



SERVICE GUIDE VOICE GRADE SERVICES PRODUCT AND PRICING

1. SERVICE PRICES

Channel Termination - Per Point of Termination

	<u>USOC</u>	<u>Monthly</u>
Two-Wire	T6E2X	\$ 40.00
Four-Wire	T6E4X	\$ 60.00

Channel Mileage

- Fixed	1L5XX	58.00
- Per mile	1L5XX	2.20

Optional Features and Functions

Voice and WAL Bridging

Two-Wire/Four Wire

- Per port

Two-Wire	BCNV2	1.41
Four-Wire	BCNV4	2.51

Data Bridging

Two-Wire/Four Wire

- Per port

Two-Wire	BCND2	4.70
Four-Wire	BCND4	2.46

Telephoto Bridging

Two-Wire/Four Wire

- Per port

Two-Wire	BCNF2	0.48
Four-Wire	BCNF4	0.95

Conditioning Per

Point of Termination

- C Type	X1CPT	17.35
- Sealing Current	1HBPT	None

Improved Termination

Per point of termination

- Four-Wire	1RL4W	7.84
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Improved Return Loss

Per point of termination

- Two-Wire	1RL2W	4.17
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Customer Specified

Receive Level

Per point of termination

- Two-Wire	RLS	None
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Data Capability

Per point of

Termination	1RL2W	0.74
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Signaling Capability Per point of termination	XSS++	9.00
Selective Signaling Arrangement - Per arrangement	VYZ++	ICB
Transfer Arrangement (key activated) - Per four port arrangement including control channel termination	VYY++	ICB
- Per five port arrangement including control channel termination	VY5++	ICB

* One Year Minimum on all features and functions.

Special Construction charges may apply

Expedite Charge, per order:	\$1,500.00	USOC: CX4GX
Design Change Charge, per order:	\$ 100.00	USOC: H28
Service Date Change Charge, per order:	\$ 100.00	USOC: OMC
Design Management Charge, per request circuit level moved:	\$1,150.00	USOC: PCC10
Circuit Identification Charge, per occurrence:	\$ 300.00	USOC: NRTAG

2. DESCRIPTION:

2.1 A Voice Grade channel is a channel, which provides voice frequency transmission capability in the nominal frequency range of 300 to 3000 Hz and may be terminated two wire or four wire. Voice Grade channels are provided between customer designated premises, between a customer designated premises and a Telephone Company hub or as a WATS Access Line (WAL) between a customer designated premises and a WATS Serving Office (WSO).

2.2 WAL Service is associated with the closed end of 800 Service, WATS or similar services. It is provided for use with Switched Access Service as set forth in FCC Tariff No. 35.

2.3 WAL Service is arranged for either originating calling, terminating calling, or two way calling. It is provided with either rotary dial or dual tone multifrequency address signaling and either loop start, ground start, E&M or reverse battery supervisory signaling. The choice of signaling is at the option of the customer and

subject to the technical limitations identified in the Technical Reference TR NPL 000334.

Voice Grade Service Technical Specifications Packages

Parameter	Package VG-												W	
	C	1	2	3	4	5	6	7	8	9	10	11		12
Attenuation														
Distortion	X	X	X	X	X	X	X	X	X	X	X	X	X	X
C-Message														
Noise	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Echo Control	X	X	X	X		X		X	X			X	X	X
Envelope Delay														
Distortion	X						X	X	X	X	X	X	X	X
Frequency Shift	X						X	X	X	X	X	X	X	X
Impulse Noise	X					X	X	X	X	X	X	X	X	X
Intermodulation														
Distortion	X					X	X	X	X	X	X		X	
Loss Deviation	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Phase Hits, Gain														
Hits, Dropouts	X													
Phase Jitter	X						X	X	X	X	X	X		X
Signal-to-C														
Message Noise			X											
Signal-to-C														
Notch Noise	X				X	X	X	X	X	X	X	X	X	X

The desired parameters are selected by the customer from the list of available parameters

2.4 The following channel interfaces for Voice Grade service do not require signaling capability: DA, DB, DD, DE, DS, NO, PR and TF. The following channel interfaces for Voice Grade service require signaling capability: AB, AC, CT, DX, DY, EA, EB, EC, EX, GO, GS, LA, LB, LC, LO, LR, LS, RV and SF.

2.5 The following interfaces are available with WAL Service: LO, LS, DS, GO, GS, EB.

2.6 Compatible Voice Grade channel interfaces and available WAL channel interfaces are set forth in Technical References TR-NPL-000334 and TR-NPL-000335.

2.7 Optional Features and Functions are:

- Central Office Bridging Capability including Voice and WAL Bridging (two wire and four wire), Data Bridging (two wire and four wire) and Telephoto Bridging (two wire and four wire).
- Conditioning: Provides more specific transmission characteristics for Voice Grade services. C Type conditioning controls attenuation distortion and

envelope delay distortion. Sealing Current helps maintain continuity on dry metallic loops. For two point services, the parameters apply to each service. For multipoint services, the parameters apply to each mid link or end link. C Type conditioning and Data Capability may be combined on the same service. C Type Conditioning is provided for the additional control of attenuation distortion and envelope delay distortion on data services. The attenuation distortion and envelope delay distortion specifications for C Type Conditioning are delineated in Technical Reference TR-NPL-000335.

- Sealing Current Conditioning is provided to help maintain continuity on dry metallic loops. It is usually associated with four-wire DA or NO type channel interfaces.
- Customer Specified Premises Receive Level allows the customer to specify the receive level at the Point of Termination. The level must be within a specific range on effective four-wire transmission. The ranges are delineated in Technical References TR-NPL-000334 and TR-NPL-000335.
- Improved Termination at four-wire point of termination (applicable to each two wire port): Provides for a fixed 600 ohm impedance, variable level range and simplex reversal. Telephone Company equipment is required at the customer's premises where this option is ordered. The Improved Termination parameters are delineated in Technical Reference TR-NPL-000335.
- Improved Return Loss On Effective Two-Wire Transmission provides for more stringent Echo Control specifications. In order for this option to be applicable, the transmission path must be four-wire at one POT and two-wire at the other POT. Placement of Telephone Company equipment may be required at the customer's premises with the two-wire POT. The Improved Return Loss parameters are delineated in Technical References TR-NPL-000334 and TR-NPL-000335.
- Data Capability provides transmission characteristics suitable for data communications. Specifically, Data Capability provides for the control of Signal to C Notched Noise Ratio and intermodulation distortion. It is available for two-point services or multipoint services. The Signal to C-Notched Noise Ratio and inter-modulation distortion parameters for Data Capability are:
 - Signal to C-Notched Noise Ratio is equal to or greater than 32dB
 - Intermodulation distortion:
 - Signal to second order modulation products (R2) is equal to or greater than 38dB.
 - Signal to third order modulation products (R3) is equal to or greater than 42dB.

When a service equipped with Data Capability is used for voice communications, the quality of the voice transmission may not be satisfactory.

- Signaling Capability provides for the process by which one customer premises alerts another customer premises on the same service with which it wishes to communicate.
- Selective Signaling Arrangement is an arrangement that permits code selective ringing for up to ten codes on a multipoint service.
- Transfer Arrangement is an arrangement that affords customers an additional measure of flexibility in the use of their access channel(s). The arrangement can be utilized to transfer a leg of a Special Access Service to another channel that terminates in either the same or a different customer premises. A key activated control service is required to operate the transfer arrangement. A spare channel, if required, is not included as part of the option.
- The following table shows the technical specifications packages with which the optional features and functions are available.

Available with Technical Specifications Package VG-														
Parameter	C	1	2	3	4	5	6	7	8	9	10	11	12	W
C-Type Conditioning	X					X	X	X	X	X	X			
Central Office Bridging Capability	X	X			X	X					X	X	X	X
Central Office Multiplexing	X					X								
Customer Specified Premises Receive Level	X	X	X					X	X	X				X
Data Capability		X						X	X			X		
Improved Termination	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Improved Return Loss	X	X	X					X						X
Improved Two-Wire Voice Transmission														X
Sealing Current Conditioning	X					X	X				X			
Selective Signaling Arrangement	X	X												
Signaling Capability		X	X	X	X					X	X	X		
Telephoto Capability	X												X	
Transfer Arrangement	X	X	X	X	X	X	X	X	X	X	X	X	X	X

THIS CINCINNATI BELL SERVICES AGREEMENT IS SUBJECT TO CINCINNATI BELL GENERAL TERMS AND CONDITIONS. BY SUBMITTING AN ACCESS SERVICE REQUEST, CUSTOMER ACKNOWLEDGES THAT CUSTOMER HAS READ, UNDERSTANDS, ACCEPTS AND AGREES TO BE BOUND BY ALL SUCH TERMS AND CONDITIONS.

3. SERVICE AND RATES

3.1 In addition to the Service Prices, Customer will incur any and all charges that may be mandated by any regulatory Commission with jurisdiction over Cincinnati Bell or Voice Grade Service .

3.2 If Customer cancels, in whole or in part, any requested addition, rearrangement, relocation or other modification to Voice Grade Service prior to completion thereof, Customer will reimburse Cincinnati Bell for the actual time and material expenses incurred by it in connection with such modification prior to Cincinnati Bell's receipt of notice of cancellation; provided, however, the amount of such reimbursement will not exceed the service, construction, installation, termination and other charges for which Customer would have otherwise been responsible.

3.3 Access Order service dates for the installation of new services or rearrangements of existing services may be changed, but the new service date may not exceed the original service date by more than 30 calendar days. When, for any reason, the customer indicates that service cannot be accepted for a period not to exceed 30 calendar days, and Cincinnati Bell accordingly delays the start of service, a Service Date Change Charge will apply. If the customer requested service date is more than 30 calendar days after the original service date, the order may be canceled by Cincinnati Bell and reissued with the appropriate cancellation charges applied unless the customer indicates that billing for the service is to commence.

3.4 If nonrecurring charges associated with the installation of Voice Grade Service are waived and the Voice Grade Service is then terminated prior to the expiration of the Initial Term, the Customer will become liable for payment of the waived charges.

4. TERM

4.1 Voice Grade Service is available for a minimum term of 12 months. If a Customer terminates a service, without cause, prior to the expiration of the minimum term, the Customer will pay to Cincinnati Bell a termination charge equal to all remaining amounts due or to become due, including but not limited to all monthly charges for which Customer would have been responsible if the Customer had not terminated prior to the end of the 12, month term..

4.2 The initial term for the individual services covered under this Supplement shall be specified in the applicable Access Service Request.

4.3 Following expiration of the term of a service covered under this Supplement, the service will automatically renew for a term of the same duration at the then-current rate in the rate schedule, unless either party provides written notice to terminate at least thirty (30) days prior to expiration of the initial or any renewal term.

5. OUTAGE ADJUSTMENTS

5.1 An interruption of service will start when an inoperative Voice Grade Service is reported to Cincinnati Bell and end when the service is operative. Any service interruptions greater than 30 consecutive minutes will result in a credit equal to 1/1440 of the applicable monthly charge for the service involved. The same credit will apply for each additional 30-minute period that the service remains inoperable. In any month, as a result of an interruption or series of interruptions, the total credit per rate element of the interrupted service may not exceed 100 percent of the monthly charge for that particular rate element and are the complete remedy to the Customer for service interruptions.