customer remains responsible for all outstanding indebtedness for the service). Administrative changes are as follows:

- Change of customer name (i.e., the customer of record does not change but rather the customer of record changes name),
- Change of customer's premises address when the change of address is not a result of a physical relocation of equipment.
- Change in billing data (name, address or contact name or telephone number).
- Changes of jurisdiction, e.g. intraLATA to intrastate, intrastate to interstate, etc.

B3. CHANNELS AND EQUIPMENT

B3.3 Rate Terms and Conditions (Cont'd)

(T)

B3.3.1 Types of Rates and Charges (Cont'd)

A. (Cont'd)

2. Nonrecurring Charges (Cont'd)

c. Service Rearrangements (Cont'd)

(2) All other service rearrangements will be charged for as follows:

- If the change involves the addition of other customer designated premises to an existing multipoint service, the nonrecurring charge for the local channel and bridging rate element(s) being added will apply. Nonrecurring charges for interoffice channel mileage and/or optional features may also apply. may also apply.
- If the change involves the addition of other customer designated premises to an existing two-point service, resulting in a multipoint circuit configuration, the nonrecurring charge for the local channel rate element(s) being added will apply. Nonrecurring charges for interoffice channel mileage may also apply.
- If the change involves the disconnection of a customer designated premises from an existing multipoint circuit resulting in a two-point circuit configuration, no charge will apply.
- If the change involves the addition of an optional feature or function which has a separate nonrecurring charge, that nonrecurring charge will apply.
- If the change involves changing the type of signaling on a voice grade service the subsequent, nonrecurring charge will apply for the new type signaling. The charge will apply per service termination affected.
- For rearrangements and all other activities involving physical changes to the service provided or the addition of optional features without separate nonrecurring charges, a charge equal to a local channel rate element nonrecurring charge will apply. Only one such charge will apply per service order per change.
- For a change of customer of record, where no specific transfer of service charge is stated and for all other activities involving no physical changes, the following charges will apply: (1) If the request is for multiple circuits of the same type, a charge equal to one "First" Local Channel nonrecurring charge applies, (2) If the request is for only one circuit, a charge equal to one "Additional" Local Channel nonrecurring charge applies, (3) If the request is for multiple circuits of different types, charges will be applicable for each type of circuit according to the same guidelines in (1) and (2) preceding.

B3.3.2 Moves

A. A move involves a change in the physical location of one of the following:

1. The point of interface at the customer premises.
2. The customer's premises.

B. The charges for the move are dependent on whether the move is to a new location within the same building or to a different building.

1. Moves Within the Same Building

When the move is to a new location within the same building, the charge for the move will be an amount equal to one-half the nonrecurring (i.e., installation) charge for the affected service termination at the customer's premises. There will be no change in the minimum period requirements. If a move is made at the same time a service rearrangement is made, the total charge will never exceed a full nonrecurring charge for the basic service.

2. To a Different Building

Moves to a different building will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply. New minimum period requirements will be established at the new location. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

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B3.CHANNELS AND EQUIPMENT

B3.3 Rate Terms and Conditions (Contd)

(T)

B3.3.3 Mileage Measurements

- A. When station locations of a private line service are located in different wire center serving areas, interoffice channel charges apply. Charges are based on the direct airline distance measured between the serving wire centers. Mileage is determined in accordance with the following:
1. Obtain the "V" and "H" coordinates for each wire center, as listed in the National Exchange Carrier Association, Inc. (NECA) Tariff F.C.C. No. 4.
 2. Obtain the difference between the "V" coordinates of the two wire centers. Obtain the difference between the "H" coordinates. (The difference is always obtained by subtracting the smaller coordinate from the larger coordinate.)
 3. Square each difference obtained in 2. preceding.
 4. Add the squares of the "V" difference and the "H" difference obtained in 3. preceding.
 5. Divide the sum of the squares obtained in 4. preceding by 10.
 6. Obtain the square root of the result obtained in 5. preceding. This is the rate distance in miles. (Fractional miles being considered as full miles.)

EXAMPLE: The rate distance is required between City One and City Two.

	V	H
City One	7,260.00	2,083.00
City Two	7,364.00	1,865.00
Difference	104.00	218.00
Squared		10816+47524=58340

58,340 divided by 10 = 5834

Square root of 5834 = 76.38 = 77 Airline miles

- B. When a private line is furnished over facilities which the Company elects to provide on a direct basis and is not routed through a central office, one two-point channel charge from B3.4.2 will apply. The arrangement is limited to channels not more than one airline mile in length.
- C. For the purpose of applying multipoint charges, the bridging or hubbing locations are determined by that combination of airline distances connecting the serving wire center which will produce the lowest interoffice mileage charges. Bridging charges apply when three or more channels connect at the same location.
- D. For Series 1000, 2000 and 6000 channels the customer may specify the sequence in which the service points are to be connected in which case the rate mileage is the shortest airline mileage determined in accordance with paragraph C. preceding which will connect the wire centers of the service points in the specified sequence.

B3. CHANNELS AND EQUIPMENT

B3.4 Rates and Charges

(M1)

B3.4.3 Continuous Property Channels (Cont'd)

(M2)

A. Rates - Monthly Service (Cont'd)

(M2)

2. Service Connection Charges (Cont'd)

(M2)

- a. Service Ordering Charges are applicable, per service order, for receiving and recording information and/or taking action in connection with a customer's request and processing the necessary data. These charges include the engineering design function. Only one Service Ordering Charge applies for (1) a two point channel service, (2) a multi-point channel service where all points are ordered and installed at the same time, and (3) more than one channel service ordered and installed at the same time of the same type for termination at the same premises. (M2)
- b. Premises Visit Charges are applicable, per channel, for termination of a channel within the same building, a channel between buildings on the same continuous property, a channel not routed via the central office, a Local Channel, or for Inside Moves. Only one Premises Visit Charge applies when more than one channel service of the same type is terminated at the same premises at the same time. (M2)
- c. Channel connection charges are applicable for the connection and testing of Local Channels, Channel Terminals, channels wholly within the same building, and channels between buildings on the same continuous property, channels not routed via the central office, or for Inside Moves. The charges applicable are those nonrecurring charges associated with Local Channels, Channel Terminals, channels wholly within the same building (B3.4.3.A.1.a. and/or (b)), and channels between buildings on the same continuous property, and channels not routed via the central office. Connection charges for moving a channel termination from one point within a building to another point within the same building (Inside Moves) are per termination and are as specified in f. and g. following. (M2)
- d. Changes (M2)
Changing from one type of service to another type of service is considered as a disconnect and new connect. (M2)
- e. Unloading cable pairs (M2)
(1) Charges (M2)

	Nonrecurring Charge	USOC	
(a) Per Local Channel	\$1,000.50	NA	(M2)
(b) Per Interoffice Channel	1,885.25	NA	(M2)
f. Charges for Types 2230 -2261			(M2)
(1) Service Ordering Charge			(M2)

	Nonrecurring Charge				USOC	
	Series 2100					
	(2001/2101)	(2012)	(2021 /2121)	(2040/2140)		
	2230	2231	2260	2261		
(a) (DELETED)						(M2)
(b) Additional Stations within a building ¹	\$123.00	\$123.00	\$123.00	\$123.00	NA	(T)(M2)
(c) Channels wholly within the same building ²	123.00	NA	123.00	123.00	NA	(T)(M2)
(d) Channels between buildings on the same continuous property	123.00	123.00	123.00	123.00	NA	(M2)
(e) Inside Moves	93.25	93.25	93.25	93.25	NA	(M2)

Note 1: Premises Visit Charges do not apply to Type 2015 Station Terminals. (T)(M2)

Note 2: This charge is also applicable to additional stations installed subsequently in a building. (T)(M2)

M1 - Material previously appearing on this page now appears on page(s) 10.1 of this section.

M2 - Material appearing on this page previously appeared on page(s) 10.1.4 and 10.1.5 of this section.

B3. CHANNELS AND EQUIPMENT¹

B3.4 Rates and Charges (Cont'd)

B3.4.3 Continuous Property Channels (Cont'd)

A. Rates - Monthly Service (Cont'd)

2. Service Connection Charges (Cont'd)

f. Charges for Types 2230 - 2261 (Cont'd)

		Nonrecurring Charge Series 2100				USOC
		(2001/2101) 2230	(2012) 2231	(2021/2121) 2260	(2040/2140) 2261	
(2)	Premises Visit					
(a)	For a channel within the same building for Inside Moves	NA	\$32.25	\$36.00	\$26.50	NA
(b)	For a channel between buildings on the same continuous property	\$36.50	49.50	49.50	36.50	NA
(3)	Connection Charge ¹					
(a)	Inside Moves	75.50	122.00	122.00	75.50	NA
g.	Charges for Types 2432 - 2464					

		Nonrecurring Charge Series 2100				USOC
		(2014) 2432	(2041/2141) 2462	(2120 /2020) 2463	(2122/2022) 2464	
(1)	Service Ordering Charge					
(a)	(DELETED)					
(b)	Additional Stations within a building	\$123.00	\$123.00	\$123.00	\$123.00	NA
(c)	Channels wholly within the same building ¹	123.00	NA	123.00	123.00	NA
(d)	Channels between buildings on the same continuous property	123.00	123.00	123.00	123.00	NA
(e)	Inside Moves	93.25	93.25	93.25	93.25	NA
(2)	Premises Visit					
(a)	For a channel within the same building for Inside Moves	NA	32.25	36.00	26.50	NA
(b)	For a channel between buildings on the same continuous property	36.50	49.50	49.50	36.50	NA
(3)	Connection Charge ¹					
(a)	Inside Moves	75.50	122.00	122.00	75.50	NA

B3.4.4 Interoffice Channels²

A. Fixed and Mileage Charges applicable

1. Voice Grade

		Fixed Monthly Charge	Monthly Charge Per Mile	Nonrecurring Charge Per Channel	USOC	(I)
(a)	Series 2000	\$637.00	\$151.00	\$48.83	3LBBS	

Note 1: Connection charges for channels other than for Inside Moves are as specified in B3.4.3.1 and 2 and B3.4.4.

Note 2: For method of determining mileage, see B3.1.3.A.5 concerning these channels.

B3. CHANNELS AND EQUIPMENT¹

B3.4 Rates and Charges (Cont'd)

B3.4.5 Optional Features and Functions

A. Bridging

Bridging charges are applicable where more than two Local Channels, or one or more Local Channels and more than one Interoffice Channel, or more than one Local Channel and one Interoffice Channel are bridged or hubbed at the same wire center. No additional bridging charges are applicable for Series 1000, Types 1204 and 1205.

1. Voice Grade Bridges (Series 2000)

	Monthly Rate	Nonrecurring Charge	USOC	
a. Voice Bridging				
(1) Per Port				
(a) Two-Wire (Type 2230)	\$ 105.00	\$54.79	BQ9	(I)
(b) Four-Wire (Type 2435)	105.00	62.00	BQ9	(I)
b. Data Bridging				
(1) Per Port				
(a) Four-Wire (Types 2463 and 2464)	105.00	63.00	BQ9	(I)
c. Telemetry and Alarm Bridging-Split Band, Active Bridging				
(1) Common Equipment, per central office				
(a) First bridging shelf, capacity of 48 two-wire connections	1,992.00	430.00	XW1	(I)
(b) Additional bridging shelf, capacity of 56 two-wire connections installed subsequent to the first bridging shelf	1,992.00	390.00	XW2	(I)
(c) Additional bridging shelf, capacity of 56 two-wire connections installed at the same time as the first bridging shelf	1,008.00	240.00	XW8	(I)
(2) Channel connections, per channel connected				
(a) Remote station channel connection	79.00	22.30	XW3	(I)
(b) Mid-link channel connection, first channel	198.00	65.00	XW4	(I)
(c) Mid-link channel connection, subsequent channels	198.00	47.64	XW5	(I)

B. Signaling Arrangements

Signaling arrangements are provided at the customer's option to arrange channels for suitable signaling. Signaling is required on all off-premises extension channels and tie line channels associated with PBX (or similar) systems.

	Monthly Rate	Nonrecurring Charge		USOC	
		Initial	Subsequent		
1. Per local channel					
(a) Ringdown-Manual	\$ 9.00	\$10.50	\$12.51	SL3	(I)
(b) Ringdown-Automatic	9.00	28.25	33.65	SL5	(I)
(c) E & M Type	79.00	35.50	42.28	SLM	(I)
(d) Type A (0-199 ohms)	105.00	28.00	33.65	SAL	(I)
(e) Type B (200-899 ohms)	79.00	18.00	21.44	SAU	(I)
(f) Type C (900 or more ohms)	9.00	3.00	3.57	SAY	(I)
2. Per Channel not routed via the Central Office or between buildings on the same continuous property					
(a) Type A Arrangement (0-199 ohms)	14.10	41.10	49.10	SALSD	
(b) Type B Arrangement (200-899 ohms)	4.55	30.00	35.70	SAUSD	
(c) Type C Arrangement (900 or more ohms)	-	-	-	SAYSD	
3. Per Channel not routed via the Central Office or between buildings on the same continuous property or channels within the same building					
(a) E & M Type	5.75	33.00	39.25	SLMEM	

B3.CHANNELS AND EQUIPMENT

B3.4 Rates and Charges (Cont'd)

B3.4.3 Continuous Property Channels (Cont'd)

A. Rates - Monthly Service (Cont'd)

2. Service Connection Charges (Cont'd)

f. Charges for Types 2230 - 2261 (Cont'd)

(2) Premises Visit

		Nonrecurring Charge Series 2100				USOC	
		(2001/2101) 2230	(2012) 2231	(2021/2121) 2260	(2040/2140) 2261		
(a)	For a channel within the same building for Inside Moves	NA	32.25	36.00	26.50	NA	
(b)	For a channel between buildings on the same continuous property	36.50	49.50	49.50	36.50	NA	
(3)	Connection Charge ¹						(T)
(a)	Inside Moves	75.50	122.00	122.00	75.50	NA	
g.	Charges for Types 2432 - 2464						
(1)	Service Ordering Charge						

		Nonrecurring Charge Series 2100				USOC	
		(2014) 2432	(2041/2141) 2462	(2120/2020) 2463	(2122/2022) 2464		
(a)	(DELETED)						
(b)	Additional Stations within a building	\$123.00	\$123.00	\$123.00	\$123.00	NA	
(c)	Channels wholly within the same building ¹	123.00	NA	123.00	123.00	NA	(T)
(d)	Channels between buildings on the same continuous property	123.00	123.00	123.00	123.00	NA	
(e)	Inside Moves	93.25	93.25	93.25	93.25	NA	
(2)	Premises Visit						
(a)	For a channel within the same building for Inside Moves	NA	32.25	36.00	26.50	NA	
(b)	For a channel between buildings on the same continuous property	36.50	49.50	49.50	36.50	NA	
(3)	Connection Charge ¹						(T)
(a)	Inside Moves	75.50	122.00	122.00	75.50	NA	

Note 1: Connection charges for channels other than for Inside Moves are as specified in B3.4.3.1 and 2 and B3.4.4. (T)

B3. CHANNELS AND EQUIPMENT

B3.4 Rates and Charges (Cont'd)

B3.4.4 Optional Features and Functions (Cont'd)

C. Conditioning (Voice Grade Services)

1. Conditioning provides more specific transmission characteristics for data services. There are two types of C-conditioning and one type of D-conditioning, each with different technical specifications. C-Type conditioning controls attenuation distortion and envelope delay distortion. D-Type conditioning controls the signal to C-notched noise ratio and intermodulation distortion.

Conditioning is charged for on a per Local Channel basis for two-point and multi-point service. For two-point services the parameters apply to each service. For multi-point services the parameters apply to any path between any two service points.

2. The types and description of the available conditioning options are as follows:

Type Conditioning	Frequency Response Specification	Envelope Delay Distortion Specification
C1 (two-point or multipoint)	300-2700 Hz, -2dB to +6dB. 1000-2400 Hz, -1dB to +3dB. 300-3000 Hz, -3dB to +12dB.	1000-2400 Hz, less than 1000 microseconds
C2 (two-point or multipoint)	300-3000 Hz, -2dB to +6dB. 500-2800 Hz, -1dB to +3dB.	1000-2600 Hz, less than 500 microseconds 600-2600 Hz, less than 1500 microseconds 500-2800 Hz, less than 3000 microseconds
	C-Notched Noise	Non-Linear Distortion
D1 (two-point)	Noise level 28dB below signal level	2nd Order Distortion 35dB below signal level 3rd Order Distortion 40dB below signal level

(Obsoleted, See B103.8.1)

3. When a channel is equipped with Type D1 conditioning and is utilized for voice communications, the Company does not undertake to represent that the channel will be suitable for such voice transmission.

	Monthly Rate	Nonrecurring Charge		USOC	
		Initial	Subsequent		
4. C-Type Conditioning					
a. C-Type Conditioning is available for Types 2463 and 2464.					
(1) C-Types of Conditioning per local channel					
(a) C1-Type	\$33.00	\$8.50	\$10.12	P2W	(I)
(b) C2-Type	-	30.00	35.73	P3W	
5. D-Type Conditioning					
a. D-Type Conditioning					
(1) Available for Types 2463 and 2464					
(a) D1-Type	79.00	30.00	35.73	QHA	(I)
(b) (Obsoleted, See B103.8.1)					

EFFECTIVE: December 1, 2005

B3. CHANNELS AND EQUIPMENT¹

(C)

B3.5 Classification and Rates - Multistation Arrangements

(C)

B3.5.1 General

- A. A Multistation charge is applicable for each Local Channel, or Service Configuration *arranged to provide communications capability where:* (M) (T)

- All stations of a service are located on the same premises consisting of more than two stations. (C) (M)

- Stations of a service are located on different premises and more than one station on the same premises are connected to that service. (C) (M)

1. Multistation Services which are connected to a Local Channel are offered for Types **2230, 2463 and 2464** (2101, 2001, 2120, 2020, 2122 and 2022) only. (C) (M)

2. A maximum of four bridged stations per premises per Local Channel is allowed for Types **2463 and 2464** (2120, 2020, 2122 and 2022) (C) (M)

3. Data equipment must be within 1500 feet of the termination of the Local Channel. (M)

- B. Rates (M) (T)

1. Multistation Charges - Charges are applicable where more than one station location on the same premises is connected to a Local Channel (M)

- a. Series 2000 (**2100**) (C) (M)

- (1) For Nonkey System termination, per Local Channel or Station Terminal (M)

	Nonrecurring Charges	Monthly Rate	USOC	
(a) Type 2230 (2101/2001)	\$35.50	\$3.70	MPG1X	(M)
(b) Type 2463 (2120/2020)	210.75	3.70	MPG3X	(C) (M)
(c) Type 2464 (2122 /2022)	210.75	3.70	MPG3X	(C) (M)

- (2) For Key System termination, per Local Channel or Station Terminal (C) (M)

- (a) Type 2230 (**2101/2001**) use **52.50** **5.25** **MPH1X** (M)

2. Multistation Charges - Charges applicable where there are more than two station locations forming one service configuration and the service configuration is wholly within the same building or on the same continuous property, or not routed via the central office. (M)

- a. Series 2000 (**2100**) (C) (M)

- (1) Per Service Configuration (C) (M)

(a) Type 2230 (2101) use	77.75	11.90	MPJ1X	(C) (M)
(b) Type 2463 (2120) use	71.00	3.70	MPJ7X	(C) (M)
(c) Type 2464 (2122) use	71.00	3.70	MPJ9X	(C) (M)

Note 1: The material appearing on this page is the result of a restructure of this section. (N)

B3. (DELETED)

(D)

CANCELLATION PAGE

The following pages *are* cancelled. *All material has been deleted from the specified page by the revision listed here.*

(C)

Page	Revision
1	3
2	7
3	11
4	11
5	11
6	10
7	10
8	10
9	12
10	9
10.1	6
10.1.1	2
10.1.2	3
10.1.3	2
10.1.4	2
10.1.5	2
10.1.6	2
10.1.7	3
10.1.8	2
10.1.9	2
10.2	6
10.3	7
(DELETED)	

(D)

EFFECTIVE: December 1, 2005

B3. (DELETED)

(D)

CANCELLATION PAGE

(N)

The following are virtual pages which replaced their previous revisions. All material has been deleted from the specified page by the revision listed here. As material is added to these pages, the pages will be filed with the next revision level and the virtual page appearance here will be deleted.

(N)

Page	Revision	Page	Revision	Page	Revision	
1	3	16.1	4	51	1	(N)(M)
2	7	17	6	52	2	(N)(M)
3	11	18	6	53	1	(N)(M)
4	11	19	5	54	4	(N)(M)
5	11	20	6	55	4	(N)(M)
6	10	21	5	56	4	(N)(M)
7	10	22	5	57	4	(N)(M)
8	10	23	2	58	4	(N)(M)
9	12	24	1	59	3	(N)(M)
10	9	25	1	60	3	(N)(M)
10.1	6	26	1	61	1	(N)(M)
10.1.1	2	27	6	62	1	(N)(M)
10.1.2	3	28	6	63	1	(N)(M)
10.1.3	2	29	6	64	3	(N)(M)
10.1.4	2	30	5	65	3	(N)(M)
10.1.5	2	31	6	66	1	(N)(M)
10.1.6	2	32	5	67	1	(N)(M)
10.1.7	3	33	5	68	5	(N)(M)
10.1.8	2	34	5	69	5	(N)(M)
10.1.9	2	35	5	70	5	(N)(M)
10.2	6	36	6	71	3	(N)(M)
10.3	7	36.1	2	72	5	(N)(M)
10.4	6	37	5	73	2	(N)(M)
10.5	7	38	5	74	2	(M)
10.6	4	39	6	(DELETED)		(M)(D)
10.7	5	40	2			(M)
10.8	5	41	2			(M)
10.9	5	42	5			(M)
10.10	2	43	5			(M)
11	2	44	5			(M)
11.1	1	45	4			(M)
12	1	46	5			(M)
13	1	47	4			(M)
14	2	48	3			(M)
15	1	49	2			(M)
16	3	50	1			(M)