Defense Logistics Management Standards Office (DLMSO)

Supporting the Warfighter Today and the Future Logistics Enterprise of Tomorrow

DLMS Migration Brief

UID & DLMS Migration Workshop March 9-10, 2004
Business Rules and Standards

Purpose/Mission - Business Process Interoperability:

- Facilitate enterprise integration and continuous process improvements to logistics management and operations by:
  - Developing business rules and implementation of DoD policy
  - Developing and managing the DoD logistics information exchange infrastructure
  - Publishing detailed procedures that identify who does what, when, and how along the DoD supply chain:
    - Organizational responsibilities
    - Metrics
    - Information exchange formats
    - Standard data elements and codes
Hierarchical Architecture of DoD Business Interoperability:

- **Business Policy:** A required outcome -- *Property stewardship*

- **Business Process:** An assemblage of business rules that collectively form a process -- *Physical Inventory Management*

- **Business rule:** States what must or must not be done
  
  *If an NSN had activity today, report ending balance to ICP*

- **Business Object:** A collection of data in a specified format that launches a business process or reports process results
  
  *An order, inventory adjustment, request for payment, etc.*
DLMSO has the responsibility for managing the development and approval process for the logistics of:

- business process rules,
- business objects/information exchanges, and
  (within the scope of DODD 8190.1 & DOD 4000.25 series of manuals)
- metadata (within the Logistics Community of Interest (COI)).
Key DoD oversight policy:

- **Wynne 22 Dec. 2003, Memo, Migrate to DLMS, Eliminate MILS**

- **DoDD 8190.1, DoD Logistics Use of EDI Standards:**
  - Assigns DLMSO as DoD Executive Agent for logistics data interchange
  - Establishes ANSI ASC X12 as DoD standard for logistics system interchanges:
    - All new systems
    - Major modifications to existing systems

- **DoDD 4140.1 Materiel Management Policy**
  - Authorizes publication of DoD business rules and standards

- **DoD 4140.1-R Materiel Management Regulation**
  - “Loaded” with DLMSO policy, procedure, and guidance

DoD 4000.25 series of Manuals covering both the DLMS and DLSS/MILS (8K pages)

Business rule and standard operational development and implementation are well grounded in DoD policy.
What are the DLSS/MILS Transactions?

- DoD unique EDI standard developed 40 years ago
- Fixed length (80 positions) transactions (over 500 types)
- Each transaction contains fixed length data fields
- Technically obsolete
- Serious constraint to business improvements

11 million daily computer-to-computer exchanges via DAASC
What are the DLMS Transactions?

- Commercial EDI standard based transactions
  - ANSI ASC X12 implementation conventions
  - W3C compliant XML schemas
- 57 X12 ICs and XML schemas support all MILS functionality
- Variable length transactions and data fields
DAASC delivers the ability to receive and transmit logistics data across various networks, supporting numerous protocols and formats. This communications interoperability minimizes the number of interfaces that the DoD Components must maintain for the exchange of logistics data. DAASC maintains a history of all transactions processed/routed to support supply chain analysis.

**Customers**

- Departments of:
  - Army
  - Navy
  - Air Force
  - Marine Corps
- USTRANSCOM
- Defense Agencies
- Intelligence
- DoD Dependent Schools
- NATO
- FMS Countries

- Departments of:
  - Commerce
  - State
  - Justice
  - Transportation
  - NASA
  - GSA
  - FAA
  - VA
  - FEMA
  - USPS
  - GAO
  - CG

**Transaction Volume (CY 2003):** 4,185,551,967

- CY 2002 - 3,360,356,729 DLSS/DLMS
- CY 2001 - 3,145,906,094 DLSS/DLMS

**DAAS Transitions:**

- DLSS (MILS)
- DLMS (X12)
- DLMS (XML)

**Suppliers**

- Defense Logistics Agency
- Military Services
- General Services Admin.
- Commercial Suppliers

- OFFICIAL REPOSITORY & DISTRIBUTION POINT FOR DoD DIRECTOR (D)
- SUPPORT SERVICE / AGENCY CONTINGENCY OPERATIONS
Why Extensible Markup Language (XML)?

• XML - subset of SGML (Standardized General Markup Language) and HTML

• Provides flexible information exchange form designed for WEB based applications

• DLMSO XML schemas that can be used now

• DLMSO has developed W3C compliant XML schemas, using EDIFECs SpecBuilder tool.
  The XML schemas equate to the DLMS ANSI ASC X12 ICs/supplements.

• DLMSO participating/supporting various industry groups (ASC X12 XML Workgroup,
  Federal CIO XML Workgroup, and DISA Namespace Manager & Repositories)

• DAASC has capability to translate - MILS/DLSS><DLMS X12><DLMS XML

• Using the DLMS XML capitalizes on our many years of agreeing on data naming, codes
  and tags and maintains interoperability with legacy system EDI capability
Business Rules and Standards

Why a “standard” approach?

- Ensures interoperability among trading partners for information exchanges
- Can satisfy all current and future data exchange requirements
Business Rules and Standards

XML Schema
Business Rules and Standards

DISA Repository

http://diides.ncr.disa.mil/xmlreg/user/index.cfm

DoD METADATA REGISTRY AND CLEARINGHOUSE

DoD XML Registry
Session validated for Nat Obey [Logout]

Search Results
(69 Records)

Submission Packages
DLMSO_100_Series_XM... (v.1.0,Developmental,20-Feb-03) [MGTINTCG Namespace - Management Intercha...]
XML Schema for 4030 140B Unique Item Tracking Reporting

DLMSO_800_Series_XM... (v.1.0,Developmental,11-Feb-03) [MGTINTCG Namespace - Management Intercha...]
XML Schema for 4030 842A NV Nonconformance Report DoD WebSDR

DLMSO_810L_XML_Sche... (v.1.0,Developmental,15-Apr-02) [MGTINTCG Namespace - Management Intercha...]
XML Schema for 4010 810L Rev 1 Invoice (Logistics Bill)

DLMSO_XML_Schema_18... (v.2.0,Developmental,31-Jul-02) [MGTINTCG Namespace - Management Intercha...]
XML Schema for 4010 180M Material Returns Reporting
The XML Resource Library (XRL) provides a mechanism for managing metadata used for e-commerce and data exchanges. It establishes a recognized authoritative site for the submission and access of information models containing XML artifacts such as schemas, DTDs, mapping documents, etc. Furthermore, it provides services to support data integration and application interoperability.

The XRL is an operational or active repository to facilitate and enable data interoperability (data exchange). It has been specifically designed using the ebXML Technical Architecture Specification. Within the repository portion of the ebXML architecture specification, is the requirement to make vocabularies, business templates and Business Processes used to transact business accessible by all partners. The XRL serves this purpose. This means that information for data exchanges can be kept, maintained and reused as data exchanges grow. This data is otherwise lost or invisible. Another key feature of an operational repository is to validate a data exchange. This is a standard process that an application can automatically invoke through the XRL.

Using XRL assists in improving data sharing and exchange. The XRL also helps reduce data latency and the use of derivative data, improving the reliability of information retrieved. As a result, commanders and operational planners will have access to information that allows them to make better management decisions.
### Extensible Markup Language (XML)

The following table lists XML schemas for the DLMS supplements and their equivalent ANSI ASC X12 formats. The remaining schemas are available at: [810-858; 861-997](http://www.dla.mil/j-6/dlmso/eLibrary/TransFormats/Schemas).

<table>
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<th>No.</th>
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Business Rules and Standards

Where To Find The DLMS Transactions

• DLMSO Web Site PDF
  • DLMS X12 [http://www.dla.mil/j-6/dlmso/elibrary/Trans Formats](http://www.dla.mil/j-6/dlmso/elibrary/Trans Formats)

• DLMSO Web Site Links To:
  • DLIS XML Resource Library (XRL) [https://www.dlis.dla.mil/xrl](https://www.dlis.dla.mil/xrl)
What help is available to assist in

- DLMSO & DAASC
  - Functional and technical consultation
  - Training
  - DAASC mappings between MILS and DLMS data
- Test Transactions
- Coordinate system-to-system testing

- DLA & USAMMA experience & lessons learned

http://www.dla.mil/j-6/dlmso/