

VIA ELECTRONIC FILING

October 1, 2021

Mr. Cayce Hinton
Director, Office of Industry Development & Market Analysis
Attention: Tariff Section
Florida Public Service Commission

Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Re: TL727

Dear Mr. Hinton:

Attached for filing are the following revisions to the Embarq Florida, Inc. d/b/a CenturyLink Access Service Tariff, issued October 1, 2021 with a proposed effective date of November 1, 2021:

<u>Section</u>	<u>Page</u>	<u>Section</u>	<u>Page</u>
7 CONTENTS	5th Revised Page 1	7	2nd Revised Page 25.1
7 CONTENTS	5th Revised Page 2	7	5th Revised Page 26
7	3rd Revised Page 2	7	3rd Revised Page 28
7	3rd Revised Page 11	7	3rd Revised Page 29
7	4th Revised Page 13	7	4th Revised Page 52.1
7	4th Revised Page 14	7	3rd Revised Page 53
7	4th Revised Page 15	7	4th Revised Page 54
7	3rd Revised Page 16	7	4th Revised Page 58
7	2nd Revised Page 17	7	4th Revised Page 59
7	2nd Revised Page 18	7	5th Revised Page 60
7	3rd Revised Page 19	7	6th Revised Page 63
7	3rd Revised Page 20	7	5th Revised Page 66
7	3rd Revised Page 21	7	6th Revised Page 67
7	3rd Revised Page 22	7	5th Revised Page 69
7	4th Revised Page 23	7	5th Revised Page 71
7	3rd Revised Page 24	7	4th Revised Page 72.1
7	5th Revised Page 25		

This filing grandfathers certain low-bandwidth Private Line Services effective November 1, 2021. Newer technologies and services are available to customers in lieu of these technologically obsolete services. New orders and moves of existing services will be allowed to the extent permitted by existing term contracts. Existing terms will not be renewed upon expiration. Customers currently under a term commitment plan may retain their low-bandwidth services on a month-to-month basis upon expiration of their current term plan.

If you have any questions regarding this filing, please contact me.

Sincerely,

Darlen N. Terry

Attachments

FL 2021-12

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fifth Revised Page 1 Cancels Fourth Revised Page 1

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

CONTENTS

			<u>Page</u>	
E7.1	General		1	
	E7.1.1	Channel Types	1	
	E7.1.2	Rate Categories	3	
	E7.1.3	Service Configurations	5	
	E7.1.4	Alternate Use	9	
	E7.1.5	Special Feature Routing	9	
	E7.1.6	Design Layout Report	9	
	E7.1.7	Acceptance Testing	10	
	E7.1.8	Ordering Options and Conditions	10 11	
	E7.1.9	Jurisdictional Report Requirements	11	
E7.2	Service	Description	11	
	E7.2.1	Reserved For Future Use	13	
	E7.2.2	Voice Grade Service - GRANDFATHERED	14	(0
	E7.2.3	Digital Data Service - GRANDFATHERED	23	(0
	E7.2.4	High Capacity Service	26	
E7.3	Channe	I Interface and Network Channel Codes	31	
	E7.3.1	Glossary of Channel Interface Codes and Options	31	
	E7.3.2	Impedence	35	
	E7.3.3	Digital Hierarchy Channel Interface Codes	35	
	E7.3.4	Service Designator/Network Channel Code		
		Conversion Table	36	
E7.4	Rate Re	egulations	37	
	E7.4.1	Types of Rates and Charges	37	
	E7.4.2	Dedicated Access Services Capable of		
		Using the Local Exchange Network	45	
	E7.4.3	Minimum Periods	47	
	E7.4.4	Moves	47	
	E7.4.5	Mileage Measurement	48	
	E7.4.6	Facility Hubs	49	
	E7.4.7	Shared Use of Digital High Capacity Service	51	
	E7.4.8	Zone Density Plan	52	
	E7.4.9	Term Discount Plan	52.1	

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fifth Revised Page 2 Cancels Fourth Revised Page 2

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

CONTENTS

			<u>Page</u>	
E7.5	Rates a	nd Charges	53	
	E7.5.1	Voice Grade Service - GRANDFATHERED	53	(C)
	E7.5.2	Digital Data Service - GRANDFATHERED	60	(C)
	E7.5.3	High Capacity Service	67	, ,
	E7.5.4	Term Discount Plan	73	

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Third Revised Page 2 Cancels Second Revised Page 2

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.1 General (Cont'd)

E7.1.1 Channel Types (Cont'd)

Following is a brief description of each type of channel:

Voice Grade [1] - a channel for the transmission of analog signals within an approximate bandwidth of 300-3000 Hz. (C)

Digital Data [1] - a channel for the digital transmission of synchronous serial data at rates of 2.4, 4.8, 9.6, 19.2 or 56.0 Kbps. (C)

High Capacity - a channel for the transmission of isochronous serial digital data at rates of 1.544, 3.152, 6.312, 44.736 or 274.176 Mbps.

Detailed descriptions of each of the channel types are provided in 7.2. following.

The customer also has the option of ordering digital high capacity facilities (i.e., 1.544 Mbps, 3.152 Mbps, 6.312 Mbps, 44.736 Mbps and 274.176 Mbps) to a Company Hub for multiplexing to individual channels of a lower capacity. Descriptions of the types of multiplexing available at the hubs, as well as the number of individual channels which may be derived from each type of facility are set forth in E7.2. following. Additionally, the customer may specify optional features for the individual channels derived from the facility to further tailor the channel to meet specific communications requirements. Descriptions of the optional features and functions available are set forth in E7.2. following.

For example, a customer may order a 3.152 Mbps facility from a designated premises to a Company Hub for multiplexing to two 1.544 Mbps channels. The 1.544 Mbps channels may be further multiplexed at the same or a different Hub to Voice Grade channels or may be extended to other customer designated premises. Optional features may be added to either the 1.544 Mbps or the Voice Grade channels.

[1] Effective November 1, 2021 Voice Grade and Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Third Revised Page 11 Cancels Second Revised Page 11

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.1 General (Cont'd)

E7.1.9 Jurisdictional Report Requirements

A customer or end user must order Dedicated Access Service for either interstate or intrastate use. Dedicated Access Service connecting to an interstate facility, either directly or through a customer provided switch, must be ordered as interstate Special Access.

E7.2 Service Description

For the purpose of ordering, there are three categories of Dedicated Access Service. These are:

- Voice Grade [1] (VG)
- Digital Data [1] (DA)
- High Capacity (HC)

Each service consists of a basic channel to which a technical specifications package (predefined), channel interface(s) and, when desired, optional features and functions are added to construct the service desired. Each of the Components of the service are described in this section.

The channel description specifies the characteristics of the basic channel and indicates whether the channel is provided between customer designated premises or between a customer designated premises and a Company hub where bridging multiplexing functions are performed.

Information pertaining to the technical specifications packages indicates the transmission parameters that are available with each package. The information is displayed in a matrix found in each service description (e.g., VG matrix in E7.2.2.B. following) with the transmission parameters listed down the left side and the packages listed across the top. Each package is identified by a code, e.g., VG1. The first two letters of the code indicate the category of Dedicated Access Service to which the parameters are applicable.

[1] Effective November 1, 2021 Voice Grade and Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

(N) (N)

FL2021-12

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fourth Revised Page 13 Cancels Third Revised Page 13

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

All services installed after the effective date of this tariff will conform to the transmission specification standards contained in this tariff or in the following Technical References for such category of service:

Voice Grade [1]	TR-NWT-000335	(C)
Digital Data [1]	TR-NWT-000341	(C)
for 2.4, 4.8, 9.6 and 56.0 Kbps	TR-NWT-000335	
for 19.2 Kbps	TR-NWT-000335	
for 64.0 Kbps	TR-NWT-000335	
High Capacity	GR-342	
	GR-54	

Reserved For Future Use E7.2.1

(N)

FL2021-12

^[1] Effective November 1, 2021 Voice Grade and Digital Data Services are grandfathered. (N) Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fourth Revised Page 14
Cancels Third Revised Page 14

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

- E7.2 Service Description (Cont'd)
 - E7.2.1 Reserved For Future Use (Cont'd)
 - E7.2.2 Voice Grade Service [1]

(C)

A. Basic Channel Description

A Voice Grade channel is a channel which provides voice frequency transmission capability in the normal frequency range of 300 to 3000 Hz and may be terminated two-wire or four wire.

^[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fourth Revised Page 15 Cancels Third Revised Page 15

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.2 Voice Grade Service [1] (Cont'd)

(C)

B. Technical Specifications Packages

							VG N	1ATR	IX				
Parameter	C^2	1	2	3	4	5	6	7	8	9	10	11	12
Attention Distortion	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ
C-Message Noise	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	X	X	Χ
Echo Control	Χ	Χ	Χ	Χ		Χ		Χ	Χ			X	Χ
Envelope Delay Distortion	Χ						Χ	Χ	Χ	Χ	X	X	Χ
Frequency Shift	Χ						Χ	Χ	Χ	Χ	X	X	Χ
Impulse Noise	Χ					Χ	Χ	Χ	Χ	Χ	X	X	Χ
Intermodulation Distortion						Χ	Χ	Χ	Χ	Χ	X		
Loss Deviation	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	X	X	Χ
Phase Hits, Gain Hits,													
and Droputs	Χ												
Phase Jitter	Χ						Χ	Χ	Χ	Χ	X	X	
Signal-to-C Message Noise	•				Χ								
Signal-to-C Notch Noise	Χ					Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ

The technical specifications for these parameters are delineated in Technical Reference Publication TR-NWT-000335

C. Channel Interfaces¹

The following channel interfaces for Voice Grade service do not require signaling capability: AH, DA, DB, DD, DE, DS, NO, PR and TF.

The following channel interfaces for Voice Grade service require signaling capability: AB, AC,CT, DX, EA, EB, EC, EX, GO, GS, LA, LB, LC LO, LR, LS, RV AND SF.

Compatible channel interfaces are set forth in Technical Reference TR-NPL-A and Associated Addendum.

Note1: Channel Interface Codes are found in E7.3.1 following.

Note²: The desired parameters are selected by the customer from the list of available parameters.

[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Third Revised Page 16 Cancels Second Revised Page 16

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.2 Voice Grade Service [1] (Cont'd)

(C)

- D. Optional Features and Functions
 - 1. Central Office Bridging Capability
 - a. Voice Bridging (two-wire or four-wire): provides for the parallel connection of one voice circuit to another without interrupting the integrity or continuity of the first.
 - Data Bridging (two-wire or four-wire): provides for the parallel connection of one data circuit to another without interrupting the integrity or continuity of the first.
 - c. Telephoto Bridging (two-wire or four-wire): provides for the parallel connection of one Telephoto circuit to another without interrupting the integrity or continuity of the first.

2. Conditioning

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.

In addition, a customer may desire that either the attenuation distortion or the envelope delay distortion, or both, be improved to more stringent specifications than those provided for C-Type conditioning. In such cases the customer has the option of ordering Improved Attenuation Distortion and/or Improved Envelope Delay Distortion.

^[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Second Revised Page 17 Cancels First Revised Page 17

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.2 Voice Grade Service [1] (Cont'd)

(C)

- D. Optional Features and Functions (Cont'd)
 - 2. Conditioning (Cont'd)

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 D-Conditioning may be combined on the same service.

a. CType Conditioning

C-Type Conditioning is provided for the additional control of attenuation distortion and envelope delay distortion on data services. The attenuation and envelope delay distortion specifications for C-Type Conditioning are:

Attenuation Distortion (Frequency Response) Relative to 1004 Hz

Frequency	Variation
Range (Hz)	(dB)
504 - 2804	-1.0 to +3.0
304 - 3004	-2.0 to +6.0

Envelope Delay Distortion

Frequency	Variation
Range (Hz)	(micro-seconds)
1004 - 2604	Less Than 501
604 - 2604	Less Than 1501

^[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Second Revised Page 18 Cancels First Revised Page 18

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.2 Voice Grade Service [1] (Cont'd)

(C)

- D. Optional Features and Functions (Cont'd)
 - 2. Conditioning (Cont'd)
 - b. Improved Attenuation Distortion

Improved attenuation distortion is provided for additional control of attenuation distortion. The improved attenuation distortion specifications are:

Attenuation Distortion (Frequency Response) Relative to 1004 Hz

Frequency	Variation
Range (Hz)	(dB)
404 - 2804	-1.0 to +2.0
304 - 3004	-1.0 to +3.0
3004 - 3204	-2.0 to +6.0

c. Improved envelope delay distortion is provided for additional control of envelope distortion. The improved envelope delay distortion specifications are:

Envelope Delay Distortion

Frequency	Variation
Range (Hz)	(micro-seconds)
1001 - 2604	Less Than 101
604 - 2604	Less Than 301
504 - 2804	Less Than 3001

(N)

(N)

^[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Third Revised Page 19 Cancels Second Revised Page 19

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.2 Voice Grade Service [1] (Cont'd)

(C)

- D. Optional Features and Functions (Cont'd)
 - 2. Conditioning (Cont'd)
 - d. Sealing Current Conditioning

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.

3. Customer Specified Premises Receive Level

This option 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.

4. Improved Return Loss

On Effective Two-Wire Transmission at Two-Wire Point of Termination: 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 Company equipment may be required at the customer's premises with the two-wire POT.

^[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Third Revised Page 20 Cancels Second Revised Page 20

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.2 Voice Grade Service [1] (Cont'd)

(C)

- D. Optional Features and Functions (Cont'd)
 - 5. DA-Type Conditioning

DA-Type Conditioning provides transmission characteristics suitable for data communications. Specifically, DA-Type Conditioning 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 Ration and intermodulation distortion parameters for DA-Type Conditioning 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 DA-Type Conditioning and is used for voice communications, the quality of the voice transmission may not be satisfactory.

^[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Third Revised Page 21 Cancels Second Revised Page 21

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.2 Voice Grade Service [1] (Cont'd)

(C)

- D. Optional Features and Functions (Cont'd)
 - 6. Telephoto Conditioning

Telephoto Conditioning provides transmission characteristics suitable for telephotographic communications. Specifically, Telephoto Conditioning is provided for the control of attenuation distortion and envelope delay distortion on telephotographic services. The attenuation distortion and envelope delay distortion parameters for Telephoto Conditioning are:

Attenuation Distortion (2204 Hz Reference)

Frequency	Variation
Range (Hz)	(dB)
304 - 3204	-1.0 to +2.5
504 - 3004	-0.5 to +1.5

Envelope Delay Distortion

Frequency	Variation
Range (Hz)	(micro-seconds)
1004 - 2604	Less Than 111
804 - 2804	Less Than 181

7. Improved Termination

On effective Four-Wire Transmission 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. Company equipment is required at the customer's premises when this option is ordered.

^[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Third Revised Page 22 Cancels Second Revised Page 22

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.2 Voice Grade Service [1] (Cont'd)

(C)

D. Optional Features and Functions (Cont'd)

The following table shows the technical specifications packages with which the optional features and functions are available:

		Avai	lable	with	Tech	nical	Spec	ificat	ions I	Packa	ige VC	3-
	1	2	3	4	5	6	7	8	9	10	11	12
C-Type Conditioning Improved Attenuation				Χ	X	Χ	Χ	Χ	Χ			
Distortion Improved Envelope				Χ	Χ	Χ	Χ	Χ	Χ			
Delay Distortion Sealing Current Conditioning				Χ	X X	Χ	Χ	Χ	Χ			
DA-Type Conditioning					Χ	X				Χ		
Central Office Bridging Customer Specified		Х			X	Х				Х	Χ	Х
Premises Receive Level	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	X	X	
Improved Return Loss	Χ	X					Χ					
Improved Termination	Χ	X	Χ	Χ	Χ	Χ	Χ	Χ	Χ	X	Χ	Χ
Telephoto Conditioning											Χ	

^[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fourth Revised Page 23 Cancels Third Revised Page 23

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.2 Voice Grade Service [1] (Cont'd)

(C)

E. Four-Wire/Two-Wire Conversations

When a customer requests that an effective four-wire channel be terminated with a two-wire channel interface at the customer designated premises, a four-wire to two-wire conversion of the four-wire local channel is required. The rate for the conversion is included as part of the basic Local Channel rate.

E7.2.3 Digital Data Service [1]

(C)

A. Basic Channel Description

A Digital Data channel is a channel for duplex four-wire transmission of synchronous serial data at the rate of 2.4, 4.8, 9.6, 19.2, 56 or 64 Kbps. The actual bit rate is a function of the channel interface and channel selected by the customer. The channel provides a synchronous service with timing provided by the Company through the Company's facilities to the customer in the received bit stream. Subrating is not available at the 19.2 Kbps speed.

(N) (N)

FL2021-12

^[1] Effective November 1, 2021 Voice Grade and Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Third Revised Page 24
Cancels Second Revised Page 24

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.3 Digital Data Service [1] (Cont'd)

(C)

A. Basic Channel Description (Cont'd)

The customer may provide the Channel Service Unit-type equipment or other Network Channel Terminating Equipment associated with the Digital Data channel at the customer premises. The interim program for interconnection of such equipment is set forth in Technical Reference Publication AS No. 1.

B. Technical Specifications Packages

DA Matrix

Parameter	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
Error Free Thirds	Χ	Χ	Χ	Χ	Χ	Χ

The Company will provide a channel capable of meeting a monthly average performance equal to or greater than 99.875 percent error-free seconds while the channel is in service, if it is measured through a CSU equivalent which is designed, manufactured, and maintained to conform with the interconnection specifications contained in Technical Reference PUB MDP-326-726.

Interface options and service objectives are as specified in Technical Reference TR-NPL-000341.

(N) (N)

FL2021-12

^[1] Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fifth Revised Page 25 Cancels Fourth Revised Page 25

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.3 Digital Data Service [1] (Cont'd)

(C)

C. Channel Interfaces

The following channel interfaces (CIs) define the bit rates that are available for a Digital Data channel:

<u>CI</u>	Bit Rate
DU-24(S)	2.4 Kbps
DU-48(S)	4.8 Kbps
DU-96(S)	9.6 Kbps
DU-19	19.2 Kbps
DU-56(S)	56.0 Kbps
DU-64	64.0 Kbps

The (S) is an additional BellSouth designation for use when the optional Secondary Channel feature is required.

D. Optional Features and Functions

1. Data Amplification

Provides for data transmission when the customer is located beyond the normal range of 42 decibel (dB) loss for digital data service (56.0 Kbps and 64.0 Kbps). The dB loss is determined by the route and length of the cable in addition to the gauge of the cable from the last signaling point (usually, but not always the switching office)to the customer's premise. When the dB loss is greater than 42, a repeater and associated equipment must be installed to regenerate the digital signal for accurate and acceptable data transmission to occur.

2. Central Office Bridging Capability

Provides for the parallel connection of one virtual circuit without interrupting the integrity or continuity of the first. This service is only available from a company-designated digital hub.

^[1] Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Second Revised Page 25.1 Cancels First Revised Page 25.1

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.3 Digital Data Service [1] (Cont'd)

(C)

- D. Optional Features (Cont'd)
 - 3. Secondary Channel Capability (SCC) is a derived companion digital transmission path that is independent of the primary data path and operates at a substantially lower bit rate. This derived channel allows the customer to perform network management functions during the normal operation of the network. This diagnostics channel utilizes a portion of a customer's previously unavailable data bit stream allowing for the ability to remotely control and test the network and peripheral devices without taking the network out of service. Special customer equipment is necessary to utilize the benefits of the Secondary Channel. Customers not wishing to utilize this capability will not be impacted. Due to transmission equipment restrictions, Secondary Channel cannot be provided on 56 Kbps circuits that require the installation of loop repeater equipment for provision of service.

The following table shows the technical specifications packages with which the optional features and functions are available.

		-	Available Specifica		chnical ackage D	OA-
Central Office	<u>1</u>	2	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
Bridging Capabilities	Х	X	Χ	X	Χ	
Secondary Channel Capabilitiy	Х	Х	X	X	X	
Data Amplification				Χ		

^[1] Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fifth Revised Page 26 Cancels Fourth Revised Page 26

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.4 High Capacity Service

A. Basic Channel Description (Cont'd)

A High Capacity channel is a channel for the transmission of nominal 64.0 Kbps or 1.544, 3.152, 6.312, 44.736 or 274.176 Mbps isochronous serial data. The actual bit rate is a function of the channel interface selected by the customer. High Capacity services are provided between customer designated premises through serving wire centers or between a customer designated premises and a Company Hub.

The channel termination rate element for DS3 services may vary based on distance. The mileage used to determine the monthly rate for channel terminations located outside a Telephone Company Central Office is the airline distance between the customer's designated premises and the Telephone Company serving wire center. The mileage measurement is determined by utilizing exchange maps and mileage tables located in designated Telephone Company offices for such purposes.

2) **Fractional DS1** ^[1] channels provide simultaneous, two-way transmission at contiguous bit rates of 128.0, 256.0 and 384.0 kbps. Fractional DS1 channels operate over the combined bandwidth of adjacent channels to create a contiguous bit rate.

Due to technical limitations associated with the provision of Fractional DS1, this service will be offered only in central offices where a compatible channel bank exists and the distance between the central office and the customer designated premises is less than or equal to 12,000 feet.

(N) (N)

(C)

^[1] Effective November 1, 2021 Fractional DS1 Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Third Revised Page 28 Cancels Second Revised Page 28

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.4 High Capacity Service (Cont'd)

- D. Optional Features and Functions (Cont'd)
 - 2. Central Office Multiplexing (Cont'd)
 - a. DS3 to DS1

An arrangement that converts a 44.736 Mbps channel to 28 DS1 channels using digital time division multiplexing.

b. DS1C to DS1

An arrangement that converts a 3.152 Mbps channel to two DS1 channels using digital time division multiplexing.

c. DS1 to Voice^[1] (C)

An arrangement that converts a 1.544 Mbps channel to 24 channels for use with Voice Grade Services. A channel of this DS1 to the Hub can also be used for a Digital Data Service.

^[1] Effective November 1, 2021 Voice Grade, Digital Data and Fractional DS1 Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Third Revised Page 29 Cancels Second Revised Page 29

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.2 Service Description (Cont'd)

E7.2.4 High Capacity Service (Cont'd)

- D. Optional Features and Functions (Cont'd)
 - 2. Central Office Multiplexing (Cont'd)

f. **DS1 to DS0** [1] (C)

An arrangement that converts a 1.544 Mbps channel to 24 64.0 Kbps channels utilizing digital time division multiplexing.

- 3. Clear Channel Capability
 - a. Clear Channel Capability (CCC) is an arrangement that alters a DS1/1.544 Mbps signal with unconstrained information bits, to meet pulse density requirements outlined in TR-NPL-000054 and TA-TSY-000342. This will allow a customer to transport an all zero octet over a DS1/1.544 Mbps High Capacity channel, providing an available combined maximum 1.536 Mbps data rate. This arrangement requires the customer signal at the channel interface to confirm to Bipolar with 8 Zero Substitution (B8ZS) line code as described in TR-NPL-000054 and TR-NPL-000342.
 - b. CCC is provided on DS1/1.544 Mbps High Capacity channels between two customer designated premises, or between a customer designated premises and a Company Hub location, and is subject to the availability of facilities. This optional feature may be ordered at the same time the DS1/1.544 Mbps High Capacity channel is ordered, or it may be ordered as an additional feature of an existing channel.

^[1] Effective November 1, 2021 Voice Grade, Digital Data and Fractional DS1 Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fourth Revised Page 52.1 Cancels Third Revised Page 52.1

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.4 Rate Regulations (Cont'd)

E7.4.9 Term Discount Plan [1]

(C)

A) General

The Special Access Term Discount Plan (TDP) applies to Special Access Digital Data Services (56.0 and 64.0 Kbps), High Capacity DS1 (1.544Mbps) and DS3 (44.736 Mbps) services, DS3 to DS1 and DS1 to DS0 Multiplexing. The TDP provides the customer with discounted rates for the services listed. The customer agrees to a minimum service commitment per service when the TDP is established. In order for a_circuit to be eligible for TDP pricing, the customer must commit a channel termination and/or multiplexer associated with that circuit to a TDP. The commitment level for a circuit will be based on channel terminations and/or multiplexers. Customers may disconnect or move channel terminations and/or multiplexers within the state and not be subject to termination liability charges as long as the commitment levels are maintained.

B) Commitment Level

All eligible special access rate elements for a given circuit (channel termination, channel mileage termination (fixed), channel mileage facility (per mile) and multiplexing), must be ordered for the same commitment period with the same service date for the same customer. A customer establishes a TDP by committing all or a portion of their in-service channel terminations and/or multiplexers to a minimum term of 3 years up to a maximum term of 5 years. During the term of the selected TDP, the customer must maintain an in-service commitment threshold of not less than 90% or more than 130% of the committed channel terminations and/or multiplexers.

As long as a customer's actual in-service level of channel terminations and/or multiplexers remains within the commitment threshold, the customer will be billed the TDP rate for all eligible rate elements. Additionally, if a customer's in-service level exceeds the initial in-service level by no more than 30%, the customer will be billed the TDP rates for all eligible rate elements. For example, the customer has 200 DS1 channel terminations and/or multiplexers and elects to commit 150 channel terminations and/or multiplexers to a 3 year TDP. The customer will be billed TDP rates as long as the in-service level of the channel terminations and/or multiplexers is equal to or greater than 135 (90% minimum threshold) but not more than 195 (130% maximum threshold).

[1] Effective November 1, 2021 Voice Grade, Digital Data and Fractional DS1 Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations. Customers will not be able to renew Digital Data Services within the term plan.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Third Revised Page 53 Cancels Second Revised Page 53

Effective: November 1, 2021

E7.5 Rates and Charges

E7.5.1 Voice Grade Service [1]

(C)

A. Local Channel

- 1. Per Point of Termination
 - a. Voice Grade

		Monthly Rate	Nonrecurring Charge
(a)	Two-Wire	\$22.95 (I)	\$270.00
(b)	Four-Wire	\$34.50 (I)	275.00

^[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fourth Revised Page 54 Cancels Third Revised Page 54

Effective: November 1, 2021

E7.5 Rates and Charges

E7.5.1 Voice Grade Service [1] (Cont'd)

(C)

B Interoffice Channel

Fixed	Monthly
Monthly	Charge
<u>Charge</u>	Per Mile
\$24.00	\$1.20
φ 24. 00	φ1.20

C. Optional Features and Functions

			Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>
1.	Bridg	ging		
	(a)	Voice Bridging – Per Port - Two-Wire - Four-Wire	\$3.95 3.95	\$34.00 34.00
	(b)	Data Bridging – Per Port - Two-Wire - Four-Wire	\$6.70 6.70	\$37.00 37.00
	(c)	Telephoto Bridging – Per Port - Two-Wire - Four-Wire	\$3.95 3.95	\$34.00 34.00

^[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fourth Revised Page 58 Cancels Third Revised Page 58

Effective: November 1, 2021

E7.5 Rates and Charges

E7.5.1 Voice Grade Service [1] (Cont'd)

(C)

- C. Optional Features and Functions (Cont'd)
 - 2. Conditioning, Per Point of Termination

			Monthly <u>Rate</u>	Nonrecu <u>Initial</u>	rring Charge <u>Subsequent</u>
	(a) (b)	C-Type Improved Attenuation	\$1.00	\$16.00	\$86.00
	(c)	Distortion Improved Envelope	84.25	78.00	160.00
	(C)	Delay Distortion	118.50	78.00	160.00
	(d)	Sealing Current	.35	34.00	95.00
3.	Impr	oved Return Loss			
	(a)	Improved Return Loss at the Two-Wire			
	(b)	Point of Termination Improved Return Loss at the Four-Wire	\$15.15	\$7.00	\$280.00
		Point of Termination	15.15	7.00	280.00

^[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fourth Revised Page 59 Cancels Third Revised Page 59

Effective: November 1, 2021

E7.5 Rates and Charges (Cont'd)

E7.5.1 **Voice Grade Service** [1] (Cont'd)

(C)

C. Optional Features and Functions (Cont'd)¹

		Monthly <u>Rate</u>	Nonre <u>Initial</u>	curring Charge <u>Subsequent</u>
4.	Customer Specified Receive Level Per Two-Wire Point of Termination	\$16.65	\$4.00	\$72.00
5.	DA-Type Conditioning – per Point of Termination	\$.30	\$10.00	\$310.00
6.	Telephoto Capability per Point of Termination	\$2.20	\$4.00	\$275.00
7.	Improved Termination			
	- Per Point of Termination	2.20	4.00	280.00

^[1] Effective November 1, 2021 Voice Grade Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fifth Revised Page 60 Cancels Fourth Revised Page 60

Effective: November 1, 2021

E7.5 Rates and Charges (Cont'd)

E7.5.2 Digital Data Service [1]

(C)

A. Local Channel

1. Per Point of Termination

	Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>
All Speeds (2.4, 4.8, 9.6, 19.2, 56.0, 64.0)	\$62.20	\$350.00

^[1] Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Sixth Revised Page 63 Cancels Fifth Revised Page 63

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.5 Rates and Charges (Cont'd)

E7.5.2 Digital Data Service [1] (Cont'd)

(C)

B. Interoffice Channel – Channel Mileage

	Monthly Rates		
	Termination	Facility	
	(Fixed)	(Per Mile)	
All Speeds (2.4, 4.8, 9.6, 19.2, 56.0, 64.0)	\$25.00	\$3.00	

^[1] Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fifth Revised Page 66 Cancels Fourth Revised Page 66

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.5 Rates and Charges (Cont'd)

E7.5.2 **Digital Data Service** [1] (Cont'd)

(C)

(N)

(N)

C. Optional Features and Functions

		Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>
1.	Bridging		
	Per port (2.4, 4.8, 9.6, 19.2, 56.0 Kbps)	\$15.00	\$20.00
2.	Digital Data Secondary Channel Capability, per Local Channel		
	Each	15.00	235.00
3.	Data Amplification	85.00	100.00
4.	Contract Rates for Bridging ¹		

Note¹: See E107 for obsolete rates.

^[1] Effective November 1, 2021 Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Sixth Revised Page 67 Cancels Fifth Revised Page 67

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.5 Rates and Charges (Cont'd)

E7.5.3 High Capacity Service

A. Local Channel

1.	1.544 Mbps DS1 (per point of termination)	Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>
	Zone 1 Zone 2 Zone 3	\$130.00 135.00 140.00	\$360.00 360.00 360.00
2.	Fractional DS1 [1] (per point of termination)		
	(a) 128 kbps (b) 256 kbps (c) 384 kbps	94.00 95.00 103.00	320.00 320.00 320.00
3.	44.736 Mbps DS3 (per point of termination)		
	Within CO Zone 1 Zone 2 Zone 3	891.00 1,041.00 1,114.00	400.00 400.00 400.00
	0-3 Miles Zone 1 Zone 2 Zone 3	1,479.00 1,816.00 1,942.00	400.00 400.00 400.00
	Over 3 Miles Zone 1 Zone 2 Zone 3	2,597.00 3,193.00 3,396.00	400.00 400.00 400.00
4.	Per Point of Termination		
	(a) 3.152 Mbps (b) 6.312 Mbps (c) 274.176 Mbps	ICB rates an	d charges apply d charges apply d charges apply

^[1] Effective November 1, 2021 Fractional DS1 Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

(C)

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fifth Revised Page 69 Cancels Fourth Revised Page 69

Effective: November 1, 2021

(N)

(N)

E7. DEDICATED ACCESS SERVICES

E7.5 Rates and Charges (Cont'd)

E7.5.3 High Capacity Service (Cont'd)

B. Interoffice Channel

Mileage^{1:}

IVIII	loage	Fixed Monthly <u>Charge</u>	Monthly Charge <u>Per Mile</u>	
1.	1.544 Mbps			
	Zone 1 Zone 2 Zone 3	\$50.00 55.00 60.00	\$20.00 22.00 24.00	
2.	Fractional DS1 [1]			(C)
	(a) 128 kbps (b) 256 kbps (c) 384 kbps	\$41.00 43.00 45.00	\$6.00 7.00 8.00	
3.	44.736 Mbps			
	Zone 1 Zone 2 Zone 3	\$615.00 738.00 812.00	\$118.00 139.00 148.00	

^{4. 3.152} Mbps – ICB rates and charges apply.

Note¹: See Section E107 for obsolete rates.

^{5. 6.312} Mbps – ICB rates and charges apply.

^{6. 274.176} Mbps – ICB rates and charges apply.

^[1] Effective November 1, 2021 Fractional DS1 Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink By: Chantel Miller, Director

Fifth Revised Page 71 Cancels Fourth Revised Page 71

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

E7.5 Rates and Charges (Cont'd)

E7.5.3 High Capacity Service (Cont'd)

C. Optional Features and Functions

1. Multiplexing

Per .	Arrangement:			
		Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>	
		rato	<u>onargo</u>	
(a)	DS3 to DS1, each			
	Zone 1	\$459.00	\$212.00	
	Zone 2	540.00	212.00	
	Zone 3	567.00	212.00	
(b)	DS1 to Voice, DS1 to DS0 [1], each			(C)
	Zone 1	\$253.00	\$175.00	
	Zone 2	287.50	175.00	
	Zone 3	304.75	175.00	
		Monthly <u>Rate</u>	Nonrecurring <u>Charge</u>	
(c)	DS1C to DS1, each ¹	-	-	

Note¹: ICB rates and charges apply.

^[1] Effective November 1, 2021 Voice Grade and Digital Data Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations.

Embarq Florida, Inc. d/b/a CenturyLink

By: Chantel Miller, Director

Fourth Revised Page 72.1 Cancels Third Revised Page 72.1

Effective: November 1, 2021

E7. DEDICATED ACCESS SERVICES

Channel Termination Per Point of Termination

E7.5 Rates and Charges (Cont'd)

Term Discount Plan [1] E7.5.4

(C)

•	Onamici Terrimation Ferri ont of Terrimation		
		3 Year	<u>5 Year</u>
	Digital Data (56.0, 64.0 Kbps):	\$56.00	\$50.00
	1.544 Mbps:		
	Zone 1 Zone 2 Zone 3	\$115.00 120.00 125.00	\$100.00 110.00 115.00
	44.736 Mbps:		
	Within the Central Office		
	Zone 1 Zone 2 Zone 3	\$694.00 771.00 810.00	\$624.00 675.00 709.00
	0-3 Miles		
	Zone 1 Zone 2 Zone 3	\$1,153.00 1,357.00 1,425.00	\$1,009.00 1,187.00 1,247.00
	Over 3 Miles		
	Zone 1 Zone 2 Zone 3	\$2,031.00 2,389.00 2,508.00	\$1,777.00 2,090.00 2,195.00

^[1] Effective November 1, 2021 Voice Grade, Digital Data and Fractional DS1 Services are grandfathered. Availability to current customers is limited to circuits in service at existing locations. Customers will not be able to renew Digital Data Services within the term plan.