

#### DEFENSE LOGISTICS AGENCY HEADQUARTERS 8725 JOHN J. KINGMAN ROAD FORT BELVOIR, VIRGINIA 22060-6221

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#### MEMORANDUM FOR SEE DISTRIBUTION

#### SUBJECT: Next Generation Logistics Transactions – Extensible Markup Language (XML) Kick-Off Meeting

Minutes and briefings from the September 9, 2003, XML Kick-Off meeting are attached for your review and comment. Minutes/briefing slides can be found at <u>http://www.dla.mil/j-6/dlmso/other\_activities/xml\_meetings.asp</u>.

Point of contact for this action is Mr. Wilbert Bailey, 703-767-6984, e-mail: <u>wilbert.bailey@dla.mil</u>.

honcu. JAMES A. JOHNSON

Director Defense Logistics Management Standards Office

Attachments:

1. Agenda

2. Meeting Minutes Next Generation Logistics Transactions – Extensible Markup Language (XML), September 9, 2003

3. Attendee List

DISTRIBUTION: J-64 Attendees

### Next Generation Logistics Transactions – Extensible Markup Language (XML) Kick-Off Meeting Agenda September 9, 2003

Time	<u>Subject</u>	Lead/Presenter
0900	Welcome/Purpose	Lt Col Vicencio
0905	Administrative Remarks	Mr. Gower
0910	ADUSD(L&MR)(SCI) Perspective	Col Pipp
0940	DLSS/DLMS XML	Mr. Yeakel/Obey
	• (DLMS) XML Overview	
	Why XML/Our Approach	
1015	Break	All
1030	DLSS/DLMS XML Cont.	
1100	Defense Automatic Addressing System (DAAS)	Mr. Scott
	Translation/Processing Capabilities	
1145	Lunch	All
1300	ANSI ASC X12 EDI/XML Global Initiatives	Mr. Berwanger
1400	Break	
1415	Component XML Initiatives/Use	
	• Navy	Mr. Jacobs
	• Air Force	Mr. Clark
1530	Open Discussion/Wrap-up	Lt Col Vicencio

### Next Generation Logistics Transactions – XML Kick-Off Meeting Minutes September 9, 2003

The meeting opened with the Deputy Director, Defense Logistics Management Standards Office (DLMSO), welcoming and thanking the attendees for attending. The purpose of the meeting was to review the role of DLMSO in logistics transactions, and through the development process of new and emerging technologies, the goal has been and continues to be interoperability. Providing the users with a capability that meets expanding requirements, and at the same time, captures the required data for continued operations of DOD legacy system has been the key to achieving that goal. XML is a logical evolutionary step along the path of achieving the "target environment" of employing shared/integrated data through best business practices using commercial off-the-shelf applications. Following is a summary of points made and discussion pertaining to the agenda topics:

### • ADUSD(L&MR)(SCI) Perspective :

- The Assistant Deputy Under Secretary of Defense, Logistics & Materiel Readiness, Supply Chain Integration (ADUSD(L&MR)(SCI)) supports this effort because it directly supports DOD policies. Current logistics operational policies are prescribed in the DOD Materiel Management Regulation DOD 4140.1. It sets forth the community services responsibilities for the Defense Logistics Management Standards Office (DLMSO), the Defense Automatic Addressing System Center (DAASC), and the Defense Logistics Information Service (DLIS), to support the logistics community with electronic data exchange standards and services. Most importantly it allows the logistics community to adopt best business processes and preserves interoperability.
  - Both DOD 4140.1-R, "DoD Supply Chain Management Regulation", and DOD Directive 8190.1, "Do D Logistics Use of Electronic Data Interchange (EDI) Standards," identify the American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 as the baseline EDI standard for use in logistics. Both the regulation and the directive state that while ASC X12 shall be the baseline standard for the Defense Logistics Management System (DLMS), the DLMS shall encompass emerging electronic information exchange business capabilities. The subject of the meeting was about an emerging capability--incorporation of XML into the DLMS.
- DOD needs to move off the MILS (Military Standard System) to capitalize on the new and more flexible information exchange standards that exist today; MILS are not compatible with commercial business practices of today.
- Interoperability is the key to warfighter support. Feedback on how the Services/Agencies can be interoperable in the area of XML is sought and welcomed. Service/Agency initiatives in this area should collaborate with DLMSO.
- Defense Logistics Standard Systems (DLSS)/DLMS XML Overview/Why Our Approach:
  - The new baseline from the MILS was changed in 2000 to ANSI ASC X12 via DOD 8190.1. The DLMS represents all the 500+ MILS transactions in 47 DOD supplements to ANSI ASC X12 implementation conventions.
  - The key to DLMSO's role is ensuring interoperability to allow the Services/Agencies to improve business processes at their own pace of modernization through publishing

and documenting business processes via a collaborative Service/Agency approval process.

- The media of exchange can be varied but the rules remain the same, as agreed to and documented in the DOD 4000.25 series of manuals.
- DLMSO manages the DLMS and chairs several committees, consisting of Service/Agency representatives, which govern the business rules.
- Process changes are actually a day-to-day collaboration in reaching agreement on a particular change and then formally vetting that change through a particular DLMS committee review process.
- The DLMS/XML transactions support the capture of individual item tracking data requirements and other new data requirements required to support new or modified best practices.
- > Data integration is the glue between policy, rules and standards.
- Migrating from DLSS/MILS to X12 and/or XML alone does not bring process improvement, just a new format. You must change your business processes/rules in order to improve your business.
- Business rules and standards are applied to logistics exchange transactions in six levels, all must coexist to for a successful communication between a sender and receiver.
- As long as there is agreement to the business rules, then the formats can be mapped.
- DLMSO has provided support to several enterprise resource planning (ERP) efforts: DLA Business Systems Modernization, USA Medical Material Agency, USA Logistics Modernization, and Navy ERP.
- DLMSO has developed an XML schema for every DLMS supplement. Maintaining MILS limits functionality—using DLMS X12 or the XML equivalents capitalizes on commercial standards and promotes interoperability.
- Use of standards (data, codes, transmission formats, etc.) is the preferred approach, mediation methods/tools are used only when standardization cannot be achieved. Mediation is not done in isolation—it involves the same process as the formal committee review process.
- Differences exist in implementing XML among the Services/Agencies—this forum highlights the need to collaborate on the differences and resolve the differences to facilitate interoperability. The current DLMSO schemas (V2) employ the current ANSI ASC X12 naming convention so that the tags are human readable; the DLMSO EDI schema tool has been modified to incorporate this feature.
  - This is an interim solution as ANSI ASC X12 is moving toward contextinspired component architecture (CICA), which is a good way for all of DOD to move in XML development.
  - Using the DLMS XML schemas guarantees interoperable transactions that are mappable to the DLSS/MILS.
  - When the XML standards/specifications bodies reach agreement the DLMS will migrate to it.
- All XML schemas are available via: <u>http://www.dla.mil/j-6/dlmso/eLibrary/TransFormats/xml.asp</u>
- All DLMSO XML schemas have been registered on the Defense Information Systems Agency (DISA) and Defense Logistics Information Service (DLIS) registries at:

- ✤ DOD: <u>http://xml.dod.mil/xmlreg/user/index.cfm</u>
- ✤ DLIS: <u>https://www.dlis.dla.mil/xrl/</u>
- You must first register before accessing registry XML artifacts.
- Go to the DOD Metadata Registry and Clearinghouse and the DLIS Repository web sites and fill out the registration form, then submit.
- The DISA hosted DOD Metadata Registry and Clearing House currently includes a metadata repository that contains all the data elements within the Defense Data Dictionary System (DDDS).
  - ✤ The DDDS is in compliance with ISO 11179.
  - The DDDS is available at: <u>http://metadata.dod.mil</u>
- DLMSO is available to assist Service/Agency XML requirements, and can mediate to incorporate those requirements within the existing DLMS schemas.

## DAASC Translation/Processing Capabilities

- > DAASC has been routing MILS transactions since 1966.
- If ebXML is incorporated into DOD logistics transactions, DAASC will integrate the required mapping capabilities.
- EDI X12 traffic is on the increase but not near the volume of MILS/DLSS transactions. It is not evident that XML can do a better job than ANSI ASC X12 EDI, particularly when high volumes are involved.
- > DAASC successfully tested all the DLMS schemas and maps they developed.
- The latest version of Mercator is used for basic translation requirements, to include the modification for XML. Currently version 1 (employs the ANSI element code vice element name) of the DLMS schemas are available.
- DAASC collaborates with receiving customers to ensure they receive the transactions in the proper format. For unique-item tracking, receivers need to communicate how they want to receive the transactions.
- If customers do not register their unique intra-Service/Agency rules with DLMSO, those transactions will not pass through DAAS with all the initial data.
- Ongoing electronic business initiatives (contact <u>sscott@daas.dla.mil</u> for further information) include:
  - Unique Item Tracking for commercial asset visibility (CAV) transactions
  - USTRANSCOM/LMI/Korea customs transactions
  - ✤ NAVICP ePilot project
  - DLIS/DISA/DAASC Central Contractor Registration ebXML data to X12 translation.
- > DAAS stores data which can be provided to customers for document validation.

## ANSI ASC X12 EDI/XML Global Initiatives

- Since the committee charter provides for involvement in new and emerging technologies, involvement with XML fall within their realm of operations.
- The Joint Core Initiative group is coordinating with United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) (<u>http://www.unece.org/cefact/</u>) to develop a single XML standard.
- The Government sub-group coordinates overlapping requirements with other subgroups. A government bill of lading question would most likely go to the transportation group, but if in question, the review board would decide.

- One business process cannot fit all occasions, and they can be extended to fit other similar requirements.
- The XML standard maintenance cycle has been reduced from 9 to 3-4 months, thereby reducing the time required to incorporate changes.
- A reference model for XML design, CICA, a methodology for building and interpreting ebusiness documents, contains solid intellectual property policy. A draft of this document is available at: awaiting document from Mr Berwanger
  - CICA may be a good tool to use throughout DOD for XML development since it contains reusable segments, and can build documents from the metadata.
  - Gartner predicts that by 2008 a majority of business transactions will be based on ASC X12 XML from CICA.
- A significant effort involves ANSI ASC X12 work with UN/CEFACT to develop best practices and incorporate into X12 initiatives so they become compatible with each other.
- > XML is EDI is known as X12 XML.
- Currently it is not possible to take advantage design rules in newer versions without migrating from the older to the newer version.

## Component XML Initiatives

- ➢ USN
  - The CIO office is in the process of segregating XML data requirements into 24 functional areas and developing policy, standards, councils, work groups, namespace managers, and a developer's guide. There will be one USN enterprise domain/namespace. Data elements that exist in other domains would be reviewed for duplication, where the DOD domain would take precedence.
  - Navy Voluntary Consensus Organizations are responsible for making each other aware of what is occurring within DOD.
  - The efforts by the working groups need to be shared among the Services/Agencies to ensure interoperability. An action item was taken by DLMSO: DLMSO and the Services/Agencies explore and determine the appropriate mechanism and forums for enhanced coordination of XML schemas and XML initiatives.
  - It was agreed that DLMS schemas would take precedence over Navy developed schemas.
- ➢ USAF—AMC/CAV
  - ✤ Air Force Materiel Command has a pilot project using XML to transmit commercial asset visibility requirements for item repair.
  - The project will test viability of transmitting XML data from a contractor system into an Air Force system.
  - ♦ CAV 2 will include serial number tracking.
  - DLMSO can provide assistance in transaction development.
    - The project leader will coordinate with DLMSO to determine which, if any, existing DLMS XML schemas are applicable.
    - Schemas may be adjusted to incorporate additional requirements of this project.
    - CAV requirements for the USA have already been incorporated in DLMS XML schemas.

- This project should be presented to the Assistant Deputy Under Secretary of Defense, Logistics & Materiel Readiness, Maintenance Policy Programs and Resources (ADUSD(L&MR)(MPP&R)).
- This project fits within the area of the Logistics Data Strategy Work Group under ADUSD, Logistics & Materiel Readiness, Logistics Systems Management ((ADUSD)(L&MR)(LSM)).
- ✤ The project is expected to be complete the end of February 2004.

# • Wrap-up

- > Interoperability is key to warfighter support.
- This forum was a necessary step to ensure collaboration between the Services/Agencies in XML development.
- > Everyone can learn from each other's initiatives.
- The DLMS now provides the Components the flexibility to communicate via X12 and XML and be assured of interoperability to other DLMS X12 or XML users and legacy systems using the DLSS/MILS.
- DLMSO is ready to assist the Components desiring to utilize the DLMS XML schemas.