**Qwest Corporation** 125 South Dakota Avenue Sioux Falls, SD 57194

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January 2, 2003

# SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

Ms. Debra Elofson, Executive Director Public Utilities Commission State Capitol Building Pierre, South Dakota 57501

Dear Ms. Elofson:

As required in the Commission's Order in Docket TC98-187, attached please find paper copies of changes to our tariffs and catalogs in December. These changes are submitted for informational purposes only.

Sincerely,

Colleen E. Sevold Manager-Policy & Law

Attachment

# 9.2 Emergency Reporting Service

- 9.2.1 UNIVERSAL EMERGENCY NUMBER SERVICE 911
  - B. Enhanced Universal Emergency Number Service (E911) (Cont'd)
    - 4. Service Features

State of South Dakota

Issued: 10-28-2002

- a. E911 Service may be available with the following Service Feature offerings:[1]
  - Automatic Number Identification
  - Automatic Number Identification and Selective Routing
  - Automatic Number Identification and Automatic Location Identification
  - Automatic Number Identification, Automatic Location Identification and Selective Routing.
- b. Forced Disconnect is standard with each of the Service Features.
- c. The following standard features are included with Selective Routing:
  - Default Routing
  - Alternate Routing
  - Speed Calling
  - Fixed, Manual, and Selective Transfer Arrangements

- [1] When Selective Routing is utilized where two jurisdictions are served by one central office, each jurisdiction may select a different feature combination as long as SR is one of the features.
- (M) Material moved to Page 31.

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# SOUTH DAKOTA PUB UTILITIES COMMISSI

# 9.2 EMERGENCY REPORTING SERVICE

9.2.1 UNIVERSAL EMERGENCY NUMBER SERVICE - 911

B. Enhanced Universal Emergency Number Service (E911) (Cont'd)

5. Wireless E9-1-1 Connectivity[1]

Wireless E9-1-1 Connectivity allows for the delivery of a wireless 9-1-1 call through the Company E9-1-1 network to a PSAP. Wireless carriers have the option of connecting directly through the Company E9-1-1 Control Office or through *CELLTRACE* which provides cell location and ANI information.

a. Connection through Company E9-1-1 Control Office

Carriers having the capability to provide wireless handset ANI, cell site and sector and/or longitudinal and latitudinal (x,y) coordinates in the appropriate format, may connect directly to the Company's E9-1-1 Control Office. The E9-1-1 Control Office will forward information to the PSAP as well as provide Selective Routing functions.

b. *CELLTRACE* 

*CELLTRACE* is a hybrid call associated signal (HCAS) solution within the Company E9-1-1 Control Office that provides for the forwarding of ANI from a wireless handset to a PSAP. A call to 911 from a wireless handset is passed from the Mobile Switching Center (MSC) to the Company's selective routing switch on dedicated facilities. Upon completing the call to the PSAP, the cell site location and the number of the originating call are displayed on the PSAP's ALI display device.

c. Definitions

# ALI Delivery

The process which delivers the ALI information, and the wireless handset's ANI, cellsite and sector and/or longitudinal and latitudinal (x,y) coordinates to the PSAP.

# Mobile Switching Center (MSC)

A Wireless Carriers switch that manages facilities used to provide wireless twoway telecommunications services.

[1] Per FCC Report and Order 94-102, the Carrier must at least route a wireless caller's E9-1-1 call to the nearest PSAP and deliver the associated ten-digit wireless handset telephone number, the cell site and the sector.

## 9.2 EMERGENCY REPORTING SERVICE

# **9.2.1** UNIVERSAL EMERGENCY NUMBER SERVICE - 911 B.5. (Cont'd)

# CELLTRACE Interface

A non-blocking trunk signaling device which automatically provides the PSAP with the caller's wireless handset ten digit ANI, the location of the cell site that originated the call and the name of the wireless service provider. This information is then delivered to the 9-1-1 database.

### Psuedo ANI (PANI)

A unique seven digit non-dialable number used to route a wireless 9-1-1 call.

# SR/ALI Phase I Wireless

Selective Routing/Automatic Location Identification (SR/ALI) Phase I provides for the routing of a wireless 911 call to a PSAP based on the PANI and delivery of ALI information to the PSAP, including PANI, and the wireless handset's ANI. This information is "pushed" into the ALI database so that when the PSAP makes the ALI request, this location information is returned.

### SR/ALI Phase II Wireless

SR/ALI Phase II provides for the routing of a wireless 911 call to a PSAP based on PANI information. In Phase II, the wireless carrier has equipment that finds latitude and longitude, x and y coordinates, of the caller when they dial 911. This information is held in their database based on the callers ANI. When the PSAP requests the ALI for the caller, they go to the ALI database to "pull" the latitude and longitude information from the wireless carrier's database. SR/ALI Phase II allows the PSAP to continually "pull" the latitude and longitude information via ALI. This ability to "pull" information is referred to as retrievable location (RLOC).

- d. Terms and Conditions
- (1) Wireless E9-1-1 Connectivity is determined by the municipality, county, or state government unit, or an authorized agent to whom authority has been legally delegated. Phase I data (PANI) cellsite and sector, and wireless handset's ANI will be provided by Wireless Carriers if Phase II data (latitude and longitude, coordinates) is not available.

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# 9. CENTRAL OFFICE SERVICES

# 9.2 EMERGENCY REPORTING SERVICE

# 9.2.1 UNIVERSAL EMERGENCY NUMBER SERVICE - 911

B.5. (Cont'd)

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- (2) Delivery of wireless calls to the PSAP requires specific entries in the E9-1-1 ALI database. These entries must be MSAG valid and agreed upon by each PSAP. The entries are then loaded into the ALI database by the Wireless Carrier.
- (3) A minimum of two dedicated trunks are required between the MSC and the Selective Routing switch and are the responsibility of the Wireless Carrier. In addition, the PSAP is required to subscribe to two selective routing ports to terminate these incoming trunks.
- (4) SR/ALI Feature Options
  - (a) PSAPs must subscribe to either the SR/ALI per trunk port option or the End User Subscriber Option.
- (b) To receive the SR/ALI End User Subscriber Option rate, the PSAPs must adhere to the following:
  - Provide the Company with wireless carrier-specific end user subscriber counts when service is requested;
  - For the purpose of true-up, annually provide the Company with wireless end user subscriber counts for the previous calendar year, by March 31st;
- (c) PSAPs who do not provide the carrier-specific line counts at the time service is requested, or wireless line counts annually by March 31st, will be charged at the per-port rate USOC E8WFX, following.
- (5) The customer is responsible for determining call routing based on jurisdictional boundaries.
- (6) Phase II RLOC is an incremental charge to the SR/ALI connectivity option selected and feature functionality.

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# 9. CENTRAL OFFICE SERVICES

# 9.2 EMERGENCY REPORTING SERVICE

- 9.2.1 UNIVERSAL EMERGENCY NUMBER SERVICE 911
  - B. Enhanced Universal Emergency Number Service (E911) (Cont'd)
    - 6. Rates and Charges
      - a. General
      - (1) The calling party is not charged for calls placed to the 911 number. This includes calls originating from pay telephones.
      - (2) When a call is transferred from a primary PSAP and toll charges are applied, the charges are billed according to rates applicable from the rate center in which the PSAP initiating the transfer resides to the rate center where the transfer terminates.
      - (3) The rates and charges contained herein are in addition to any applicable charges rendered by other Local Exchange Companies in connection with the provisioning of this service to the E911 Provider.
      - (4) The rates and charges for E911 Service are based upon utilizing standard addressing in populating the DMS. Addressing not in this format will result in errors that must be manually corrected.
      - (5) Private Line Transport Channels connecting a PSAP to various agencies such as police, fire or ambulance service, are provided at established rates for such channels and facilities specified in the Private Line Transport Services Catalog.
      - (6) Nonrecurring Payment Options

E911 Service Providers will have two options of paying the nonrecurring charges for E911 Service:

- Charges will be paid at the time E911 is turned up for service.
- Charges may be paid through an Installment Payment Plan, ranging from 36 to 60 months. The installment amount will be based on the nonrecurring costs divided by the number of months of payments. During the Installment Payment Plan period, interest will be charged to the E911 Service Provider. The installment billing contract will stipulate the amount of interest incurred by the E911 Service Provider, and all terms of the contract will be reviewed by the Public Utilities Commission[1].
- [1] If an E911 Service Provider chooses to terminate service prior to the completed payment period, the present worth (computed at the installment contract interest rate) of the remaining uncollected amounts will be paid Qwest Corporation at the time of termination.
- (M) Material moved from Page 30.

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# 9.2 EMERGENCY REPORTING SERVICE

# **9.2.1** UNIVERSAL EMERGENCY NUMBER SERVICE - 911 B.6. (Cont'd)

- b. E911 Transport Service
- (1) E911 Transport Service provides dedicated transmission paths to connect E911 Service components located throughout the state, by utilizing analog voice, analog data and high capacity channels. This service is available to any E911 Service Provider.

The transport rates listed in this Tariff are exclusive to Qwest Corporation only. E911 Service Providers will be billed separately for their transport by Qwest Corporation and by other Local Exchange Companies. E911 Service Providers are fully responsible for payment of transport rates and charges billed by Qwest Corporation and other Local Exchange Companies.

- (2) Terms and Conditions
- (a) In addition to the regulations set forth elsewhere in this Tariff, the following regulations apply to E911 Transport Service.
- (b) For purposes of ordering service, individual channel requirements must be identified, e.g., voice, data, etc. These channels must be ordered individually.
- (c) The terms and conditions for the individual channels, excluding rates and charges, apply as specified elsewhere in this Tariff.

# 9.2 EMERGENCY REPORTING SERVICE

# **9.2.1** UNIVERSAL EMERGENCY NUMBER SERVICE - 911 B.6.b. (Cont'd)

# (3) Rate Regulations

(a) An average rate has been established for recurring E911 Transport Mileage, based on a Qwest Corporation E911 Service offering for twelve proposed systems. The rate stated below is based on a price per 100 access lines served by the twelve proposed systems. It is acknowledged that changes in the total number of systems may necessitate recalculation of the average rate. Any change in the rate will require Commission approval.

		USOC	Monthly Rate
•	Average Transport Mileage, for each 100 end user access lines[1,2]	9TS	\$5.22
	imes[1,2]	915	\$3.22

- [1] Telecommunications Service Priority (TSP) is not included in this rate. Please refer to TSP tariff.
- [2] Rounded up to the nearest 100 exchange end user access lines (as established by the records in the ALI/DMS). At the time when service is first established, through and including December 31 of that same year, the number of access lines used to determine the total price to be charged for this service will be the maximum number of end user access lines in service in the area covered by the PSAP during the twelve month period immediately preceding the month in which E911 Service is first established. The number of access lines will be trued up annually by counting the number of end user access lines in service in the area covered by the PSAP during the previous calendar year. The number of billing units will be calculated based on this annual count for that current billing year.

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#### 9.2 **EMERGENCY REPORTING SERVICE**

### 9.2.1 **UNIVERSAL EMERGENCY NUMBER SERVICE - 911**

B.6.b.(3) (Cont'd)

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(b) The installation charges in (4) following will apply regardless of whether the customer purchases Qwest Corporation E911 Services or provides a customer-owned system based on the number of voice and/or data circuits needed to configure the system.

A nonrecurring charge is applicable with averaged mileage. The nonrecurring charge for the averaged mileage is as follows:

	USOC	Nonrecurring Charge
<ul> <li>Nonrecurring Charge for Averaged Transport Mileage,</li> </ul>		
per circuit	91CAD	\$ 60.27

- (c) When additional circuits are added after the initial E911 system installation, the nonrecurring charges specified for the specific channel(s) being added, will apply.
- (d) Any E911 Providers who do not purchase the Qwest Corporation E911 Service offerings of ANI, ALI or SR, or any Providers who require additional circuits for redundancy or diversity, are eligible for the E911 deaveraged Transport rates in (4) following.

# 9.2 EMERGENCY REPORTING SERVICE

# 9.2.1 UNIVERSAL EMERGENCY NUMBER SERVICE - 911

B.6.b. (Cont'd)

(4) The basic and local channel charges apply for dedicated circuits within the PSAP serving End Office. For customers who elect the average Transport Mileage Rate, previously shown in B.6.b.(3)(a), the local channel monthly rates stated below also apply. The Transport Mileage charges apply to interexchange dedicated circuits and are in addition to the local channel charges.

		USOC	Nonrecurring Charge	Monthly Rate
(a)	Basic Charge			
	• Voice, per circuit	N/A	\$237.02	· _
	• Data, per circuit	N/A	237.02	
	Travel Charge	N/A	_	_
(b)	Local Channels			
	• 2-Wire Voice w/signaling, per channel	1CP	76.35	\$ 9.01
	• 4-Wire Data, per channel	1DZ	94.95	18.43

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# 9. CENTRAL OFFICE SERVICES

## 9.2 EMERGENCY REPORTING SERVICE

9.2.1 UNIVERSAL EMERGENCY NUMBER SERVICE - 911

B.6.b.(4) (Cont'd)

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		USOC	Nonrecurring Charge	Monthly Rate
(c)	Transport Mileage			
	Mileage Bands			
	<ul> <li>Over 0 to 8</li> <li>Fixed</li> <li>Per mile</li> </ul>	FQYX1 3LBXA	\$60.27 _	\$24.54 0.18
	<ul> <li>Over 8 to 25</li> <li>Fixed</li> <li>Per mile</li> </ul>	FQYX2 3LBXB	60.27	24.54 0.18
	<ul> <li>Over 25 to 50</li> <li>Fixed</li> <li>Per mile</li> </ul>	FQYX3 3LBXC	60.27	24.54 0.18
	<ul> <li>Over 50</li> <li>Fixed</li> <li>Per mile</li> </ul>	FQYX4 3LBXD	60.27	24.54 0.18

(5) A list of rate centers and their V-H coordinates are available at 125 South Dakota Avenue, 8th Floor, Sioux Falls, South Dakota.

For the purposes of determining airline mileages, vertical and horizontal grid lines have been established across South Dakota. The spacing between adjacent vertical grid lines and between horizontal grid lines represents a distance of one coordinate unit. This unit is the square root of 0.1, expressed in statute miles. A four-digit vertical (V) and a four-digit horizontal (H) coordinate is computed for each rate center from its latitude and longitude location by use of appropriate map projection equations. A pair of V-H coordinates locates a rate center, for determining airline mileages, at a particular intersection of an established vertical grid line with an established horizontal grid line. The distance between any two rate centers is the airline mileage computed between their respective coordinate intersections, as explained below:

# 9.2 EMERGENCY REPORTING SERVICE

9.2.1 UNIVERSAL EMERGENCY NUMBER SERVICE - 911

B.6.b.(5) (Cont'd)

### • Method

To determine airline mileage for Private Line Transport Services, proceed as follows:

- (a) Obtain the "V" and "H" coordinates for each rate center.
- (b) Obtain the difference between the "V" coordinates of the two rate centers. Obtain the difference between the "H" coordinates.
   NOTE: The difference is always obtained by subtracting the smaller coordinate from the larger coordinate.
- (c) Square each difference obtained in (b) above.
- (d) Add the squares of the "V" difference and the "H" difference obtained in (c) above.
- (e) Divide the sum of the squares obtained in (d) above by 10.
- (f) Obtain the square root of the result obtained in (e) above. This is the rate distance in miles. (Fractional miles being considered as full miles.)

• EXAMPLE

The rate distance as calculated and determined between Pierre, South Dakota and Huron, South Dakota.

				$\mathbf{V}$	н
Pierre Huron Difference				6316 <u>6201</u> 115	5497 <u>5183</u> 314
Squared Divided by Square Root	13,225	+	98,596 10 105.745	$ \begin{array}{r} = & 111,821 \\ = & 11,182 \\ = & 106 \end{array} $	.1 airline miles

- c. Service Features
- (1) When the central office features are established at the time transport elements are established, the nonrecurring charges for the features are included in the nonrecurring charges for the transport elements as shown in (4) following. This is also true when adding ANI or ALI or changing feature combinations with ANI or ALI. The only time there is a separate nonrecurring charge applicable for the central office features is when SSR is added separate from the transport elements.

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# 9. CENTRAL OFFICE SERVICES

# 9.2 EMERGENCY REPORTING SERVICE

- 9.2.1 UNIVERSAL EMERGENCY NUMBER SERVICE 911
  - B.6.c. (Cont'd)

		USOC	Nonrecurring Charge	Monthly Rate
(2)	ANI (Direct Trunked), per 100 exchange access lines served[1]	982	\$33.10	\$ 2.69
(3)	Combined ANI and SR, per 100 exchange access lines served[1]	983	75.35	11.78
	• Per order when adding Selective Routing	N/A	3.73	_
(4)	Combined ANI and ALI, per 100 exchange access lines served[1]	986	74.29	10.31
(5)	Combined ANI, ALI and SR, per 100 exchange access lines served[1]	958	91.96	11.87
	• Per order when adding SR	N/A	3.73	_

[1] Rounded up to the nearest 100 exchange end user access lines (as established by the records in the ALI/DMS). At the time when service is first established, through and including December 31 of that same year, the number of access lines used to determine the total price to be charged for this service will be the maximum number of end user access lines in service in the area covered by the PSAP during the twelve month period immediately preceding the month in which E911 Service is first established. The number of access lines will be trued up annually by counting the number of end user access lines in service in the area covered by the PSAP during the previous calendar year. The number of billing units will be calculated based on this annual count for that current billing year.

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# 9. CENTRAL OFFICE SERVICES

# 9.2 EMERGENCY REPORTING SERVICE

- 9.2.1 UNIVERSAL EMERGENCY NUMBER SERVICE 911
  - B.6.c. (Cont'd)

		USOC	Nonrecurring Charge	Monthly Rate
(6)	ALI/SR, (non-Qwest Corporation Exchanges), per 100 exchange access lines served[1]	EH2	\$79.57	\$8.12
	served[1]	10112	$\psi (f) (f)$	ψ0.12
	• Per order when adding SR	N/A	3.73	
(7)	ALI Only, (non-Qwest Corporation Exchanges), per 100 exchange access lines served[1]	EJ8	61.90	6.55
(8)	SR Only, (non-Qwest Corporation Exchanges), per 100 exchange access lines served[1]	9RW	63.00	8.02
	• Per order when adding SR	N/A	3.73	
d. F	Provisioning of Circuits			
•	E911 EM circuits	TGZ	_	_

[1] Rounded up to the nearest 100 exchange end user access lines (as established by the records in the ALI/DMS). At the time when service is first established, through and including December 31 of that same year, the number of access lines used to determine the total price to be charged for this service will be the maximum number of end user access lines in service in the area covered by the PSAP during the twelve month period immediately preceding the month in which E911 Service is first established. The number of access lines will be trued up annually by counting the number of end user access lines in service in the area covered by the PSAP during the previous calendar year. The number of billing units will be calculated based on this annual count for that current billing year.

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# 9.2 EMERGENCY REPORTING SERVICE

# 9.2.1 UNIVERSAL EMERGENCY NUMBER SERVICE - 911

B.6. (Cont'd)

e. Customer Records

- (1) The nonrecurring charge for Customer Records, as listed below, will apply at the time of the initial establishment or reestablishment of Customer Records.
- (2) The installation charge identified below will apply at the time of the initial downloading of data and is based on the number of individual access lines for which information is provided.

	USOC	INSTALLATION CHARGE	Nonrecurring Charge	Monthly Rate
Customer Records	5			
- Per 100 access lines[1]	9RJ1X	\$12.27	_	\$6.84
- Per Order	N/A	_	\$4.62	_

- [1] Rounded up to the nearest 100 exchange end user access lines (excluding all types of WATS terminations).
- (M) Material moved to Page 40.2.

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# 9.2 EMERGENCY REPORTING SERVICE

- 9.2.1 UNIVERSAL EMERGENCY NUMBER SERVICE 911
  - B.6. (Cont'd)

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f. Wireless Connectivity

(1)	Phase I Selective Routing/ Automatic Location Identification Trunk Port for each,	USOC	Nonrecurring Charge	Monthly Rate
	Incoming trunk	E8W1X	\$ 21.43	\$ 9.67
	Outgoing trunk	E8WOX	34.51	9.67
(2)	Phase I Selective Routing/Automatic Location Identification Features			
	• Selective Routing/ Automatic Location Identification Features, per trunk port	E8WFX	4,993.00	626.00
	<ul> <li>Selective Routing/ Automatic Location Identification Features, per 100 Wireless End User Subscribers[1]</li> </ul>	E8WEX	49.93	6.26

[1] Rounded to the nearest 100 End User subscribers.

# 9. CENTRAL OFFICE SERVICES

### 9.2 EMERGENCY REPORTING SERVICE

9.2.1 UNIVERSAL EMERGENCY NUMBER SERVICE - 911

B.6.f. (Cont'd)

	USOC	Nonrecurring Charge	Monthly Rate	(N)
(3) Phase II Retrievable Location Feature Functionality[1]				
<ul> <li>Upgrade to ALI database, Per PSAP</li> </ul>	WR9	\$542.29	\$115.38	
(4) CELLTRACE[2]				
• CELLTRACE Interface, per trunk port	9AN	[3]	[3]	(N)
g. PSAP Equipment				(T)(M)

The Company no longer provides E911 Customer Premises Equipment (CPE) on a regulated basis.

h. Moves or Changes

Charges for Provider requests that necessitate additions, removals, moves or changes of access facilities on Company premises will be based upon actual costs incurred by the Company. (T)

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- [1] RLOC Feature Functionality is in addition to the Selective Routing/Automatic Location Identification Features selected in B.6.f.(2).
- [2] Customers subscribing to *CELLTRACE* must also subscribe to elements identified under Selective Routing/Automatic Location Identification.

[3] Rates and Charges based on an individual customer case by case basis.

(M) Material moved from Page 40.

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