



*Performance from Experience*

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## **COMMON LANGUAGE® Circuit Switch Originating Equipment Codes**

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## **COMMON LANGUAGE®**

### **Circuit Switch Originating Equipment Codes**

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## 1. General

- 1.0.1 This practice describes the COMMON LANGUAGE standard codes for identifying central office line equipment connected to the subscriber loop.
- 1.0.2 This practice is re-issued to reflect additions of new switching systems.
- 1.0.3 Questions concerning these codes should be directed to the Executive Director, COMMON LANGUAGE Products Business Unit, Telcordia Technologies, Inc., (Telcordia) through the appropriate Operating Telephone Company COMMON LANGUAGE Contact.
- 1.0.4 The Telcordia COMMON LANGUAGE Products Business Unit provides the technical expertise to maintain the General Code Sets. Input to this procedure is provided by the General Codes Technical Advisory Group, in accordance with the procedures outlined in BR 751-000-102, "COMMON LANGUAGE® Code Set Request Procedures."

## 2. Originating Equipment Codes

- 2.0.1 **Originating Equipment Codes** identify the physical central office switch equipment connected to the customer's transmission path. The originating equipment provides access to control equipment used to complete a call.
- 2.0.2 In order to provide unique identification of central office line equipment, it may be necessary to identify the type of switch.

## 3. Originating Equipment Code Structure

- 3.0.1 The **Originating Equipment Code** consists of a 3- to 15-character alphanumeric code structured for each type of central office line equipment.
- 3.0.2 **Step-by-Step (Line Group):** The Originating Equipment Code for Step-by-Step (Line Group) is a 5- to 8-character numeric code. The first character is the bay identification and is optional. Characters 2 through 4 identify the line finder group. If bay identification is used in character

position 1, leading zeroes are required in positions 2 and/or 3. Character 5 is a hyphen (paragraph 3.0.16.). Character 6 identifies the bank, character 7 the level, and character 8 the terminal.

**Examples:**

CODE	DATA VALUE
1-104	Line Finder Group 1, Bank 1, Level 0, Terminal 4
1002-123	Bay 1, Line Finder Group 002, Bank 1, Level 2, Terminal 3

- 3.0.3 **Step-by-Step (Line Switch Group):** The Originating Equipment Code for Step-by-Step (Line Switch Group) is a 4- to 9-character alphanumeric code. Characters 1 through 4 identify the line switch group. Character 5 identifies the master switch suffix and is optional. Character 6 is a hyphen (see paragraph 3.0.16). Characters 7 through 9 identify the terminal. Leading zeroes are not required.

**Examples:**

CODE	DATA VALUE
B1-1	Line Switch Group B1, Terminal 1
B101A-100	Line Switch Group B101, Master Switch Suffix A, Terminal 100

- 3.0.4 **Panel:** The Originating Equipment Code for Panel is a 3- to 7-character numeric code. Characters 1 through 3 identify the line group. Character 4 is a hyphen (see paragraph 3.0.16). Characters 5 through 7 identify the terminal. Leading zeroes are not required.

**Examples:**

CODE	DATA VALUE
1-8	Line Group 1, Terminal 8
101-110	Line Group 101, Terminal 110

- 3.0.5 **No. 1 Crossbar:** The Originating Equipment Code for No. 1 Crossbar is a 10- to 12-character alphanumeric code. Character 1 identifies the terminating marker group and is optional. Characters 2 and 3 identify the choice, and character 4 identifies the quarter choice. Characters 5 and 10 are hyphens (see paragraph 3.0.16). Characters 6 through 9 identify the

column, character 11 the switch, and character 12 the vertical. Leading zeroes are not required.

**Examples:**

CODE	DATA VALUE
101A-4010-88	Terminating Marker 1, Choice 01, Quarter Choice A, Column 4010, Switch 8, Vertical 8
02B-302-62	Choice 02, Quarter Choice B, Column 302, Switch 6, Vertical 2

3.0.6 **No. 3 Crossbar:** The Originating Equipment Code for No. 3 Crossbar is a 9-character numeric code. Characters 1 and 2 identify the line link. Characters 3, 5, and 7 are hyphens (see paragraph 3.0.16). Character 4 identifies the line block, character 6 the line group, and characters 8 and 9 the line.

**Example:**

CODE	DATA VALUE
01-2-2-56	Line Link 01, Line Block 2, Line Group 2, Line 56

3.0.7 **No. 5 Crossbar:** The Originating Equipment Code for No. 5 Crossbar is a 8- or 9-character numeric code. Character 1 identifies the marker group and is optional. Characters 2 and 3 identify the line link frame. Characters 4 and 7 are hyphens (see paragraph 3.0.16). Characters 5 and 6 identify the vertical group, character 8 the horizontal group, and character 9 the vertical file.

**Examples:**

CODE	DATA VALUE
102-08-93	Marker Group 1, Line Link Frame 02, Vertical Group 08, Horizontal Group 9, Vertical File 3
58-10-72	Line Link Frame 58, Vertical Group 10, Horizontal Group 7, Vertical File 2

3.0.8 **The 1 and 1AESS™ Systems (2-Wire):** The Originating Equipment Code for No. 1 and No. 1A ESS Systems (2-Wire) is a 10- or 11-character numeric code. Character 1 identifies the control group and is optional. Characters 2 and 3 identify the line link network. Characters 4 and 8 are hyphens (see paragraph 3.0.16). Character 5 identifies the line switch frame, character 6 the line switch bay, and character 7 the concentrator.

Character 9 identifies the concentrator switch, and characters 10 and 11 identify the concentrator level.

**Example:**

CODE	DATA VALUE
12-101-202	Line Link Network 12, Line Switch Frame 1, Line Switch Bay 0, Concentrator 1, Concentrator Switch 2, Concentrator Level 02

- 3.0.9 **1ESS System (4-Wire):** The Originating Equipment Code for 1ESS Systems (4-Wire) is a 7-character numeric code. Characters 1 and 2 identify the trunk link network, and character 3 identifies the trunk switch frame. Character 4 is a hyphen (see paragraph 3.0.16). Character 5 identifies the grid, character 6 the switch, and character 7 the level.

**Example:**

CODE	DATA VALUE
121-213	Trunk Link Network 12, Trunk Switch Frame 1, Grid 2, Switch 1, Level 3

- 3.0.10 **2, 2A, 2B, and 2CESS Systems:** The Originating Equipment Codes for 2, 2A, 2B, and 2CESS Systems is a 7-character numeric code. Characters 1 and 2 identify the network number. Character 3 is a hyphen (see paragraph 3.0.16). Character 4 identifies the concentrator group; character 5 the concentrator, character 6 the switch, and character 7 the level.

**Example:**

CODE	DATA VALUE
12-2343	Network Number 12, Concentrator Group 2, Concentrator 3, Switch 4, Level 3

- 3.0.11 **3ESS System:** The Originating Equipment Code for the 3ESS Systems is a 7-character numeric code. Characters 1 and 2 identify the concentrator group. Character 3 is a hyphen (see paragraph 3.0.16). Character 4

identifies the concentrator, character 5 the switch group, character 6 the switch, and character 7 the input level.

**Example:**

CODE	DATA VALUE
07-0134	Concentrator Group 07, Concentrator 0, Switch Group 1, Switch 3, Input Level 4

3.0.12 **Remote Switching System:** The Originating Equipment Code for the Remote Switching System is a 10- or 11-character numeric code. Character 1 identifies the host control group and is optional. Characters 2 and 3 identify the remote switching system and character 4 identifies the module. Characters 5 and 7 are hyphens (see paragraph 3.0.16). Character 6 identifies the terminal type, characters 8 and 9 the line switch group, character 10 the switch and character 11 the level.

**Example:**

CODE	DATA VALUE
0121-0-1277	Host Control Group 0, Remote Switching System 12, Module 1, Terminal Type 0, Line Switch Group 12, Switch 7, Level 7

3.0.13 **5ESS® System:** The Originating Equipment Code for a 5ESS System is a 10- or 12-character numeric code. Characters 1 and 2 identify the time multiplex switch and is optional. Characters 3 through 5 identify the interface module. Characters 6 and 10 are hyphens (see paragraph 3.0.16). Character 7 identifies the line unit, character 8 identifies the concentrator, character 9 identifies the switch group, character 11 identifies the switch, and character 12 identifies the level.

**Examples:**

CODE	DATA VALUE
01096-120-12	Time Multiplex Switch 01, Interface Module 096, Line Unit 1, Concentrator 2, Switch Group 0, Switch 1, Level 2
006-420-71	Interface Module 006, Line Unit 4, Concentrator 2, Switch Group 0, Switch 7, Level 1

3.0.14 **Northern Telecom DMS™ 10:** The Originating Equipment Code or Peripheral Equipment for DMS 10 is a 12-character code. Characters 1 and 2 are always the alpha characters PE which identifies the subsequent

characters as the peripheral equipment or terminal number of a particular station. Characters 3, 6, 8, and 11 are hyphens (see paragraph 3.0.16). Characters 4 and 5 identify the bay number, character 7 identifies the shelf number, characters 9 and 10 identify the PACK slot number, and character 12 identifies the circuit number.

**Examples:**

CODE	DATA VALUE
PE-09-3-10-2	Peripheral Equipment, Bay 09, Shelf 3, PACK Slot 10, Circuit 2
PE-21-5-08-4	Peripheral Equipment, Bay 21, Shelf 5, PACK Slot 08, Circuit 4

- 3.0.15 **Northern Telecom DMS 100 or DMS 100/200:** The Originating Equipment Code for the DMS 100 or DMS 100/200 is a 14-character code. Characters 1 through 3 comprise the Frame Function Code (FFC) "LME." Characters 4, 7, 9 and 12 are hyphens. (See paragraph 3.0.16) Characters 5 and 6 identify the frame number. Character 8 identifies the line module of the frame. Characters 10 and 11 identify the line drawer, while characters 13 and 14 identify the card position number.

**Example:**

LME-31-1-19-31	Line Module Equipment Frame 31, Line Module 1, Line Drawer 19, Card Position 31.
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- 3.0.16 **Siemens EWSD Switching Machines:** The originating equipment codes for Siemens switching machines are either 6, 9 or 12 characters in length.

For analog circuit terminations on a digital line unit (DLU) (remote switch), the code is 12 characters long. Characters 1 through 4 identify the "Digital Line Unit" (analog lines) number. Characters 5, 7 and 10 are hyphens. Character 6 identifies the shelf number, while characters 8 and 9 together identify the circuit module within the shelf. Characters 11 and 12 identify a circuit found on a module.

For analog circuit terminations on an EWSD switch, the code is 9 characters long. Character 1 identifies the "Time Switch Group". Characters 2, 5 and 7 are hyphens. Characters 3 and 4 identify the "Line Trunk Group". Character 6 identifies the "Line Trunk Unit." Characters 8 and 9 identify the circuit found on a module.

For digital circuit terminations, the code is 6 characters long. Character 1 identifies the "Time Switch Group". Characters 2 and 5 are hyphens.

Characters 3 and 4 together identify the "Line Trunk Group" (digital lines) number. Character 6 identifies the "Digital Interface Unit."

3.0.17 **NEC America, NEAX®-61E Switching Machine:** The originating equipment code for the NEC America switching machine is 15 characters in length. Character positions 1 and 2 of the code are filled by the Frame Function Code "LT." Characters 3, 6, 8, and 14 are hyphens. Characters 4 and 5 together represent the bay number. Character 7 represents the module type; "L" for line module, "T" for trunk module or "D" for digital interface module. Characters 9 and 10 together represent the module number. Characters 12 and 13 together represent the lower module position number accepting the circuit pack assignment. Character 15 identifies the circuit number.

3.0.18 **Northern Telecom, DMS-10/Series 400:** The originating equipment code for the Northern Telecom DMS-10/Series 400 is either 12 or 15 characters in length. For Line Concentrating Equipment frames, the code is 15 characters in length. Code positions 1 through 3 are filled by the Frame Function Code, "LCE." Code positions 4, 7, 9, 11 and 13 are hyphens. Code positions 5 and 6 are the bay number. Code position 8 is the shelf number. Code position 10 is the line drawer number. Code position 12 is the line subgroup. Positions 14 and 15 identify circuits within the subgroup.

For Peripheral Equipment frames, the code is 12 characters in length. Code positions 1 and 2 are filled by the Frame Function Code "PE." Code positions 3, 6, 8, and 11 are hyphens. Code positions 4 and 5 are the bay number. Code position 7 is the shelf number. Positions 9 and 10 identify the circuit card. Code position 12 identifies a circuit on a circuit card.

3.0.19 For certain existing computer applications, the use of hyphens as delimiters is disallowed. For these applications, the hyphens may either be replaced by a space or eliminated entirely, leaving no separation between code segments.

