

FEATURE DOCUMENT
SEMIRESTRICTED CENTREX STATION CLASS FEATURE
2-WIRE NO. 1 AND NO. 1A ELECTRONIC SWITCHING SYSTEMS

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NOTICE
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INTRODUCTION

1. GENERAL INFORMATION

SCOPE

1.01 This feature document describes the semirestricted centrex station class (SEMI) feature for the No. 1 and No. 1A ESS.

REASON FOR REISSUE

1.02 When this document is reissued, the reason for reissue will be stated in this paragraph.

FEATURE AVAILABILITY

1.03 The SEMI feature is available with 1E3 and later generic programs for No. 1 ESS and with 1AE4 and later generic programs for No. 1A ESS. The SEMI feature is in the generic program base.

2. DEFINITION

2.01 The semirestricted centrex station class (SEMI) feature restricts direct inward dialing (DID) calls access to Business Customer—CO stations. Access to these stations is permitted from intragroup stations, the attendant tie lines, and foreign exchange lines.

DESCRIPTION

3. USER OPERATION

CUSTOMER

3.01 The SEMI feature provides business customer station users with a terminating major class that restricts DID access but permits other calls to be completed normally to these stations.

3.02 DID calls can be call transferred and call forwarded (call forwarding variable, call forwarding busy line, and call forwarding don't answer) to semirestricted stations.

3.03 A semirestricted line can be used as a night directory number or as a satellite directory number.

TELEPHONE COMPANY

3.04 Not applicable.

4. SYSTEM OPERATION

HARDWARE

4.01 Not applicable.

OFFICE DATA STRUCTURES

Translations

4.02 The SEMI feature is provided by setting item TMAJ in directory number class word 1 (DNCL 1) to decimal 30.

4.03 If the line class code representing the desired originating major class code and terminating major class code 30 does not exist, it may be necessary to build additional universal service order code translations.

FEATURE OPERATION

4.04 When a call attempts termination to a centrex station with a SEMI class of service, the directory number (DN) translations identifies it as such via a terminating major class code of 30. This major class indicates that DID calls to this station are to be denied access but intragroup, centrex attendant, tie line, foreign exchange line calls, and call transferred or call forwarded DID calls are permitted access.

4.05 The system determines the kind of call attempting termination. If the call is of the permissible type, it is allowed to complete normally. If it is a DID call, the SEMI feature intercepts the call by routing it to an attendant or a recorded announcement, depending upon the option designated in the terminating station's centrex group translations, in the same way as are calls to nondirect inward dialed stations (terminating major class 16).

CHARACTERISTICS

5. FEATURE ASSIGNMENT

5.01 The SEMI feature is provided on a per-centrex station basis.

6. LIMITATIONS

6.01 Not applicable.

7. INTERACTIONS

7.01 Not applicable.

8. RESTRICTION CAPABILITY

8.01 Not applicable.

INCORPORATION INTO SYSTEM

9. INSTALLATION/ADDITION/DELETION

9.01 Figure 1 illustrates the procedure for assigning the SEMI terminating class to a line.

10. HARDWARE REQUIREMENTS

10.01 Not applicable.

11. SOFTWARE REQUIREMENTS

COST FACTORS

A. No. 1 ESS

Fixed

11.01 The following memory is required whether or not the feature is used:

- **Generic program (program store):** The increase in the number of No. 1 ESS generic program store words for the SEMI feature is approximately ten.

Conditional

11.02 The following memory is required when the feature is activated:

- **Translations (program store):** For each originating major class code and terminating major class code 30 combination in the office, two words are required in the universal service order code translator.

Variable

11.03 Not applicable.

B. No. 1A ESS

Fixed

11.04 The following memory is required whether or not the feature is used:

- **Generic program (program store):** The increase in the number of No. 1A ESS generic program store words for the SEMI feature is approximately 12.

Conditional

11.05 The following memory is required when the feature is activated:

- **Translations (unduplicated call store, file store):** For each originating major class code and terminating major class code 30 combination in the office, two words are required in the universal service order code translator.

Variable

11.06 Not applicable.

DETERMINATION OF QUANTITIES

11.07 Refer to cost factors above.

PROCESSOR TIME

A. No. 1 ESS

11.08 The real-time cost for the completion of an intragroup call for a semirestricted station is approximately five cycles more than an intragroup call to an unrestricted station. For the completion of call-forwarded calls to a semirestricted station, the real-time cost is approximately ten cycles more than a call-forwarded call to an unrestricted station.

11.09 The real-time cost for intercepting a DID call for a semirestricted station is approximately ten cycles more than for a fully restricted individual centrex station.

11.10 The cycle time for No. 1 ESS is 5.5 μ sec.

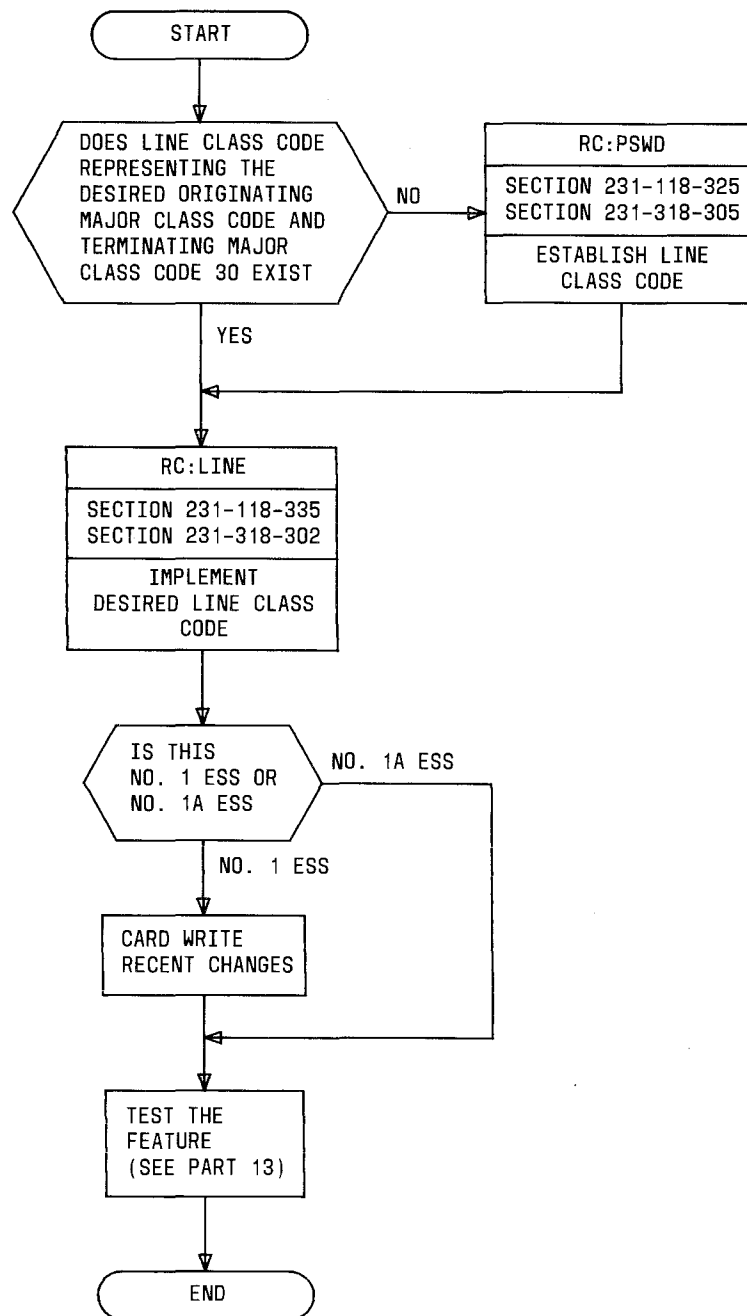


Fig. 1—Procedure for Assigning the SEMI Terminating Class to a Line

B. No. 1A ESS

11.11 The real-time cost for the completion of an intragroup call for a semirestricted station is approximately ten cycles more than an intragroup call to an unrestricted station. For the completion of call-forwarded calls to a semirestricted station,

the real-time cost is approximately 20 cycles more than a call-forwarded call to an unrestricted station.

11.12 The real-time cost for intercepting a DID call for a semirestricted station is approximately 20 cycles more than for a fully restricted individual station.

11.13 The cycle time for No. 1A ESS is 0.7 μ sec.

FEATURE DEFINING SET CARDS

11.14 Not applicable.

12. DATA ASSIGNMENTS AND RECORDS

TRANSLATION FORMS

12.01 The following ESS translation forms [see reference C(1) in Part 18], are affected by the SEMI feature:

- (a) ESS 1101, Directory Number Record, is used to record the line class code assigned on form 1306 for directory numbers.
- (b) ESS 1306, Line Class Code Record, furnishes information required by the system for processing calls to the subscribers with major terminating class code 30.
- (c) ESS 1502B, Abbreviated Class Code Records, is used to define major class codes permissible in a central office.

RECENT CHANGES

12.02 The RC message format affected by the SEMI feature is as follows:

MESSAGE	FUNCTION
RC:LINE:	Assigns or deletes terminating major class 30 for a Centrex-CO station via keyword LCC. Refer to A(3) or A(4) in Part 18 for more information.

13. TESTING

13.01 TTY input and output messages, found in Part 18B, can be used to verify the SEMI feature. These messages are:

- VFY-DN input message verifies directory numbers in the central office. System response should be a TR01 output message with the directory number information and major class 30.

13.02 Perform test calls to the semirestricted station to verify proper operation of the feature.

14. OTHER PLANNING TOPICS

14.01 Not applicable.

ADMINISTRATION

15. MEASUREMENTS

15.01 Not applicable.

16. CHARGING

AUTOMATIC MESSAGE ACCOUNTING

16.01 Not applicable.

UNIFORM SERVICE ORDER CODES

16.02 Not applicable.

SUPPLEMENTARY INFORMATION

17. GLOSSARY

17.01 Not applicable.

18. REFERENCES

A. Bell System Practices

- (1) Section 231-118-325—RC Procedures for PSWD, GENT, PSBLK, and SUBTRAN (CTX-6 through 1E5 Generic Programs)—2-Wire No. 1 Electronic Switching System
- (2) Section 231-318-305—RC Procedures for PSWD, PSBLK, SUBTRAN, and GENT (Through 1AE5 Generic Program)—2-Wire No. 1A Electronic Switching System
- (3) Section 231-118-335—Line RC Procedures for LINE, TWOPTY, MPTY, SCLIST, MLHG, ACT, and CFV (CTX-7 through 1E5 Generic Program)—2-Wire No. 1 Electronic Switching System
- (4) Section 231-318-302—Line RC Procedures for LINE, TWOPTY, MPTY, SCLIST, MLHG, and CFV (Through 1AE5 Generic Program)—2-Wire No. 1A Electronic Switching System

(5) Section 231-090-073 Feature Document, Call Forwarding Features—2-Wire No. 1 and No. 1A Electronic Switching Systems.

(4) Output Message Manual OM-6A001 (No. 1A Electronic Switching System).

B. Teletypewriter Input and Output Manuals

(1) Input Message Manual IM-1A001 (No. 1 Electronic Switching System)

(2) Output Message Manual OM-1A001 (No. 1 Electronic Switching System)

(3) Input Message Manual IM-6A001 (No. 1A Electronic Switching System)

C. Other Documentation

(1) Translation Guide—TG-1A

(2) Translation Output Configuration PA-591003 No. 1 Electronic Switching System

(3) Translation Output Configuration PA-6A002 No. 1A Electronic Switching System.