

Effective: November 1, 2009

CENTREX ELECTRONIC TANDEM SWITCHING FEATURES

A. GENERAL

Centrex Electronic Tandem Switching Features are provided only in association with Centrex Service furnished from compatible electronic type switching equipment located on the premises of the Telephone Company, and may be provided only to Centrex systems which are served by the same such compatible electronic type switching equipment.

B. REGULATIONS

1. Explanation of Terms

Automatic Route Selection - Deluxe

- a. Automatic route selection - deluxe accepts only a ten-digit telecommunications network call attempt after a Centrex Service automatic route selection - deluxe facilities code is dialed, automatically scans the digits and selects the first choice completing route when available, or subsequent route if the first choice route is not available. Routes may include foreign exchange trunk facilities, Wide Area Telephone Service (WATS) access line facilities, Local Exchange Service access line facilities to the long distance telecommunications network and Common Control Switching Arrangement (CCSA) access lines or other facility arrangements where compatible.

The final completion route may be to the long distance telecommunications network or, at the option of the customer, the call attempt is routed to overflow tone if a facilities restriction level is insufficient to complete the call. When automatic route selection - deluxe is provided in conjunction with uniform numbering/automatic alternate routing, incoming tie trunks from other Centrex or Private Branch Exchange (PBX) systems connected directly to the automatic route selection - deluxe equipped Centrex system may be arranged to have automatic access to the automatic route selection - deluxe and uniform numbering/automatic alternate routing features. When such arrangements are provided, the tie trunks to the Centrex automatic route selection - deluxe become dedicated tie trunks and separate tie trunks are required from the distant Centrex or PBX systems if access is to be provided to other Centrex functions at the automatic route selection - deluxe equipped Centrex system. In addition, when automatic route selection - deluxe is provided in conjunction with uniform/numbering automatic alternate routing, routes may include tie trunks to a distant Centrex system or PBX equipped with an automatic route selection - deluxe like capability for subsequent access to the long distance telecommunications network. The automatic route selection - deluxe feature provides all number translation and supervision necessary to route the call, and a more expensive route tone is supplied, at the option of the customer, as a function of the route selected for a particular call.

CENTREX ELECTRONIC TANDEM SWITCHING FEATURES

B. REGULATIONS (Cont'd)

1. Explanation of Terms (Cont'd)

b. Time-of-day Routing

Time-of-day routing is an automatic route selection - deluxe option which permits preprogrammed selection of up to three sets of alternate routing pattern groups for off-network calls on a time-of-day and day-of-week basis. Manual override of time-of-day routing is available with the facility administration and control feature.

Centrex Electronic Tandem Switching Features

Centrex Electronic Tandem Switching Features are optional service features which are, except as specified for customer administration and control following, comprised of both automatic route selection - deluxe and facilities restriction levels and, at the option of the customer, the following service features and arrangements are available.

- Account Codes
- Authorization Codes
- Automatic Overflow to Direct Distance Dialing
- Centralized Station Message Detail Recording*
- Deluxe Queuing
- Facility Administration and Control
- Facility Assurance Reports
- Station Message Detail Recording to Premises*
- Time-of-day Routing
- Traffic Data To Customer-Pollable
- Uniform Numbering/Automatic Alternate Routing

Customer Administration and Control

Customer administration and control is comprised of either or both of the following Centrex electronic tandem switching features.

- a. Facilities administration and control permits customer control of parameters which determine user calling privileges, i.e., authorization codes and associated facilities restriction levels. In addition, facilities restriction levels associated with Centrex lines, tie trunks and authorization codes may be collectively upgraded or downgraded by invoking a pre-determined set of facilities restrictions levels identified as controlled alternate facilities restrictions levels. Manual override control of time-of-day pattern groups and activation or deactivation of queuing on a facility group basis is also provided.

* Effective December 31, 2021, Station Message Detail Recording (SMDR), Centralized Station Message Detail Recording, and Station Message Detail Recording to Premises are hereby canceled and withdrawn and no longer available.

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CENTREX ELECTRONIC TANDEM SWITCHING FEATURES

B

REGULATIONS (Cont'd)

1. Explanation of Terms (Cont'd)

Customer Administration and Control (Cont'd)

- b. Traffic data to customer-pollable/facility assurance reports permits the customer to poll the switching equipment on a daily or hourly basis to obtain certain traffic measurements on facility groups and queues, and provides the customer the ability to obtain automatic circuit assurance data, such as the identity of facilities not accessed and facilities constantly off-hook in the previous two hours.

Control equipment must be provided on the customer's premises to record the traffic data and obtain automatic circuit assurance data.

Deluxe Queuing

Deluxe queuing permits a call from a line user to be placed in queue on the first choice route in the automatic route selection - deluxe or uniform numbering/automatic alternate routing pattern if all routes allowed by the user's facilities restriction level in that routing pattern are already in use. Two queuing arrangements are available.

a. Off-hook Queue

An off-hook queue, in which case the calling line remains off-hook and is held in queue until a facility in the first choice route becomes available.

b. Ring-back Queue

A ring-back queue, in which case the handset of the calling station is placed on the switch-hook and the calling line is called back when a facility in the first choice route becomes available.

Calls held in queue beyond a predetermined time limit will be removed from the queue and be routed, at the option of the customer, via subsequent route choices or to an overflow tone.

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CENTREX ELECTRONIC TANDEM SWITCHING FEATURES

B. REGULATIONS (Cont'd)

1. Explanation of Terms (Cont'd)

Facilities Restriction Level

- a. A facilities restriction level is required in connection with automatic route selection - deluxe. Each line and incoming tie trunk is provided a facilities restriction level to determine both the types of calls and types of facilities within the privileges of the associated user. When the facilities restriction level is transmitted over a tie trunk to a distant PBX or Centrex system equipped with automatic route selection - deluxe like capability, it is identified as a traveling class mark.
- b. Authorization codes are a facilities restriction level option which provides for a line user to dial a code which overrides the facilities restriction level associated with that line or incoming tie trunk.

The Centrex system requires dialing of the authorization code when the default facilities restriction level, i.e., the facilities restriction level associated with the line or incoming tie trunk, has insufficient privileges to complete the call. The authorization code is also verified and recorded in the station message detail recording to premises* record when the station message detail recording to premises* feature is provided.

Station Message Detail Recording to Premises*

- a. Station message detail recording to premises* provides a record, equipment located on the customer's premises, of calls placed using the automatic route selection - deluxe and uniform number/automatic alternate routing features of the electronic tandem switching equipped Centrex system. Both originating and terminating message detail can be recorded for electronic tandem switching calls.
- b. Account codes permit a line user to dial a series of digits which will appear in the station message detail recording to premises* record for that particular call.

The account codes can be used by the customer for account or project identification. Adding an account code to a call, where arrangements have been made to provide this feature, is at the discretion of the line user. Each customer's account code must contain the same number of digits, not to exceed eight, and must not conflict with electronic tandem switching on-network code assignments.

* Effective December 31, 2021, Station Message Detail Recording (SMDR), Centralized Station Message Detail Recording, and Station Message Detail Recording to Premises are hereby canceled and withdrawn and no longer available.

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CENTREX ELECTRONIC TANDEM SWITCHING FEATURES

B. REGULATIONS (Cont'd)

1. Explanation of Terms (Cont'd)

Uniform Numbering/Automatic Alternate Routing

- a. Uniform numbering permits users to place calls via tie trunks using a uniform dialing plan. The user dials an access code, and an account code, where this option is provided, followed provided, followed by a seven-digit number which uniquely identifies a special on-network line.

The number consists of a three-digit location code and a four-digit line number. When the same access code is followed by a ten-digit telecommunications network number, the call is routed via the automatic route selection - deluxe feature. The uniform numbering feature provides the number translation and supervision necessary to route the call.

- b. Automatic alternate routing provides automatic routing of on-network calls to alternate tie trunk routes when primary tie trunk routes are busy.
- c. Automatic overflow to Direct Distance Dialing is an option of uniform numbering/automatic alternate routing which provides completion of on-network call attempts over the long distance telecommunications network when all primary and alternate tie trunk routes are busy.

2. Automatic Route Selection - Deluxe

- a. Automatic route selection - deluxe is furnished only in association with facility restriction levels.
- b. Preferred and alternate routes in automatic route selection - deluxe routing patterns will be specified by the customer.
- c. A maximum of three automatic route selection - deluxe pattern groups with a maximum of 64 patterns in each pattern group will be provided. The three pattern groups referred to will consist of one primary and two additional pattern groups for time-of-day routing.
- d. A maximum of ten routes are provided in a routing pattern.
- e. Each WATS band is treated as a separate route.
- f. A maximum of 64 number plan areas, including the home number plan area, may be designated by the customer for routing of calls by number plan area and central office codes.

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CENTREX ELECTRONIC TANDEM SWITCHING FEATURES

B. REGULATIONS (Cont'd)

2. Automatic Route Selection - Deluxe (Cont'd)

- g. The time-of-day routing feature permits up to 16 programmed changes in pattern groups per week. When additional automatic route selection - deluxe patterns are required due to time-of-day changes, rates and charges as specified in C. following apply to each additional pattern.
- h. The Centrex Service optional feature of Long Distance Message Restriction Service does not function on calls routed via automatic route selection - deluxe. Automatic Route Selection - Deluxe cannot be used to route local calls.

3. Facility Restriction Levels

- a. Facility restriction levels are only furnished in association with automatic route selection - deluxe.
- b. A maximum of eight facilities restriction levels are available for each Centrex system.
- c. A maximum of 20,000 authorization codes are available for each Centrex system.
- d. Authorization codes must consist of a uniform number of digits, with a minimum of three and a maximum of six digits.
- e. Customer implementation of change of authorization codes or associated facilities restriction levels requires the facilities administration and control feature.

4. Deluxe Queuing

- a. The text and announcement provided with the recorded announcement option of deluxe queuing will be provided by the Telephone Company.
- b. The music-on-queue option is available only with off-hook queue and the music source must be provided by the customer.
- c. The customer must specify the length of time a call is held in queue before overflowing to subsequent routes or to overflow tone.
- d. Off-hook queue must be equipped for either recorded announcement or music-on-queue options.
- e. Incoming tie trunks can only be arranged for off-hook queue.
- f. Centrex lines at a Centrex electronic tandem switching location may have either ring-back queue or off-hook queue. All such lines must be equipped with the same type queuing.

CENTREX ELECTRONIC TANDEM SWITCHING FEATURES

B. REGULATIONS (Cont'd)

5. Station Message Detail Recording to Premises*

- a. The data provided by station message detail recording to premises* is not the same as that provided on the monthly Telephone Company-rendered bill, and comparisons will not be accepted as the sole basis for the resolution of billing discrepancies.
- b. Station message detail records will be provided on terminal equipment located on the customer's premises at the rates and charges specified in C. following.
- c. Processing of message detail information by the Telephone Company accounting center is not provided with the station message detail recording to premises* feature.
- d. The customer must designate all lines in a compatible electronic type switching system Centrex customer group and/or selected facility groups on which station message detail recording to premises* originating and terminating records are to be provided.
- e. Additions and deletions of station message detail recording to premises* recording are provided by Telephone Company service orders.
- f. Where station message detail recording to premises* is provided, a detailed record may be made for each completed call. At the option of the customer, arrangements can be made to provide records of calls attempted as well as calls completed. Under certain exceptional conditions, with station message detail recording to premises*, calls may be processed without recording the call detail.
- g. Account codes are available with the initial installation of station message detail recording to premises* at no additional charge.

6. Customer Administration and Control

The customer administration and control feature of traffic data to customer-pollable/facility assurance reports may be provided to compatible electronic type switching system served Centrex systems which are not equipped with the electronic tandem switching features of automatic route selection - deluxe and facilities restriction levels.

7. Uniform Numbering/Automatic Alternate Routing

- a. When uniform numbering/automatic alternate routing is provided, the customer must specify the first choice route and each subsequent route to each Centrex or PBX system involved.

* Effective December 31, 2021, Station Message Detail Recording (SMDR), Centralized Station Message Detail Recording, and Station Message Detail Recording to Premises are hereby canceled and withdrawn and no longer available.

CENTREX ELECTRONIC TANDEM SWITCHING FEATURES

B. REGULATIONS (Cont'd)

7. Uniform Numbering/Automatic Alternate Routing (Cont'd)

- b. The maximum number of routes in a routing pattern is four and the maximum number of routing patterns is 180.
- c. Calls routed via the long distance telecommunications network are subject to the appropriate long distance messages charges.

8. Centralized Station Message Detail Recording**

Centralized Station Message Detail Recording** Service is furnished to multilocation customers with Centrex Service systems served by compatible electronic type switching system central offices. It provides message detail collection by a centralized message detail recorder which polls local storage units located at the customer's various locations.

C. RATES

1. Automatic Route Selection - Deluxe

	Service Establishment Charge	Installation Charge	Per Month	USOC
a. Common equipment, per access code for Centrex customer group equipped in a compatible electronic type switching system	\$3714.22	\$1533.06	\$373.92	ASH
b. Route selection patterns				
(1) Per facility connected in a pattern or patterns*			4.23	ASJ
(2) By numbering plan area code only, per pattern		36.77	5.24	ASK
(3) By numbering plan area and central office codes, per pattern		158.28	15.51	ASO
c. Arrangements for additional pattern groups for time-of-day routing, each		317.83	28.48	ASZ

* In addition, rates and charges apply as specified in the Telephone Company's applicable tariff or product guide for the associated facility and facility connection.

* Effective December 31, 2021, Station Message Detail Recording (SMDR) and Centralized Station Message Detail Recording are hereby canceled and withdrawn and no longer available.

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CENTREX ELECTRONIC TANDEM SWITCHING FEATURES

C. RATES (Cont'd)

1. Automatic Route Selection - Deluxe (Cont'd)

d. Additions and Changes

	<u>Installation Charge</u>	<u>Per Month</u>	<u>USOC</u>
(1) Additions, deletions or changes or routes, associated facilities restriction levels, or more expensive route tone application in existing patterns, per pattern*	\$ 36.77	None	RCHAP
(2) Addition of patterns, per pattern	Apply same rates and charges as specified in b.(2) and b.(3) preceding.		
(3) Addition of a facility to, or deletion of a facility from, an existing route	-	None	-
(4) Additions or changes in numbering plan area or central office code routing, per code, per pattern group affected*	29.91	None	RCHAC
(5) Additions, deletions and/or changes in time-of-day routing intervals	47.98	None	RCHAT

	<u>Service Establishment Charge</u>		
2. Facilities Restriction Level			
a. Centrex line or incoming or two-way tie trunk connection, each	-	5.73	\$.20
b. Authorization Codes			
(1) Common equipment, each	\$7453.37	883.68	463.66
(2) Authorization codes, per 100 codes, or fraction thereof	-	28.55	6.54
(3) Per facility connected in an automatic route selection - deluxe or uniform numbering/automatic alternate routing pattern or patterns, each	-	-	3.24

* This charge is applicable whether the code addition or change is customer or Telephone Company initiated.

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CENTREX ELECTRONIC TANDEM SWITCHING FEATURES

C. RATES (Cont'd)

2. Facilities Restriction Level (Cont'd)

c. Changes		Service Establishment Charge	Installation Charge	Per Month	USOC
(1)	Changes in facilities restriction level per Centrex line or tie trunk connection, each	-	\$ 1.99	None	-
(2)	Change in a single authorization code and/or associated facilities restriction level where Telephone Company service order activity is required, each	-	1.99	None	RCHFA

3. Deluxe Queuing

a.	Common Equipment, per Centrex customer group equipped in a compatible electronic type switching system	\$1956.81	353.97	\$4162.03	QDC
b.	Queue, per facility group equipped	-	102.20	2.49	QDF
c. Queue slots					
(1)	Off-hood queue slot with:				
(a)	Recorded announcement, each*	-	-	23.62	QDA
(b)	Music, each†	-	-	22.68	QDM
(2)	Ring-back queue slot, each	-	-	15.83	QDR
d.	Recorded announcement common equipment, each	-	51.11	74.78	QDE

* In addition, recorded announcement common equipment is required as specified in d. following.

† In addition, music-on-queue is required as specified in e. following.

CENTREX ELECTRONIC TANDEM SWITCHING FEATURES

C. RATES (Cont'd)

3. Deluxe Queuing (Cont'd)

		Service Establishment Charge	Installation Charge	Per Month	USOC
e.	Music-on-queue				
(1)	Common equipment, each	-	\$294.74	\$ 153.27	QDD
(2)	Connecting channel between serving central office common equipment and the music source on the custo- mer premises.....	Apply rates and charges for Series 2000, type 2120, Channel as specified in the Verizon Virginia LLC Product Guide for Detariffed Services, Section 4.			
f.	Changes				
(1)	Change from ring-back queue to off-hook queue or vice versa, per queue.....	-	43.00	None	RCHQ1
(2)	Change in the quantity of queue slots, per queue	-	43.00	None	RCHQ2
(3)	Change in queue threshold time limit, per queue	-	43.00	None	RCHQ3
(4)	Change in recorded announcement, each	-	43.00	None	RCHQ4
(5)	Change in post-queue routing from subsequent routes to tone or vice versa, per queue.....	-	43.00	None	RCHQ5

4. Station Message Detail
Recording to Premises**

a. Central Office Equipment

(1)	Common equipment, each*	\$3963.51	396.35	1059.42	MDR
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* In addition, a data set is required as specified in (4) following.

** Effective December 31, 2021, Station Message Detail Recording (SMDR) and Station Message Detail Recording to Premises are hereby canceled and withdrawn and no longer available.

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CENTREX ELECTRONIC TANDEM SWITCHING FEATURES

C. RATES (Cont'd)

4. Station Message Detail
Recording to Premises (Cont'd)

		Installation Charge	Per Month	USOC
a.	Central Office Equipment (Cont'd)			
(2)	Per facility connected in automatic route selection-deluxe or uniform numbering/automatic alternate routing patterns when the system is equipped for originating records, each*	\$ 7.23	\$8.10	MDX
(3)	Per tie trunk facility equipped for terminating records, each	7.23	.75	MDT
(4)	Data Sending and Transmitting equipment.....	Rates and charges apply as specified for Central Office Data Sets in Section 4 of the Verizon Virginia LLC Product Guide for Detariffed Services.		
b.	Additions and Changes			
(1)	Account codes-change in number of account code digits, per system†	26.17	None	RCHMA
(2)	Station message detail recording to Premises** records-change from recording completed calls only to all calls attempted, or vice versa, per system.....	26.17	None	RCHMC
(3)	Change in status of all lines in compatible electronic type switching system Centrex customer group and/or individual facility from "records not required" to "records required", vice versa.....	4.98	None	RCHMF

* Applies to all originating facilities connecting in automatic route selection- deluxe or uniform numbering/automatic alternate routing patterns when any such facility is arranged to provide an originating record to the customer.

** Effective December 31, 2021, Station Message Detail Recording (SMDR) and Station Message Detail Recording to Premises are hereby canceled and withdrawn and no longer available.

† Also applies to the initial provision of account codes in a system when such provision is subsequent to the installation of station message detail recording to premises**.

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CENTREX ELECTRONIC TANDEM SWITCHING FEATURES

C. RATES (Cont'd)

5.	Uniform Numbering/Automatic Alternate Routing	Service	Installation	Per	USOC
		Establishment Charge	Charge	Month	
a.	Common equipment, each.....	\$6855.11	\$1838.41	\$884.93	UNR
b.	Route selection patterns				
(1)	Per uniform numbering/automatic alternate routing pattern	-	36.77	5.24	UNP
(2)	Per tie trunk connected in uniform numbering/automatic alternate routing and/or automatic route selection - deluxe pattern or patterns*	-	-	4.17	UNF
(3)	Per facility for automatic overflow to direct distance dialing†	-	9.54	43.87	UNO
c.	Additions and Changes				
(1)	Additions, deletions or changes of routes or associated facilities restriction levels in existing patterns, per pattern	-	36.77	None	RCHUP
(2)	Additions of patterns, per pattern	Apply same rate and charge as specified in b.(1) preceding.			
(3)	Additions or deletions of a facility to an existing route	-	-	None	-
(4)	Additions or changes in on-network location code routing, per code.....	-	47.98	None	RCHUC

* In addition, a Tie Trunk Terminal for Advance Senderized Tie Trunk is required as specified in Section 9 of these Product Guide.

† In addition, a Business PBX Trunk Dial Tone Line is required at rates and charges as specified in the Verizon Virginia LLC Product Guide for Detariffed Services, Section 3A.2.

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CENTREX ELECTRONIC TANDEM SWITCHING FEATURES

C. RATES (Cont'd)

6. Customer Administration and Control		Service Establishment Charge	Installation Charge	Per Month	USOC
Central Office Equipment					
a.	Common Equipment, each*	\$ 860.01	\$1121.75	\$797.68	CAX
b.	Data Sending and Transmitting Equipment†	Rates and charges apply as specified for Central Office Data Sets in Section 4 of the Verizon Virginia LLC Product Guide for Detariffed Services.			
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c.	Facilities Administration and Control Common Equipment, each	3,072.33	204.41	311.59	FA2
d.	Traffic Data to Customer- pollable/Facility Assurance Reports				
(1)	Common equipment, each	12,607.16	221.85	504.79	PTA
(2)	Per queue equipped	-	58.59	3.43	PTU
(3)	Per facility group equipped	-	58.59	8.35	PTY
7. Centralized Station Message Detail Recording					
Central Office Equipment for Centrex systems served by a compatible electronic type switching system		Rates and charges apply as specified for Station Message Detail Recording to Premises*, Central Office Equipment, preceding.			

* One central office common equipment is required in connection with the furnishing of either or both items specified in c. and d. following. In addition, a data set is required as specified in b. following.

** Effective December 31, 2021, Station Message Detail Recording (SMDR) and Station Message Detail Recording to Premises are hereby canceled and withdrawn and no longer available.

† In addition, a Business Individual Dial Tone Line is required at rates and charges as specified in the Verizon Virginia LLC Product Guide for Detariffed Services. (T)
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