

## **C7. CHAPTER 7 – DEFENSE LOGISTICS MANAGEMENT STANDARDS USE OF ACCREDITED STANDARDS COMMITTEE X12**

C7.1. PURPOSE. The purpose of this chapter is to describe Defense Logistics Management Standards (DLMS) use of Accredited Standards Committee (ASC) X12 standards.

C7.2. IMPLEMENTATION CONVENTIONS (ICs). ASC X12 develops uniform standards for electronic interchange of business transactions. The main objective of ASC X12 is to provide standards to facilitate electronic interchange of general business transactions. The standards provide a broad range of transaction setup upon which trading partners may base specific ICs. By agreement between trading partners, ICs are developed to satisfy a specific business interchange. These ICs do not incorporate the full range of allowable business information in a transaction set but tailor the configuration of the transaction sets to identify selected data segments and data elements essential to the business interchange. The Logistics Community has exercised a similar judgment in developing and defining the DLMS ICs.

C7.3. DLMS ICs.

C7.3.1. The DLMS ICs represent a combination of ASC X12 standards and implementation guidance specific to the DLMS. The main objective is to provide standards to facilitate electronic interchange of general business transactions. DLMS ICs identify and define the segments, data elements, and codes that DLMS trading partners use in each IC. Most importantly, DLMS ICs specify rules and formats for the content within the data elements. DLMS ICs address how the standards are implemented. One X12 transaction set may be used in several different functional areas or repeatedly within the same functional area. Each separate interpretation of the standards according to a specific usage is called an application. DLMS ICs are found on the Defense Enterprise Data Standards Office (DEDSO) Website at the DLMS IC page.

C7.3.2. Structure. Each DLMS IC consists of a cover page, X12 transaction set table diagram, segment hierarchy, and notes.

C7.3.2.1. Cover page. The cover pages includes the transaction designation (e.g., 527R, Material Due-In and Receipt), the purpose of the transaction (brief narrative description of how this transaction is used), notes (a more detailed description of the transaction within the scope of the Supply Chain), and a change history (a list of ADCs and a short description of the enhancement).

C7.3.2.2. X12 Transaction Set Table Diagram. The information here contains an outline of the X12 standard transaction set. There may be semantic notes, but only high-level information is contained within this section.

C7.3.2.3. Segment Hierarchy. The segment hierarchy includes a data element summary with information pertaining to each data element in the segment. In general, information printed in normal typeface is extracted from ASC X12 standards and information printed in italics prefaced by “DLMS Note” relates to the DLMS implementation of the standards.

C7.3.2.4. Instructions on Use of the ASC X12 Standard. In many instances, exact equivalents are not available to map the DoD information requirements to the ASC X12 standard. Specific instructions on how a particular portion of the standard is used under DLMS ICs are provided in the form of DLMS notes. The DLMS notes explain what data may be carried where. The DLMS notes are printed in italics in a gray box. Notes may be applicable to a transaction set, segment, data element, or a specific code value.

C7.3.2.5. Importance of DLMS Notes. The information provided in DLMS notes is crucial to understanding the DLMS IC. At times, the ASC X12 data element or code value name has little similarity to the commonly used DoD name for a piece of information. Additionally, an ASC X12 data element or code value may be used as a migration code (C7.4.1.3) or local code (C7.4.1.4) to carry DLMS required data not otherwise provided for by the standard. The DLMS notes explain these circumstances.

C7.3.2.6. Syntax and Semantic Notes. The terms “syntax” and “semantic,” when used in the context of EDI implementations, refer to the structure and meaning of X12-formatted information respectively.

C7.3.2.6.1. Syntax is the structure of the data. This includes establishing the method of encoding a piece of data by its attributes and identifying that data in the transfer. Defining minimum and maximum field lengths of a data element or the designation of a relevant code list are examples of syntax requirements.

C7.3.2.6.2. Semantic relates to the meaning of the data transferred. For example, a semantic note might indicate the relationships in the meaning of one or more data elements in an instance of the segment.

C7.4. DLMS USE OF ASC X12 CODES. Most DLMS ICs are based on ASC X12 version/release 4010 or 4030. When DLMS uses codes from a higher version/release, it is referred to as a Migration Code. The X12 standard currently does not allow for use of codes from a higher version/release, nor does it allow substantially changing the meaning of the underlying code, hence creating confusion and non-compliance with respect to semantic equivalence. Although technically regarded as syntactically non-compliant by the X12 standard, the DLMS authorize limited use of higher version/release codes to support Component data requirements. DAAS, DoD Components, trading partners, and Value Added Networks (VAN) will ensure commercial software products are configured in accordance with the DLMS IC.

#### C7.4.1. Code Sources.

C7.4.1.1. Deriving Code Values. Code values associated with data elements may be derived from several locations. Many of the applicable code values for DLMS data elements are listed in the DLMS ICs. DLMS will continue to support other legacy code structures used in the Defense Logistics Standard System (DLSS). Three data elements, transportation method code (transportation method/type code), unit of issue (unit or basis for measurement code), and type pack code (packaging code) use conversion guides to convert the DoD code values to the ASC X12 code values. Special processing at the sending node provides conversion from a DoD code value to an ASC X12 code value for transmission of the transaction set. The sender and the receiver employ the conversion guide so that the users see only the familiar DoD code values. DoD/ASC X12 Conversion Guides are available from the DEDSO Website.

C7.4.1.2. References to Code Source. In DLMS ICs, some data elements reference a significant number of code values that are applicable to a DLMS application. When the specific codes are not listed in the DLMS IC, a reference to a code source is provided.

C7.4.1.3. Migration Code. A “migration code” is a code used from a higher ASC X12 version/release (e.g., 5030) that is used in a lower version/release (e.g., 4010). The semantic meaning and syntax are consistent with the higher version/release. Use of a migration code refers to establishing agreement among all trading partners to use a valid X12 code from a higher version/release, with its approved X12 definition, in a lower version/release of X12. Manual intervention may be needed for some commercial ANSI ASC X12 parsers to accept the higher version/release code.

C7.4.1.4. Local Code. A “local code” is a code value that is not in the current version/release, and has not been established in a higher ASC X12 version/release. A data maintenance action with ASC X12 is in process to establish the code in a higher version/release. Once approved by ASC X12, the local code becomes a migration code. Manual intervention may be needed for some commercial applications to accept the local code.

C7.4.1.5. Borrowed Code. Use of a “borrowed code” refers to establishing an agreement among all trading partners to use a valid X12 code at the correct version but altering the code’s semantic meaning (i.e., the code is used because it conforms to syntax rules, even though its intended meaning is different from its use in the identified context). The borrowed value must be a value that is otherwise unused by the trading partners allowing its definition to be mutually changed. When a borrowed code is identified for DLMS use, DEDSO will submit an ASC X12 data maintenance (DM) action to establish a new qualifier to be approved for use in a higher (future) ASC X12 version/release. The borrowed code may be used indefinitely until DoD migrates to a higher version of ASC X12; however, it is more likely to be permanent, since migration to higher versions is very rare.

C7.4.1.6. DLMS Qualifiers.

C7.4.1.6.1. DLMS qualifiers are ASC X12 Data Element 1270 Codes that identify a DoD code list. X12 Data Element 1271 (Industry Code) is the actual code from the code list identified (or qualified) in X12 Data Element 1270. DLMS Qualifiers are available from the DEDSO Website.

C7.4.1.6.2. Qualifier values are selected from codes approved for use by ASC X12 in the version/release applicable to the DLMS IC. At times, there is no suitable qualifier available within the X12 dictionary and an alternative code must be used to identify and pass the data associated with the business process (migration or borrowed code).