QWEST Communications International Inc. Technical Publication

COMMON LANGUAGE EQUIPMENT CLASSIFICATION AND BAR CODE LABELING REQUIREMENTS FOR CENTRAL OFFICE EQUIPMENT

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NOTICE

This Technical Publication has been prepared to provide QWEST Communications International Inc. (QWEST) suppliers of telecommunications equipment information on COMMON LANGUAGE® Equipment Identification CLEI™ codes and their assignment to central office equipment. In addition, this publication provides information on the requirement by QWEST that all central office equipment must have COMMON LANGUAGE® identification as a part of that product.

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If further information is required, please contact:

QWEST Communications International Inc.
Manager – New Services Planning
700 W. Mineral Ave. MN-F15.15
Littleton, CO 80120
(303) 707-7107
(303) 707-9497 Fax #
E-mail: jhsmit2@qwest.com

Throughout this publication, the term QWEST signifies QWEST Communications International Inc.

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QWEST Corporation
Manager – New Services Planning
700 W. Mineral Ave. MN-F15.15
Littleton, CO 80120
(303) 707-7107
(303) 707-9497 Fax #
E-mail: jhsmit2@qwest.com

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Throughout this publication, the term QWEST signifies QWEST Communications International Inc.

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1. Introduction

1.1 Purpose

This Technical Publication has been prepared to provide QWEST Communications, Inc. (U S WEST) suppliers of telecommunications equipment information on COMMON LANGUAGE® Equipment Identification CLEI™ codes and their assignment to central office equipment. In addition, this publication provides information on the requirement by QWEST that all central office equipment must have COMMON LANGUAGE® identification as a part of that product.

1.2 Organization

Section 1. provides the purpose and organization of this publication. Section 2. describes guidelines and routines. Section 3. describes the CLEI™ code and Section 4. provides the information on the types of products that are assigned CLEI™ codes. Section 5. describes information about the products that are required for the coding process. Section 6. provides information on the use of the CLEI™ codes by suppliers. Section 7. provides guidelines for marking of CLEI™ codes on frames and hardwired equipment. Section 8. provides guidelines for the marking of CLEI™ codes on plug-ins and portable test equipment. Section 9. provides information on the marking of products that are returned for repair. Section 10 provides guidelines for marking of CLEI™ codes on shipping containers and packages. A glossary of terms used in this publication is provided in Section 11. Also provided is a list of references in Section 12.

Notes:

- 1. The name of QWEST is to include the 14 states of Arizona, Colorado, Idaho, Iowa, Minnesota, Montana, Nebraska, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming.
- 2. COMMON LANGUAGE® Equipment Identification CLEI™ coding includes the development of Continuing Property Record (CPR) Equipment Catalog Item Records (ECIR) and Bar Code Label Data.

The supplier is required to negotiate a contract with Telcordia Communications Research (Telcordia) for initial and ongoing CLEI™ code assignment. Information regarding this can be obtained by calling the District Manager, Marketing and Customer Support, Telcordia Communications Research Language Standards Division on (201) 699-3026.

The coding assignment must accompany supplier products at the time the item is received at QWEST facilities.

2. General Information

2.1 Definition

CLEI™ codes are unique codes that provide a standard method of identifying telecommunications equipment or products in a uniform feature-oriented language. These codes are required for circuit design, circuit layout, assignment and inventory management work as well as for estimating, planning, and ordering functions. The codes are also used for interfacing with various computer-based business information systems at appropriate levels in their structured identification hierarchy.

Accounting records that provide investment, capital, and expense data required by federal and state agencies for taxing purposes as well as setting telephone rates are associated with the use and administration of telecommunications equipment in QWEST. All telephone equipment categorized for central office usage, Federal Communications Commission (FCC) Uniform System of Accounts (USOA), Part 31 and 32, are assigned Continuing Property Record numbers for the above mentioned purposes and become an integral part of the identification of the equipment.

2.2. Code and Record Development

The Telcordia Language Standards Division is responsible for the development and maintenance of CLEI™ codes and other associated data for equipment purchased by QWEST. The development of these codes and records occurs through requests submitted by suppliers of the equipment to Telcordia Communications Research.

Requests for coding from suppliers must be accompanied by sufficient technical information about the equipment, as described in Telcordia Technical Reference TR-ISD-000325, "Information Required from Equipment Suppliers for Operations Systems". Forms are included in TR-ISD-000325 for submitting requests as well as the associated technical information to the Telcordia Language Standards Division. Suppliers must submit requests for the development of CLEI™ codes to:

Telcordia Communications, Inc.
Language Standards Division Production Control
Room 4C863
444 Hoes Lane, CN-1300
Piscataway, New Jersey 08854-4182

- When the Telcordia Language Standards Division receives a request, the attached technical data is examined to determine if it is sufficient for coding purposes. If sufficient data is not received, the requester is contacted and informed of the additional data required. Codes and records cannot be developed until all of the required data is received.

- When sufficient data is provided by the supplier, a Language Standards Division engineer familiar with the class of equipment to be analyzed determines if the equipment: Has already been coded, requires codes, or cannot be coded (does not fit code universe, Section 4. and Technical Reference TR-ISD-000325).
- When applicable, bar code label data is developed.
- On completion of the analysis and coding process, the Language Standards Division notifies the suppler with a list of the assigned codes and associated data.

2.3 Marking Equipment with CLEIä Codes

All central office equipment assigned CLEI™ codes and is purchased by QWEST must be marked with CLEI™ codes by the suppler. The guidelines for marking hardwired equipment with CLEI™ codes involves a number of processes as described in Section 7. All plug-in equipment and portable test equipment must be marked or remarked as described in Section 8. Products that are repaired must also be marked or remarked as described in Section 9. The method of marking the CLEI™ codes on shipping containers will be in agreement with the guidelines described in Section 10.

2.4 Ordering Equipment with CLEIä Codes

QWEST may order equipment according to the CLEI™ codes that have been assigned, rather than by the conventional part numbers. Therefore, suppliers should be aware that Purchase Orders may be prepared using only the CLEI™ code designation.

2.5 Equipment Designs Using Another Manufacturer's Equipment

In the event a suppler uses equipment of another manufacturer in their equipment designs and does not physically re-designate the user's product identity scheme and/or logo, the supplier should either submit a request for the coding of the embedded equipment itself, or have the supplying manufacturer do so. If supplier's central office equipment is altered by QWEST after purchase, then it shall be QWEST's responsibility to obtain any additional CLEI™ coding. If the embedded equipment has been redesigned by a manufacturer, requests must be submitted for coding by that manufacturer. Codes and records will be developed for the appropriate manufacturer whose identity is designated.

3. CLEIä Code Format and Code Structure

3.1 Purpose and Scope

A prime objective in the development of a CLEI™ code is that the functional capabilities and design intent for the product are properly accounted for and correlated with appropriate code assignments. The following paragraphs describe the format and code structure which provide for a standard form of coded identification of equipment entities. The purpose of this format and code structure is for efficient information exchange and product management by QWEST.

CLEI™ codes provide the structure and coded representation of equipment entities that are used together with associated records and are intended as an aid for: equipment and ordering; recording-keeping and assignment for circuit layout design; identification of equipment within circuit details exchanged between telecommunications carriers; and selecting inventory for circuit assignments, maintenance or modification.

3.2 Code Format

The format of a CLEI™ code consists of ten alphanumeric characters apportioned to five data elements, as follows:

DATA ELEMENT	ELEMENT NAME	NO. OF CHARACTERS	ELEMENT CODES
1	Family	2 (Pos 1,2)	Alphanumeric
2	Subfamily	2 (Pos 3,4)	Alphanumeric
3	Features	3 (Pos 5-7)	Alphanumeric
4	Reference	1 (Pos 8)	Alphanumeric
5	Complemental	2 (Pos 9,10)	Alpha

3.3 Data Element Descriptions

The Family Data Elemental denotes an equipment family or type. For example, D4 Channel Bank equipment might be assigned a Family code of D4. The subfamily element denotes functional categories within an equipment family. For example, an E&M Signaling Channel Unit might be coded CE.

The Family and Subfamily Data Elements taken together comprise a Basic Code. The four-character Basic Code is generally mnemonic and may be assigned to a variety of manufactured equipment having similar features. Conversely, several Basic Codes might be assigned to a single equipment system, which provides many dissimilar functions. The choice is determined when a functional analysis of the equipment is made. Each basic code assigned is unique within the CLEI™ universe. When a product is applicable to more than one Family or Basic Code, it will be generally coded for its predominant use.

The features Data Element denotes optional service and design capabilities available within a type of equipment when compared to similar equipment of the same or other manufacturers. Consideration is given to the following items when the Features Data Element is encoded:

- Operating Features: Optional features provided for fulfilling telephone company needs. Features are restricted to optional operating functions that are considered in developing a circuit using combinations of various equipment. Locally administered or non-record-type optional features are excluded.
- Lead-Set Features: External lead-sets required for circuit operation. Excluded are optional leads that are required for peripheral support or used for test equipment.
- Line Facility Restrictions: Features determined by line facility interface restrictions, e.g. 600-ohms versus 900-ohms impedance.
- Redesigned Equipment: Equipment that combines already separately coded features into a redesigned unit for universal use, providing all features. It may be assigned new feature code(s).
- Vintage: A code that is assigned to a feature or set of features will remain unchanged, regardless of the vintage of the product.
- Physical Differences: Codes are not generally assigned for physical differences of equipment (e.g., arrangement of components, panel size) that do not affect functional features. However, separate codes are assigned when physical differences of plug-in products result in mounting incompatibility.

The consideration of the bulleted items above is applied equally to hard-wired equipment, plug-in products, and shop-wired frame equipment. In the case of shop-wired frame equipment, attention is also addressed to any feature that affects the capacity of mountings or the mounting circuit.

The Complemental Data Element denotes other information that supports the data represented by the first four data elements and which provides for a unique equipment identity. Examples of typical information represented by this data element are manufacturing vintage, version data, and circuit, wiring or equipment data.

3.4 Code Signature

Although a full CLEI™ code is described as having ten characters and five data elements, the code structure differs for the various application of the code in the equipment hierarchy. Variable length CLEI™ codes will be developed and provided for equipment as follows:

TYPE	DATA ELEMENTS	CODE CHARACTERS
1. Frame Equipment	Family, Subfamily, Features	7
2. Hardwired units and mountings for plug-ins	All except Complemental	8
3. Plug-ins and portable test equipment	All	10

4. Product Coding Considerations

4.1 General

CLEI™ codes and inventory records are developed for telecommunications equipment and apparatus consistent with the needs of QWEST planning, engineering, provisioning, accounting, inventory control, ordering, and maintenance functions. The coding of central office equipment and apparatus is the main area of concern for supplying the requirements of operations associated with these functions.

4.2 Detailed Continuing Property Record (DCPR) Catalog

The DCPR Catalog is an accumulation of CPRs for items of property and capital investment data is detailed by FCC USOA, Parts 31 and 32, and Telcordia Accounting Standards A-1 letter. The catalog reflects accounting classification data and separations methods studies data, which is used by QWEST for tracking Central Office Equipment (COE) investment.

Although items for investment purposes will be accounted for as COE, not all items will be uniquely identified with individual property records. Most smaller items (e.g., nuts, bolts, piece parts, fuses, cabling, etc., as well as items not uniquely identifiable when installed), fall into the category of non-COE. Such items are not generally billed separately on new installations or major modifications and, therefore, are handled as "minor" material.

4.3 CLEIä Code Universe

CLEI™ codes are not developed for all of the items included in the DCPR catalog. The universe of items that are coded is substantially smaller and consists generally of equipment that is in the transmission path of the telephone network.

The determination of what items require CLEI™ codes is initially made on a major product category level. Typical categories that are coded are voice frequency transmission equipment, carrier transmission equipment, radio transmission equipment, assignable power equipment, and all central office plug-in units and portable test equipment.

The definition of the CLEI™ code universe is explained further in Telcordia Technical Reference TR-ISD-000325.

5. Product Information Requirements

5.1 General

To accomplish the task of coding products, it is necessary to obtain sufficient information about the product to assure proper identification and to adequately cover all of its functional features and options. See Telcordia Technical Reference TR-ISD-000325 for specific technical information required for CLEI™ coding.

5.2 Proprietary information

Normally, the satisfactory development of CLEI™ codes and associated property and inventory records may be accomplished without the need for any proprietary information of a supplier. Accordingly, a submission of proprietary information is neither solicited nor expected.

5.3 Continuity of Information Flow

After initial technical data is obtained and CLEI™ codes and records have been developed, technical enhancements and improvements that change the operational quality and characteristics of a product will contribute to the need for changes in existing record data and require new codes. CLEI™ code development is a sustained process in which changes in products are continually reflected in the codes. As product changes occur, code data will be reviewed and updated. Therefore, non-proprietary information associated with all planned changes in the design of a product, whether minor or complex, will be made available to Telcordia Communications Research for code review.

5.4 Product Changes that affect CLEIä Codes

Typical product changes that affect CLEI™ codes or the associated inventory and property records are:

- Changes in a product's identification, e.g., part number, and/or secondary identifiers such as issue, series, vintage, etc.
- Changes in addition to, or deletions from the functional capabilities or applications of the product.
- A change in the manufacturer of a product.
- Any change that affects the bi-directional interchangeability, either physically or electrically, of any unit with its predecessor.
- Class A changes applied to plug-in units. See QWEST Technical Publication 77354, Guidelines for Product Change Notices, for a description of a Class A change.
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6. Publicity

QWEST does not endorse suppliers, their products, or their services. This policy is meant to avoid any situation that can produce the following undesirable results:

- Express endorsement of a particular supplier, product, or service may lead to an undue burden by requiring similar endorsements of other suppliers' products or services and also to avoid favored treatment.
- Implied or apparent endorsement can result in a misunderstanding on the part of others as to QWEST's evaluation or acceptance of particular suppliers, products or services.

Suppliers must not use CLEI™ codes or data in their advertising or promotion brochures if an inference of endorsement by QWEST is suggested.

7. Marking Hardwired Products

7.1 General

CLEI™ codes that are marked on hard-wired products will be visible when viewed from an in-service or installed position.

Space will be allocated to mark a full ten-character code. For hard-wired units, the marking will be eight characters with space allocated for two additional characters on one line. For frames, the allocation is seven characters, which will always appear horizontally on one line.

The codes will be marked horizontally or vertically, never diagonally. It is preferred that vertical markings appear 90 degrees counterclockwise from the horizontal.

Codes may be located to coexist with the manufacturer's identification marking of products. When space does not permit a CLEI™ code to coexist with existing markings, the CLEI™ code marking will be given highest priority among all markings that appear on a product.

7.2 Marking Medium and Character Sizes

A supplier's selection of the marking medium should be dependent upon appearances and cost factors. Rubber stamping, burn-on, and silk-screening processes should be considered. If the burn-on process is utilized, only the first four characters (Basic Code) should be burned on. However, the requirements included herein regarding style, size, color, and location should be followed.

CLEI™ codes will be marked according to the following character-size guidelines:

EQUIPMENT	HEIGHT (INCHES)
Equipment Panels and Mounting Plates Common Cover	3/8
Face of Plate or Panel	3/8
Face of Large Apparatus or Equipment over 1-3/4 inches wide	3/8
Face of Small Apparatus or Equipment 1-3/4 inches or less in width	3/16
Unit Frame Work	3/8
Frame Base	3/4
Frame Upright	3/8

When there is insufficient space for marking the CLEI™ code in a preferred size, the size may be progressively reduced to the next smaller size, but no smaller than 5/64 inch.

7.3 Character Type Faces

The following typefaces, representative items of the Standard American Type Founders, will be employed except that the letter O will be an inverted letter Q. The typographical identification is given for each size. For example, 18-point News Gothic Condensed type is the complete identification of the standard size and style of type having capital letters approximately 3/16 inch high and for convenience referred to as 3/16 inch characters. Lower-case lettering will not be used.

CHARACTER SIZE (HEIGHT IN INCHES)	TYPE FACE
5/16	8-point News Guide
1/8	12-point News Gothic
3/16	18-point News Gothic Condensed
	18-point News Gothic (Silk-Screen Characters Only)
3/8	36-point News Gothic Condensed
	36-point News Gothic (Silk-Screen Characters Only)
3/4	72-point Alternate Gothic No. 1

Black ink on light surfaces and white ink on dark surfaces will be used, depending on which gives the better contrast. An exception to this is the use of other colors for important esthetic reasons.

8. Bar Code Label Application Plug-in Products

8.1 General

The affixing of COMMON LANGUAGE® bar code labels on plug-in products and portable test equipment is designated as a design requirement that provides for the automatic identification of these products which can be used as input to the various computer-based inventory management and administrative systems residing in QWEST.

The primary label used for this purpose is self-adhering, and its dimensions are 0.4 inch by 1.0 inch. Information on the label consists of a number, i.e., equipment catalog item number, binary-coded into bars for electronic scanning using a portable scanning device, and its related CLEI™ code in human-readable form.

8.2 Supplier Generic Label Requirements

Telcordia Technical Reference TR-TAP-000383 Generic Requirements for COMMON LANGUAGE® Bar Code Labels, provides the requirements for a primary pressure-sensitive adhesive-backed label type with both a binary code and an alphanumeric code readable on the face. This Technical Publication also provides the requirements for other label types that may be substituted for the primary labels. The conditions for their use are described in paragraphs 8.11 through 8.13.

8.3 Label Placement on Plug-in Units

A label must be affixed to a plug-in unit to meet the following requirements:

- The label must be affixed on a smooth, flat, clean surface. Affixing of labels over screw heads, minor identifications or protrusions, voids, etc., must always be avoided.
- The label must be located on a plug-in so that it can be electronically scanned and read when the plug-in is inserted in its mounting, (i.e., its "in-service" position).
- The label must be affixed horizontally or vertically, never diagonally. It is preferred that vertical placement appear 90 degrees counterclockwise form the horizontal.
- There must be no physical obstructions, which could interfere with the wand of a scanning device as it scans the bar code when the plug-in unit is in an "in-service position.

- When a plug-in is inserted in its mounting, there must be no obstruction, which will normally cover or hide the label from view. Specifically, the label will not be hidden from view by a designation strip, framework flange, etc. The label must be readily observable by a craftperson engaged in scanning operations in a central office environment.

Note: Some conditions that are found in central office environments which can cause difficulty in the scanning process and which must be considered when placing labels on plug-in units are dim lighting the location of units at below eye level, and, especially, the location of units at above eye level that also require the climbing of ladders to scan the units.

- The COMMON LANGUAGE® bar code label must be given the highest priority among other product markings that appear on the product.

8.4 Label Placement on Portable Test Equipment

A label must be affixed on portable test equipment to meet the following requirements in addition to those for plug-in units as described in paragraph 8.3, bullets 1,3 and 6.

- The label must be readily observable on the equipment and must have no physical obstructions, which would interfere with the wand of a scanning device as it scans the bar code.
- The label must generally be placed in near proximity to the markings the manufacturer shows for product identification.

8.5 Label Placement on Plug-on-Plug Modules

A label will be affixed to an ancillary plug-in module that will be plugged into a basic plug-in when the following conditions exist:

- There is no space for a label on the module.
- The module is expected to be provisioned by QWEST and will be included in the company's spares inventory.

There should be no concern by a manufacturer for the visibility of a label affixed to an ancillary plug-in module when it is plugged into a basic plug-in that is in its in-service position.

8.6 Waiver of Labeling for Backplane Devices.

Devices that are used on the rear of equipment frames or shelf units should be verified with QWEST for labeling requirements. Typically, these devices include printed wiring board backplanes, strapping cards, adapter cards, etc. Exempted from this waiver are devices, which meet the same conditions for labeling as shown in paragraph 8.5, bullets 1 and 2.

8.7 Bar Code Data Development

The Telcordia Language Standards Division is solely responsible for the development and maintenance of the bar code data used for COMMON LANGUAGE® bar code labels. The data is developed at the time CLEI™ codes are developed and assigned to a manufacturer's plug-in products or portable test equipment.

Requests for CLEI™code and record development, including bar code data development, will be addressed to the Telcordia Language Standards Division, as follows:

Telcordia Communications, Inc.
Language Standards Division Production Control
Room 4C863
444 Hoes Lane, CN-1300
Piscataway, New Jersey 08854-4182

Requests must be submitted in conformance with the guidelines described in Telcordia Technical Reference TR-ISD-000325, Equipment Information Required From Suppliers for Operation Systems.

8.8 Product Manufacturing and Design Changes Affecting Bar Code Data

When a change in the design of a plug-in, or a portable test equipment item, or in the manufacturing process, is effected, whether minor or complex, a request for code development will be submitted to Telcordia's Language Standards Division for code review and possible label data changes. Because relevant CLEI™ code and bar code number may change, labels manufactured for a specific generation or vintage of product must not be affixed to a subsequently changed product except when it is indicated as acceptable in an appropriate Telcordia bar code data document.

A CLEI™ code and bar code number for a plug-in item is changed when:

- A changed Plug-in is not bi-directionally interchangeable, physically, functionally, or electrically, with its predecessor, or
- A product's identification e.g., part number and/or secondary identifiers such as issue, series, vintage, etc., changed, or
- A manufacturer's company name is changed, or
- A change is implemented on a class A basis. See QWEST Technical Publication 77354, Guidelines for Product Change Notices, for a description of a Class A change.

8.9 Bar Code Data Reports

Telcordia Communications Research normally provides bar code data to a supplier upon satisfactory completion of a request. The data is provided showing the supplier's product identifier cross-referenced to an assigned CLEI™ code and bar code number to be binary-coded in the bars shown on a label.

In addition bar code data is available in a series of Telcordia BR-795-301-XXX practices on Microfiche. Data is provided for three categories of product labeling capabilities.

- Products that can be labeled.
- Products that cannot be labeled.
- Products that require decisions whether they can or cannot be labeled.

The data is provided in a variety of sorted sequences, as well, e.g., by CLEI™ code, by ECI number, by manufacturer and product identifier. A description of each BR-795-301-XXX practice may be found in BR-795-000-000, Numerical Index-Division 795.

Special reports containing bar code data are also available on paper copy. Information for acquiring special reports or BR 795-301-XXX practices may be obtained by addressing a request to:

District Manager
Marketing and Customer Support-
Language Standards Division
Room 4C863
444 Hoes Lane, CN-1300
Piscataway, New Jersey 08854-4182

8.10 CLEIä-Coded Products Lacking Bar Code Label Data

Some plug-in or portable test equipment items, assigned CLEI™ codes prior to the establishment of bar code labeling as a design requirement and still being manufactured, may require the development of bar code data. Lists of these items are shown in Telcordia practices BR 795-301-008 and BR 795-301-009 (see paragraph 8.9).

The manufacturer will send a written request for the development of bar code data for these items to the address shown in paragraph 8.7. The request will contain the following information:

- The manufacturer's product identifier, including manufacturing vintage information.
- The CLEI™ code assigned to the unit.
- The type label (A, B , D or E) that will be affixed to the unit. See Telcordia Technical Reference TR-TAP-000383 for a description of each label type.

8.11 Use of "Write-On" Labels

Once a product has been marked with a bar code label, the labeling process will be continued through all subsequent design and manufacturing changes. Occasionally, the interval between the manufacture of a previously CLEI™-coded design and a new design may prevent the timely availability of new labels for the changed product. In the interim, when an appropriate label is not available, a "write-on" label marked with both the newly assigned CLEI™ code and the first six digits of the bar code number will be affixed to the item. The bar code number will be shown separately above the CLEI™ code. This procedure allows a QWEST craftsperson to key this data into the scanning device manually during inventory. Only "write-on" labels meeting the requirements of Telcordia Technical Reference TR-TAP-000383 will be used for this purpose.

CLEI™ codes and bar code number may be hand printed on "write-on" labels using a permanent black marking pen or equivalent. Lettering will conform with American National Standard X3.45-1974 and will be a minimum 5/14 inch in height. As a preferable alternate to hand printing, CLEI™ codes and bar code numbers may be machine printed or stamped on "write-on" labels. Lettering should be black; the character set would be OCR-B in accordance with American national Standard X3.49-1975, except that the letter O should be an inverted letter Q, and should be a minimum 5/64 inch in height. The inks used for this purpose will produce lettering, which is permanent (nonfading) and nonsmudging.

8.12 Use Slit Labels

It is preferable to use only the 0.4-inch by 1.0-inch standard label for label-affixing purposes and products will be designed to accept this label. However, some variations to this desired approach are permissible and are described in paragraph B.

Telcordia Technical Reference TR-TAP-000383 provides for slit label, identical in general design to the standard 0.4 inch by 1.0-inch bar code label except it is die-cut through the center of the 0.4-inch height. This results in the bar code being shown on one half and the CLEI™ code on the other.

8.13 Use of Special Design Labels

Telcordia Technical Reference TR-TAP-000383 provides requirements for labels incorporating a standard 0.4-inch by 1.0 inch bar code label in a label of optional larger size graphic content. This allows a manufacture to accommodate additional desired marking in a common label for single label applications.

Note: TR-TAP-000383 specifies as requirements for bar code label design unique materials, printing, adhesive, and optical properties. There will be no variations except by reissue of TR-TAP-000383.

9. Marking Products Returned For Repair

Products that are returned for repair will be marked with the appropriate CLEI™ code or bar code label if not already marked. The method and location of marking will be consistent with similar products already marked and/or following the requirements outlined in Section 7.0 or 8.0 of this publication. If the product is already marked but the method and/or location of the marking does not conform to the requirements, the existing CLEI™ code marking or bar code label will be removed and the new code (or label) will be marked on the product. Areas where markings have been removed will be restored to be discernible with other unmarked and similar areas of the product.

10. Marking Containers

The product identification information marked on product shipping containers will be complete. This includes any modification data that indicates the factory has applied the latest product change as detailed on manufacturing drawings or other related documentation.

All markings will be 1/4 inch minimum characters (except shipping label). Containers for hard-wired equipment will be marked with only the first eight characters of the CLEI™ code. Shipping containers for frames will be marked with only the first seven characters of the CLEI™ code. CLEI™ codes will be marked horizontally without any intervening spaces between code characters.

Each individual package containing a plug-in item, whether the item is labeled or not, will be affixed with an appropriate code bar label. Bar code data for package labels is provided in Telcordia practices BR 795-301-006 and BR 795-301-007, for plug-in items designated as not capable of being labeled.

The outside of the container in which the product is packed for shipment will show the following marking information on one end or side of each individual package and of each carton containing multiple individual packages: quantity, manufacturer's product identification code (model or part number), descriptive title, CLEI™ code, manufacturer's name and/or trademark, and gross weight in pounds; for example:

ONE--
22Hasxxx19-3
AMPLIFIER
(Manufacturer's name and/or trademark)
Gross Weight 2 lbs.

Containers containing different-coded products will be marked with the quantity of each product and its associated CLEI™ code or bar code label.

11. Definitions

11.1 Acronyms

ANSI	American National Standards Institute
CLEI™	COMMON LANGUAGE® Equipment Identification
COE	Central Office Equipment
CPR	Continuing Property Record
DCPR	Detailed Continuing Property Record
ECIR	Equipment Catalog Item Records
FCC	Federal Communications Commission
IRM	Information Resource Management
USOA	Uniform System of Accounts

11.2 Glossary

Bar Code Number

A bar code equivalent of nine characters consisting of a six-digit number followed by two dashes and a parity character (for code 11 labels only; for code 39, just the six digit numbers). Each code number is correlated with a unique CLEI™ code on a one-to-one basis.

Character

A code position within a data element.

Circuit Assignment

A QWEST function resulting from a request for communications service, or a circuit design, that lists, reserves, or designates the facilities and equipment, and/or frequency that is to be used for a particular type of communications service and/or interface.

Circuit Detail

Circuit design data.

Circuit Layout

A preliminary final QWEST drawing or grouping of assigned facilities and equipment, with related information pertaining to transmission requirements, etc., for a particular type of communications service.

Containing Property Record

Any entry in the catalog of central office property record items (Detailed Continuing Property Record Catalog) that classifies equipment by equipment type, e.g., plug-in, hardwired, etc. CPRs are used to track investment if an item is of a capital nature.

Data Element

A uniquely named and defined category of data.

Frame Equipment

A structural unit of hardware that contains smaller units of hardware.

Hardwired Equipment, Product, or Units

Equipment mounted in an equipment frame and cabled to a distribution or terminating point, or wired to another unit.

Lead Set

Leads which are externally connected to a wired equipment unit but are identified as pertinent to the application of the unit in QWEST circuit assignment and design.

Non-record-Type Optional Features

Those options for which QWEST office wiring list records need not be maintained. Examples of these are (a) Straps or cross-connections required to make effective certain features which are subject to change by the operating personnel to meet the requirements of changes in circuit assignment or varying service conditions, (b) Strapping of components to give certain filament voltage, tone intensity, transmission loss, percent break or pulse speed, change in timing, compensation for trunk loop resistance, change in gain repeater, etc., and (c) Connection to transformer windings to convert from a high to a low trunk impedance or vice versa.

Plug-In

Defined for QWEST property record treatment purposes as apparatus or equipment that is connected to a mating circuit element item by jack- and plug-type connectors, spade clips on wires, eyelets and screws, spring or screw-down devices that permit quick connection, or other friction-type contacts. Items that are basically plug-ins but which are connected to other items by one or more soldered (or wire wrapped) connections are not generally classified as plug-ins.

Provisioning

The operations necessary to respond to service orders, trunk orders, and special service circuit orders and to provide the resources necessary to fill these orders. It includes forecasting, planning, construction and installation of facilities, preparing and responding to orders, and maintenance of facilities.

Trunk Relay

A circuit interface, part of a switching system, associated with the connection of a trunk to the switching system.

Vintage

A period of manufacture of a product. It refers to the specific version (list, issue, modification, etc.) of a unit and embodies a unique combination of circuit features, wiring and hardware arrangement.

Wand Scanning

A method of electronically reading bar code labels. The device used for this purpose consists of a light pen wand scanner attached to a portable recognition and memory unit.

12. References

12.1 QWEST Publications

PUB 77354 — Guidelines for Product Change Notices, Issue G, September 2001,

12.2 Miscellaneous Publications

TR-ISD-000325 — *Equipment Information Required for Suppliers for Operations Systems*

12.3 Document Ordering Information

All documents are subject to change and their citation in this document reflects the most current information available at the time of printing. Readers are advised to check status and availability of all documents.

Those who are not QWEST employees may order;

American National Standards Institute (ANSI) documents from:

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