COMMON LANGUAGE
LOCATION IDENTIFICATION (CLLI)
CODE DESCRIPTION

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1. GENERAL

1.01 This Section describes basic coding principles for uniquely identifying geographic locations of places and things of interest to the Bell System and to Operating Telephone Companies (OTC) through the use of Common Language Location Identification (CLLI). These principles provide a language standard used in manual and mechanized environments, and are an integral part of many centrally developed systems and related applications.

1.02 Specifically, this section contains the following:

(a) An overall description of the Common Language Location Identification code

(b) A description of place, state, province or territory, and country codes

(c) A description of building codes

(d) A description of entity codes (formerly identified as building subdivision codes which included traffic, plant, and administrative units)

(e) A description of nonbuilding location codes, such as poles, manholes, radio locations, etc

(f) A description of customer location codes.

1.03 This Section revises and replaces Section 795-100-100, Issue 4, in its entirety, and reflects a code grouping concept which will simplify the CLLI coding process. Specific changes are as follows:

(a) The term "Building Subdivision" is replaced by the more generic term "Entity."

(b) All existing Traffic, Plant, and Administrative Unit codes have been grouped into two basic categories: Switching Entities and Nonswitching Entities. Existing code formats have ***not*** been changed.

(c) Text, figures, and tables have been redeveloped to clarify ambiguous references.

(d) Standardized code format notation.

(e) New codes have been added for each of the following: Indian Ocean, Teleconference Board, and Digital Switching Systems.

(f) Guidelines for encoding locations for minicomputers installed in nonbuilding locations, remote switchers, subscriber line carriers, pair gain systems, and radio towers collocated with buildings.

(g) Enhanced definition of "country" for Common Language purposes.

1.04 This Section has been structured to permit extraction of Part 10, CLLI Exhibits, for use as an encoding aid.

1.05 Common Language Location Identification codes are in widespread use throughout the Bell System and are maintained in an on-line master data base by the Bell Laboratories Common Language Department at Piscataway, New Jersey. Each Operating Company's CLLI coordinator is responsible for maintaining that Company's CLLI database, using procedures defined in this section and in the CLLI On-line System User's Manual. Descriptive information associated with the CLLI code, may be found in the CLLI On-Line System.

1.06 Common Language Location Identification codes identify originating and terminating locations for Common Language Facility Identification (CLFI) and for Common Language Circuit Identification-Message Trunks (CLCI-MSG). Refer to Section 795-450-100 and Section 795-400-100, respectively, for descriptions of these uses of CLLI. The CLLI codes have been deployed extensively in centrally developed systems, eg, TIRKS, FACS, etc. For these reasons, indiscriminate and/or unnecessary CLLI code changes should be avoided.

1.07 It is important to remember that CLLI codes should be without specific user orientation, ie, codes should not be oriented toward a particular department or user and should be within the guidelines of this section.

1.08 All Operating Company personnel having responsibility for assigning and maintaining CLLI codes must know what codes are stored in their portion of the CLLI master file.

It is not the intent of the CLLI codes to identify all information pertaining to the location or to identify each piece of equipment or each work group at a particular location. For most of the detail, the user must look beyond CLLI to other code sets or data bases.

1.09 Questions concerning codes contained in this section, and requests for new codes should be directed, via the Operating Company Common Language Coordinator, to the Common Language Department at Bell Laboratories. Development of new codes and changes in coding procedures require approval of AT&T Company.

2. CODE DESCRIPTION AND STRUCTURE

A. Code Description

2.01 The Common Language Location Identification code is a geographic identifier which uniquely identifies the geographic location of places and certain "things" of interest to the Bell System and Operating Telephone Companies in the United States, Canada, and other countries. Collectively, these are known as "CLLI" or "location" codes, and are used in various manual and mechanized systems.

2.02 The CLLI codes identify ***existing and proposed buildings*** which contain or will contain personnel and/or equipment, eg, switching machines, boards/desks, radio and carrier equipment, plant service centers, testrooms, frames, maintenance groups, etc. They identify nonbuilding locations of entities, such as repeaters, poles, manholes, facility junctions, etc. In addition, CLLI codes identify certain customer locations.

B. Code Structure

2.03 The CLLI code is an 11-character mnemonic alphanumeric code consisting of the following elements:

(a) ***Place*** (character positions 1 through 4).

(b) ***State*** of the United States, Province or Territory of Canada, or Country (character positions 5 and 6). These are known collectively as "State" codes.

(c) ***Building*** (character positions 7 and 8).

(d) ***Entity*** (character positions 9 through 11), formerly called Building Subdivision. All Traffic, Plant, and Administrative Units have been regrouped into two categories: Switching Entities and Nonswitching Entities.

(e) ***Nonbuilding location or customer location*** (character positions 7 through 11).

2.04 These elements may be combined into the following basic Common Language Location Identification formats:

(a) Place, state, building, and entity (11 characters)

(b) Place, state, and nonbuilding location (11 characters)

(c) Place, state, and customer location (11 characters)

(d) Place, state, and building (8 characters).

Note: When it is not necessary to identify an entity within a building, this 8-character format may be used.

2.05 Refer to Part 10, Figure 1 which displays CLLI code structure and identifies, by code element, the permitted character set.

2.06 Encoding schemes which reserve certain characters (or groups of characters) within CLLI code elements should be avoided. Such schemes may lead to future coding problems.

2.07 The remainder of this section describes, in detail, each element of the CLLI code.

Note: Throughout the following text, basic formats are prescribed for each code element. These formats are presented using a uniform system of notation, as follows:

- Parentheses enclose lower case letters indicating user assigned values:

  (a) Indicates alphabetic characters, a through z

  (n) Indicates numeric characters, 0 through 9

  (x) Indicates alphabetic or numeric characters, a through z or 0 through 9, may be used.

- Upper case letters (A through Z) identify required values, ie, the upper case letter displayed in the format is the character required.

- Where specific characters are not permitted, they are identified.

3. PLACE (CHARACTER POSITIONS 1 THROUGH 4)

3.01 ***Place*** is defined as a municipal locality or similar type area in the United States, Canada, or foreign country. Such a locality may be referred to as a town, city, community, or place. It may also include military locations, local names, major shopping centers, mountains, bodies of water, etc. Items such as exchange areas are ***not*** considered to be place locations.

3.02 The ***Place Codes*** are developed and assigned only by the Common Language Department at Bell Laboratories. Requests for Place codes should be directed to operating company CLLI coordinators who will request codes from Bell Laboratories. Documentation must accompany requests for Place codes when those places are not locatable by map or atlas. Additional information concerning Place codes is found in Section 751-100-050.

3.03 ***Place Code Format:*** Place code field is a 4-character variable length field which accepts only alpha characters, is left justified, and must be blank filled when a Place code contains less than 4 characters. It resides in character positions 1 through 4 of the CLLI code format.

Example:

PLACE NAME	PLACE CODE
Denver (Colorado)	DNVR

When a place name contains less than 4 characters, the Place code is left-justified in the Place code field, and unused positions in the field must be blank filled.

Example:

PLACE NAME	PLACE CODE	PLACE AND STATE CODE
Rye (New York)	RYE	RYE NY

Note: In this case, the 3-character Place Code RYE is left-justified and followed by 1 blank character to fill the 4-character field.

Caution: No. 4 ESS cannot manage Place codes having less than 4 characters.

3.04 When a place location is unknown (eg, in long range planning), a temporary Place code may be developed by placing hyphens in character positions 1 and 2 followed by 2 alpha characters.

Example:

PLACE NAME	PLACE CODE
Location Unknown	--CM

In this case, the alpha characters are arbitrary and are assigned by the CLLI coordinator of the operating company doing the planning. When the place location becomes known, the temporary Place code ***must*** be changed to the appropriate 4-character Place code.

3.05 Place codes are unique within a particular state, province or territory, or country.

3.06 Places having the same place name but located in different states usually will be assigned the same Place code.

Examples:

PLACE NAME	PLACE CODE	PLACE AND STATE CODE
Plainville (New York)	PLNV	PLNVNY
Plainville (Ohio)	PLNV	PLNVOH

The same Place code may represent different place names in different states.

Examples:

PLACE NAME	PLACE CODE	PLACE AND STATE CODE
Lymansville (Rhode Island)	LYVL	LYVLRI
Lynnville (Indiana)	LYVL	LYVLIN

3.07 If a place name is duplicated within a particular state, province or territory, or country, the county name will be incorporated into the Place code.

Examples:

PLACE NAME	PLACE CODE	PLACE AND STATE CODE
Jacksonville (Center County) Pennsylvania	JCCT	JCCTPA
Jacksonville (Lehigh County) Pennsylvania	JCLH	JCLHPA

4. STATE, PROVINCE OR TERRITORY, OR COUNTRY (CHARACTER POSITIONS 5 AND 6)

4.01 ***The States of the United States, Provinces and Territories of Canada, and Country*** are defined in paragraphs 4.03, 4.04, and 4.05, respectively. Each code is unique within the combined code set. Collectively, these codes are frequently called "state" codes. Requests to modify or expand this code set must be submitted by operating company CLLI coordinators to the Common Language Department, Bell Laboratories.

4.02 ***State Code Format:*** The "state" code field (which is used to identify states of the United States, provinces and territories of Canada, and foreign countries) is a 2-character fixed field which accepts only alpha characters, and resides in character positions 5 and 6 of the CLLI code format.

Examples:

STATE NAME	STATE CODE
Pennsylvania (United States)	PA
Nova Scotia (Canada)	NS

Refer to Table A in Part 10 which includes a comprehensive list of state names, 2-character state codes, and Section 795-xxx-100 references for each of the states of the United States, and provides reference information for provinces and territories of Canada, and foreign countries.

4.03 ***State of the United States*** is defined as one of the 50 states of the United States, the District of Columbia, or possessions of the United States.

4.04 ***Province or Territory of Canada*** is defined as one of the ten administrative subdivisions of Canada, or two geographical territories (ie, Yukon and Northwest) under the governmental ju-

risdiction of Canada. A complete listing of 2-character codes for provinces and territories of Canada may be found in Section 751-100-055, Common Language State, Province and Territory of Canada, and Country Codes.

4.05 ***Country:*** A territorial division usually is defined as having independent national status, and a defined territory and government. In addition, some geographical areas, such as territories, atolls, possessions, domains, or portions of a larger entity are also included in the listing of Country Codes. Additional information concerning the Common Language Standard Country Codes (and a complete listing of the codes) may be found in Section 751-100-055, Common Language State, Province and Territory of Canada, and Country Codes.

> ***Note:*** Each country is represented by a 2-character alpha code which corresponds to an International Dial Code. Occasionally, more than one International Dial Code is assigned to a country. When this occurs, a separate 2-character alpha Common Language Country Code must be assigned for each additional dial code.

4.06 Unique CLLI Place and State codes are assigned as follows:

(a) When it is necessary to identify satellites in earth orbit, the 4-character Place code field is assigned the code "STLT", and the 2-character state code field uses the code "EO."

Example:

PLACE NAME	PLACE AND STATE CODE
Satellite	STLTEO

Refer to Table A in Part 10 and paragraph 7.17 for further information.

(b) When it is necessary to identify locations on ships at sea, a unique 4-character Place code field identifies the body of water, and the 2-character state code field is assigned the code "HS."

Example:

PLACE NAME	PLACE AND STATE CODE
Bering Sea	BRGSHS

Refer to Part 10, Table A, for the full list of unique Place and State codes.

4.07 High Seas locations should be considered as being off the land's edge without regard to the 3-, 12-, or 200-mile limit, etc, recognized by various countries. The Long Lines Overseas CLLI Coordinator is responsible for determining where the land ends, and the body of water begins, and whether to use the HS code or a state, province, or country code. Entity Codes (Switching and Nonswitching), or Nonbuilding Codes may be assigned to a High Seas location, as appropriate.

5. BUILDING (CHARACTER POSITIONS 7 AND 8)

5.01 ***Building*** is defined for CLLI purposes, as any existing or proposed structure or part of a structure which contains telephone company (Bell System, Independent, or customer owned) equipment or personnel. To qualify for a building code, the area must be large enough to allow a person to enter and move around inside. This includes central office buildings, business and commercial offices, customer buildings, Independent Telephone Company buildings, garages, headquarters buildings, sheds and small buildings containing repeaters, underground vaults, building complexes, areas within a structure, or other similar structures. Refer to Part 10, Figure 2, CLLI Codes Assigned to Various Locations.

5.02 A ***building complex*** is defined as two or more buildings interconnected by walkways or tunnels, or sharing a common wall. A building complex may be identified with a single building code. When a building complex code is used, all entity designations within the complex must be unique. When each building in a complex must be identified, refer to paragraph 5.08 and Part 10, Figure 2a.

5.03 ***Building Codes*** are developed, assigned, and managed by Operating Company CLLI coordinators.

5.04 ***Building Code Format:*** Building code is a 2-character fixed length field which accepts 2-

alpha characters or 2-numeric characters and occupies character positions 7 and 8 of the CLLI code format.

> ***Note:*** Building code ***cannot*** be a combination of alpha and numeric characters, eg, H5 or 5H is not permitted.

5.05 Building codes are assigned to the place and state in which they are geographically located. When a building is outside the boundaries of all identified places, it should be assigned to the nearest place within the state.

5.06 The alpha character "X" in character position 7 is reserved for identification of Independent Telephone Company owned buildings. To identify Independent Telephone Company buildings, use the alpha character "X" in position 7 and any other alpha character in position 8 of the CLLI code format.

Example:

NAME	BUILDING CODE	PLACE, STATE, AND BUILDING CODE
Independent Telephone Company Building	XA	CITYSTXA

5.07 Where a building code is required and the building location is unknown (as in long range planning), a hyphen (-) is used in character position 8 of the CLLI code format. Any alpha character is used in character position 7.

Example:

	BUILDING CODE	PLACE, STATE, AND BUILDING CODE
Building (location unknown)	B-	CITYSTB-
Building-Independent telephone company (location unknown)	X-	CITYSTX-

5.08 When a company elects to code each building in a complex (defined in paragraph 5.02) using a separate building code for each building in the complex, entities (subdivisions) common to two (or more) of the buildings must be assigned to ***only one*** of the building codes.

Guideline: When the equipment and facilities in two (or more) buildings share a common frame, the equipment, facilities, and frame must be identified as being in only one of the buildings. It is not the intent of the CLLI code to subdivide a building into parts according to floor, ownership, function, etc, and assign each part a separate building code. Refer to Part 10, Figure 2a.

5.09 When telephone equipment and/or personnel are temporarily located in a trailer which must be identified, the trailer may be identified and coded as a separate building, or it may be included as part of an existing building with which it is associated.

6. ENTITY (FORMERLY BUILDING SUBDIVISION) (CHARACTER POSITIONS 9 THROUGH 11)

6.01 An ***Entity*** (formerly called a Building Subdivision) is defined as any unit of equipment, work group, person, or job function which is directly related to message and/or data switching and termination.

Entities are assignable to two broad categories: Switching and Nonswitching.

> ***Note:*** This element of the CLLI code was identified previously as "Building subdivision" code, and included three components identified as Traffic Units, Plant Units, and Administrative Units. To simplify the CLLI coding process and to provide additional code flexibility, a code grouping concept has been implemented. All existing Traffic, Plant, and Administrative Codes have been grouped into two categories: Switching Entities and Nonswitching Entities, and the code element has been renamed "Entity." No existing CLLI codes are changed by the introduction of this concept.

6.02 ***Entities*** are uniquely identified by the Entity Code suffixed to the Place, State, and Building Codes (character positions 1 through 8). Entity codes are associated with the place, state, and building in which they are physically located.

6.03 ***Entity Codes*** are developed, assigned, and managed by operating company CLLI coordinators, using the guidelines suggested by this section.

6.04 ***Entity Code Formats:*** Entity code is a 3-character alphanumeric field which occupies

character positions 9 through 11 of the CLLI code format.

Entity codes may consist of any of the combinations of alpha and numeric characters described in the following paragraphs. For convenience, refer to code format summaries in Part 10, Table B, "General Reference List of Entity Codes by Entity Category."

A. Switching Entities

6.05 ***Switching Entities*** (formerly called Traffic Units) are defined as units of equipment that are directly related to message and/or data switching, and are categorized as:

- End Offices
- Tandem Offices
- Special Switching Applications
- Concentrators
- Switchboards and Desks
- Other Switching Entities.

End Offices

6.06 End offices are identified according to switching equipment located within. An end office may include a complete switching system, a multiunit switching machine (or trunk termination), or a single unit switching machine (or trunk termination). End offices may be Crossbar, Step-by-Step, Electronic Analog, Electronic Digital, or any combination.

Part 10, Table B summarizes the various end office Entity codes that are allowable, and the following paragraphs discuss these Entity codes in detail.

Complete Switching Entity Identification Method

6.07 Use of this method to uniquely identify complete switching entities is recommended because fewer code changes are required when single entities (units) are removed or changed.

Examples:

SYSTEM TYPE	IDENTIFICATION BASIS	CLLI ENTITY CODE FORMAT (CHAR. POS. 9-11)	
		GROUP	COMBINATIONS OF GROUPS*
Crossbar	Marker Group	MG(n)	MG(a)
Step-by-Step	Step Group	SG(n)	SG(a)
Electronic Analog	Control Group	CG(n)	CG(a)
Electronic Digital	Digital Switcher	DS(n)	DS(a)

* Restriction: For these CLLI Entity Codes, characters B,D,I,O,T,U,W, and Y are not permitted in character position 11.

6.08 Complete crossbar switching systems and combinations of marker groups may be identified on a Marker Group basis.

(a) ***Marker Group—MG(n):*** Crossbar Switching Systems are identified by the characters "MG" in character positions 9 and 10, followed by a marker group identifying number in character position 11. Refer to Part 10, Figure 2b.

Example:

ENTITY NAME	ENTITY CODE	CLLI FORMAT
Crossbar Switching System, Marker Group 400	MG4	NWRKNJ23MG4

(b) ***Marker Group Combinations—MG(a):*** A combination of marker groups is identified by the characters "MG" in character positions 9 and 10, and any alpha character except B, D, I, O, T, U, W, or Y in character position 11.

Example:

ENTITY NAME	ENTITY CODE	CLLI FORMAT
Combination of Marker Groups 2 and 12	MGA	NWRKNJ23MGA

6.09 Using the identification categories provided in paragraph 6.07 and the procedures provided in paragraph 6.08, step-by-step, electronic analog, and electronic digital switching systems are identified using "step group" (SG), "control group" (CG), and "digital switcher" (DS) codes, respectively. In character position 11, a numeric character identifies a complete switching system, and an alpha character identifies combinations of complete switching systems. (The characters B, D, I, O, T, U, W, and Y may not be used in character position 11 for these CLLI group entity codes.)

Examples:

ENTITY NAME	ENTITY CODE	CLLI FORMAT
Step-by-Step Switching System	SG2	NWRKNJBRSG2
Electronic Switching System (Analog)	CG2	NWRKNJBRCG2
Electronic Switching System (Digital)	DS2	NWRKNJBRDS2

6.10 When it is necessary to identify a combination of different types of switching systems, the CLLI Coordinator may select the first two characters of one of the codes and add an alpha code (observing the restrictions applied to character position 11) to identify the combination. In other words, the combination of SG1 and CG1 may be coded either as SG(a) or as CG(a).

6.11 Electronic Switching Systems, both analog and digital, may be identified by using their associated numeric 3-character all-number calling (ANC) codes, however, for the future, it is preferable to use the appropriate CG and DS code formats.

Multiple Entity—(n)(n)(a)

6.12 A multiple entity end office or multitype trunk termination is a combination of 2 or more single entities and is coded by substituting an alpha character for the last numeric character (11th character position) of any single entity identified in the combination. (Restriction against using characters B, D, I, O, T, U, W, or Y in character position 11 applies to this format.)

6.13 A multiple entity code may be used to identify:

(a) A combination of two or more single entity switching machines or trunk terminations.

Example:

ENTITIES	ENTITY CODE	CLLI FORMAT
No. 5 Crossbar Multiunit (Consisting of single units 431 and 753)	43E	NWRKNJMA43E

(b) Combinations of the same or different types of switching machines or trunk terminations:

Examples:

ENTITIES	ENTITY CODE	CLLI FORMAT
Combination of No. 1 Crossbar Units 349 and 382, and No. 5 Crossbar Units 222 and 386	38C, or 34A, or 22A, etc.	NWRKNJMA38C

(c) A complete switching system.

Example:

ENTITY	ENTITY CODE	CLLI FORMAT
No. 5 Crossbar Switching System consisting of Units 249, 268, 451, and 541	45H, or 24A or 26C, etc.	NWRKNJMA45H

(d) When there is ***dedicated*** trunking into or out of a combination tandem and end office, that entity ***must*** be given tandem identification. Refer to paragraph 6.20 (d).

Single Entity—(n)(n)(n)

6.14 A single entity end office is defined as having a single switching machine or trunk termination and may be identified by using its numeric 3-character all-number calling (ANC) code. Refer to Part 10, Figure 2b.

Example:

ENTITY	ENTITY CODE	CLLI FORMAT
Step-by Step Central Office No. 853	853	ALSTNHLR853

6.15 A single entity end office may be identified as a complete end office switching system by using the numeric 3-character ANC code (n)(n)(n), or the multiunit code (n)(n)(a). Refer to paragraph 6.12.

6.16 When a switching machine located in a trailer (or any temporary structure) requires a CLLI code, the codes should be developed in accordance with paragraph 5.09 which discusses trailer identification, and in accordance with paragraphs 6.05 through 6.15 which discuss switching machine (entity) identification.

Tandem Offices

6.17 A Tandem is defined as an intermediate switching entity for interconnecting end offices and/or toll offices.

6.18 Tandem offices may include the following entities: electronic switching tandems, crossbar tandems, No. 4 type switching systems, step-by-step tandems, portion of an end office serving as a tandem, etc.

Individual Tandem—(n)(n)T

6.19 An individual tandem is identified by placing numeric characters in character positions 9 and 10 of the CLLI Entity code and the character "T" in position 11. Refer to Part 10, Figure 2a.

Example:

ENTITY	ENTITY CODE	CLLI FORMAT
Crossbar Tandem Number 23	23T	NWRKNJMA23T

Combinations of Tandems and Switchboards

6.20 The individual tandem code, (n)(n)T, always identifies the tandem itself, however, the following combinations which designate trunking entities may exist:

(a) ***Tandem Combinations—C(n)T:*** This code is used to identify multiple tandem entities or multiple types of tandem trunk terminations, ie, tandems with common trunking.

Example:

ENTITY	ENTITY CODE	CLLI FORMAT
Combination of Crossbar switching entities A and B	C3T	GRSBOHGRC3T

(b) ***Switchboard and Tandem Combination—B(n)T:*** This code identifies a tandem multipled to an associated switchboard.

Example:

ENTITY	ENTITY CODE	CLLI FORMAT
Combination of Toll Switchboard and Crossbar Tandem	B2T	FNDYOHPLB2T

The B(n)T code may be used to identify the combination of a tandem at one location and a switchboard at another location. The Place, State, and Building Code of the ***tandem*** location should be used in character positions 1 through 8.

Example:

ENTITIES	ENTITY CODE	CLLI FORMAT
Tandem located at Longview, Texas associated with a Switchboard located at Dallas, Texas	B3T	LGVWTXMAB3T

(c) ***Other Tandem Combinations—(n)GT:*** This code identifies combinations of tandem and end office, TSPS control unit and its associated tandem, or a Remote Trunking Arrangement (RTA) and its associated tandem (when more than one TSPS Control unit or RTA is associated with a tandem).

Example:

ENTITY	ENTITY CODE	CLLI FORMAT
Combination of No. 1 Crossbar and Tandem	5GT	SOVLNJSM5GT

(d) ***Combination of Tandem and End Office:*** When there is ***dedicated*** trunking into or out of a tandem and end office, tandem identification ***must*** be used.

(1) When the code is intended to include ***only*** the end office function, use CG(x), DS(x), or (n)(n)(x).

(2) When the code is intended to include ***only*** the tandem function, use (n)(n)T.

(3) When the code is intended to include the end office function ***and*** local tandem function, use (n)GT.

(4) When the code is intended to include the end office function ***and*** toll tandem function use (n)GT.

Other Switching Applications

6.21 Other switching applications may be coded as follows:

(a) ***Remote Switcher—RS(n):*** The Remote Switcher code identifies switching system entities that are remotely controlled from a "host" Electronic Switching System (ESS). The Remote Switcher serves as an extension of the host and receives command information over a dedicated data link. Included in this category are trailer mounted step-by-step and crossbar switching assemblies known as "mobile mechanical remote switchers."

Examples:

ENTITY	ENTITY CODE	CLLI FORMAT
Remote Switcher No. 2	RS2	ABRDOH79RS2
Host ESS	CG3	HNTNOHMACG3

(b) ***Common Control Switching Arrangements—Z(a)Z:***

Examples:

ENTITY	ENTITY CODE	CLLI FORMAT
Common Control Switching Arrangement (CCSA)	ZCZ	NWRKNJ32ZCZ
Enhanced Private Switched Communications Service (EPSCS)	ZBZ	CLEVOH62ZBZ

(c) ***Teletypewriter Switching Systems (TWX)-X(a)X:*** Identifies a switching system that serves the TWX network. These switching systems may serve a dual purpose and may also have codes assigned to message telephone and/or CCSA switching functions.

Example:

ENTITY	ENTITY CODE	CLLI FORMAT
No. 5XB DTWX Switching System	XBX	NWRKNJMAXBX

Concentrators

6.22 ***Concentrator—CT(x):*** The Concentrator code identifies all types of concentrator entities. It is also used to identify Data Station Controller (DSC) entities. Refer to Part 10, Figure 2c.

Example:

ENTITY	ENTITY CODE	CLLI FORMAT
Intercept Concentrator No. 3	CT3	ATCYNJACCT3

Switchboard and Desk Entities

6.23 Switchboard and desk entities (formerly called Traffic Switchboards and Desks) are uniquely identified by the character "B" in position 11 of the CLLI code format.

A set of prescribed 3-character switchboard and desk entity codes, which may be assigned to character positions 9 through 11, is provided in Part 10, Table C, CLLI Encoding Guide for Switchboard and Desk Termination Entities. Also refer to Figure 2 in Part 10 which shows CLLI codes assigned to various locations.

Miscellaneous Switching Termination Entities

6.24 Miscellaneous switching termination entities (formerly called Miscellaneous Traffic Unit terminations) are described, generally, as the variety of mechanisms or systems which serve as end points for the switching network, eg, switchers at other Common Carrier locations, announcement machines, distributors, etc. These switching termination entities are recognized by the character "D" in position 11 of the CLLI code format.

A set of prescribed 3-character switching termination entity codes, which may be assigned to character positions 9 through 11, is provided in Part 10, Table D, CLLI Encoding Guide for Miscellaneous Switching Termination entities. Also refer to Figure 2 in Part 10 which shows CLLI codes assigned to various locations.

B. Nonswitching Entities

6.25 ***Nonswitching Entities*** (formerly called Frames, Plant Units, and Administrative Units) are defined as units of equipment, job functions, individuals, groups, or centers that are directly related to the interconnection and transmission of messages and/or data between switching entities, and are categorized as:

- Frames
- Administrative Groups
- Exchange Switchrooms
- Software Cross-connectable Devices
- Maintenance Groups (including Switching Control Centers and Systems)
- Test or Service Positions
- Radio Towers Associated With Buildings
- Service Centers
- Toll Test Rooms/Test Boards
- Other Nonswitching Entities.

6.26 Nonswitching entities are uniquely identified by suffixing an appropriate entity code to the CLLI Place, State, and Building code (character positions 1 through 8) describing their physical location. Refer to Part 10, Figure 2 which shows CLLI codes assigned to various locations.

6.27 ***Nonswitching Entity Codes*** occupy the Entity code element (formerly called Building Subdivision) of the CLLI code structure (character positions 9, 10, and 11), and consists of a specific

alpha character (A, E, F, K, M, P, Q, S, T, or W) in position 9, followed by any combination of alpha or numeric characters in positions 10 and 11, with the following restrictions:

(a) Alpha character "G" cannot be used in position 10.

(b) Alpha characters B, D, I, O, T, U, W, or Y cannot be used in character position 11.

Refer to the summary of acceptable code formats in Part 10, Table E, CLLI Encoding Guide for Nonswitching Entities.

Frames

6.28 ***Frames—F(x)(x):*** This nonswitching entity code is used to identify all hardwired distributing and cross-connect frames. This includes frames such as main distributing, carrier line distributing, intermediate distributing, toll distributing, local or line distributing, protector, high frequency cabinets, and digital signal cross-connect (DSX-0, DSX-1, etc) frame locations. Refer to Figures 2a and 2b in Part 10.

Examples:

ENTITY	ENTITY CODE	CLLI FORMAT
Main Distributing Frame	FO1	NWRKNJMAFO1
DSX Cross Connect Frame	FA3	NWRKNJMAFA3
COSMIC Frame Lineup	FC2	NWRKNJMAFC2

Other Nonswitching Entities

6.29 Other Nonswitching Entity codes should be assigned in accordance with subparagraphs (a) through (i), as follows:

(a) ***Administrative Groups—A(x)(x):*** An administrative group is defined as an individual, group, or computer which provides management, coordination, or support to the main line of operations.

The code identifies individual types as well as arbitrary groupings of administrative entities, such as marketing, personnel, chief engineers, stock rooms, etc, and includes computer, minicomputer, and computer terminal locations. Refer to Part 10, Figure 2b.

Examples:

ENTITY	ENTITY CODE	CLLI FORMAT
Network Administration Center	AU2	NWRKNJ23AU2
Minicomputer	A23	PSSCNJPSA23
Stock Room	A46	PSSCNJMAA46

(b) ***Exchange Switchroom—E(x)(x):*** An Exchange Switchroom is identified by an "E" in position 9 of the CLLI code format.

Example:

ENTITY	ENTITY CODE	CLLI FORMAT
Exchange Switchroom	E22	HMLTNCMAE22

(c) ***Software Cross-Connectable Entities—K(x)(x):*** This nonswitching entity code is used to identify all software cross-connectable devices, such as, digital access and cross-connect systems (like DACS), etc.

Example:

ENTITY	ENTITY CODE	CLLI FORMAT
Digital Access and Cross-connect System 32	K32	ATLNGAMAK32

(d) ***Maintenance Groups—M(x)(x):*** The maintenance group code includes individual types as well as arbitrary groupings of maintenance work groups. These include toll, radio, step-by-step, and carrier crossbar maintenance groups; switching control centers; radio consoles for dispatching maintenance personnel; maintenance systems, such as Circuit Maintenance System (CMS), Centralized Automatic Reporting on Trunks (CAROT), Carrier Transmission Maintenance System (CTMS), Customer Service Administration Control Center (CSACC); Signal Transfer Points (STP), etc. Refer to Figure 2d in Part 10.

Example:

ENTITY	ENTITY CODE	CLLI FORMAT
Trunking Maintenance Group	M35	HMLTNCMAM35

Reminder: The character "G" is not permitted in position 10; the combination "MG" in positions 9 and 10 identifies marker groups.

(e) ***Test or Service Position—P(x)(x):*** This code identifies local test and repair positions.

Example:

ENTITIES	ENTITY CODE	CLLI FORMAT
Local Test Desk position	P23	RLGHNCMAP23
Automated Reporting System (ATRS) Desk position	P34	NWRKNJMAP34

(f) ***Radio Tower Collocated With a Building—Q(n)(n):*** Radio locations are described also in paragraphs 7.05, 7.12, and 9.09. Refer to Figures 2c, 2d, and 2g in Part 10.

Example:

ENTITY	ENTITY CODE	CLLI FORMAT
Radio tower on roof	Q23	NYCMNYMAQ23

(g) ***Service Center—S(x)(x):*** Includes all types of service centers, such as Plant Service Centers, Special Services Centers, Centralized Test Centers, ATRS Network Analysis Bureaus, etc.

Examples:

ENTITY	ENTITY CODE	CLLI FORMAT
Plant Service Center	S23	GNVLMSMAS23
Service Test Center	STC	GNVLMSMASTC
Automated Trouble Reporting System (ATRS) Network Analysis Bureau	SA2	GNVLMSMASA2

(h) ***Toll Test Room or Test Board—T(x)(x):*** A Toll Test Room (or Board) is identified by the character "T" in position 9 of the CLLI code format.

Example:

ENTITY	ENTITY CODE	CLLI FORMAT
Toll Test Room	T2A	WVVYNHMRT2A

(i) ***Other Nonswitching Entities—W(x)(x):*** Includes miscellaneous nonswitching entities which cannot be identified by using the codes listed in subparagraphs (a) through (h) in this paragraph. This code may be used for terminating equipment of all kinds including toll, intraexchange office and local loop. Refer to Figure 2e in Part 10.

Example:

ENTITY	ENTITY CODE	CLLI FORMAT
Power Room	WPR	HMDSNYHSWPR

7. NONBUILDING LOCATIONS (CHARACTER POSITIONS 7 THROUGH 11)

A. General

7.01 The ***Nonbuilding location/customer location*** element of the CLLI Code is a 5-character fixed length field which is suffixed to the CLLI Place and State code (character positions 1 through 6). It is generally referred to as the "nonbuilding" code, and occupies character positions 7 through 11 of the CLLI code format.

7.02 The nonbuilding element of the CLLI code is permitted to contain 3 categories of information, Bell Operating Company nonbuilding locations, Independent Telephone Company nonbuilding locations, and Customer locations. Refer to Part 10, Table F, CLLI Encoding Guide for Nonbuilding and Customer Locations.

7.03 A ***Nonbuilding location*** is defined as the site or position of Telephone Company equipment ***other than buildings.*** For Common Lan-

guage Location Identification (CLLI) purposes, nonbuilding locations may include:

- International Boundary Crossing Points
- End Points
- Junctions
- Manholes
- Poles
- Radio Locations
- Toll Stations
- Independent Telephone Company Owned Nonbuilding Locations
- Customer Locations
- Miscellaneous Nonbuilding Locations.

7.04 Nonbuilding locations are assigned codes according to the place and state in which they are ***geographically*** located. If the nonbuilding location is outside the boundaries of all identified places, it should be assigned to the nearest place within the state.

7.05 When there is a requirement to identify the ***structure*** in which or on which a nonbuilding entity is located, use the Building Code described in Part 5 of this Section. For example, a Building Code may be assigned to a Microwave Radio Relay Building if switching or nonswitching entities within the building must be identified. In this case, the code represents building location, not a radio location. Refer to Figures 2d and 2g in Part 10.

7.06 No attempt should be made to identify nonbuilding locations as entities within a building.

B. Bell Operating Company Nonbuilding Locations—(Character Positions 7 through 11)

International Boundary Crossing Points — B(n)(n)(n)(n)

7.07 A location on a border between two adjacent countries is assigned a "B" in character position 7 followed by 4 numeric characters.

Example:

NONBUILDING LOCATION	CODE	CLLI FORMAT
Sault St. Marie (Michigan) - Ontario (Canada) International Boundary Crossing Point	B2232	SSMRMIB2232

End Point Locations—E(n)(n)(n)(n)

7.08 An End Point is defined as a location in the network where two or more trunk facility routes converge or cross with no cross-connection capability. The end point format may also be used to identify locations where facilities cross state, province, or company boundaries. The end point code is assigned an "E" in character position 7 followed by 4 numeric characters.

Example:

NONBUILDING LOCATION	CODE	CLLI FORMAT
A specific splice on a pole between 2 spans	E2345	JRCYNJE2345

Junction Locations—J(n)(n)(n)(n)

7.09 A Junction is defined as a location in the facility network with cross-connection capability, and is identified by the character "J" in character position 7 followed by 4 numeric characters.

Example:

NONBUILDING LOCATION	CODE	CLLI FORMAT
Cross-connect box 29-A	J2345	KLGRNEJ2345

The Junction code should not be used to identify the manhole or pole where the junction is located. Refer to manhole and pole code formats.

Manhole Locations—M(n)(n)(n)(n)

7.10 Manhole locations are identified by assigning the character "M" to character position 7 followed by 4 numeric characters.

Example:

NONBUILDING LOCATION	CODE	CLLI FORMAT
Manhole No. 137A	M5234	TOLDOHM5234

Pole Locations—P(n)(n)(n)(n)

7.11 Pole locations are identified by the character "P" in character position 7 followed by 4 numeric characters. Refer to Part 10, Figure 2f.

Example:

NONBUILDING LOCATION	CODE	CLLI FORMAT
Pole No. 2453	P2453	TOLDOHP2453

Radio Locations—Q(n)(n)(n)(n)

7.12 Radio locations include microwave radio-relay repeater locations and miscellaneous radio locations such as mobile radio, coastal harbor radio, high seas radio, earth stations (fixed or floating), etc. Nonbuilding radio locations are identified by the character "Q" in character position 7 followed by 4 numeric characters. Refer to paragraphs 7.05, 7.13, 9.09, and to Part 10, Figure 2g.

Examples:

NONBUILDING LOCATION	CODE	CLLI FORMAT
Mobile Radio Location	Q6789	PSSCNJQ6789
Microwave Radio Relay Repeater Location	Q2345	PSSCNJQ2345

7.13 Identification of a radio tower collocated with a building is discussed in paragraph 6.29 (f), and is exhibited in Part 10, Figure 2d.

Repeater Locations—R(n)(n)(n)(n)

7.14 This code format identifies the nonbuilding location of all types of repeaters except microwave radio-relay repeaters (see paragraph 7.12) regardless of where they are positioned, ie, on poles, pads, or pedestals, in manholes, etc. When the structure in which the repeater is located must be identified, refer to Section 5, Building. Repeater locations are identified by the character "R" in position 7 and numeric characters in positions 8 through 11. Additional guidelines are provided in paragraph 9.10. Refer to Figures 2e and 2f in Part 10.

Examples:

NONBUILDING LOCATION	CODE	CLLI FORMAT
Repeater Station No. 34	R2234	DRSDOHR2234
Pole Mounted Repeater	R7889	DRSDOHR7889

Toll Station Locations—S(n)(n)(n)(n)

7.15 This nonbuilding location code format usually identifies toll stations that are not served from a local central office but are interconnected to a switchboard. This type of toll station is identified by the character "S" in position 7 followed by 4 numeric characters.

Example:

NONBUILDING LOCATION	CODE	CLLI FORMAT
Toll Station No. 222	S3222	PSSCNJS3222

Other Nonbuilding Locations—U(n)(n)(n)(n)

7.16 When requirements to code nonbuilding locations cannot be satisfied by using code formats in paragraphs above, as in the case of pad, pedestal, vault, access road, parking lot, vacant lot, etc, the code for "other" nonbuilding locations may be used. Place the character "U" in character position 7 and numeric characters in positions 8 through 11.

Example:

NONBUILDING LOCATION	CODE	CLLI FORMAT
Pedestal No. 4567	U4567	STSDMIU4567

7.17 ***Satellites:*** A satellite in earth orbit is identified using the encoding guide for unique places found in Table A. The Place and State Codes "STLT" and "EO" may be entered in character positions 1 through 6 of the CLLI Code format, and the Radio Code may be entered in character positions 7 through 11.

Example:

NONBUILDING LOCATION	CODE	CLLI FORMAT
Early Bird Satellite	Q8232	STLTEOQ8232

C. Independent Telephone Company Nonbuilding Locations—X(n)(n)(n)(n)

7.18 When an Independent Telephone Company nonbuilding location must be identified, use the character "X" in character position 7 and numeric characters in positions 8 through 11. It is not necessary to identify that location by type, (ie, "R" for repeater "Q" for Radio, etc).

Example:

NONBUILDING LOCATION	CODE	CLLI FORMAT
Independent Telephone Company Nonbuilding Location No. 342	X2342	RBBNMNX2342

7.19 An ***Other Common Carrier (OCC)*** is not an Independent Telephone Company and ***should not*** be identified as one. An OCC location should be identified in the same manner as a Bell System location, ie, with a building and entity code, nonbuilding code, or customer location code. Refer to additional information in paragraph 6.24 and Table D in Part 10.

8. CUSTOMER LOCATIONS (CHARACTER POSITION 7 THROUGH 11)

8.01 ***Customer Locations*** may be described as follows:

- Military installations
- Customer locations associated with a switched service network
- Customer locations with Centrex installations
- Customer locations that are required for trunk forecasting and design work.

8.02 The ***Customer Location Code*** is a 5 character fixed length alphanumeric code which is suffixed to the CLLI Place and State code (character positions 1 through 6). The customer location code occupies positions 7 through 11, and is comprised of 2 categories:

- Customer Nonbuilding Location code
- Customer Building and Entity Code.

8.03 Customer Location Codes are ***always*** assigned to the place and state in which they are geographically located. If the customer location is outside the boundaries of all identified places, nonbuilding codes are assigned to the nearest place within the state.

A. Customer Nonbuilding Locations—(n)(a)(n)(n)(n)

8.04 The Customer Nonbuilding Location Code format may be used to develop a single code for a customer, or to develop a set of codes to identify multiple locations for a specific customer within a city or town.

Example:

CUSTOMER NONBUILDING LOCATION	NONBUILDING CODE	CLLI FORMAT
XYW Company South Street, Newark, N.J.	2A146	NWRKNJ2A146
XYW Company Main Street, Newark, N.J.	2A147	NWRKNJ2A147

B. Customer Building and Entity Locations

8.05 When there is a requirement to identify an entity within a customer's building, use Building and Entity identification following guidelines provided in Part 5 (Building) and Part 6 (Entity) of this section.

Example:

CUSTOMER BUILDING AND ENTITY LOCATION	BUILDING AND ENTITY CODE	CLLI FORMAT
Centrex Equipment at University of Michigan identified by its ANC 752	UM752	UNVTMIUM752

9. GENERAL GUIDELINES FOR ASSIGNING CLLI CODES

9.01 This Part includes a set of guidelines which provide a unified approach to development, administration, and maintenance of CLLI codes. Understanding CLLI code structure and applicability permits CLLI coordinators to ensure stability of codes and associated data in existing and future processes.

9.02 The CLLI codes satisfy ongoing requirements for identification of locations and certain entities at those locations, and are applicable in any manual or mechanized system.

CLLI codes should ***not*** be oriented toward a particular user. It is ***not*** the intent of the CLLI codes to identify each piece of equipment or each work group at a particular location. The CLLI code is ***not*** intended to describe attributes of the locations or entities being identified, therefore no attempt should be made to embed operational information in the code. When intelligence (meaning) is embedded in CLLI codes, those codes become increaingly difficult to administer as the need for new code classifications develop.

9.03 The code development and assignment process should include discussions with message trunk forecasting and transmission engineering groups. Code selection should consider future requirements as well as current application, with future requirements having the higest priority.

9.04 The code assignment process must include consideration of the needs of users of CLLI codes, for instance, CLCI-MSG (Common Language Circuit Identification for Message Trunks) and CLFI (Common Language Facility Identification), since the CLLI codes are embedded in these circuit and facility identification codes.

9.05 Due to widespread use of CLLI codes throughout the Bell System and in centrally developed systems, unnecessary code changes should be avoided. Obsolete CLLI codes should be removed from all data bases.

9.06 Schemes which reserve characters or groups of characters within the elements of CLLI codes should be avoided. Such schemes may lead to future encoding problems.

Encoding Switching Entities—Guidelines

9.07 Assignment of a CLLI code to identify an entity is based on function of that entity at its assigned location. An entity may have many switching functions, and each function should be identified.

Example: The following set of sample CLLI switching entity codes has been developed to reflect the various functions and switching capabilities of a hypothetical central office comprised of:

Foreign Exchange 922
Tandem Switcher
Switching Entity 233
Switching Entity 232

Sample codes:

FUNCTIONS AND SWITCHING CAPABILITIES	CODE	CLLI FORMAT
922,233,232 combined to form Marker Group No. 1 (all units trunked together-less tandem)	MG1	WXYZNJMAMG1
233,232 originating and terminating locations	23A	WXYZNJMA23A
922 foreign exchange switcher	92A	WXYZNJMA92A
Tandem-originating and terminating tandem traffic only	O1T	WXYZNJMAO1T
233 and 232 plus tandem, grouped (originating and terminating)	2GT	WXYZNJMA2GT
Terminating to 233 only	233	WXYZNJMA233
Terminating to 232 only	232	WXYZNJMA232
Terminating to foreign exchange switcher 922	922	WXYZNJMA922

Encoding Remote Terminal Locations—Guideline

9.08 Remote terminal (RT) locations may include enclosures (mini or maxi huts), vaults, pads, pedestals, manholes, poles, radio towers, buildings, trailers, or customer premises.

When an RT is placed in or on a site which has been assigned a CLLI code, the existing code for that site (pole, manhole, building, etc) is the code for that RT. CLLI codes should not be used to identify either individual remote terminals or central office terminals (COT). CLLI identifies the LOCATION of these terminals.

Specifically, when an RT is located in an enclosure (mini or maxi hut), in a vault, on a pad, or on a pedestal, use the miscellaneous nonbuilding code U(n)(n)(n)(n).

When an RT is located on a pole, use the pole code P(n)(n)(n)(n). When an RT is located in a manhole, use the manhole code M(n)(n)(n)(n). When an RT is located at a radio location, use the radio location code Q(n)(n)(n)(n).

When an RT is located on customer premises coded as a nonbuilding location, use the customer nonbuilding location code (n)(a)(n)(n)(n) form.

When an RT or COT is located in a central office building, customer building, or trailer, the 8-character building location form described in Part 5 (Building) may be used. When there is need to further subdivide these locations, the 11-character building and entity form described in Parts 5 and 6 (Entity) may be used.

Procedure for Modifying CLLI Codes Identifying Radio and Repeater Locations

9.09 Consider the case where a minicomputer has been installed at a remote location to serve as a microwave radio relay and the location has been identified using the nonbuilding radio location code Q(n)(n)(n)(n) as described in paragraph 7.12. The requirement to subdivide that location may be satisfied by using the following procedure:

(1) Establish an appropriate building code by placing an alpha character in position 8 following the character "Q" in position 7, (eg, QC).

(2) Since this identifier now has a building code, assign an appropriate nonswitching entity radio code for the microwave radio relay as described in paragraph 6.29(f).

Code Transformation:

EXISTING NONBUILDING CODE	INTERMEDIATE CODING STEP	REVISED CODE
Q(n)(n)(n)(n) Q5432	Q(a)Q(n)(n) QCQ(n)(n)	QCQ(n)(n) QCQ32

Added entity at the same building location: QCQ64

9.10 When a repeater associated with a building has been identified using the nonbuilding repeater location code R(n)(n)(n)(n), and it becomes necessary to subdivide that location, the following procedure may be used:

(1) Establish an appropriate building code by placing an alpha character in position 8 following the character "R" in position 7.

(2) Since this location now has a building identifier, assign an appropriate nonswitching entity code, using either the A(x)(x) or W(x)(x) form.

Example:

EXISTING NONBUILDING CODE	MODIFIED FORM	REVISED CODE
R(n)(n)(n)(n) R2345	R(a)A(x)(x) or R(a)W(x)(x)	 RBA45 or RBW45

10. CLLI EXHIBITS

10.01 This part includes Figures and Tables which display CLLI codes described in this section. These Exhibits have been developed for use as encoding and performance aids.

Figures

1. CLLI Code Structure

2. CLLI Codes Assigned to Various Locations

Tables

A. CLLI Encoding Guide—States of the United States, Provinces and Territories of Canada, Foreign Country Codes, and Unique Place and State Codes

B. CLLI General Reference List of Entity Codes by Entity Category

C. CLLI Encoding Guide for Switchboard and Desk Termination Entities

D. CLLI Encoding Guide for Miscellaneous Switching Termination Entities

E. CLLI Encoding Guide for Nonswitching Entities

F. CLLI Encoding Guide for Nonbuilding and Customer Locations

COMMON LANGUAGE LOCATION IDENTIFICATION (CLLI) CODE STRUCTURE

CLLI CODE ELEMENT	CHARACTER POSITION AND PERMITTED CHARACTER SET				REFERENCE SECTION 795-100-100
	1-4	5-6	7-8	9-11	
Place	aaaa				Part 3
State		aa			Part 4
Building			aa or nn		Part 5
Entity Switching Nonswitching				xxx	Part 6
Nonbuilding Locations			annnn		Part 7
Customer Locations			nannn		Part 8

(Key: a = any alpha character, a-z; n = any numeric character, 0-9;
x = any alpha or numeric character, a-z or 0-9)

These CLLI code elements may be combined into the following formats:

(a) Place, state, building, and entity (11 characters)
(b) Place, state, and nonbuilding location (11 characters)
(c) Place, state, and customer location (11 characters)
(d) Place, state, and building (8 characters)

Note: When it is not necessary to identify an entity within a building, the 8-character format may be used.

When software cross-connectable locations are being identified, the 11-character format must be used.

A temporary place code may be developed by placing hyphens in positions 1 and 2 and alpha characters in positions 3 and 4. When a permanent place code is assigned, the temporary place code must be removed.

When a place name contains less than 4 characters, the place code is left justified in the place code field, and unused positions in the field must be blank filled.

Fig. 1—CLLI Code Structure

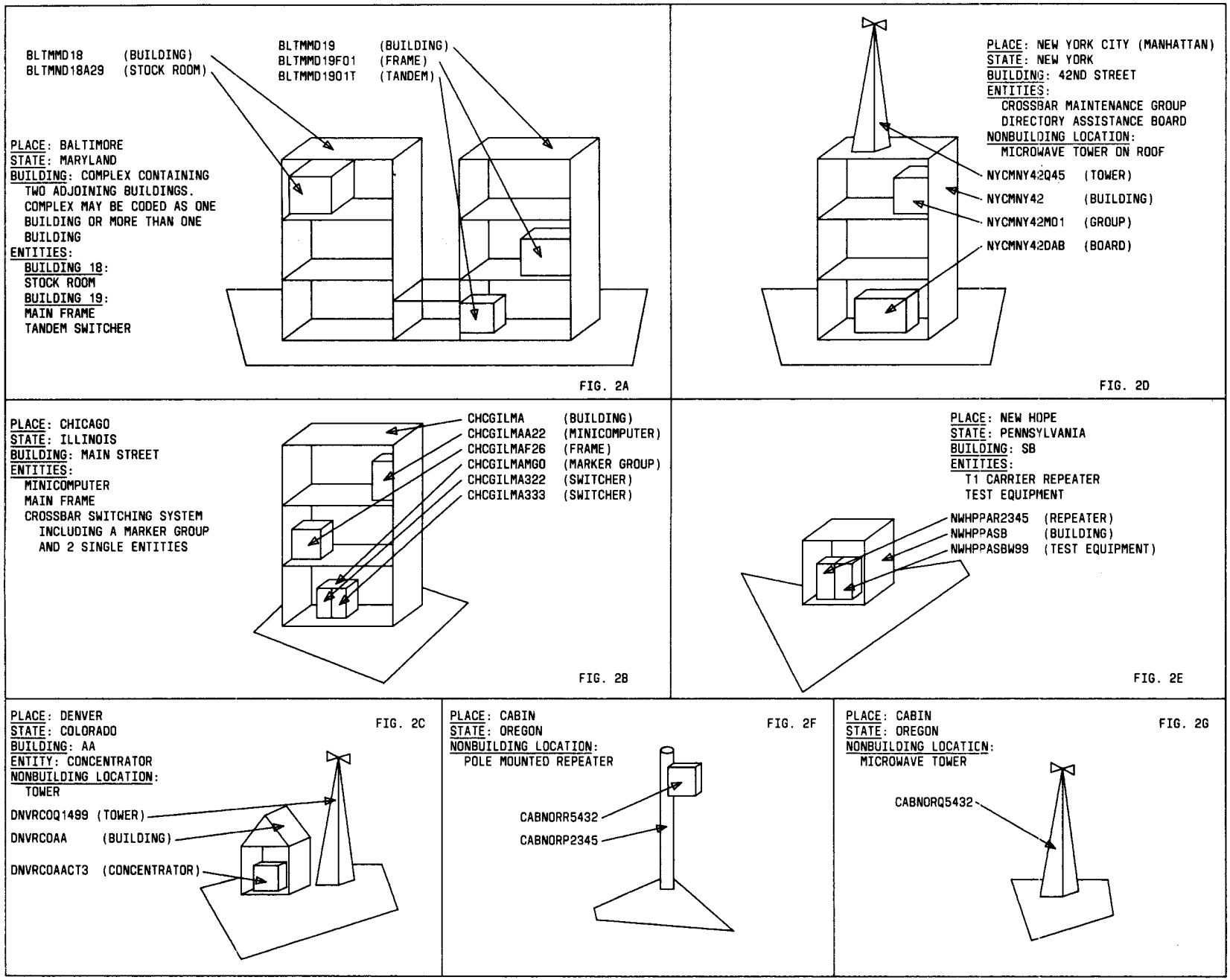

Fig. 2—CLLI Codes Assigned to Various Locations

TABLE A

COMMON LANGUAGE LOCATION IDENTIFICATION (CLLI) ENCODING GUIDE FOR STATES OF THE UNITED STATES, PROVINCES AND TERRITORIES OF CANADA, FOREIGN COUNTRIES, AND UNIQUE PLACE AND STATE CODES

STATE NAME	STATE CODE	REFERENCE BSP SECTION
Alabama	AL	795-101-100
Alaska	AK	795-102-100
Arizona	AZ	795-103-100
Arkansas	AR	795-104-100
California	CA	795-105-100
Colorado	CO	795-106-100
Connecticut	CT	795-107-100
Delaware	DE	795-108-100
District of Columbia	DC	795-109-100
Florida	FL	795-110-100
Georgia	GA	795-111-100
Hawaii	HI	795-112-100
Idaho	ID	795-113-100
Illinois	IL	795-114-100
Indiana	IN	795-115-100
Iowa	IA	795-116-100
Kansas	KS	795-117-100
Kentucky	KY	795-118-100
Louisiana	LA	795-119-100
Maine	ME	795-120-100
Maryland	MD	795-121-100
Massachusetts	MA	795-122-100
Michigan	MI	795-123-100
Minnesota	MN	795-124-100
Mississippi	MS	795-125-100
Missouri	MO	795-126-100
Montana	MT	795-127-100
Nebraska	NE	795-128-100
Nevada	NV	795-129-100
New Hampshire	NH	795-130-100
New Jersey	NJ	795-131-100
New Mexico	NM	795-132-100
New York	NY	795-133-100
North Carolina	NC	795-134-100
North Dakota	ND	795-135-100
Ohio	OH	795-136-100
Oklahoma	OK	795-137-100
Oregon	OR	795-138-100
Pennsylvania	PA	795-139-100
Rhode Island	RI	795-140-100

TABLE A (Contd)

COMMON LANGUAGE LOCATION IDENTIFICATION (CLLI)
ENCODING GUIDE
FOR
STATES OF THE UNITED STATES, PROVINCES AND TERRITORIES OF CANADA, FOREIGN COUNTRIES, AND UNIQUE PLACE AND STATE CODES

STATE NAME	STATE CODE	REFERENCE BSP SECTION
South Carolina	SC	795-141-100
South Dakota	SD	795-142-100
Tennessee	TN	795-143-100
Texas	TX	795-144-100
Utah	UT	795-145-100
Vermont	VT	795-146-100
Virginia	VA	795-147-100
Washington	WA	795-148-100
West Virginia	WV	795-149-100
Wisconsin	WI	795-150-100
Wyoming	WY	795-151-100
Provinces and Territories of Canada		795-179-100
Countries		795-180-100

UNIQUE PLACE NAME	PLACE CODE	STATE CODE
Satellite (refer to 4.06 and 7.17)	STLT	EO
Arctic Ocean	ARON	HS
Atlantic Ocean	ATON	HS
Bering Sea	BRGS	HS
Caribbean Sea	CRBS	HS
Gulf of Mexico	GLMX	HS
Indian Ocean	INON	HS
Pacific Ocean	PCON	HS

TABLE B

COMMON LANGUAGE LOCATION IDENTIFICATION (CLLI)
GENERAL REFERENCE LIST OF ENTITY CODES
BY ENTITY* CATEGORY

ENTITY CATEGORY	ENTITY	CLLI ENTITY CODE FORMAT (CHARACTER POSITIONS 9, 10, 11)	
SWITCHING (Formerly Traffic Units)	End Office		
	Complete Switching System:		
	Crossbar	MG(n)	MG(a^1)
	Step-By-Step	SG(n)	SG(a^1)
	Electronic-Analog	CG(n)	CG(a^1)
	-Digital	DS(n)	DS(a^1)
	Single Entity	(n)(n)(n)	(n)(n)(a^1)
	Multiple Entity	—	(n)(n)(a^1)
	Tandem Office		
	Individual Tandem	(n)(n)T	
	Tandem Combinations:		
	Tandem/Tandem	C(n)T	
	Tandem/Switchboard	B(n)T	
	Tandem/Marker Group or Control Group	(n)GT	
	Special Switching Applications:		
	Common Control Switching Arrangements	Z(a)Z	
	Remote Switching Systems	RS(n)	
	Teletypewriter Switching Systems	X(a)X	
	Concentrator	CT(x^1)	
	Switchboard and Desk Terminations (Formerly called Traffic Switchboards and Desks)	Refer to Table C	
	Miscellaneous Switching Termination Entities (Formerly called Miscellaneous Traffic Unit Terminations)	Refer to Table D	
NONSWITCHING (Formerly Plant, or Administrative Units)	Frames (all types)	F(x)(x)	
	All other Nonswitching Entity Codes	Refer to Table E	

Notes:

* Formerly called Building Subdivision Code, Traffic, Plant, and Administrative Unit codes.

(a^1) = Alpha Characters B, D, I, O, T, U, W, and Y are not permitted in this character position. The alpha character in this position indicates that combinations of switching entities are represented.
(a) = Any alpha character, A-Z
(n) = Any numeric character, 0-9
(x) = Any alpha or numeric character, A-Z or 0-9
(x^1) = Any alpha or numeric character, except B, D, I, O, T, U, W, and Y.

Upper case character displayed in the code format is the required character for that type of entity.

TABLE C

COMMON LANGUAGE LOCATION IDENTIFICATION (CLLI) ENCODING GUIDE FOR *SWITCHBOARD AND DESK TERMINATION ENTITIES

TYPE	CLLI CODE FORMAT (CHARACTER POSITIONS 9, 10, 11)	CODE EXAMPLE
Centralized Automatic Message Accounting (CAMA) Board	(n)CB	2CB
Dial Service Assistance (DSA) Board	(n)DB	2DB
Combined Toll, DSA, and CAMA	(n)BB	3BB
Directory Assistance (Information)	(n)IB	2IB
Intercept Board	(n)NB	2NB
Combined Directory Assistance and Intercept	(n)QB	4QB
Inward Toll Board	(n)WB	2WB
Manual Switchboard	(n)MB	2MB
Overseas Toll Board	(n)VB	2VB
Rate and Route Desk	(n)RB	2RB
Service Observing Switchboard; Service Evaluation Center and Signal Converter Allotter Used for the Service Evaluation System	(n)OB	5OB
Special Boards: Conference Mobile Marine Switchboard Converted to Special Operation Service Traffic (SOST)	(n)LB	3LB
Teleconference Board	(n)(n)B	26B
Telephone Company PBX (offical)	(n)PB	3PB
Traffic Service Position System (TSPS) Board	(n)EB	3EB
Traffic Service Position (Universal TSP)	(n)UB	2UB
Toll Board (Through, Outward)	(n)TB	2TB
Other Switchboard and Desk Entities	(n)ZB	2ZB

Note: Switchboard and Desk entities always have alpha character "B" in character position 11 of the CLLI code format.

Upper case character displayed in the code format is the required character for that type of entity.

(n) = any numeric character, 0 through 9, may be used.

*Formerly called Traffic Switchboard and Desks.

TABLE D

COMMON LANGUAGE LOCATION IDENTIFICATION (CLLI) ENCODING GUIDE FOR MISCELLANEOUS SWITCHING TERMINATION ENTITIES#

TYPE	CLLI CODE FORMAT (CHARACTER POSITIONS 9, 10, 11)	CODE EXAMPLE
Announcement Machine*, incl Voice Storage System (VSS), Public Announcement System (PA), Mass Announcement Systems (MAS), Audio Response Units	(n)AD	3AD
Centrex (Central Office)	(n)XD	2XD
Distributors:		
Automatic Distributor	(n)CD	2CD
Time Distributor*	(n)TD	5TD
Weather Distributor*	(n)WD	2WD
Other Distributors*	(n)DD	4DD
Emergency (911 Service)	(n)ED	2ED
Intercept:		
Automatic Intercept System: File Access System (FAS)	(n)ID	3ID
Combined Operator, Trouble, and Machine Intercept	(n)ND	2ND
Position Link Frame	(n)PD	2PD
Rate and Quote System	(n)QD	3QD
TSPS Common Control Unit, Remote Trunking Arrangement	(x)UD	2UD
Other Switching Termination Entities, incl. Improved Mobile Telephone System (IMTS) and all other mobile control terminals Bellboy Control terminal Coin to Collect Verification Circuit Switchers at Other Common Carrier Locations	(x)MD	7MD

Note: Miscellaneous switching termination entities always are identified by the alpha character "D" in character position 11 of the CLLI code format.

Upper case characters displayed in the code format are the required characters for that type of entity.

Entity types "Other (miscellaneous) Switching Termination Entities" and "TSPS Common Control Unit" will accept any alpha or numeric character in position 9. The remaining entity types on this list require any numeric character, 0 through 9, in position 9.

* When identifying announcement systems, the announcement machine portion of the system should be coded (n)AD. The distributors should be coded (n)DD, except for Time and Weather Distributors which are coded (n)TD and (n)WD, respectively.

\# Formerly called Miscellaneous Traffic Unit Terminations.

TABLE E

COMMON LANGUAGE LOCATION IDENTIFICATION (CLLI) ENCODING GUIDE FOR NONSWITCHING ENTITIES#

TYPE	CLLI CODE FORMAT (CHARACTER POSITIONS 9, 10, 11)	CODE EXAMPLE
Frames (all types)	F(x)(x)	F23
Administrative Entities	A(x)(x)	AA3
Exchange Switchroom	E(x)(x)	E3A
Software Cross-connectable Entities	K(x)(x)	K32
Maintenance Group (including work centers, such as Switching Control Centers, and Operations Systems such as CAROT, CMS, CTMS)	M(x)(x)	MA2
Test or Service Position	P(x)(x)	P34
Radio Tower collocated on building	Q(n)(n)	Q23
Service Center	S(x)(x)	SP2
Toll Test Room (or Board)	T(x)(x)	TTR
Other Nonswitching Entities	W(x)(x)	WVL

Notes: (n) = Any numeric character, 0-9, may be used.
(x) = Any alpha (A-Z) or numeric (0-9) character may be used, with restrictions as follows:

- Character "G" cannot be used in character position 10.
- Characters B, D, I, O, T, U, W, and Y cannot be used in character position 11.
- Upper case character displayed in the code format is the required character for that type of entity.

Formerly called Frames, and Plant and Administrative Unit Codes.

TABLE F

**COMMON LANGUAGE LOCATION IDENTIFICATION (CLLI)
ENCODING GUIDE
FOR
NONBUILDING AND CUSTOMER LOCATIONS**

TYPE	CLLI CODE FORMAT (CHARACTER POSITIONS 7 THROUGH 11)	CODE EXAMPLE
Bell Operating Company Nonbuilding Locations:	(a^1)(n)(n)(n)(n)	
Boundary	B(n)(n)(n)(n)	B1234
International boundary crossing points		
End Point	E(n)(n)(n)(n)	E2345
Junction	J(n)(n)(n)(n)	J5432
Manhole	M(n)(n)(n)(n)	M9876
Pole	P(n)(n)(n)(n)	P8834
Radio	Q(n)(n)(n)(n)	Q5634
Repeater	R(n)(n)(n)(n)	R3457
Toll Station	S(n)(n)(n)(n)	S3344
Other	U(n)(n)(n)(n)	U8877
Independent Telephone Company Nonbuilding Locations	X(n)(n)(n)(n)	X1234
Customer Location	(n)(a)(n)(n)(n)	1A234

Note: (a) = any alpha character, A-Z, may be used.

(a^1) = alpha characters B, E, J, M, P, Q, R, S, or U may be used.

(n) = any numeric character, 0-9, may be used.

Where upper case character appears in code format, the character displayed is the required character.