



Defense Logistics Management Standards (DLMS) Introductory Training



Introduction to the DLMS



DLMS Training Catalog

Module 1 - Introduction to the DLMS

Module 2 - Electronic Data Interchange (EDI) Basics and ASC X12 EDI Definitions and Concepts

Module 3 - DLMS Functionality & Transaction Life-Cycle

Module 4 - DLMS Implementation Convention Content

Module 5 - IUID & RFID - Emerging Technologies

Module 6 - Creating/Reengineering DOD Logistics Business Processes

Module 7 - Enterprise Interoperability Tools

Module 8 - DoD Activity Address Directory (DoDAAD)

Module 9 - Supply Discrepancy Reporting (SDR)

Module 10 - DLMS Functional Financial Transaction (standalone)

Module 11 - Creating/Reengineering DOD Logistics (standalone)

<http://www.dlmso.dla.mil/>



Course Objectives

Students will gain basic understanding of the:

- **DLMS purpose, definition, concepts, infrastructure, and policies**
- **Background and basics of electronic data interchange (EDI)**
- **The strategy and roadmap to implement the DLMS**
- **Accredited Standards Committee (ASC) X12 EDI definitions and basic structure**
- **ASC X12 applied in DOD: the DLMS Implementation Conventions (ICs)**
- **Emerging technologies/initiatives**
- **How to prepare and submit proposed DLMS changes**



Module Structure

Module 1 – Introduction to the DLMS

- **Background**
- **Corporate Infrastructure**
 - **Enterprise Support Services**
 - **Where to Get Help**
- **Policy and Guidance**
- **Ten Steps to Successful Implementation**



Module 1 Objectives

Students will gain basic understanding of:

- **What are the DLMS**
- **Why they are important**
- **How they are developed and maintained**
- **How EDI fits into the DLMS**
- **What enterprise services support the DLMS**
- **DLMS concepts & implementation strategy**
- **The policies governing the DLMS**
- **Ten Steps to a successful DLMS implementation**



Defense Logistics Management Standards





DLMS Mission & Purpose

Strategic Network Optimization

Process Reengineering

Service Oriented Architecture

Business Enterprise Architecture

Net-Centric Operations

Standard Financial Information Structure

SUPPLY CHAIN INTEROPERABILITY

Best Business Practices

FIAR

BRAC

Performance Based Logistics

Information Superiority

NWRM

RFID

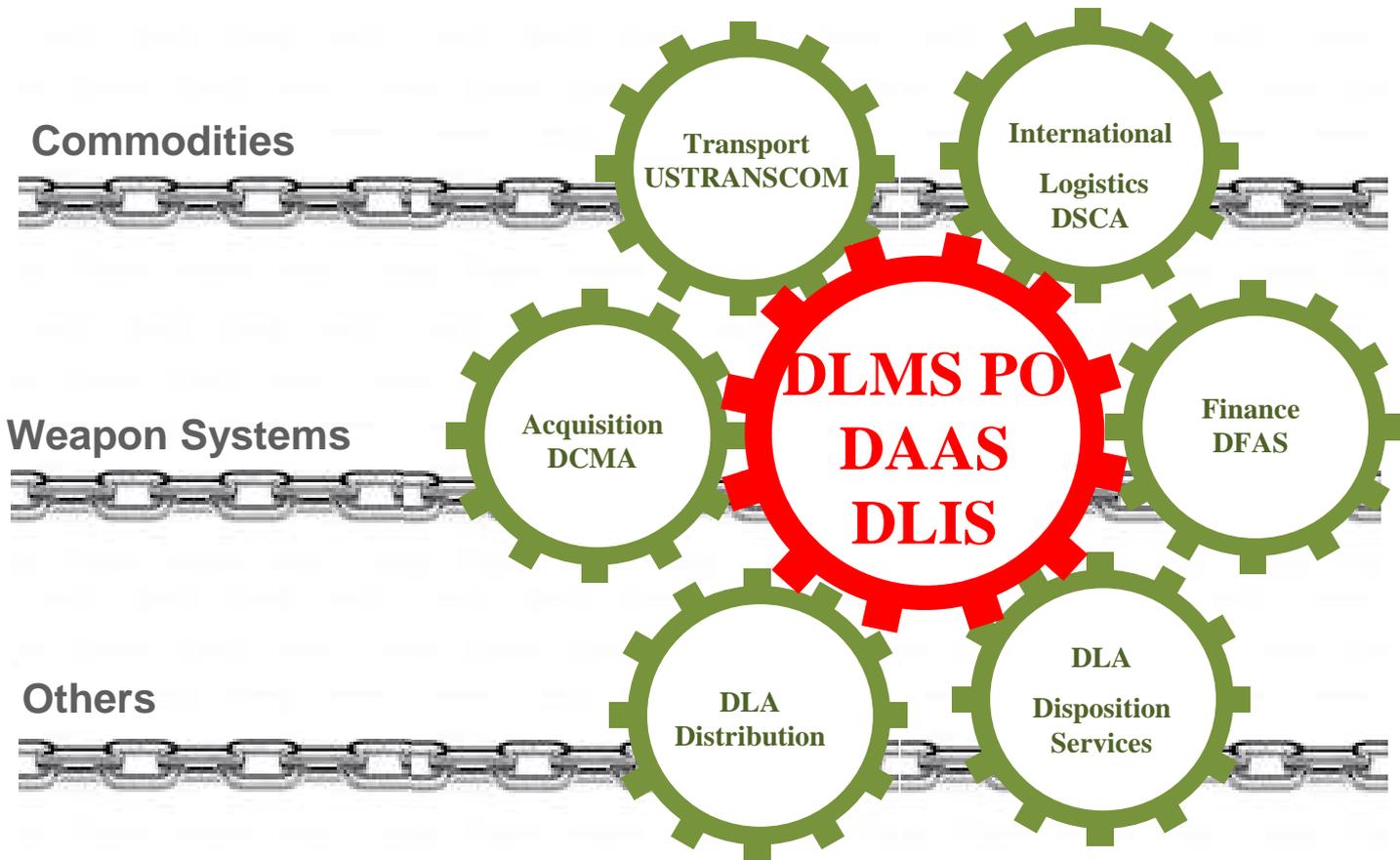
IUID



Interoperability of What?

Functional Services Providers

Supply Chains



DLMS Global Services Providers



Interoperability Framework

- **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. *Storage Activities must report the ending on-hand inventory balance to the item owner for all items having any balance effecting business activity that day.*

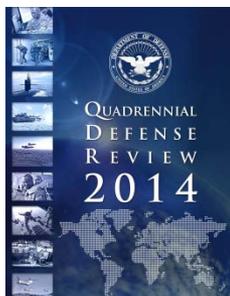
- **Business Object:** A collection of data in a specified format that launches a process or reports process results. *An order, inventory adjustment, request for payment, etc.*

- **Business Metadata:** Characteristics of a data element. *Inventory Balance Date = 8 numeric characters (yyyymmdd)*





The DLMS Enable Achievement of DOD Goals and Acquisition and Logistics Functional Business Strategy



Better Buying Power and Financial Management Reforms

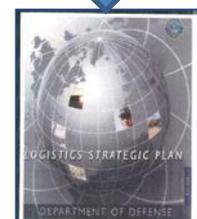
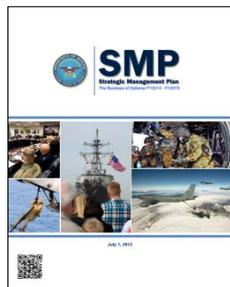
- Achieve affordable programs
- Control costs throughout the product lifecycle;
- Incentivize productivity and innovation in industry and government;
- Eliminate unproductive processes and bureaucracy;

Goal 2: Strengthen DOD financial management to respond to Warfighter needs and sustain public confidence through auditable financial statements

Goal 3: “Build agile and secure information capabilities to enhance combat power and decision making while optimizing value.”

Goal 4: Strengthen DOD Acquisition processes, spanning requirements determination, development, procurement, support and disposal ensure that the Department’s force structure and supporting infrastructure is modernized, recapitalized, and sustained within available resources.

Functional Framework



Logistics Strategic Plan

Full DLMS Implementation 2019



Drive Acquisition and Logistics Business Strategy

Execution



Execute Acquisition and Logistics Business Strategy & Systems

Technical Framework



Component Receives DBC/IRB Business System Funding Approval



Component certifies Business Enterprise Architecture Compliance



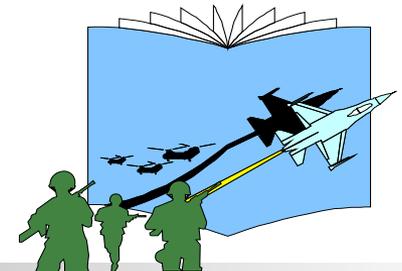
Period of Transition & Transformation

- **In 1962, the DOD established the Military Standard Systems (MILS) to realize the advantages of advancing computer technology and ensure interoperability**
- **The MILS information exchange format is technically obsolete, unique to DOD and inhibits functional process improvements and process reengineering efforts**
- **DOD is modernizing business systems which includes replacing the MILS with the DLMS**



What are the DLMS?

- **The Defense Logistics Management Standards (DLMS) are a broad base of process rules, data standards and electronic business objects (information exchange forms) designed to meet DOD's requirements for total logistics support.**
 - ✓ Developed in collaboration with representatives from the Military Departments, Defense Agencies, and participating Federal Agencies
 - ✓ Accommodates the new Enterprise Resource Planning (ERP) system processes and implementation, while supporting legacy system data exchange requirements.





More about the DLMS:

- Includes procedures, data standards, code lists, metrics, policies, and transaction formats
- Currently consist of three data transmission forms:
 - ✓ **DLMS EDI Implementation Conventions (IC)** that use ASC X12 transaction sets to consolidate the functionality of 500+ MILS transaction formats
 - ✓ **DLMS XML Schemas** – one for each EDI IC
 - ✓ **Web Services** – Funds Verification Processing
- Maintains capability to communicate legacy system information requirements while expanding to support new initiatives such as:
 - ✓ Item Unique Identification (IUID)
 - ✓ Base Realignment And Closure (BRAC)
 - ✓ Passive Radio Frequency Identification (pRFID)
 - ✓ Financial Improvement Audit Readiness (FIAR)



Types of DLMS Support

- **Supports transitioning from the MILS to the DLMS**
 - ✓ Replaces all of the MILS transaction formats/associated procedures
 - ✓ Examples: MILSTRIP, MILSTRAP, MILSBILLS
- **Supports new processes/capabilities not previously associated with a MILS transaction**
 - ✓ Publishes the transaction format, adds data elements to DLMS Dictionary, and prescribes the business rules/procedures
 - ✓ Examples: Warehouse Service Advice/Response, Passive RFID Visibility, Catalog Data Exchange, IUID
- **Provides transaction formats for logistics processes that are not administered by the DLMS Program Office**
 - ✓ Publishes the transaction format/adds data elements to DLMS Dictionary
 - ✓ Provides overview of process/references governing policy/process (no procedural detail)
 - ✓ Examples: Stock Readiness (Storage Quality Control Report and Stock Screening), Product Quality Deficiency Report, Weapon Systems Data Change



DLMS Global Services Providers

- **Goal: Interoperable infrastructure processes and applications**
- **Focus: Common support services – translation, business rules, standards, reference repositories, testing, etc.**



Enterprise enabling services and infrastructure available to all, providing maximum implementation flexibility



Enterprise Business Process Standards Office (DLMS Program Office)



**DOD's Executive Agent for
Logistics Data Interchange**

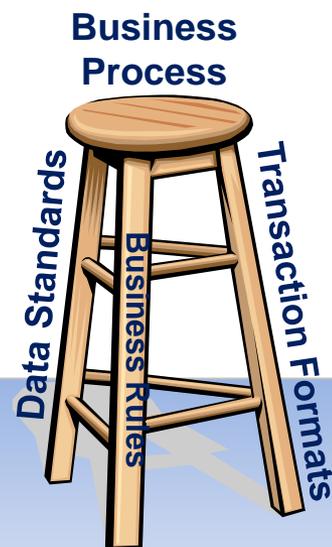


DLMS PO Purpose/Mission

Business Process Transformation & Interoperability

Facilitate enterprise integration and continuous process improvements to logistics management and operations while maintaining interoperability by:

- Developing business rules that implement 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 logistics chain



Laws, Regulations & Policies



DOD Consensus Builder

The DLMS PO administers DOD-wide:

- Defense Logistics Management Standards (DLMS)
- DOD Physical Inventory Control Program
- DLMS Data Management Plan
- Military Standard (MILS)

The DLMS PO chairs:

- DLMS Process Review Committees (PRCs)
- Pipeline Measurement Process Review Committee (PM PRC)
- DOD Supply Discrepancy Reporting Committee
- Joint Physical Inventory Working Group
- Joint Small Arms/Light Weapons Coordinating Group
- DoDAAD / MAPAD Committees

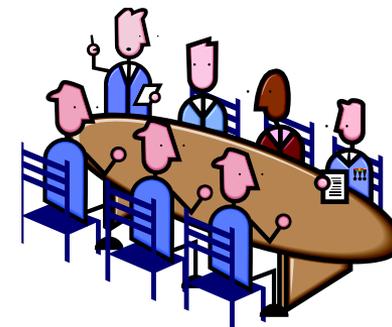




DLMS Process Review Committees (PRC)

- **The DLMS PO chairs the following:**

- ✓ Supply PRC
- ✓ Finance PRC
- ✓ Pipeline Measurement PRC
- ✓ DoDAAD, MAPAD, SDR, JPIWG & others



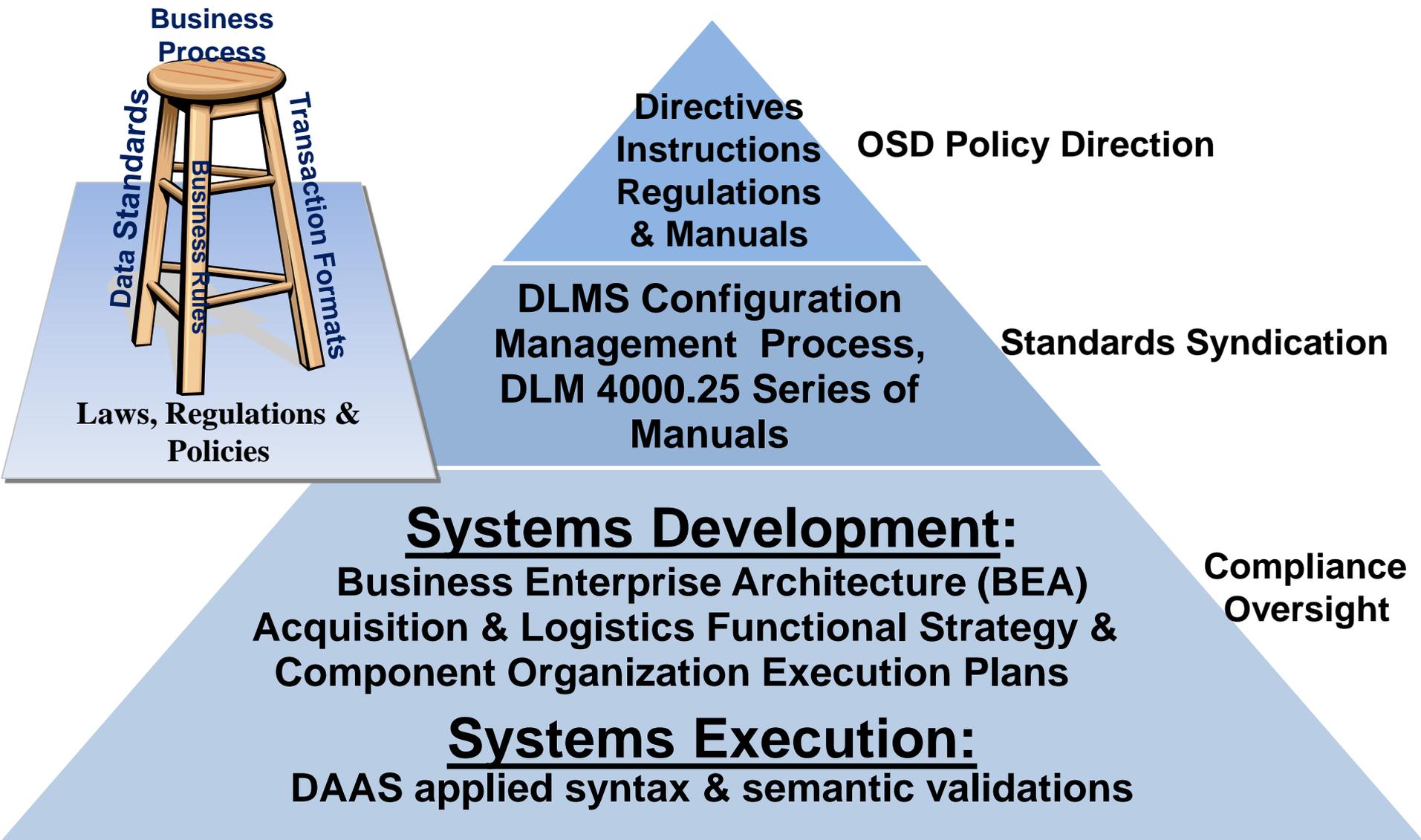
- **Composed of representatives from the DOD Components, the U.S. Coast Guard, and participating Federal Agencies**

- **Responsibilities include:**

- ✓ Develop and recommend revised policy, procedures, or process improvements
- ✓ Develop, evaluate, and coordinate proposed DLMS changes
- ✓ Help resolve problems, violations, and deviations that arise during system operations



DLMS Governance Process





DLMS Process Review Committees

INPUTS

- OMB/OSD Policy Guidance
- Service/Agency Requirements
- DAAS Technical Expertise

Proposed DLMS Changes (PDCs)

A Structured Collaboration

Model

***MANAGED
TRANSFORMATION
PROCESS***

Artful Negotiation & Consensus Building

OUTPUTS

- Business Rules
- Business Objects
- Meta Data
- Functional Requirements

Approved DLMS Changes (ADCs)

DAAS & Components Implement

<http://www.dlmso.dla.mil/About/committees.asp>

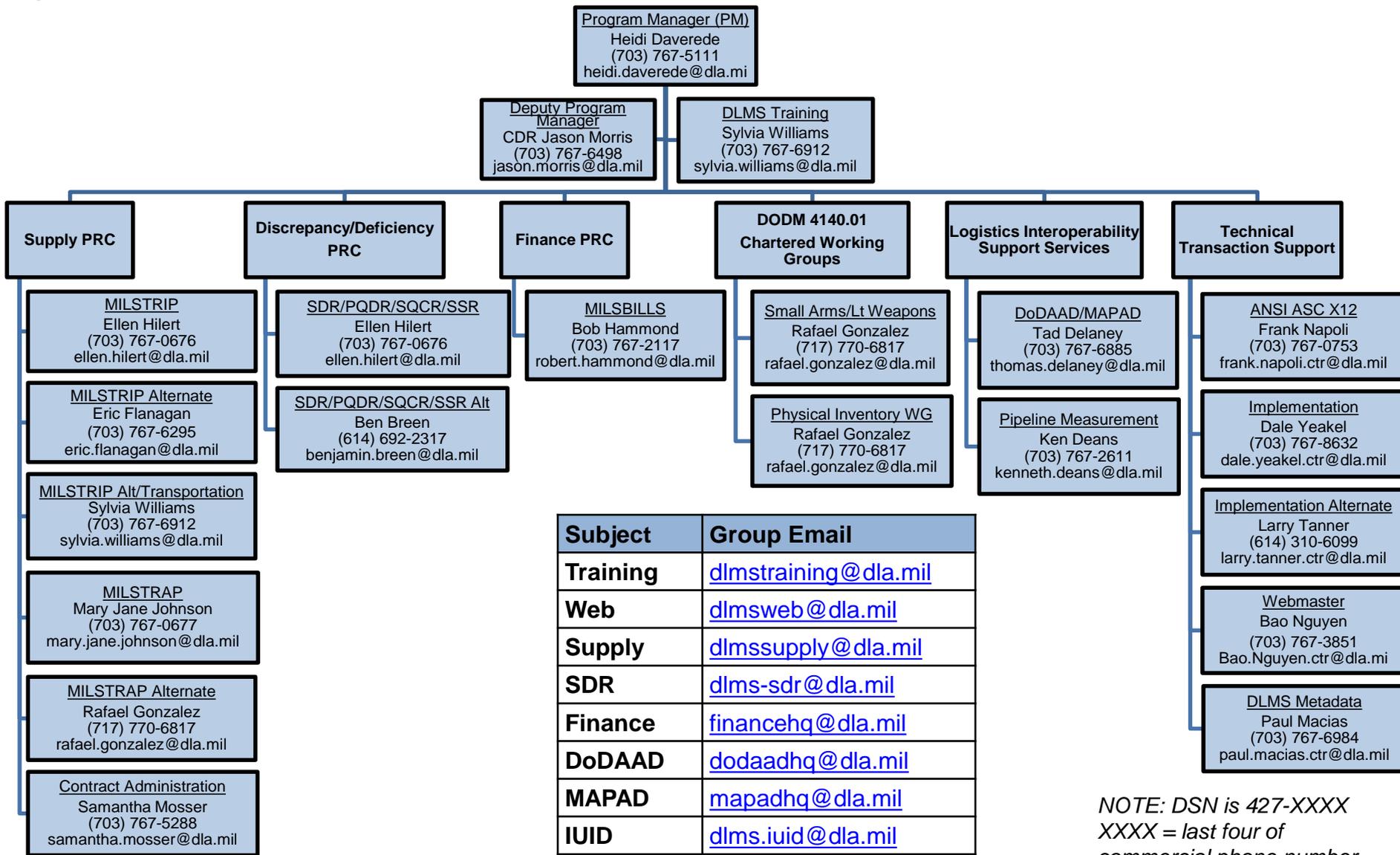


DLMS PO Implementers Support

- **Functional and technical consultation**
- **Providing X12 implementation conventions and XML schemas**
- **Arranging trading partner meetings/teleconferences**
- **Testing assistance as required**
- **Facilitate coordination with DAAS & trading partners**
- **Modification & configuration management of DLMS**
 - ✓ Business Rules
 - ✓ Transaction formats
 - ✓ Metadata
- **DLMS PO web site support**
- **Providing DLMS Training materials and classes**



DLMS PO Support to Implementers





Defense Transportation Electronic Business (DTEB) Committee





Defense Transportation Electronic Business (DTEB) Committee

- **Established under authority of DUSD (L&MR)**
- **Focal point for DOD transportation e-business standards and requirements**
- **Community of interest:**
 - DOD
 - Federal Government
 - Commercial industry
- **Chair: USTRANSCOM J-6CDO**
 - Members: Military Services, Defense Logistics Agency, USTRANSCOM Components, DLMS PO, GSA, DFAS, AAFES, NEXCOM, Defense Commissary Agency and Marine Corps Exchange

<http://www.ustranscom.mil/cmd/associated/dteb/>



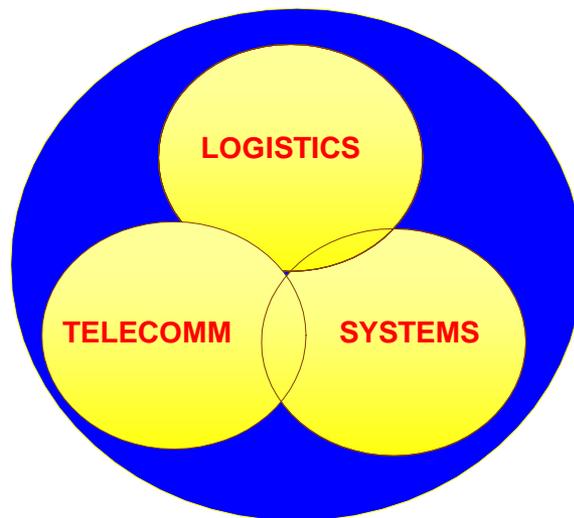
Defense Transportation Regulation (DTR 4500.9-R)

- “Prescribes policies and procedures...”
- “Assigns responsibilities for performing traffic management functions...”
- “Prescribes standard data elements, codes, formats, documents, forms, rules, methods, and procedures ... for movement of materiel within the Defense Transportation System (DTS).”
- Procedures apply to Military Services, DLA, DCMA, Coast Guard, GSA, USTRANSCOM and its Component Commands, and other activities/agencies using the DTS.
- Seven Parts: Part II - Cargo Movement relevant to Logistics

<http://www.ustranscom.mil/dtr/dtrp2.cfm>



Defense Automatic Address System (DAAS)



(formerly Transaction Services, or
Defense Automatic Addressing System Center (DAASC))



DAAS Mission:

The Defense Automatic Addressing System (DAAS) mission is to perform as an interoperable gateway for the DOD Components, Government activities, and Foreign Military Sales countries to provide value added services and to deliver logistics data to the appropriate destination, efficiently, expeditiously and accurately.

DAAS Vision:

Support the DOD warfighter's mission by:

Providing logistics data to the appropriate destination in the proper format the first time and every time.

Providing global network interoperability.

Providing value-added services and a central logistics data repository.

Being proactive in supporting DOD modernization efforts.





DAAS Support to ERPs and Legacy System Migrations

- **DAAS infrastructure production and test environment daily functions:**
 - Transaction receipt, edit, translation, archiving, and routing
 - Maintenance of logistics information databases
 - Recurring and special reports and data queries
- **DAAS technical consultation and support for:**
 - Set-up of new accounts, telecom protocols, and data protection schemes
 - Logical data mappings between MILS, DLMS EDI, and DLMS XML
 - Coordination of integration testing with System PMO and trading partners
 - Evaluation of test results and assistance with problem resolution
 - Transaction tracking, archiving, file recovery/resubmission.
 - DAAS Customer Support Desk 365/24/7
- **Authoritative Source of customer related reference databases:**
 - Customer profiles & routing rules
 - DoDAAD, MAPAD, Fund Code, Project Code, RICs, LMARS, etc.



DAAS Business Services

Customers

DOD (98% of workload)

- Departments of:
 - Army
 - Navy
 - Air Force
 - Marine Corps

- Defense Agencies
- Intelligence
- DOD Dependent Schools
- NATO
- FMS Countries

Civilian (2% of workload)

- Departments of:
 - Commerce
 - State
 - Justice
 - Transportation

- NASA
- GSA
- FAA
- VA
- FEMA
- USPS
- GAO
- CG

Volumes

- CY 2015 – 8.0 Billion MILS & EDI
- CY 2014 – 9.0 Billion MILS & EDI
- CY 2013 – 7.4 Billion MILS & EDI
- CY 2012 – 8.3 Billion MILS & EDI
- CY 2011 – 9.0 Billion MILS & EDI
- CY 2010 – 9.6 Billion MILS & EDI
- CY 2009 – 9.7 Billion MILS & EDI
- CY 2008 – 8.4 Billion MILS & EDI

264,917 Business Partners Worldwide

DAAS Business Services Offered

- Enterprise Wide Order Fulfillment and Information Processing
- Editing, Validating, Routing & Archiving
- Performance Measurements
- Disparate systems interoperability

Customer Business Transactions:

- MILS
- DLMS (X12 & XML)
- ANSI X12, XML UDF and IDoc

Business Transport Methods:

- Websphere MQ
- SFTP
- SMTP
- HTTPS

Suppliers

Defense Logistics Agency

Military Services

General Services Administration

Commercial Suppliers





DAAS Support

Logistics Functional Support POCs:

- Army/GSA (TransSvcsArmy_GSASupport@dla.mil):
 - Allen Coleman (937) 656-3708/DSN 986-3708
- Air Force (TransSvcsAirForceSupport@dla.mil):
 - Bernace Collier (937) 656-3766/DSN 986-3766
- Navy/Marines/Coast Guard (TransSvcsNavy_MarineSupport@dla.mil):
 - Edward “Nolan” Davis (937) 656-3255/DSN 986-3255
- DLA (TransSvcsDLASupport@dla.mil):
 - George "Scott" Amburgey (937) 656-3780/DSN 986-3780

DLMS eBusiness Program Management POCs:

- Gary Wooddell (937) 656-3830/DSN 986-3830 gary.wooddell@dla.mil

Performance Based Agreement/Memorandum of Agreement:

- DLMS POC: Audrey Lavoie, (937) 656-3838 Audrey.lavoie@dla.mil



DAAS Support cont.

Mapping Support POCs:

- Doug Mummert (937) 431-8000 doug.mummert.ctr@dla.mil
- Bill Strickler (937) 431-8000 william.strickler.ctr@dla.mil

Testing POC:

- Julie Kampman (937)656-3841/DSN 986-3841 julie.kampman.ctr@dla.mil

eBusiness Group (account set-up):

- EDI@dla.mil



Logistics Information Service

(Formerly DLIS)



Logistics Information Service

Mission:

- **Create, obtain, manage, and integrate logistics data from a variety of sources for dissemination as user-friendly information to meet or exceed the needs of DOD, Federal and international logisticians**
 - ✓ Provide cataloging services for 7.5 million active national stock numbered items.
 - ✓ Implement cataloging policies, procedures and metrics to monitor performance
 - ✓ Deliver state-of-the-art logistics support

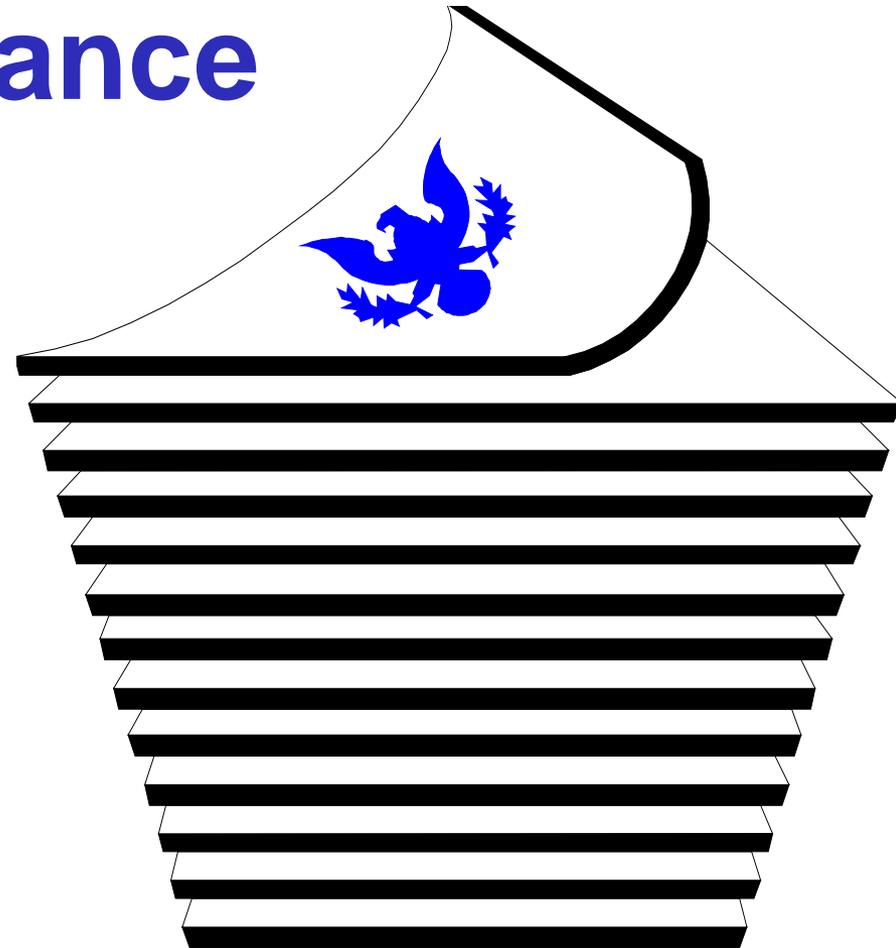


Logistics Information Service

- **Enterprise Reference Repositories**
 - ✓ Federal Logistics Information System (FLIS)
 - ✓ IUID Registry (includes GFP Registry)
 - ✓ Master Data Capability (FLIS IUID Indicator)
 - ✓ Federal Registration Registry (FedReg)
 - ✓ Commercial and Government Entity (CAGE) Registry



Policy and Guidance





DOD Policy and Guidance

- DOD Directive 8190.01E
- DOD Instruction 4140.01
- DOD Manual 4140.01
- DLM 4000.25 series of manuals
- Business Enterprise Architecture (BEA)



DOD Policy and Guidance

**DOD Directive 8190.01E,
*Defense Logistics Management
Standards (DLMS)*
*January 9, 2015***



DOD Directive 8190.01 E cont.

The DLMS Policy:

- **DLMS is the DOD standard for electronic data interchange among the AISs that comprise assigned business processes of the global supply chain management system.**
- **The American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 (referred to in this directive as ASC X12) is the baseline standard that supports the DLMS transactional information exchanges.**

Components are responsible to:

- **Uniformly implement the DLMS in all AISs that perform business functions that support the global supply chain management system.**
- **Use the services of the DLMS global services providers to support the AISs that perform the business functions covered by the DLMS.**



DOD Policy and Guidance

DOD Instruction 4140.01

DOD Supply Chain Materiel Management Policy (December 14, 2011)

- **Materiel management functions shall be implemented with DOD standard systems**
- **Authorizes publication of:**
 - ✓ DoDM 4140.01, “DOD Supply Chain Material Management Procedures”
 - ✓ DLM 4000.25 series of manuals:
 - ✓ DLM 4000.25 (Defense Logistics Management Standards)
 - ✓ DLM 4000.25-1 (MILSTRIP)
 - ✓ DLM 4000.25-2 (MILSTRAP)
 - ✓ DLM 4000.25-4 (DAAS)



DOD Policy and Guidance

DODM 4140.01

**DOD Supply Chain Material
Management Procedures**

(February 10, 2014)

Policy on DLMS Remains Unchanged



DODM 4140.01, Vol. 8 cont.

- **DOD Components will support and maintain DLMS for all covered functions**
 - ✓ DLMS will be the primary system governing logistics functional business management standards and practices
 - ✓ DLMS will use ASC X12 EDI transactional interfaces
 - ✓ DLMS PO shall provide configuration management for DLMS
 - ✓ MILS will be deactivated upon DOD-wide implementation of DLMS
 - ✓ DLMS will be the basis for new, replacement and major modifications to logistics business processes/systems



DODM 4140.01, Vol. 8 cont.

- **DAAS will be:**

- ✓ Designated as the corporate community service provider for DLMS
- ✓ The logistics community's authoritative repository for end-to-end performance metrics
- ✓ Designated as the source for conversion services (MILS-DLMS)

- **DOD Components will:**

- ✓ Route all MILS/DLMS transactions to DAAS
- ✓ Use DAAS MILS/DLMS conversion services
- ✓ Uniformly implement DLMS



DOD Policy and Guidance

DLM 4000.25

DEFENSE LOGISTICS MANAGEMENT STANDARDS MANUAL (May 2014)

- DLM 4000.25 will subsume DLM 4000.25-1 and 4000.25-2 (target December 2016)
- Documents the detailed business processes and rules, information exchange formats, data standards and codes
- Developed using the DLMS Process Review Committee (PRC) collaborative model

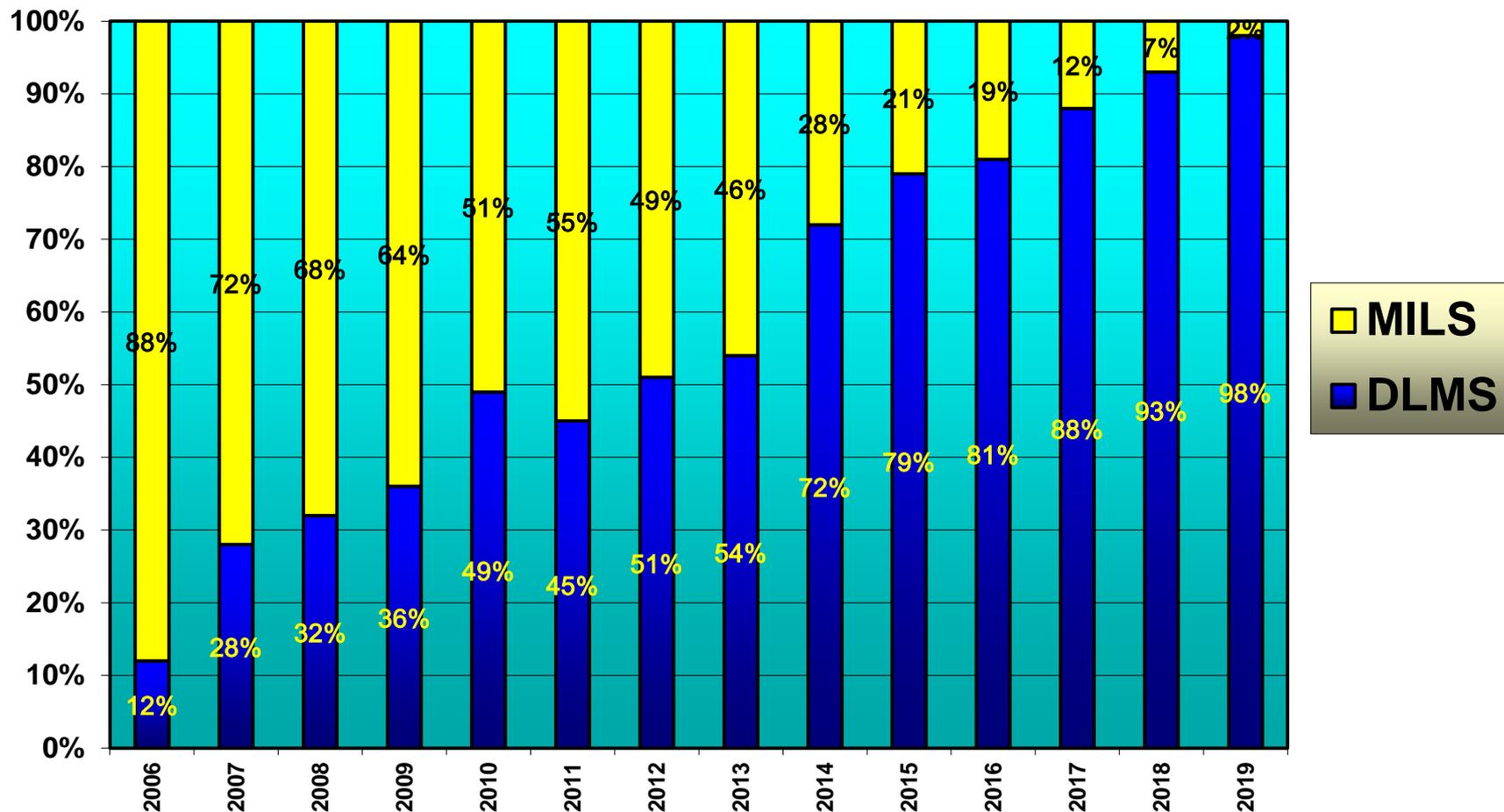


The DLMS are a Business Transformation Initiative

- DLMS are mandated in the Business Enterprise Architecture (BEA)



DLMS Migration Metric Projection



Metric measuring progress is the Percentage of DLMS Transactions versus MILS Transactions Percentages for 2016 through 2019 are estimates based on system implementation dates.



Ten Steps to Success

DLMS Implementation Strategy Guide (Appendix 3)

1. Assemble Team of functional and technical experts on the system
2. Initiate early contact with DAAS and other trading partners. POC is Joanne Norman, (937) 656-3745 DSN 986-3745, email Joanne.Norman@dla.mil
 - Develop an applicable agreement (e.g., Memorandum of Agreement, Performance Based Agreement, Interservice/Interdepartmental/Agency Support Agreement, Interface Requirements Document) and Authority to Operate (ATO) or equivalent (e.g., Interim ATO, System Security Plan, DOD Information Assurance Certification and Accreditation Process).
 - Submit the agreement, ATO, and System Access Request (SAR) to DAAS.
 - Acquire DAAS MILS to DLMS X12 data maps for the transactions to be migrated
 - Establish communications mechanisms with DAAS and determine what transfer protocol will be used with DAAS
3. Schedule DLMS training
 - Training courses can be requested by contacting DLMS Program Office
 - POC: Sylvia Williams, 703-767-6912, DLMSTraining@dla.mil



Ten Steps to Success cont.

- 4. Select, acquire or develop an EDI or XML translator/parser**
- 5. Develop phased migration plan/schedule**
- 6. Pick a simple transaction to work first and do one at a time, reusing as much as possible for the next transaction**
- 7. Use EDI or XML translation software and DAAS logical data maps to map/parse data for incoming/outgoing DLMS transactions**
- 8. Establish table driven MILS or DLMS on/off switching mechanism to establish control, allow for phasing and fail safe fall back**
- 9. Test, Test, Test**
 - Establish “loop back” testing arrangement with DAAS where legacy system sends MILS to DAAS and DAAS returns equivalent DLMS X12 for validation/verification.**
 - Conduct unit code testing on each transaction (test all conditions)**
 - Schedule and conduct integration testing with DAAS & Trading Partners**
- 10. Schedule live cut over in increments, implementing few transactions at a time coordinating closely with DAAS**



Summary

- **DOD Directives mandate moving from DoD-unique logistics data exchange standards to the DLMS**
- **The Defense Logistics Management Standards are a broad base of DOD-approved business rules, standards, objects and processes designed to ensure interoperability**
- **The strategy to implement DLMS makes use of a managed, phased transformation process with a structured collaboration model**
- **DAAS ensures global network interoperability during the transition from the MILS to the DLMS**
- **The DLMS are the new standard for all new or replacement logistics systems, or in major modifications made to existing systems**



Module 1 Quiz

Question 1: Which document requires DOD Components to replace DOD-unique logistics data exchange standards with the DLMS?

- a) The DOD Directive 8190.01E
- b) DODM 4140.01
- c) The Constitution
- d) Both a & b

Question 2: Two part question: 1) Office responsible for standard business process and transactions standards supporting Supply? 2) Transportation?

- a) DLMS PO
- b) DTEB
- c) OSD
- d) Secret Service

Question 3: Why does DOD policy mandate the routing of all logistics transactions through DAAS and the use of DAAS conversion services when translations among message formats are required?

- a) Save money
- b) Ensure Interoperability
- c) Provide Pipeline metrics
- d) Single trading partner
- e) All of the above
- f) None of the above

Question 4: Which of the following is also called the “DLMS Manual”?

- a) DOD Directive 8190.01E
- b) DODM 4140.01
- c) DLM 4000.25
- d) Declaration of Independence



End of Module 1