



**ADOPTING COMMERCIAL
ELECTRONIC DATA
INTERCHANGE
STANDARDS FOR
DEPARTMENT OF DEFENSE
LOGISTICS**

APRIL 2000



ACQUISITION AND
TECHNOLOGY

OFFICE OF THE UNDER SECRETARY OF DEFENSE

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SUBJECT: Adopting Commercial Electronic Data Interchange Standards for DoD Logistics
Phased Implementation Plan

The implementation of commercial electronic data interchange (EDI) standards supports the DoD vision of interoperable systems functioning in an integrated data environment taking advantage of civil sector best business practices. Implementing commercial EDI standards lays an essential foundation to enable DoD to transform its obsolete and inefficient logistics business practices and move to world class processes that support *Joint Vision 2010*.

This plan implements Under Secretary of Defense (Acquisition, Technology and Logistics) Policy and Guidance for DoD Use of EDI Standards in Logistics Applications and satisfies the Defense Reform Initiative Directive #48 requirement for an implementation plan. It provides a detailed phased approach that moves DoD to American National Standards Institute Accredited Standards Committee X12 commercial EDI standards. As indicated in the Plan Components will submit individual implementation plans to the Defense Logistics Management Standards Office within 180 days of the date of this memorandum.

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Executive Summary

To ensure the Department of Defense (DoD) exploits available commercial standards as part of its business system upgrade efforts, the Deputy Secretary of Defense issued Defense Reform Initiative Directive (DRID) #48, Adoption of Commercial Electronic Data Interchange (EDI) Standards for DoD Logistics Business Transactions.

This plan satisfies the requirement of DRID #48 and the Under Secretary of Defense (Acquisition, Technology & Logistics) *Policy and Guidance for DoD Use of EDI Standards in Logistics Applications*, September 14, 1999, to develop a phased implementation plan to move DoD to the use of American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 standards or other commercial EDI standards. DoD will adopt ANSI ASC X12 EDI standards for internal and external communications between federal and private sector entities as a first step toward open international EDI standards targeted for the future.

Adopting commercial EDI standards supports DoD's process improvement and reengineering goals to:

- Adopt commercial best business practices
- Increase reliance on the commercial sector for logistics support
- Maximize use of commercial-off-the-shelf (COTS) software
- Enable business process improvements and systems modernization

Logistics system modernization efforts and process improvements are the basis of this plan's implementation strategy. This plan contains the requirements, agreed to by the Components, for implementing this strategy. It describes the common user support services needed to meet the goals of DRID #48. Corporate policy and support services include:

- Clearly defined policy for improved logistics business processes and systems modernization
- Clearly defined policy for the management of logistics data
- Policy directing an end to non-critical changes to Defense Logistics Standard Systems (DLSS) transactional exchanges
- Fully operational electronic business/electronic commerce infrastructure, including flexible and robust telecommunications, that supports a transitional DLSS/ANSI ASC X12 environment

- An efficient and effective organizational structure, with DoD corporate sponsorship, capable of overseeing the implementation of ANSI ASC X12 and sustaining the Defense Logistics Management System (DLMS) infrastructure
- DLMS documentation management, including implementation convention configuration control and participation in standards setting bodies
- Translating, converting, storing, forwarding, archiving, and routing Component transactions as needed
- Logistics database services
- Selected ANSI ASC X12 and DLMS training
- Corporate end-to-end testing

Components are responsible for implementing ANSI ASC X12 in their new, planned, and legacy business process systems. Legacy logistics business systems will not be replaced or modified solely for the purpose of implementing commercial EDI standards. DoD automated information systems will be replaced or modified based on sound functional requirements and supporting economic justification. To manage the common user support services and to facilitate a smooth, synchronized implementation to ANSI ASC X12, Components will:

- Designate a single organization to oversee ANSI ASC X12 implementation
- Develop individual Component ANSI ASC X12 migration implementation plans (which will be included as appendices to this Corporate plan)
- Submit approved plans to the Defense Logistics Management Standards Office within 180 days of approval of this plan
- End non-critical changes to DLSS
- Assist Deputy Under Secretary of Defense, (Logistics & Materiel Readiness) in identifying and developing policies and guidance to effect use of ANSI ASC X12 in lieu of DoD-unique logistics data exchange standards
- Manage and coordinate implementation of ANSI ASC X12 into communications among intra- and inter-Component logistics business processes
- Evaluate legacy systems for ANSI ASC X12 implementation
- Identify additional logistics business functions; e.g., maintenance, munitions, etc., and unique transactions/data that could benefit by implementing ANSI ASC X12

- Adopt ANSI ASC X12 for third-party logistics partnerships
- Identify corporate services required to support ANSI ASC X12 implementation
- Report implementation status semiannually

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Administrative Notes

An electronic copy of this plan is available at :

<http://www.log.edi.migration.hq.dla.mil/Documents/document/DRID48IP.pdf>

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SECTION 1 OVERVIEW

1.1. INTRODUCTION

To ensure the Department of Defense (DoD) exploits available commercial standards as part of its business system upgrade efforts, the Deputy Secretary of Defense issued Defense Reform Initiative Directive (DRID) #48, *Adoption of Commercial EDI Standards for DoD Logistics Business Transactions*,¹ and the Under Secretary of Defense (Acquisition, Technology & Logistics) (USD[AT&L]) issued *Policy and Guidance for DoD Use of EDI Standards in Logistics Applications*.² Under DRID #48, the Joint Electronic Commerce Program Office (JECPO), in conjunction with the Components,³ formed a logistics electronic data interchange (EDI) integrated product team (IPT). The IPT was chartered to develop a comprehensive implementation plan for migrating to the use of American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 standards, or other commercial EDI standards identified in Federal Information Processing Standard (FIPS) 161-2.⁴ IPT members included representatives from each of the Military Departments, Defense Agencies, and participating civil agencies.

This implementation plan contains the approach for Components to follow when developing their internal plans for implementing ANSI ASC X12 commercial standards.⁵ When completed, Component plans will become individual appendices to this plan (see Appendix F for Component plan outline). As requirements are articulated in Component plans, this plan will be updated accordingly. A Component may choose to exchange data using electronic business/electronic commerce (EB/EC) capabilities other than EDI. However, when EDI is used for internal communications among DoD systems, or for external communications between DoD systems and the private sector, other federal agencies, or foreign governments, FIPS 161-2 applies. As additional EB/EC capabilities emerge and new business requirements are identified, DoD will integrate these new capabilities and their associated standards into the Defense Logistics Management System (DLMS). Recognizing that other business capabilities do exist and more will be forthcoming, the IPT revised the definition of DLMS (see Appendix Q) to cover all emerging EB/EC technologies. The DLMS will provide business rules for total logistics support for all EC capabilities.

This section discusses the future use of ASC X12 and the role of the DLMS in implementing those standards for logistics systems data exchanges to support the Joint Chiefs of Staff (JCS)

¹ See Appendix D. Deputy Secretary of Defense, DRID #48, *Adoption of Commercial EDI Standards for DoD Logistics Business Transactions*, December 9, 1998; an electronic copy of the DRID is available at: <http://www.log.edi.migration.hq.dla.mil/Documents/document/DRID48IP.pdf>.

² USD (AT&L) memorandum, *Policy and Guidance for DoD Use of EDI Standards in Logistics Applications*, September 11, 1999; an electronic copy of the policy is available at: http://www.log.edi.migration.hq.dla.mil/Documents/document/DRID48PolicyFinal_91499.pdf.

³ Throughout this document, the term *Component* is used to refer to government participants in DoD logistics. This includes the Military Departments, Defense Agencies and DoD field activities.

⁴ FIPS 161-2; an electronic copy is available at: <http://www.itl.nist.gov/fipspubs/by-num.htm>.

⁵ Hereafter referred to as “ASC X12”.

Joint Vision 2010,⁶ DoD Logistics Strategic Plan,⁷ and the Global Combat Support System (GCSS).⁸ In addition, this section reiterates DoD policies regarding EB/EC.

1.2. BACKGROUND⁹

The existing DoD logistics automated information systems (AISs) were developed using the Defense Logistics Standard Systems (DLSS) for EDI. The DLSS are a set of business rules to include: procedures, data standards, code lists, metrics, policies, and transaction formats that govern DoD logistics operations. DLSS transaction formats convey requisitioning and issue, inventory accounting, billing, contract administration, discrepancy reporting, and transportation data among Components' AISs. The approximate three billion DLSS transactions exchanged annually are crucial for conducting DoD logistics operations. However, because the DLSS are more than 35 years old, they constrain business process improvements and the evolution of logistics data exchanges as follows:

- The amount of data that can be transmitted in a single transaction is limited - DLSS fixed-length 80-position record format cannot effectively support logistics modernization initiatives
- Costs for systems development and operations are unnecessarily high - employing obsolete DLSS standards in new systems contributes to this high cost
- DLSS transaction formats and codes are embedded in the program code and data structures of legacy systems - enhancing these systems with commercial off-the-shelf (COTS) software is more difficult and costly
- DLSS standards are DoD-unique and are in an outdated format - these standards and formats significantly increase the difficulty of developing third-party logistics arrangements

⁶ Information about *Joint Vision 2010* is available at:
http://www.dtic.mil/dtic/bibtomics/joint_vision_2010.html .

⁷ USD (AT&L), *FY2000 Logistics Strategic Plan*, August 1999. An electronic copy is available at:
<http://www.acq.osd.mil/log/lsp/lsp.htm>

⁸ Information about GCSS is available at: <http://www.disa.mil/line/gcss.html>.

⁹ Additional background information can be found in *A Business Case and Strategy for Defense, Logistics Electronic Data Interchange*, Logistics Management Institute, October 1998. An electronic copy is available at: <http://www.log.edi.migration.hq.dla.mil/Documents/document/LogisticsEDIRreport.pdf>.

These constraints are inhibiting DoD's operational effectiveness at a time when dramatic changes are occurring in military logistics. The cold-war focus of a major war in Europe fought by pre-positioned forces and assets has changed to one in which diverse military missions are conducted anywhere in the world with little notice. The exchange of logistics data between Components and their trading partners is crucial to DoD's support of this new mission environment. Rather than continuing to operate a combination of DLSS and diverse Component-unique transaction formats, DoD requires the flexibility and breadth in logistics data exchanges called for in *Joint Vision 2010*. Accordingly, DoD will replace the DLSS with ASC X12 for transactional exchanges.

The DLMS¹⁰ incorporates ASC X12 and provides a broad base of business rules that include procedures, data standards, code lists, metrics, policies, and transaction formats designed to meet DoD's requirements for total logistics support. The DLMS encompasses the full functionality of DLSS and, with its variable-length transaction formats, can accommodate future information and process improvement requirements. The Defense Logistics Management Standards Office (DLMSO), DoD's Executive Agent (EA) for logistics data interchange, has completed much of the preparatory work to implement ASC X12. The functionality of more than 400 DoD-unique (DLSS) transaction formats has been consolidated into 53 federally-approved implementation conventions (ICs) that use 26 ASC X12 transaction sets. During the initial development of the DLMS, DLMSO included provisions for more than 100 enhancements that, based on input from the Components, accommodate additional data and new capabilities. The ICs include these enhancements and are outlined in DoD 4000.25-M, *Defense Logistics Management System*.¹¹

1.3. PURPOSE

This implementation plan meets the requirement of DRID #48 and the USD (AT&L) Policy and Guidance for DoD Use of EDI Standards in Logistics Applications by providing a phased strategy for migrating to commercial EDI standards for DoD logistics business transactions. This plan describes the corporate DoD resources needed to migrate to these standards and identifies what Components must do to develop and implement their internal plans to meet the goals of DRID #48.

Adopting commercial EDI standards supports DoD's process improvement and reengineering goals to:

- Adopt commercial best business practices
- Increase reliance on the commercial sector for logistics support

¹⁰ See Appendix Q, Glossary, for DLMS definition.

¹¹ DoD 4000.25-M; *Defense Logistics Management System, Version 2*, December 1995; an electronic copy is available at: <http://www.dlmso.hq.dla.mil/Manuals/DLMS/DLMSMANUAL.htm>

- Maximize use of COTS software
- Enable business process improvements and systems modernization

Replacing DoD-unique logistics transaction formats with ASC X12 serves as a necessary first step for moving DoD's automated logistics information exchange systems toward international open data interchange standards. ASC X12 is widely used in industry computer-to-computer transactional exchanges and is the basis for many transactional exchange between the private sector and federal government.

ASC X12 has the flexibility for meeting *Joint Vision 2010* objectives for transaction exchange. *Joint Vision 2010*, the JCS's basis for future DoD doctrine, emphasizes improved logistics support through a "focused logistics" concept. Focused logistics envisions fusing logistics and information technologies to provide rapid crisis response to track and shift assets while en route, and to deliver tailored sustainment packages directly to the strategic, operational, and tactical levels.

1.4. SCOPE

This plan and DoD policy acknowledge the existence of other EDI standards and non-transactional interchange capabilities. However, the primary focus of this plan is on implementing ASC X12 standards for DoD logistics business transaction interchange as a stepping-stone to open international standards. As such, this plan does not preclude the use of other data interchange and data-sharing techniques. However, when transactional exchanges is the chosen method of data interchange, the transactions will be formatted in accordance with ASC X12 standards.

This plan applies to the exchange of predefined logistics EDI transactions within DoD and between DoD and its trading partners. From an organizational standpoint, it applies to Office of the Secretary of Defense (OSD), JCS, DoD Inspector General, combatant commands, and Components. From a systems standpoint, it applies to planned, new, and legacy DoD logistics systems identified in the DoD Year 2000 (Y2K) database. From a data standpoint, this plan applies to all predefined logistics transactional data, including Component- and system-unique formats, data elements, and code lists.

1.5. POLICY

Federal and DoD policies mandate implementing EB/EC by using commercial standards. FIPS 161-2 requires using specific approved commercial EDI standards for EDI transactions. DoD Chief Information Officer (CIO) Guidance and Policy Memorandum No. 2-8190-031190,

Defense-wide Electronic Business/Electronic Commerce (EB/EC), March 11, 1999,¹² describes DoD policy for implementing EB/EC.

1.5.1. Federal Policy

FIPS 161-2 identifies approved commercial standards for exchanging transactional data using predefined formats in a computer-to-computer environment. FIPS 161-2 requires using one of three families of EDI standards—ASC X12; United Nations EDI for Administration, Commerce, and Transport (UN/EDIFACT); or Health Level 7 (HL7). FIPS 161-2 defines EDI as “the computer-to-computer interchange of strictly formatted messages.”¹³ FIPS 161-2 further states “EDI may be defined as an interchange between computers of a sequence of standardized messages taken from a predetermined set of message types.”¹⁴ FIPS 161-2, Section 9.3.2, then requires “agencies using (ASC) X12, UN/EDIFACT, or HL7 versions and releases for which ICs have been established by the FESMCC (Federal EDI Standards Management Coordinating Committee) shall adopt those ICs.” In addition, FIPS 161-2, Section 11.6, affirms the restriction on the use of industry-specific EDI standards beyond September 30, 1996, unless no equivalent ASC X12 or UN/EDIFACT standard has been developed.

1.5.2. DoD Policy

CIO Guidance and Policy Memorandum No. 2-8190-031190 directs that EB/EC principles, processes, and capabilities be used for conducting DoD business and military affairs. The memorandum states that DoD’s overriding policy is to be efficient and economical wherever possible by widely using EB/EC. It further states “The DoD will ...use industry EB/EC standards and COTS solutions to the maximum extent practical.”¹⁵ These policy requirements are supported by the goals, objectives, and strategies contained in the *DoD Electronic Business/Electronic Commerce Strategic Plan*.¹⁶

The USD(AT&L) policy and guidance memorandum, September 14, 1999, outlines policy and guidance to implement commercial EDI standards in DoD logistics business processes. The following key elements of this policy form the basis of this plan:

¹² DoD CIO Guidance and Policy memorandum No. 2-8190-031190, *Defense-wide Electronic Commerce (EB/EC)*, March 11, 1999; an electronic copy is available at: http://www.log.edi.migration.hq.dla.mil/Documents/document/EBEC_GPM.pdf. In directive form, it is currently in draft.

¹³ FIPS 161-2, op. cit. Section 3.1.

¹⁴ *ibid.*, Section 3.2.

¹⁵ *ibid.*

¹⁶ DoD Chief Information Officer, *DoD Electronic Business/Electronic Commerce Strategic Plan*, May 15, 1999. An electronic copy is available at: http://www.log.edi.migration.hq.dla.mil/Documents/document/EB-ECSP_Final-Accepted.doc.

- Replace DoD-unique logistics data exchange standards with ASC X12 standards as a first step toward moving from obsolete, inflexible DoD-unique transactional-based standards to open international data interchange standards
- Use only approved FIPS 161-2 EDI standards for EB/EC transactions in new and planned logistics business processes, which include major modifications to legacy systems
- Use DLMS as a process improvement enabler in new, replacement, and legacy logistics business systems as a part of ongoing and planned modernization programs (Internal communications¹⁷ among DoD systems will use FIPS 161-2 EDI standards and federally approved ICs. External communications between DoD systems and the private sector, other federal agencies, or foreign governments will use appropriate FIPS 161-2 EDI standards [or other appropriate standards] and federally approved ICs appropriate for the agencies, industries, or governments involved).
- Propose the adoption of commercial ICs when they are in the best interest of DoD
- Modify legacy logistics business systems to employ new functionality, where cost beneficial, in order to meet the total requirements of the DoD's migration to approved EDI standards
- Program for, fund, and implement the DLMS through process improvements and business system upgrades
- Implement EB/EC program policy guidance contained in CIO Guidance and Policy Memorandum 2-8190-031190 when migrating DoD logistics business processes to FIPS 161-2 EDI standards
- Develop and apply corporate services and processes to minimize duplication and ensure interoperability

1.6. CORPORATE INFRASTRUCTURE AND SUPPORT SERVICES

The Deputy Under Secretary of Defense (Logistics) [DUSD(L)] shall be responsible for implementation policy and oversight direction as they apply to this plan. Implementing ASC X12 is a Component responsibility. DUSD(L) will support Component logistics requirements for corporate-level infrastructure and support services necessary to successfully migrate to ACS X12, as well as to manage the fully developed DLMS environment. These support services include:

¹⁷ Internal communications refer to intra- and inter-Component logistics business systems exchanges.

- Clearly defined policy for improved logistics business processes and systems modernization
- Clearly defined policy for the management of logistics data
- Policy directing an end to non-critical changes to DLSS transactional exchanges
- Fully operational EB/EC infrastructure, including flexible and robust telecommunications, that supports a transitional DLSS/ASC X12 environment
- An efficient and effective organizational structure, with DoD corporate sponsorship, capable of supporting the implementation of ASC X12 and sustaining the DLMS infrastructure
- Continued DLMS documentation management, including IC configuration control and participation in standards setting bodies
- The corporate capability to translate, convert, store, forward, archive, and route Component transactions as needed
- Logistics database services
- Selected ASC X12 and DLMS training
- Corporate end-to-end testing

These corporate support services are discussed in Section 3 and Appendices A and B.

1.7. PLAN ORGANIZATION

The remaining sections of this plan describe specific implementation and operational management issues. This implementation plan also includes appendices addressing operations concepts, EB/EC architecture, and a format for individual Component plans. The remainder of the plan is organized as follows:

- *Section 2* discusses the ASC X12 implementation strategy
- *Section 3* discusses ASC X12 implementation management
- *Section 4* discusses change management and issue resolution
- *Appendix A* describes the mixed DLSS/ASC X12 operating concepts and considerations

- *Appendix B* outlines the corporate infrastructure architecture
- *Appendix C* describes implementation responsibilities, actions, and milestones necessary to ensure corporate resources are in place to support the migration effort and for the Components to develop their plans
- *Appendix D* contains DRID #48 and the USD(AT&L) EDI policy and guidance
- *Appendix E* describes an ASC X12 implementation success story
- *Appendix F* outlines Component ASC X12 implementation plan requirements
- *Appendices G – P* are Component ASC X12 implementation plan placeholders
- *Appendix Q* contains a glossary of terms
- *Appendix R* lists abbreviations and acronyms
- *Appendix S* lists referenced documents

SECTION 2 LOGISTICS ASC X12 EDI IMPLEMENTATION STRATEGY

2.1. INTRODUCTION

DLMS embodies ASC X12, federally approved logistics ICs, and standard defense logistics business rules that will ensure interoperability among DoD's logistics systems. EDI implementation must balance a standard enterprise implementation strategy while recognizing the need to accommodate operational, functional, and resource constraint differences among Components. This section provides an implementation strategy that allows Components flexibility in developing individual plans to implement ASC X12. It also ensures the implementation of ASC X12 is accomplished in a coordinated manner across corporate and Component boundaries. A standardized implementation analysis process is outlined below to guide Components in developing individual plans to implement ASC X12 in: new and planned systems; legacy systems; and system process improvement initiatives. This standardized analysis process applies to systems and data outlined in Section 1, paragraph 1.4. System categories are defined below:

- *New and planned systems.* Transactional-based logistics business process systems under development or undergoing major modifications
- *Legacy systems.* Transactional-based systems currently supporting logistics processes identified in the DoD Y2K database
- *Process improvement initiatives.* DoD and Component initiatives or logistics transactional-based processes that have potential for using ASC X12 or other FIPS 161-2 standards as a process improvement enabler

2.2. ANALYSIS PROCESS

New and planned systems will use ASC X12 for EDI exchanges and/or other EB/EC capabilities, as appropriate. However, legacy systems will not be replaced or modified solely for the purpose of implementing ASC X12. These systems will only be replaced or modified based on sound functional requirements and supporting economic justification. The analysis process below is recommended for determining the disposition of legacy transactional-based systems and process improvement initiatives. The analysis process consists of a series of steps/questions and a decision tree shown at Figure 2-1. Working through these steps/questions in conjunction with the decision tree ensures a consistent decision framework.

Decision tree steps/questions:

Step 1: Is the system ASC X12 compliant?

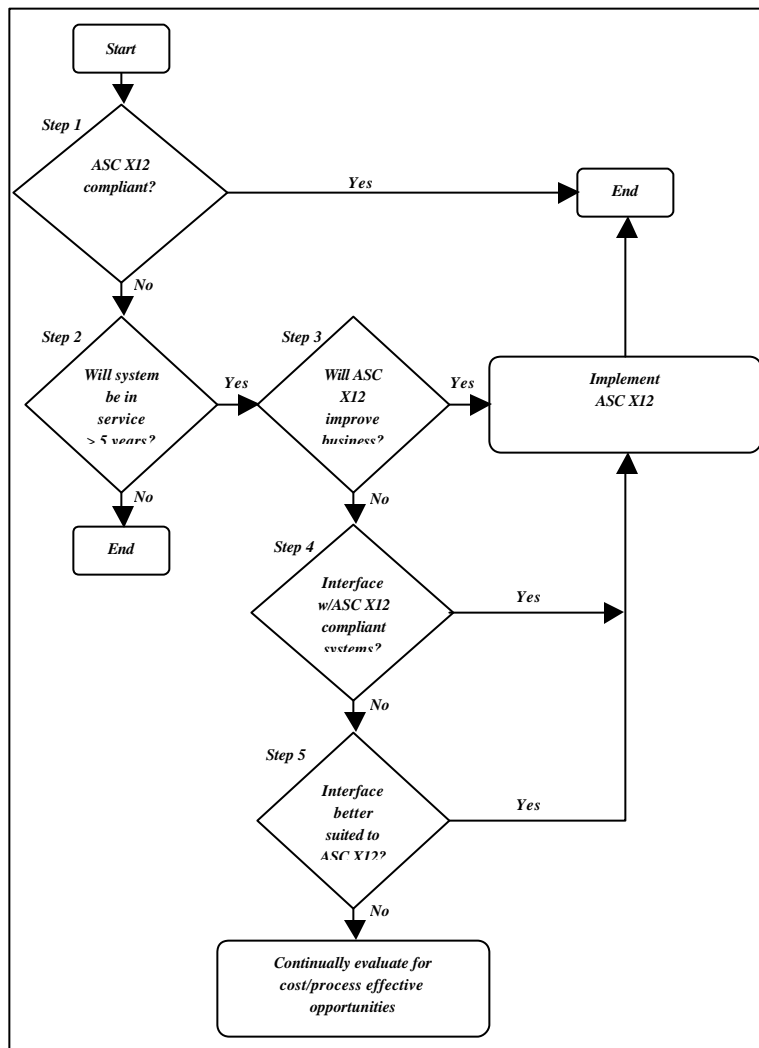
Step 2: Is the system projected to be in existence more than five years from now?

Step 3: Will transitioning the system to ASC X12 cost effectively improve your business process?

Step 4: Does the system interface extensively with ASC X12-compliant systems--if yes, does this cause adverse cost/performance impacts to those interfacing systems and/or the enterprise at large?

Step 5: Are specific interfaces or processes used in the system better suited to ASC X12?

Figure 2-1. Legacy Logistics Systems ASC X12 Decision Tree



2.3. IMPLEMENTATION STRATEGY

DoD's implementation strategy is founded upon use of ASC X12 in new and planned systems and legacy system modernization efforts and process improvements based on criteria outlined in paragraph 2.2. This strategy enables DoD to transform its obsolete and inefficient business practices and to move to improved and less costly alternatives. DLMSO, as the DoD EA for logistics data interchange and implementing ASC X12 in logistics, will ensure Components are provided with common user support services (see Section 1, paragraph 1.6. and Section 3). To support DLMSO's management efforts and to facilitate a smooth implementation, Components must assume certain responsibilities, develop an internal ASC X12 implementation plan, and periodically report on implementation progress. For detailed implementation responsibilities, actions, and milestones, see Appendix C.

2.3.1. Component Responsibilities

Components are responsible for implementing ASC X12 into their logistics business processes. Components will designate to DLMSO a single organization, in coordination with their respective EB/EC focal points, to oversee this implementation effort. In addition to internal implementation responsibilities, this organization will work in close coordination with DLMSO to:

- End non-critical changes to DLSS¹⁸
- Assist DUSD(L) in identifying and developing policies and guidance to effect use of ASC X12 standards
- Manage and coordinate implementation of ASC X12 communications among intra- and inter-Component logistics business processes
- Consider for ASC X12 implementation those legacy systems that meet the criteria outlined in Figure 2-1
- Identify additional business functions, e.g., maintenance, munitions, etc., and unique transactions/data that could benefit by implementing ASC X12
- Adopt ASC X12 for third-party logistics partnerships
- Identify corporate services required to support ASC X12 implementation

2.3.2. Component Implementation Plans

¹⁸ The only new proposals affecting changes to DLSS transactional exchanges that will be accepted are those that are urgently needed and approved or directed by DUSD(L). Components may continue to use DLSS in their current format for legacy systems until the systems are replaced, eliminated, or modernized.

As agreed to by the JECPO-chartered IPT, Components will, within 180 days of approval of this plan, develop and submit to DLMSO individual plans for implementing ASC X12. These plans will focus on Component implementation strategies for new system development, legacy system modernization, and process improvement initiatives. In addition, these plans will address key ASC X12 implementation issues and discuss how identified issues will be resolved. The DoD Y2K logistics systems database will form the basis for system identification and inclusion in Component plans. Component plans should be developed as part of their overall EB/EC plans. To ensure consistency and continuity, a Component-approved plan outline is provided at Appendix F.

2.3.3. Component Implementation Status Reporting

Beginning 2QFY01, and semiannually thereafter (or more often at Component option), a Component implementation status report will be provided to DLMSO. Reports Control Symbol (RCS): DD-AT&L (AR) 1419 applies. The purpose of this status report is to provide a vehicle for Components to escalate implementation issues for DoD action and to update Component implementation plans. Reports shall address deviations from or issues associated with their approved Component implementation plans. As a minimum, reports should summarize implementation progress by system and highlight issues that may affect implementation. Components shall update their implementation plans and provide copies to DLMSO as part of this status update.

2.4. SUMMARY

DoD migration from DLSS to ASC X12 fundamentally changes the underpinnings of DoD's logistics systems. This section provided the DoD implementation strategy and generally defined requirements to bring about this change. Section 3 expands on these requirements by focusing on organizational management responsibilities.

SECTION 3 IMPLEMENTATION MANAGEMENT

3.1. INTRODUCTION

Implementing ASC X12 is a substantial undertaking and will require the participation of many organizations over several years. This implementation will include coordinating the adoption of ASC X12 across Component logistics systems such as inventory control points (ICPs), retail supply, distribution and other depots, financial, and transportation. It will require coordinating data exchange formats in addition to the phased implementation of ASC X12 and additional DLMS enhancements. The technical approach for communications pathways, error processing, transition schedules, and a host of other issues will also need to be addressed.

3.2. IMPLEMENTATION MANAGEMENT

3.2.1. Participants:

- Joint organizations and commands (e.g., JCS, combatant commands, U.S. Transportation Command [USTRANSCOM])
- DoD Component logistics process and system managers
- Non-DoD federal agency logistics process and system managers
- Commercial organizations participating in DoD logistics processes
- DoD corporate policy and process organizations, including:
 - OSD
 - DLMSO and supporting Process Review Committees (PRCs)
 - Logistics Community Manager (LCM)
 - Organizations supporting joint initiatives, such as global and in-theater data access, security assistance, maintenance, munitions management, etc.
- DoD corporate technical organizations, including:
 - CIO
 - JECPO
 - Defense Information Systems Agency (DISA)

- Defense Automatic Addressing System Center (DAASC) and supporting Technical Review Committee (TRC)
- Joint Interoperability Test Command (JITC)
- EC standards management bodies:
 - FESMCC, DoD EDI Standards Management Committee (EDISMC), and subordinate working groups
 - Non-government standards management organizations, such as ANSI

3.2.2. DLMSO Responsibilities

DLMSO operates under the authority of DoD 4140.1-R, *Material Management Regulation*,¹⁹ and DoD Directive 4140.1, *Material Management Policy*,²⁰ and is the primary proponent for implementing data exchange in the logistics community and associated functional areas. DLMS policies, responsibilities, procedures, rules, and electronic data communication standards are documented in DoD 4000.25-M. DLMSO's on-going support of logistics data interchange includes the following functions:

- Develop, maintain, and document uniform corporate-level policies and procedures for exchanging logistics data between the Components and among other governmental agencies and private industry via the PRC process
- Develop and document inter-Component data exchange formats and other standards for logistics capabilities via the PRC process
- Develop and maintain the DoD logistics interface with the Defense Data Dictionary System

¹⁹ DoD 4140.1-R, *Material Management Regulation*, May 1988; an electronic copy is available at: <http://204.255.70.40/supreg/cover.htm>

²⁰ DoDD 4140.1, *Material Management Policy*, January 4, 1993; an electronic copy is available at: <http://web7.whs.osd.mil/pdf/d41401p.pdf>

- Perform DoD Logistics Functional Data Administrator Responsibilities as specified in DoD Directive 8320.1, *DoD Data Administration*²¹
- Ensure Components are represented on DLMS PRCs and the TRC
- Chair logistics-related PRC meetings to manage, control, and coordinate changes and additions to logistics procedures and other common-user documentation
- Coordinate technical issues with the DAASC-chaired TRC

During implementation, DLMSO will undertake the following additional responsibilities:

- Coordinate/synchronize corporate common requirements as outlined in Component implementation plans
- Develop, in coordination with the Components, the implementation status report required by Section 2, paragraph 2.3.3.
- Ensure uniform implementation of the DLMS as required by DoD Directive 4140.1 and DoD 4140.1-R
- Elevate, to the appropriate Principal Staff Assistant (PSA) proponent, implementation requirements such as requests for additional DoD policy guidance, unresolved conflicts in schedule, and other issues
- Coordinate corporate-level ASC X12 and DLMS training
- Ensure coordination with non-DoD participating agencies
- Encourage inclusion of other DoD business functions in the logistics ASC X12 implementation process, such as maintenance and munitions

For detailed responsibilities refer to Appendix C.

3.2.3. Technical Management

DAASC and the DoD Electronic Business Exchange (DEBX) serve as the cornerstones of DoD corporate resources to support ASC X12 implementation. These sites will provide telecommunications support, archiving and storage, translation services, ASC X12/DLSS conversion capabilities, and other services to support Component implementation and testing. DLMSO, in coordination with DAASC, DISA, JECPO, and the Components,

²¹ DoDD 8320.1 *DoD Data Administration*; an electronic copy is available at: <http://lg.home.microsoft.com/access/allinone.htm>

will support and coordinate the ASC X12 implementation. Overviews of the operating concept and infrastructure architecture are in Appendices A and B, respectively.

As part of the implementation, DAASC will replace its proprietary, Government-owned, DLSS/ASC X12 conversion program with a robust COTS “any-to-any” format mapping program. DAASC will convert the existing maps for the more than 400 DLSS transactions to ASC X12 (also with ASC X12-to-DLSS maps). The conversion program will operate throughout the mixed DLSS/ASC X12 period. DAASC will also monitor ASC X12 logistics data quality and conformance basic syntax/formats and telecommunications protocols, procedures, and maintain user profiles. DAASC's operational oversight will be significant during the implementation period as new systems begin ASC X12 testing and operation. During the implementation period, DAASC and DISA will need to apply increased resources to track and verify the successful movement of data through the telecommunications network. The degree and timing of additional resource requirements are dependent on Component implementation plans.

3.2.4. Working Teams

During implementation, DLMS PRC/TRC chairpersons will, as required, establish working teams, consisting of Component representatives, to address specific implementation issues that cross Component lines. The scope and focus of the teams must be agreed to by all parties involved to ensure that teams are disbanded after the objectives are met. Coordination with the working team effort will be accomplished either through direct involvement by DLMSO representation on the working teams or through periodic status reports to DLMSO.

3.3. IMPLEMENTATION STRATEGY COORDINATION

3.3.1. Coordination/Management of Component Plans

A key element of individual Component plans is the phasing of legacy systems from DLSS to ASC X12. Other important aspects will be schedules for implementing enhancements, plans for establishing translation capabilities, and requirements for corporate capabilities, such as telecommunications, translation, routing services, and training. DLMSO will coordinate the diverse plans into a single comprehensive plan and schedule and update as appropriate.

DLMSO will manage the corporate phased implementation plan. This will include tracking each Component's progress and adherence to the Component's schedule and keeping all participants aware of overall progress and issues. DLMSO will report periodic status on implementation to the Deputy DoD CIO, Director, Defense Reform Initiative, and the Defense Logistics Information Board (LIB). This coordination includes the migration toward new or revised functionality, including phased implementation of:

- Currently identified and validated DLMS enhancements

- A program for eliminating redundant or outdated DLSS data or transactions
- Revised business practices, such as unique-item tracking
- New business functions, such as maintenance and munitions
- Consolidated and standardized “Component-unique” transactions, or other EB technologies and data, into the DLMS set of tools

3.3.2. Documentation

DLMSO is responsible for corporate-level implementation documentation. This will include, as a minimum, DoD 4000.25-M, all ICs, DLSS-DLMS conversion documents, and data administration, in accordance with DoD Directive 8320.1. Other documentation, such as briefings, test plans, and specific implementation guides, will be identified and developed as the project progresses. DLMSO will coordinate the development of technical documentation with DAASC and DISA. DLMSO will also coordinate corporate-level ASC X12 and DLMS training packages for use by the Components.

3.3.3. Training Support

DLMSO, in coordination with the Electronic Commerce Resource Centers (ECRCs), will establish corporate-level training courses that will:

- Provide introductory information about EDI, ASC X12, interpreting ICs, and DLMS
- Assist functional and systems analysts in acquiring a more in-depth understanding of ASC X12, DLMS, and various infrastructure components, such as standards, software, hardware, and communications

DLMSO, with assistance from the Components, will develop additional training courses regarding other emerging DLMS EB/EC capabilities as required. The degree and timing of additional training requirements are dependent on Component implementation plans.

3.3.4. Initial Integration and Testing

From a corporate perspective, business applications and subsequent upgrades must be tested before deployment to ensure interoperability with supporting Component infrastructures. Compatibility with software applications on network servers and client computers must be considered during integration and testing.

Components will test the software for modernizing their legacy systems or bringing a new system on line, prior to submission for Government-wide test and integration on the EC

infrastructure. This will include initial testing of input and output routines that use DLSS or ASC X12 data formats and procedures.

The JITC will be available, on a fee-for-service basis, as a corporate resource to monitor, evaluate, assist, or verify the successful completion of individual Component integration and test plans. The degree and timing of additional testing requirements are dependent on Component implementation plans.

3.3.5. Corporate Integration and Testing

Once initial testing is successfully completed, Components must test transmissions with other trading partners. The principal responsibility of the EC infrastructure is to ensure that appropriate telecommunications standards/protocols are applied and that Component transmissions are successfully and accurately delivered to the intended site/system. At this point, DAASC and DEBX will work with trading partners to test that:

- Outbound and inbound transmissions conform to ASC X12 and DLMS syntactical requirements and ICs
- Envelope and routing standard structure requirements are met
- Adequate and appropriate primary/alternate telecommunications pathways are available
- Inbound or outbound transactions are received at the intended destination
- Error reporting and processing are adequately supported

Compliance with ASC X12 ICs and formats is primarily the responsibility of the trading partners involved and should be mutually verified at that level. A series of representative test transactions, using the ISA15 data element "T" (for test indicator), should be generated and exchanged between both trading partners. During this testing, transaction receipt and data correctness would be verified at the end-points of intended telecommunications path(s). Upon mutual verification of accuracy and correctness of test transactions, the ISA15 data element would then be changed to "P" (for production) prior to initiation of production traffic.

As new components, systems, transactions, data, and initiatives come on line, DAASC, in conjunction with the TRC, will be responsible for ensuring they are accurate and conform to the DLMS.

3.3.6. Data Administration

As part of the ASC X12 implementation, DLMSO will serve as the DUSD(L) executive agent performing the responsibilities of Functional Data Administrator for logistics data in accordance with DoD Directive 8320.1, DoD 8320.1-M, *DoD Data Administration Procedures*,²² and DoD 8320.1-M-1, *DoD Data Standardization Procedures*.²³ The objectives of this effort are to:

- Maintain clear, concise, consistent, unambiguous, easily accessible DoD-wide standard logistics data
- Minimize the cost and time to transform, translate, and research data
- Standardize data elements for data sharing

3.3.7. Problem Resolution

As organizations implement ASC X12 and both test and activate transactional exchanges, diverse implementation issues will arise. These issues may include finding errors in the ICs or documentation, corporate conversion programs or maps, and errors in Component programs. Testing and implementation will highlight effective ways to incorporate ASC X12 into Component systems.

Considering the expected duration of implementing ASC X12, transaction accuracy must be closely monitored. Each new system that implements ASC X12 creates the possibility for errors and disconnects. DLMSO will resolve issues and collect and share lessons learned among Components.

3.3.8. DLMS Enhancements

During the initial development of the DLMS, DLMSO included provisions for more than 100 enhancements based on input from Components, which accommodate additional data and new capabilities. These initial enhancements will be reviewed for continued need and business rule development as required. As Components modernize their systems, they should work cooperatively with DLMSO and other Components to identify additional enhancements as part of ongoing PRC processes.

²² DoD 8320.1-M, *DoD Data Administration Procedures*, March 1994; an electronic copy is available at: <http://web7.whs.osd.mil/html/83201m.htm>

²³ DoD 8320.1-M-1, *DoD Data Standardization Procedures*, April 1998; an electronic copy is available at: [http://web7.whs.osd.mil/pdf2/83201m1\(4-98\)/83201m1.pdf](http://web7.whs.osd.mil/pdf2/83201m1(4-98)/83201m1.pdf)

3.4. ASC X12 ESTIMATED CORPORATE IMPLEMENTATION COST

As a result of previous efforts by DUSD(L), DISA, Defense Logistics Agency (DLA [DLMSO and DAASC]), and JECPO, the basic infrastructure to begin implementation is in place. These efforts have produced expanded translation capabilities, business rules and procedures, federally approved ICs, and development of common EB/EC infrastructure. Table 3-1 identifies estimated startup/onetime cost requirements to ensure corporate services are in place to support the migration effort and do not reflect sustainment costs in the out-years. These requirements generally provide for common user support services such as pilot project support, training/testing, mapping, and infrastructure upgrades. Appendix F, Section 2.4., identifies a requirement to estimate implementation costs for inclusion in Component plans. As additional corporate requirements are identified in Component plans, Table 3-1 will be updated accordingly.

Table 3-1. Preliminary Corporate Cost Estimate (\$M)

<i>Category</i>	<i>FY00</i>	<i>FY01</i>	<i>FY02</i>
JECPO (DLMSO) Support	4.487	3.761	2.537
DISA/DAASC Infrastructure Support	2.484	2.252	0.000
JITC/DAASC Testing	0.100	0.000	0.000
ECRC Training	0.227	0.225	0.000
Other (TBD)			
TOTAL	7.298	6.238	2.537

Table 3-2 further expands cost categories. The cost estimates for these corporate services will be refined based on Component plan requirements, the degree and timing being dependent on individual Component schedules.

Table 3-2. Corporate Cost Category Explanation

<i>Category</i>	<i>Explanation</i>
JECPO/DLMSO Support	Ensures implementation synchronization, management, and data administration. Funds JECPO-approved Component pilot projects.
DISA/DAASC Infrastructure Support	Provides common corporate EB/EC infrastructure, mapping, and translation and conversion services.
JITC/DAASC Testing	Ensures corporate level testing oversight and support.
ECRC Training	Provides common corporate ASC X12 implementation training support packages.
Other Related Costs	TBD

3.5. SUMMARY

This section provided an overview of corporate management oversight requirements to implement ASC X12. Section 4 discusses the DLMS change management and issue resolution process.

SECTION 4 CHANGE MANAGEMENT AND ISSUE RESOLUTION

4.1. INTRODUCTION

As an increasing number of Component systems adopt ASC X12, the collective effort will shift from an implementation focus to one of operation and sustainment. The use of standard business processes and data formats by a large, diverse, and interrelated community will necessitate changes over time. Participating Components, business processes, and data requirements will change. Changes will also occur in supporting technologies and data standards. The DLMS business process must support change, but not so rapidly that it loses internal compatibility or becomes too costly. This section summarizes the DLMS change management process.

4.2. CHANGE MANAGEMENT PROCESS

4.2.1. Process Review Committee

The USD(AT&L) authorizes the Director, DLMSO, to establish PRCs,²⁴ as joint forums for administration and management of DoD's logistics business processes. As chairperson, DLMSO manages PRCs for logistics process issues regardless of the EB/EC capabilities used to meet DoD's business needs. Committees have been established for each logistics and related business function; for example: acquisition (contract administration), finance, maintenance, supply (including reutilization and marketing), and transportation. Components and participating federal agencies are members and fulfill the responsibilities of the PRC for each function.

4.2.2. Business Process Change

Changes to standard DoD business processes can originate from any source and can be submitted to the appropriate PRC for action. Actions may affect a single function or may require coordination across two or more functional areas, in which case the chairperson of the lead PRC will coordinate with other effected PRCs. Proposed changes will be staffed through the Components for approval and establishment of a joint implementation strategy and timing. The change process will reflect the existing change management process, as outlined in DoD 4000.25-M, Volume 1. Components will revise internal procedures and systems to support approved changes and implementation schedules. They are also responsible for updating internal Component documentation.

²⁴ DoD 4140.1-R, op. cit.

4.2.3. Coordination with External Standards Bodies

If changes in DoD business practices require modifying a DLMS IC, DLMSO will coordinate the changes through the EDISMC and FESMCC.²⁵ If a change is required to underlying ASC X12 standards, DLMSO will work the change through both the above standards bodies and ASC X12. If a change involves an EB/EC capability other than ASC X12, DLMSO, with assistance of the appropriate PRC and JECPO, will obtain approval through appropriate commercial, DoD, and federal sectors to establish standards for that capability.

4.2.4. Technical Review Committee

The DLMS TRC is a joint forum for managing technical issues of the logistics processes that are addressed by PRCs. The TRC is the advisory body for PRCs on related technical issues, e.g., architecture and telecommunications. It is chaired by DAASC, which provides technical support to PRCs on logistics process issues.

Since ASC X12 will be a phased implementation, it will be necessary to develop and maintain a conversion process from DLSS to ASC X12 and vice versa. This conversion enables trading partners to communicate when one trading partner is using DLSS and the other trading partner is using ASC X12. DAASC, with the assistance of PRCs, will manage and coordinate the conversion through its TRC.

4.3. DOCUMENTATION

The baseline for DoD's implementation of ASC X12 transactions and ICs is ASC X12 version 4010. Newer versions may be used on a transaction by transaction basis when approved by DLMSO in coordination with the Components. The DoD EDISMC, FESMCC, and supporting DoD logistics' PRCs approve the ICs for use in DoD logistics business processes. The business rules and supporting ICs are published by DLMSO in DoD 4000.25-M. Logistics processes using alternative EB/EC capabilities will also be documented in DoD 4000.25-M. DLMSO will publish, either separately or as annexes to DoD 4000.25-M, any additional DLMS documentation, particularly documents that will assist the Components in ASC X12 implementation.

Like the DLSS today, Components will have the option to further amplify, or supplement DoD business rules to improve internal Component operational processes at Component and base levels. These procedures may enhance the business process in interpreting the rules and applications being implemented, but not change the intent of the DoD procedures.

²⁵ *DoD Information Technology (IT) Standards Management Plan for EDI*, 3 June 1997. An electronic copy is available at: <http://www.log.edi.migration.hq.dla.mil/Documents/document/itsmp.pdf>.

4.4. BUSINESS RELATIONSHIPS

As the DoD EA for logistics data interchange, DLMSO is the conduit through which proposed changes flow to commercial, federal, and DoD standards bodies. Changes developed through the DLMS process will be submitted to the appropriate DoD, federal, and national standards bodies for consideration. DLMSO and DoD functional representatives will work with organizations to ensure needed standards are addressed by the appropriate approval authority.

Through its association with Components, DAASC, and DISA, DLMSO will assess emerging EB/EC capabilities and direction of DoD-wide information technology initiatives. As new EB/EC capabilities develop, DLMSO will address logistics functional issues to take advantage of emerging capabilities and commercial standards processes. DoD logistics processes will no longer be dependent on any one method for its business processes. DoD will use EB/EC capabilities that best support the warfighter on the basis of a given business scenario incorporating multiple capabilities into its logistics processes to meet the total support requirements of GCSS. Business relationships will be established, as needs dictate.

4.5. ISSUE ELEVATION

The DUSD(L) guides policy and oversees DoD's logistics business processes. The Under Secretary of Defense (Comptroller/Chief Financial Officer) is responsible for the financial functional process and the Director of Defense Procurement is responsible for the acquisition functional process (contract administration). Although most logistics business issues are resolved through committee actions, some issues need to be escalated to the appropriate OSD PSA for resolution. DUSD(L), in an effort to improve overall logistics performance and efficiency in support of the warfighter, established the LIB. The LIB, comprised of senior managers of Components, reviews and resolves information requirements of logistics policies, procedures, and business practices. It also ensures that budgetary priorities support operational needs. For cross-functional issues that are not resolved by the LIB, DUSD(L) will bring them to the DoD CIO Executive Board for resolution.

Logistics business issues not resolved through PRC or TRC processes will be presented to the LIB for resolution. If the issue is not within the LIB's scope (financial or acquisition), it will escalate to the appropriate OSD PSA for action. The LIB will make recommendations and advise DUSD(L) and Component leadership about logistics-related decisions and unresolved issues.

4.6. DLMSO BUSINESS PROCESS CHANGE INITIATIVES

As DoD implements ASC X12, the DLMSO business process must remain flexible and capable of adapting to a new logistics environment. This new environment is focused on the flexibility, speed of change, and system modernization enhancements ASC X12 provides the logistics community. DLMSO, in a continuing effort to leverage technology enhancements in

support of Component and DoD requirements, is exploring, through the PRC process, a variety of business process improvement initiatives which include:

- IC management
- DLSS Change Request - backlog
- Elimination of redundancies
- IC modifications
- Process accountability
- Process change funding

4.7. SUMMARY

As DoD transitions into this century, it will rely on technology and information to make the most effective use of DoD resources. It will also rely on an increasingly diverse set of logistics trading partners including Components, civil agencies, foreign governments, and private industry. This complex environment will require a framework through which participants can exchange and share data using understood business process rules and standards. DLMSO represents that framework and must continue to evolve with DoD's growth and change. This section summarized how that change would be managed to support both evolving business practices and technology.

APPENDIX A OPERATING CONCEPTS AND CONSIDERATIONS

A.1. INTRODUCTION

For an undetermined period DoD will operate in a mixed DLSS and ASC X12 transactional environment. The Defense Automatic Addressing System (DAAS) and DEBX play a critical role in sustaining this mixed environment. A significant level of mapping and translation/conversion,²⁶ between legacy DLSS and ASC X12 formats, will be required as users who have implemented ASC X12 interact with those with legacy DLSS or other non-compliant EDI systems.

It is recognized that logistics systems will undergo process reengineering changes. However, from a business process perspective, the underlying functionality of DoD logistics data exchange will remain the same. The participants will not change; requisitioners, integrated material managers and ICPs, distribution depots, finance centers, and transportation nodes will still be used. In addition, DLMSO will continue to provide corporate business rule and data exchange format services.

A.2. TRANSACTION PROCESSING

The following paragraphs describe the flow of data from the originating logistics application system through the translation process to the DoD logistics EB infrastructure and on to the recipient.

A.2.1. Initiator Processing

When a transaction (e.g., requisition or material receipt) is ready for processing, the logistics application system will initiate extraction (interface) programs that will gather the data together and pass the data to the logistics EB infrastructure for translation services. An EDI translator will transform the data into ASC X12 transaction sets and the transaction will continue to move through the DoD logistics EDI infrastructure. The following general guidelines apply:

- Extraction or interface programs will edit data to ensure it adheres to DLMS policy and data element standards, as well as ASC X12 syntax rules
- Translators will group one or more of the same transaction sets into a single EDI group and envelope

²⁶ See Appendix Q for translation and conversion definitions.

- Initiating systems will archive sent messages for no less than 90 days to ensure communication failures do not lead to loss of transmitted data
- Initiators will create additional copies for recipients not previously specified in DAAS instructions
- ASC X12 transactions will be given a control number along with group and transmission envelopes
- DLMS initiators will specify the handling of transmission of enhanced data while operating in the mixed DLSS/ASC X12 environment

A.2.2. Transaction Processing

The operations DAAS performs for a transaction vary greatly by the message type, sender, and intended recipient. For ASC X12 exchanges the following capabilities will be required:

- Receive inbound messages and archive them for 30 days
- Open messages and group envelopes down to the basic transaction sets
- Open messages and conduct standard or recipient-specific edits
- Copy opened transactions in the DAAS Logistics On-Line Tracking System (LOTS)²⁷ and route them to other DoD databases
- Route messages to appropriate recipients and locations
- Group transactions that are bound for the same destination
- Forward newly grouped envelopes to recipients and archive outbound messages
- Forward messages outside the DoD telecommunications network to civil agencies, commercial Value-added Networks (VANs), and trading partners

DAAS and/or DEBX will translate, as requested, between Component User Defined File (UDF) formats and the ASC X12 standards. During the mixed DLSS/ASC X12 period, DAAS will convert between ASC X12 and DLSS formats.

²⁷ LOTS information is available at: http://www.daas.dla.mil/daashome/daasc_lots.htm

A.2.3. Receiver Processing

Recipients will receive inbound transactions and input them into the EDI translator. The translator can apply basic edits to ensure the data meet minimal requirements of the ASC X12 transaction formats. Receiving EDI translators will send an acknowledgement back to the sender that identifies the transaction set, transaction numbers, and type of error for transaction sets that fail the edits. Due to the high volume of ASC X12 transactions and because most application systems generate status responses to key transactions, DLMS will not routinely provide positive acknowledgement. Exceptions will be made with the agreement of trading partners. Once edit checking is complete, the translator will convert the inbound data and pass it to an interface program for processing.

A.2.4. Telecommunications

DISA's Nonsecure Internet Protocol Router Network (NIPRNET), a combination of DISA-managed communication lines and the Internet, will be the primary path for communications in the continental United States (CONUS). Units, including Navy ships at sea, outside CONUS will use a variety of communications paths to connect to DISA communications channels. Civil agencies will generally connect to DEBX and from there connect to DAAS through NIPRNET. Commercial suppliers may work through their VANs or connect directly to either DEBX or DAAS via commercial telecommunications or the Internet.

A.2.5. Data Compression/Encryption Capabilities

EDI transmissions can be voluminous and therefore require significant amounts of communications bandwidth. An effective means of reducing transmission size is to compress data. If required, compression techniques will be implemented for logistics transactions. Many compression software packages provide data encryption and digital signature. This is a significant benefit because logistics data are sensitive when taken in aggregation. All encryption and digital signature capabilities will comply with the latest version of Deputy Secretary of Defense Memorandum, May 6, 1999, subject: *Department of Defense Public Key Infrastructure (PKI)*²⁸ and Deputy Secretary of Defense Memorandum, December 21, 1999, subject: *Office of the Secretary of Defense (OSD) Network Security Policy*.²⁹

A.2.6. Conversion Operations

DAASC has operated a proprietary version of conversion software for a number of years and is transitioning to a commercial “any-to-any” mapping software package that supports a more robust conversion. By using this software package, organizations will use “at will” the format

²⁸ A electronic copy is available at:

http://www.log.edi.migration.hq.dla.mil/Documents/document/DEPSECDEF_PKI_Memo.pdf.

²⁹ An electronic copy is available at:

<http://www.log.edi.migration.hq.dla.mil/Documents/document/OSDNetworkSecurityPolicy.pdf>.

they possess -- DLSS or ASC X12 -- to initiate a transaction. Operating in this environment has several implications:

- DAASC will develop and perform configuration management of conversion maps and customer profiles regardless of the physical location where conversion is performed
- DAASC will incorporate and maintain a list of organizations and specify whether they are operating in DLSS and/or ASC X12
- DLSS data elements, originally eliminated from ASC X12, must be restored to support conversion
- Organizations using ASC X12 enhanced data must do so with prior agreements brokered by DLMSO

A.3. TRANSLATION SOFTWARE

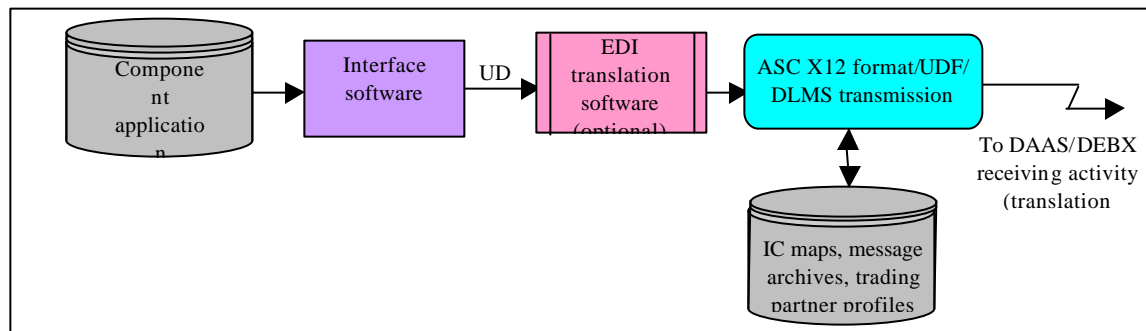
A.3.1. Translation Software

In the DLSS environment, data are exchanged in a series of more than 400 fixed-length 80-position record transactions. To generate these transactions, Component logistics systems extract data from the appropriate module, format the record, and pass it through DAAS. The recipient then edits and formats it into the receiving application system.

Transitioning to ASC X12 requires a change in the process of generating transactions. As with DLSS, transaction data will be extracted from the logistics application system; however, rather than being put into the “card” formats, the data will be placed into an interim format (known as a UDF). This format is fed into COTS EDI translator software at either the generating site or within the DoD logistics EB/EC infrastructure. The EDI translator converts data to the ASC X12 format and sends it to DAAS. The translator also performs a number of other functions, including maintaining telecommunications

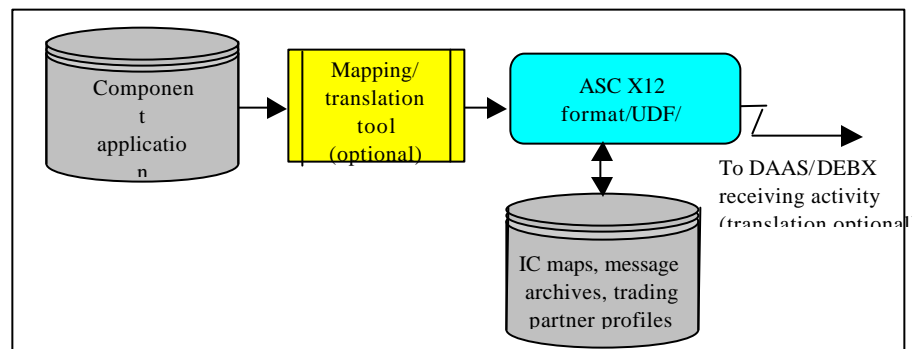
data, archiving messages, and processing errors. Figure A-1 is a generic drawing of the extraction/translation process typically used in the commercial EDI environment. The interface software operates on the same hardware platform as the application system. The translation software operates on the same or smaller hardware platform at the same facility.

Figure A-1. Processing Data from Component Legacy System to Transmitting in ASC X12 Format



Combinations of loading Component application systems in COTS database systems and using newer mapping/translation products eliminate the need to create UDFs. The mapping programs can extract the database tables, map and edit, and convert data directly into an ASC X12 format (see Figure A-2).

Figure A-2. Processing Data from Component Database Application to Transmitting in ASC X12 Format



A.3.2. Software Selection

EDI translation software automates the process of transforming Component data into ASC X12 formats for sending and receiving data. A wide variety of commercial translation software is available for Components to select from. Criteria that can affect the choice of translator include:

- Volume and variety of transactions to be exchanged
- Specific functional features to be included (e.g., communication module, security)

- Hardware and operating systems for the translation software to operate on
- Type of software used for the associated logistics application systems

The past few years have seen changes in the capabilities and relationships between commercial database systems and translators. The development of powerful “any-to-any” mapping software with specific ASC X12 modules has dramatically changed the EDI translation process.

A.3.3. Translation Software Distribution

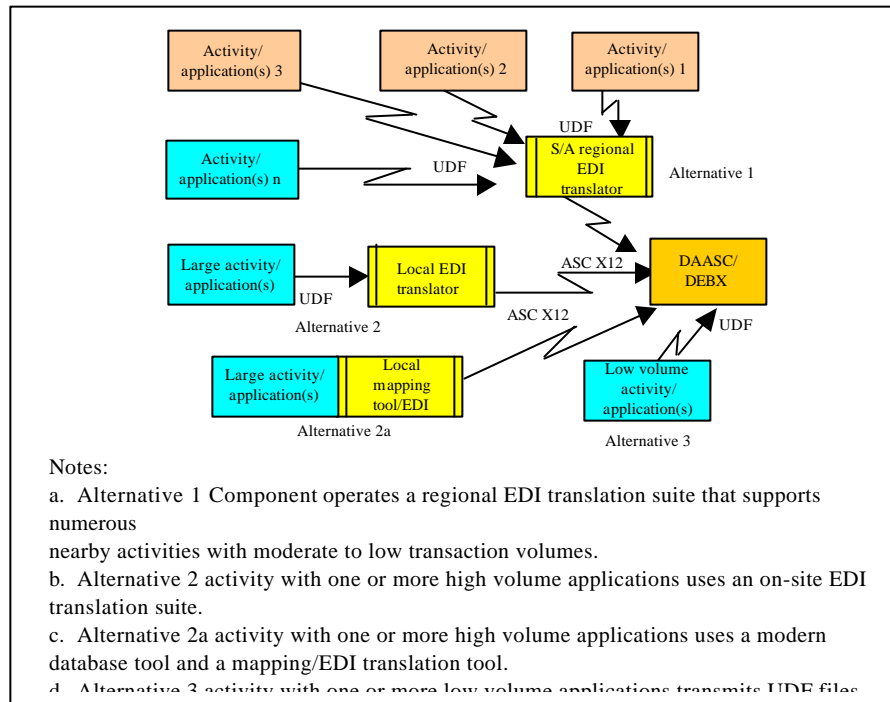
Components can adopt any of three scenarios (or a combination of the three) for deploying translation software suites and associating them with various logistics application systems.

These scenarios are:

- Establish “regional” translation centers to gather data converted into UDFs or other formats from several “nearby” facilities
- Physically locate the translation software in proximity to the application system
- Provide application data in an agreed-upon format to DAAS or a DEBX and rely on them to translate the data

These options are depicted in Figure A-3. Selecting and placing the most cost-effective translation software and hardware and telecommunications hardware and software will vary by Component and site. The existing environment and planned EDI exchanges with industry and ASC X12 operations will have to be analyzed in detail prior to making a decision.

Figure A-3. Alternative EDI Translation Scenarios



In general terms, the closer the translation software is physically to the application system and supporting technical and functional staff, the easier it is to manage the operation.

A.4. TRANSACTION ROUTING

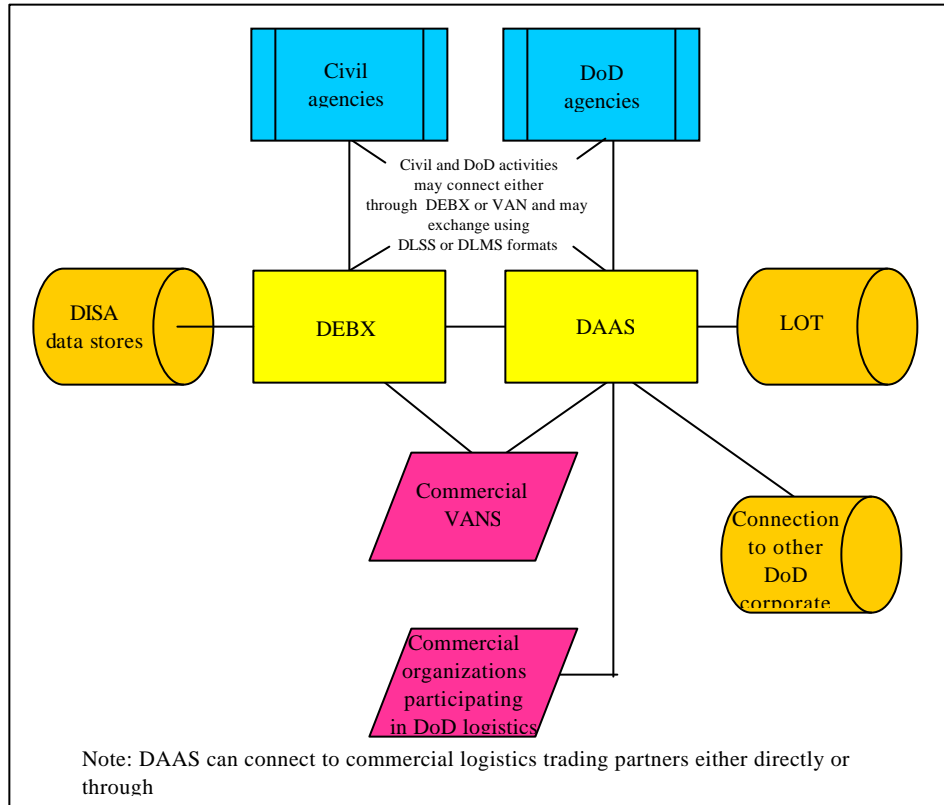
DAASC and DEBX will be central hubs and Component centers for ASC X12 transmissions. This section identifies specific considerations for routing transactions.

A.4.1. Routing Functions

DAAS will make copies of transactions and route them to recipients according to DLMS procedures. DAAS can support additional specialized standard routings if DAASC and the participating activities mutually agree. In addition, Components and participating civil agencies

can establish their primary routing link to DEBX, which in turn will forward transactions to DAASC for logistics processing. Figure A-4 depicts this routing scheme.

Figure A-4. Overview of ASC X12 Participants and Transaction Routing



A.4.2. Connections to Commercial Trading Partners

DAAS and DEBX provide telecommunications connectivity to commercial trading partners. Many commercial firms go through third-party organizations called VANS. Commercial VANS store and forward mailbox and ancillary components that in the commercial world are similar to the responsibilities of DAASC and DEBX. DAAS and DEBX are connected to many VANS and will connect to others as needed. DAAS and DEBX will also connect directly with individual trading partners as requested if the business case indicates the direct connection to be the most effective (both cost and support).

A.5. OPERATIONAL CONSIDERATIONS

The following paragraphs discuss additional operational considerations.

A.5.1. Processing

ASC X12 brings new capabilities for exchanging and accessing inter-Component data. These capabilities provide an opportunity to revise fundamental principles and assumptions about sent and received data. The following basic principles should guide Components as they modernize systems and incorporate ASC X12 capabilities:

- *Edit at origin.* Extensive editing and checking capabilities should be designed into new application interface programs - to ensure both outbound and inbound data comply with DLMS business rules
- *Eliminate unnecessary data.* To support the mixed-DLSS/ASC X12 environment a large amount of transaction data is repeated - new systems should not be developed with these data elements as part of the system
- *Transaction set size limits.* DLMS will employ a maximum of one million characters for translating, processing, and storing - Components must review their data-processing capabilities to determine if a lower number is required

A.5.2. Security Safeguards

ASC X12 implementation security safeguards shall be such that transactions and logistics information systems maintain the appropriate level of accountability, availability, access control, confidentiality, integrity, and non-repudiation based on mission criticality, classification, or sensitivity of transactions being handled. This effort will lead to increased and more readily available security capabilities throughout the federal EB/EC (EDI and web-based) architecture and will comply with the EB/EC information assurance architecture.

A.5.3. Unique-Transaction Data

The Components' Central Design Activities (CDAs) have long recognized DLSS limitations and have designed, programmed, and operated Component programs and transactions to meet evolving logistics requirements. Most of the older Component-unique transactions are DLSS-like fixed-length 80-record positions and are routed through DAAS. Many new Component-unique transactions use diverse variable-length formats and bypass DAAS. The number of formats and transactions processed independent of DAAS is unknown. To ensure uniformity of ASC X12 implementation and to provide management oversight, DLMSO, in conjunction with the Components will collect and document those data and unique data elements carried in DLSS transactions. As Components modernize and upgrade their logistics systems, unique-transactions/data will be integrated into the DLMS process.

A.6. WEB OPERATIONS AND OTHER TECHNOLOGIES

The Internet and the World Wide Web (WWW) are generating new techniques for transmitting and displaying data. These include Hypertext Mark-up Language (HTML) and eXtensible Mark-up Language (XML). Other forms of technologies are being deployed, such as automatic identification technology (AIT), which include smart cards, bar codes, and radio frequency tags. DLMSO and the Components must work with the proponents of the emerging technologies to ensure consistency with and inclusion in the DLMS.

A.7. SUMMARY

This concept of operations will evolve as Component requirements are identified and coordinated. The degree and timing of this evolution will be dependent on individual Component implementation plans.

APPENDIX B CORPORATE INFRASTRUCTURE ARCHITECTURE

B.1. INTRODUCTION

This implementation architecture is a subset of the Defense Information Infrastructure (DII), the GCSS, is based on the DII Common Operating Environment (COE),³⁰ and fully complies with the DII COE standards. The DoD EB/EC architecture is comprised of two evolving infrastructures: the DISA EB/EC infrastructure and the DAASC EB/EC infrastructure. This appendix provides an overview of the architecture and infrastructures.

B.2. DoD EB/EC ARCHITECTURE

Two recent DoD documents address DoD's policy and strategic plan for implementing EB/EC. The first document is DoD CIO *Guidance and Policy Memorandum No. 2-8190-031190 - Defense-wide Electronic Business/Electronic Commerce*; the second is the *DoD Electronic Business/Electronic Commerce (EB/EC) Strategic Plan*.

Under the CIO memorandum, it is DoD policy to “Describe and adhere to an EB/EC architecture (including operational, systems, and technical views) developed in compliance with DoD's *Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) Architecture Framework*.”³¹ Further, JECPO is required to “Develop for DoD CIO approval an overarching EB/EC architecture to include operational, system, and technical views in accordance with the C4ISR framework.”³² JECPO is tasked to ensure that “architecture views reflect improved, reengineered, and integrated business processes.”

DoD ensures that internal architectures can be integrated with one another. Three views by which an architecture can be described are:

³⁰ *DII COE; Configuration Management Plan, Version 2*, April 1, 1998; an electronic copy is available at: <http://dod-ead.mont.disa.mil/cm/general/cmrev2.pdf>.

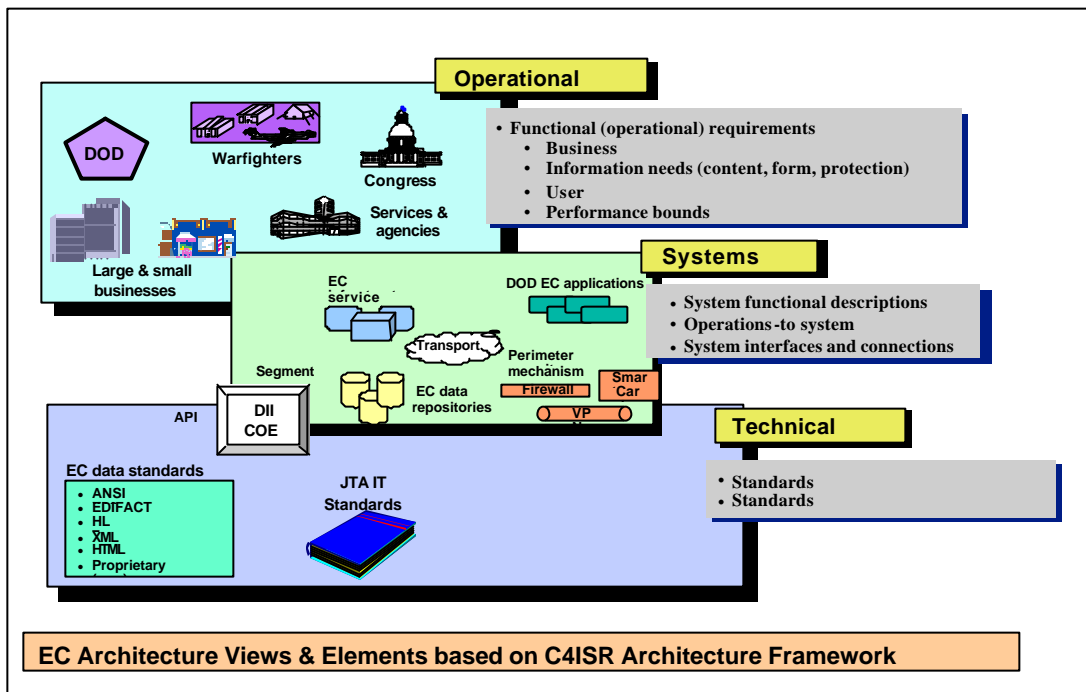
³¹ OSD, *C4ISR Architecture Framework, Version 2*, December 18, 1997; an electronic copy is available at: http://www.c3i.osd.mil/org/cio/i3/AWG_Digital_Library/pdfdocs/fw.pdf.

³² DoD CIO *Guidance and Policy Memorandum No. 2-8190-031190*; op. cit.

- *Operational View.* Description of the tasks and activities, operational elements, and information flows required to do or support an operation
- *Systems View.* Description, including graphics, of systems and interconnections providing for, or supporting, DoD business functions
- *Technical View.* Minimal set of rules, governing the arrangement, interaction, and interdependence of system parts or elements, for ensuring that a conformant system satisfies a specified set of requirements

Figure B-1 is a high-level view of the operational, systems, and technical architecture. DISA and JECPO are using these views to develop the evolving EB/EC architecture. Refer to the *DoD EB/EC Architecture Version 3.0 (draft)*³³ for details.

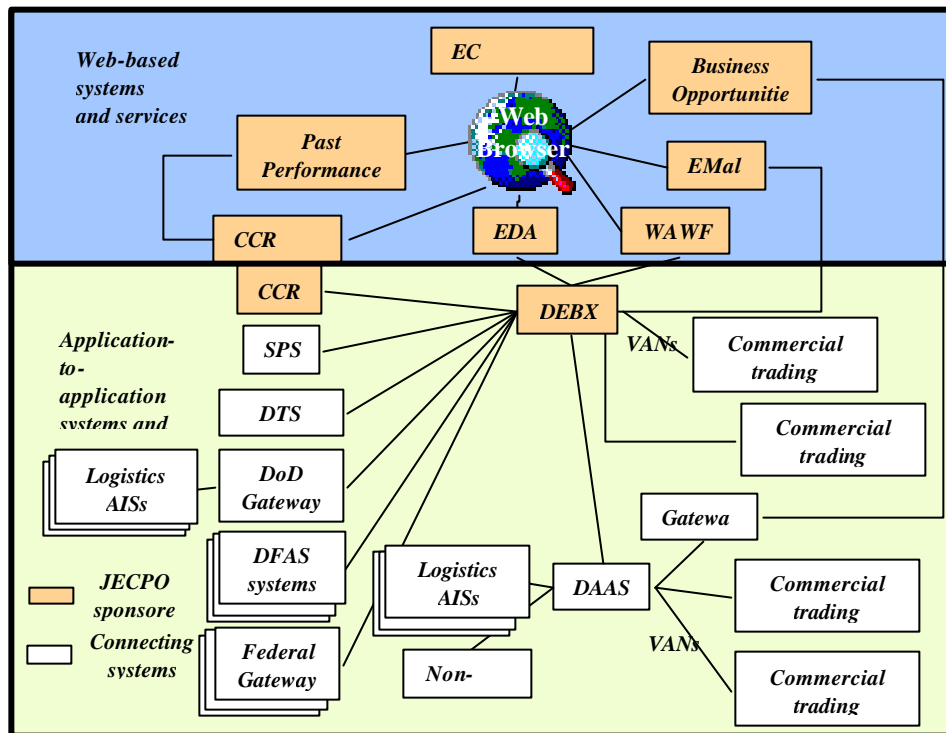
Figure B-1. DoD EB/EC Architecture Views



³³ *DoD EB/EC Architecture Version 3.0.* An electronic copy is available at: http://eblibrary.hq.dla.mil/ebec_arch/index.html.

Figure B-2 provides a different perspective by identifying systems and other elements of the EB/EC architecture, which include alternative technologies that will fill logistics information exchange needs outside the transactional exchange environment. Figure B-2 reflects a growing requirement to address Web interfaces and the interface with legacy systems and trading partners using EDI.

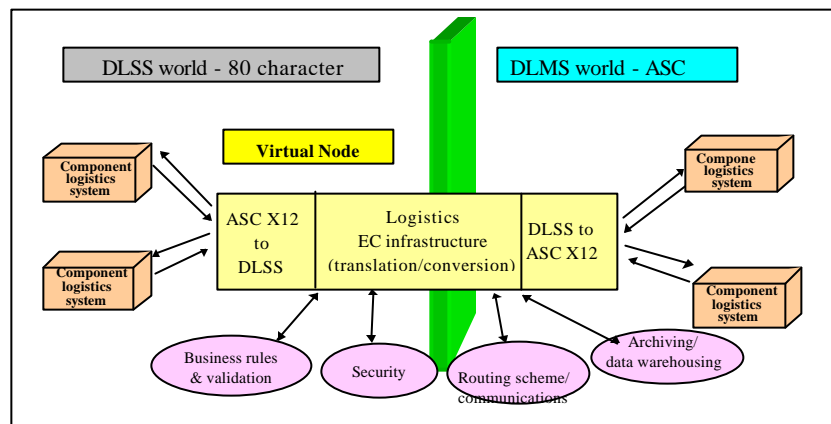
Figure B-2. DoD EB/EC Architecture (Systems View)



B.3. DoD EB/EC INFRASTRUCTURE ENVIRONMENT

The evolving EB/EC infrastructure required to support the DLMS-to-DLSS and DLSS-to-DLMS conversion requirements is based on the existing DoD EDI infrastructure. Figure B-3 is a high-level view of the current EB/EC infrastructure with a focus on the EDI transaction exchange infrastructure required for logistics. This infrastructure supports both the pass-through of already translated EDI transactions as well as translation services for inbound and outbound transactions. As DoD and JECPO work to refine the infrastructure, DLMSO will coordinate DLMS-related requirements with the Component focal points and will work with DAASC, DISA, JECPO, and the Components to ensure the requirements are fulfilled.

Figure B-3. Logistics Translation Capability



B.3.1. DISA EB/EC Infrastructure

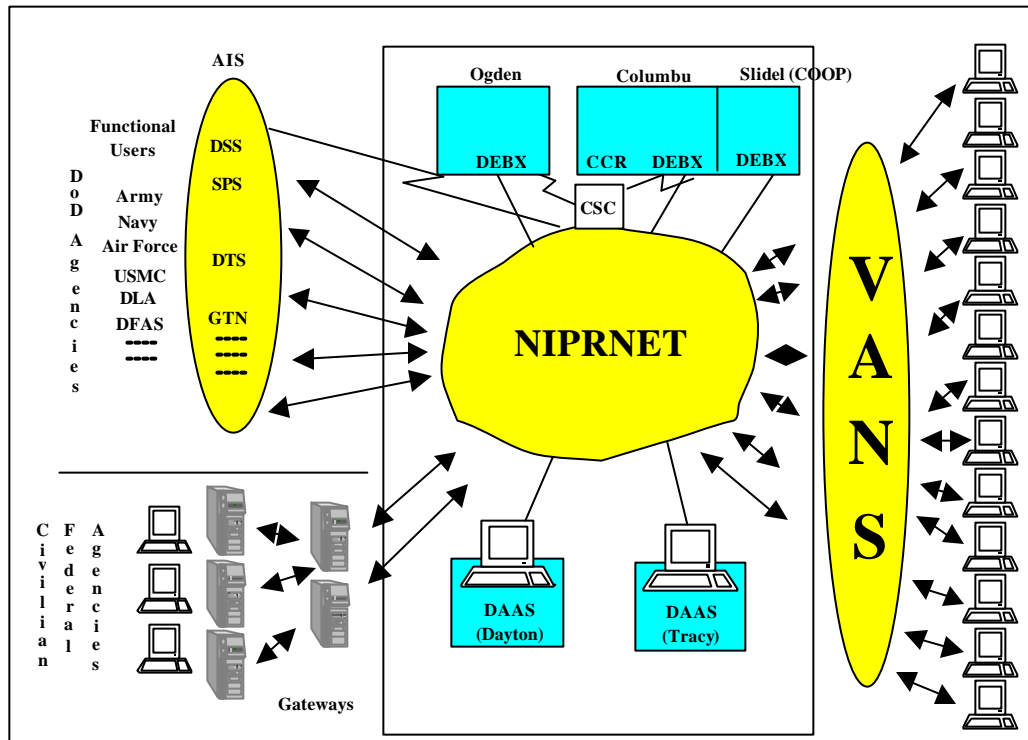
The DISA EB/EC Infrastructure (ECI) is the combination of software, hardware, and communication components that support EB/EC within DoD, the Federal Government, and between the Government and private sector. The principal components of the existing ECI are DEBX, the Central Contractor Registration (CCR), the DoD gateways (GWs), non-DoD GWs, the DII, and commercial VANs. The DEBX enhances ECI by:

- Providing rigorous end-to-end accountability of transactions and transaction sets, with no single point of failure that could cause loss or non-delivery of data
- Providing the required automation to process high-volume production information, including periodic automated reconciliation mechanisms to ensure that no deliveries are missed
- Implementing a basic archival capability
- Providing basic re-transmission and recovery as well as status monitoring

- Providing automated notification of communication failure/restore and providing status monitoring

This infrastructure provides a single entry point for industry with DEBX providing store and forward services and an audit trail of transactions. Figure B-4 graphically portrays this infrastructure:

Figure B-4. DISA EB/EC Infrastructure

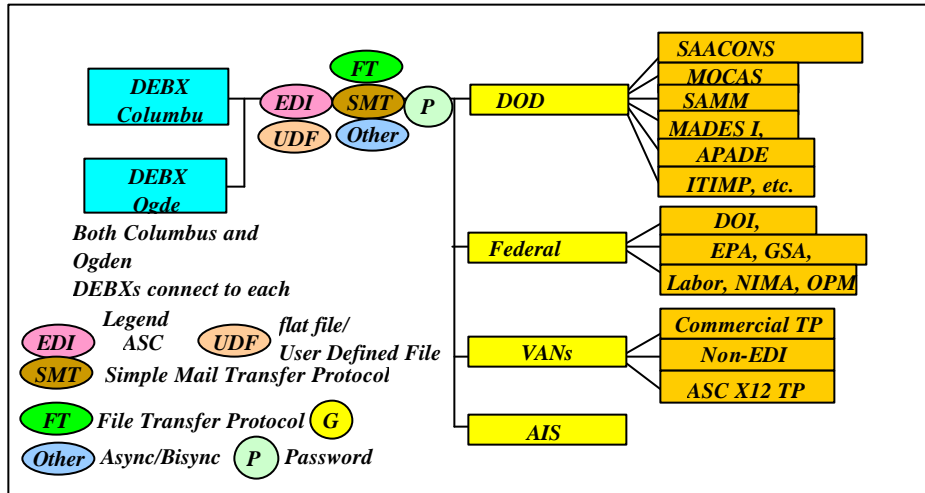


The current DEBX consists of two separate sites, Ogden, Utah and Columbus, Ohio. While the sites share hardware components that allow them to interoperate, the communications hardware configurations differ due to the unique requirements of their respective facilities. The DEBX interacts with various systems to facilitate the interchange of ASC X12 transactions. These interactions are depicted in Figure B-5. The DEBX interfaces with Component AISs that perform one or more functional applications such as procurement, contract management, inventory, maintenance, transportation, and supply operations and/or management. An AIS may exchange data in ASC X12 format or in UDFs. Those that exchange data in UDFs will require translation services from a GW or DEBX. The AIS normally communicates with its DoD or federal GW to exchange data in UDF format. However, there are some exceptions in which GW services, such as translation, are performed at the AIS.

The NIPRNET and the Asynchronous Transfer Mode (ATM) network provide the ECI communications backbone. Each DEBX local area network (LAN) is directly connected to a NIPRNET core router. Because the communication servers, which control the modem banks,

are connected to the local LAN, they can be accessed by remote DEBX as well as by the local DEBX. Any user with Internet access has the potential of connecting to the ECI. In addition, DEBX also interfaces with EDI VANs and routes ASC X12 formatted transactions to VANs and vice versa.

Figure B-5. DISA EB/EC Infrastructure Components

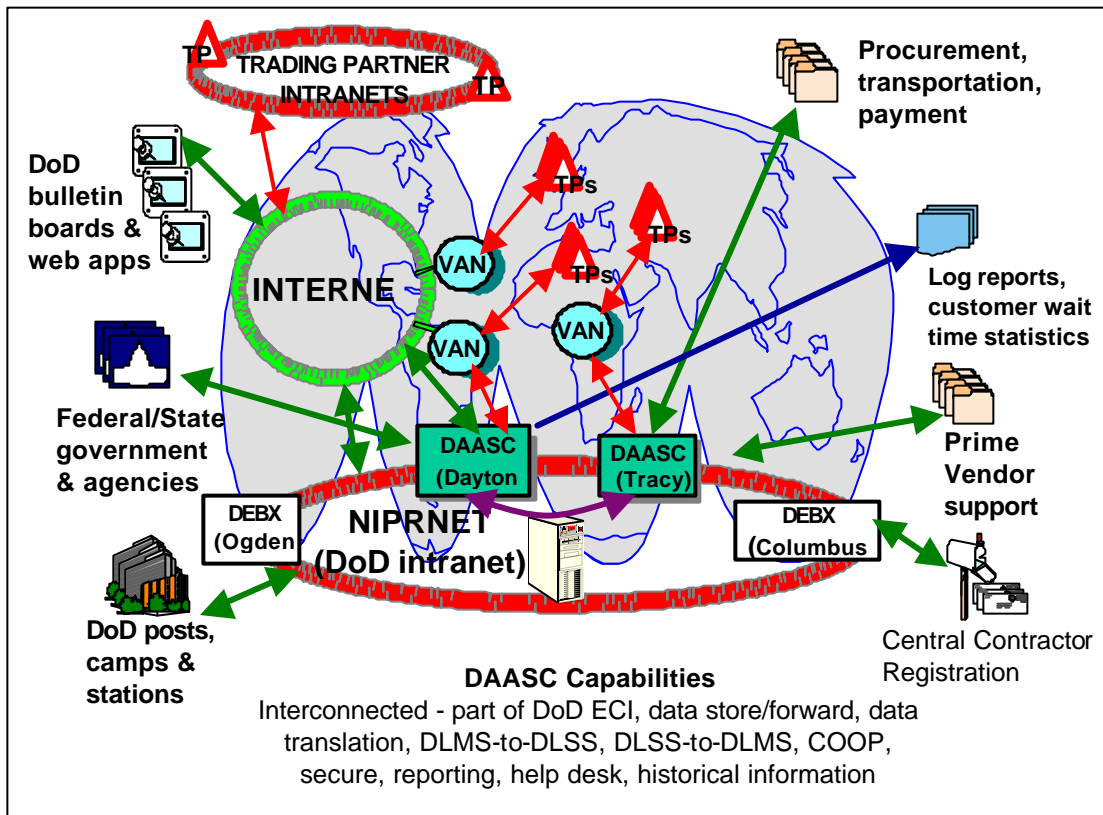


B.3.2. DAAS EB/EC Infrastructure

In addition to supporting the developing DLMS environment, the DAAS infrastructure has been developed to support the EDI needs of the full range of EDI transactions exchanged between DoD, civil agencies, and security assistance countries and their trading partners. This infrastructure interacts with other logistics infrastructures to ensure that DoD's data access needs are met, and also interacts with the DoD EB/EC architecture and DISA EB/EC infrastructure for multiple EDI production programs.

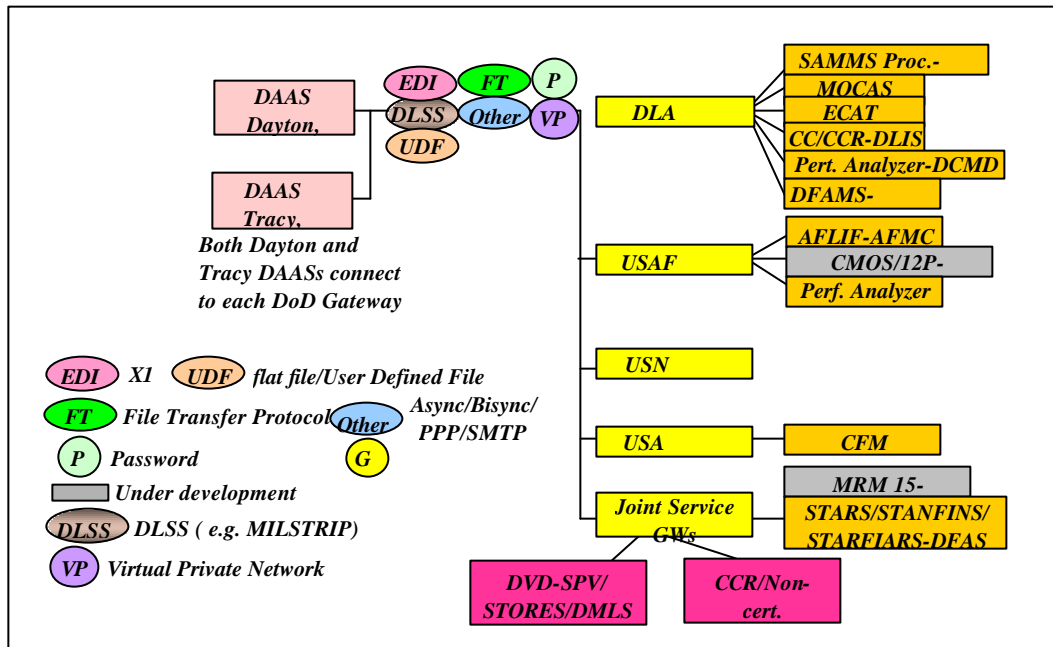
The DAAS EB/EC infrastructure was developed to meet both the current and anticipated requirement for a logistics information infrastructure that can operate fully between the government, DoD, and its trading partners. The trading partners may be either internal to DoD or external commercial activities and foreign countries. DAAS is composed of two sites located at Dayton, Ohio and Tracy, California providing 100% backup capability as required. The DAAS has been designed to support a wide range of emerging EB/EC business practices and interfaces. Figure B-6 graphically portrays the infrastructure. The DAAS provides EB/EC capabilities including translation, store/forward of messages, routing, file management, recovery of transactions, and statistics generation. Both sites are protected by firewalls and can provide data encryption if required by government and/or commercial trading partners. The DAAS also provides end-to-end support of several prime vendor initiatives in the government, functioning as a full service DoD VAN for the military customers. The DAAS can provide this capability to prime vendors if requested by the functional sponsor.

Figure B-6. DAAS EB/EC Infrastructure



The DAAS infrastructure can interact with other logistics systems to meet DoD logistics data exchange and data access needs. This interaction consists of the connections displayed in Figure B-7. The DAAS interfaces enable DoD to receive, edit, route, and collect a wide range of logistics data in various electronic formats. The data are then incorporated into interactive databases that provide current information, in detail or rolled up formats, to users at all levels of the DoD logistics process.

Figure B-7. DAAS EB/EC Infrastructure Components



B.4. SUMMARY

This appendix provided a high-level architectural overview and portrayed the corporate infrastructure framework required to support ASC X12 implementation.

APPENDIX C IMPLEMENTATION RESPONSIBILITIES, ACTIONS, AND MILESTONES

<i>Number</i>	<i>Responsible Activity</i>	<i>Action</i>	<i>Reference</i>	<i>Milestone</i>
1	DUSD(L)	Issue policy for ending non-critical changes to DLSS transactional exchanges.	Sec 1, para 1.6. (3 rd bullet) App C Tab 1 #4	Complete
2	DUSD(L)	Issue policy for the management and administration of logistics data.	Sec 1, para 1.6. (2 nd bullet) App C Tab 1 #16	4QFY00
3	DUSD(L)	Transition the DoD Y2K database to become the standard logistics systems database to support logistics systems modernization and ASC X12 implementation.	Sec 1, para 1.4. Sec 2, para 2.1. Sec 2, para 2.3.2. App C Tab 1 #25 App F, para F.1.	Complete
4	DUSD(L)	Issue policy for logistics systems modernization.	Sec 1, para 1.6. (1 st bullet) App C Tab 1 #29	4QFY00
5	JECPO	Report implementation progress to Deputy CIO, Director, Defense Reform Initiative, and LIB.	Sec 2, para 2.3.3 App D Tab 2. para 6.2.4 App C Tab 1 #12	Quarterly
6	JECPO	Develop draft organizational structure, in coordination with DUSD(L), which supports ASC X12 implementation and sustainment.	Sec 1, para 1.6. (5 th bullet) App C Tab 1 #10	3QFY00
7	JECPO	Review EDISMC and DLMS PRC functional working group processes and eliminate redundancies between them.	Sec 4, para 4.6. 3 rd item App C Tab 1 #44	3QFY00
8	JECPO	Develop and publish, in coordination with DLMSO, and present to DUSD(L) a plan of action and milestones (POA&M) for adopting new EB/EC capabilities that support logistics data exchanges.	Sec 1, para 1.2. Sec 4, para 4.4. App C Tab 1 #45	4QFY00
9	JECPO	Develop and publish, in coordination with DUSD(L), a common operational architecture to support the DLSS to ASC X12 migration (include DAAS and DEBX operational relationships).	Sec 1, para 1.6. (4 th bullet) Sec 3, para 3.2.3. App B, para B.2. App C Tab 1 #28	4QFY00
10	LCM	Develop, for LIB approval, a mechanism for funding approved DLMS change proposals.	Sec 4, para 4.6. 6 th item App C Tab 1 #50	4QFY00
11	DLMSO	Develop, in coordination with DoD and Components, a policy memorandum for DUSD(L) signature to end non-critical changes to DLSS transactional exchanges.	Sec 1, para 1.6. (3 rd bullet) App C Tab 1 #3	Complete
12	DLMSO	Develop, publish, and execute a POA&M for leveraging the LIB to oversee progress of DLMS implementation.	Sec 4, para 4.6. 5 th item App C Tab 1 #23	Ongoing

<i>Number</i>	<i>Responsible Activity</i>	<i>Action</i>	<i>Reference</i>	<i>Milestone</i>
13	DLMSO	Develop, in coordination with the Components, a screening process for eliminating pending non-critical DLSS changes.	Sec 4, para 4.6. (2 nd item) App C Tab 1 #6	3QFY00
14	DLMSO	Develop, publish, and execute a POA&M for validating (adding to or deleting) Component and DoD “100 enhancement” requirements.	Sec 1, para 1.2. Sec 3, para 3.1. Sec 3, para 3.3.1. Sec 3, para 3.3.8. App C Tab 1 #9	3QFY00
15	DLMSO	Develop, publish, and execute a POA&M for providing centralized logistics data administration and management as part of the ASC X12 implementation.	Sec 3, para 3.2.2. (4 th bullet) Sec 3, para 3.3.6. App C Tab 1 #14	3QFY00
16	DLMSO	Develop and publish, in coordination with DUSD(L), common logistics IC configuration management procedures for inclusion in regulatory guidance.	Sec 1, para 1.6. (6 th bullet) Sec 4, para 4.3. (1 st item) App C Tab 1 #46	4QFY00
17	DLMSO	Update and promulgate in DoD 4000.25-M PRCs and TRC ASC X12 implementation responsibilities.	Sec 3, para 3.2.2. (5 th , 6 th , 7 th bullet) Sec 3, para 3.2.4. App C Tab 1 #47	4QFY00
18	DLMSO	Develop and publish ASC X12 training guidance (availability, opportunity, procedures, etc.).	Sec 1, para 1.6. (9 th bullet) Sec 3, para 3.2.2. (12 th bullet) Sec 3, para 3.3.2. App C Tab 1 #26	3QFY00
19	DLMSO	Develop, publish, and execute a POA&M for capturing and maintaining corporate costing data (pilot programs, conversion, training, testing, etc.).	Sec 1, para 1.6. (9 th & 10 th bullet) Sec 3, para 3.4. App C Tab 1 #8	3QFY00
20	DLMSO	Update and promulgate in DoD 4000.25-M DLMS involvement with non-DoD participating agencies and external standards bodies.	Sec 1, para 1.6. (6 th bullet) Sec 3, para 3.2.2. (13 th bullet) Sec 4, para 4.2.3. App C Tab 1 #24	4QFY00
21	DLMSO	Develop and promulgate in DoD 4000.25-M procedures for revising business practices such as unique-item tracking.	Sec 3, para 3.3.1. (3 rd bullet) App C Tab 1 #22	4QFY00
22	DLMSO	Develop, publish, and execute a POA&M for eliminating redundant and outdated DLSS data.	Sec 3, para 3.3.1. (2 nd bullet) App C Tab 1 #34	3QFY00
23	DLMSO	Develop, publish, and execute a POA&M for evaluating use of security tools, as they become available.	App A, para A.2.5. App C Tab 1 #20	4QFY00

<i>Number</i>	<i>Responsible Activity</i>	<i>Action</i>	<i>Reference</i>	<i>Milestone</i>
24	DLMSO	Develop, publish, and execute a POA&M for reinvigorating the DLMS business rules change processes.	Sec 4, para 4.6. App C Tab 1 #43	4QFY00
25	DLMSO	Develop and publish, in coordination with JITC, ASC X12 testing guidance (availability, opportunity, procedures, etc.).	Sec 3, para 3.3.4. App C Tab 1 #27	4QFY00
26	DLMSO	Develop, publish, and execute a POA&M for approving critical IC modifications pending federal approval.	Sec 4, para 4.6. (4 th item) App C Tab 1 #49	3QFY00
27	DLMSO	Develop, publish, and execute a POA&M for coordinating, synchronizing, and providing common user implementation support services.	Sec 2, para 2.3. Sec 3, para 3.2.2. (8 th bullet) App C Tab 1 #38	4QFY00
28	DLMSO	Develop and publish an ASC X12 technical implementation procedures guide/handbook that focuses on the program manager level (include the DAASC/DEBX relationship/ services offered).	Sec 3, para 3.2.3. App C Tab 1 #32	4QFY00
29	DLMSO	Update and promulgate in DoD 4000.25-M procedures for collecting, sharing, and resolving implementation issues and problems among Components. Identify which PSAs will resolve specific issues.	Sec 3, para 3.3.7. Sec 3, para 3.2.2. (11 th bullet) App C Tab 1 #35	4QFY00
30	DLMSO	Evaluate use of XML within the DLMS.	App A, para A-7 App C Tab 1 #42	4QFY00
31	DLMSO	Develop and publish, in coordination with Components, semiannual implementation status reporting requirements.	Sec 2, para 2.3.3. Sec 3, para 3.2.2. (9 th bullet) App C Tab 1 #31	1QFY01
32	DLMSO	Develop, publish, and execute a POA&M for consolidating and standardizing “Component-unique” transactions and data.	Sec 3, para 3.3.1. (5 th bullet) App A, para A.5.3. App C Tab 1 #33	4QFY00
33	DLMSO	Update and promulgate, in coordination with the Components, in DoD 4000.25-M a “future DLMSO” concept of operations to include management of other EB/EC capabilities.	Sec 1, para 1.1. Sec 4, para 4.3., 4.4. App C Tab 1 #48	1QFY01
34	DLMSO	Develop and publish, in coordination with OSD and Components, a composite implementation/phasing schedule for systems and common requirements.	Sec 3, para 3.2.2. (8 th bullet) Sec 3, para 3.3.1 App C Tab 1 #39	4QFY01
35	DLMSO	Develop, publish, and execute a POA&M for reinvigorating inter-Component logistics data exchange partnerships and include in update/promulgation to DoD 4000.25-M.	Sec 3, para 3.2.2. (2 nd bullet) App C Tab 1 #51	2QFY01

<i>Number</i>	<i>Responsible Activity</i>	<i>Action</i>	<i>Reference</i>	<i>Milestone</i>
36	DLMSO	Develop, publish, and execute a POA&M for including other DoD business functions in the ASC X12 implementation process (e.g. maintenance and munitions).	Sec 3, para 3.2.2. (14 th bullet) Sec 3, para 3.3.1. (4 th bullet) App C Tab 1 #52	2QFY01
37	DLMSO	Develop, in coordination with DoD and Components, a policy memorandum for DUSD(L) signature for centralized logistics data administration and management program.	Sec 1 para 1.6. (3 rd bullet) App C Tab 1 #15	2QFY00
38	DAASC	Replace proprietary conversion programs with an “any-to-any” program mapping capability maintaining proprietary conversion programs during replacement.	Sec 1, para 1.6. (8 th bullet) Sec 3, para A.3.2.3. Sec 4, para 4.2.4. App A, para A.3.1. App A, para A.2.6. App C Tab 1 #19	2QFY01
39	DLMSO/ DISA/DAASC	Develop, publish, and execute, in coordination with Components, a POA&M for use of compression and encryption software for logistics data.	App A, para A.2.5. App C Tab 1 #21	4QFY01
40	DLMSO/ DISA/DAASC	Develop, publish, and execute a POA&M for monitoring and maintaining logistics data (conversion) quality, within Component systems, during ASC X12 implementation.	Sec 1, para 1.6. (7 th bullet) Sec 3, para 3.2.3. Sec 4, para 4.2.4. App A, para A.2.6. App C Tab 1 #37	4QFY01
41	DLMSO/ DISA/DAASC	Develop, publish, and execute a POA&M for integration testing of Component systems, during ASC X12 implementation, into the corporate level transaction process.	Sec 1, para 1.6. (10 th bullet) Sec 3, para 3.3.5. App C Tab 1 #36	4QFY01
42	Components	Replace DLSS with ASC X12 transaction exchanges as the standard for new, replacement, and systems under going major modifications/process improvements.	Sec 1, para 1.5.2. Sec 2, para 2.2. Sec 2, para 2.3.1. (1 st bullet) App C Tab 1 #11	Ongoing
43	Components	Designate and report to DLMSO a single organization to oversee migration to ASC X12.	Sec 2, para 2.3.1. App C Tab 1 #17 App F, para F.2.1.	2QFY00
44	Components	End submission of non-critical changes to DLSS.	Sec 2, para 2.3.1. (1 st bullet) App C Tab 1 #5	3QFY00
45	Components	Develop, publish, and execute a POA&M for managing third-party partnerships.	Sec 2, para 2.3.1. (6 th bullet) App C Tab 1 #30 App F, para F.2.1.	4QFY00
46	Components	Develop and publish, in coordination with the JECPO-chartered IPT, Component approved ASC X12 implementation plans.	Sec 1, para 1.1. Sec 2, para 2.3.2. App C Tab 1 #78	4QFY00

<i>Number</i>	<i>Responsible Activity</i>	<i>Action</i>	<i>Reference</i>	<i>Milestone</i>
47	Components	Estimate, as part of implementation planning requirements, common corporate service requirements.	Sec 2, para 2.3.1. (7 th bullet) App C Tab 1 #77 App F, para F.2.3.	4QFY00
48	Components	Define the management process to identify additional business functions that could benefit by conforming to ASC X12.	App C Tab 1 #60 App F, para F.2.2.	4QFY00
49	Components	Define the management process that ensures, new, replacement, systems undergoing major modifications, or under development, will employ ASC X12 for transaction exchange.	App C Tab 1 #55 App F, para F.2.2.	4QFY00
50	Components	Array by implementation date, new systems that will employ ASC X12 for transaction exchange, by quarters.	App C Tab 1 #57 App F, para F.2.2.	4QFY00
51	Components	Array legacy systems using the Y2K database.	App C Tab 1 #56 App F, para F.2.2.	4QFY00
52	Components	Identify and array systems by implementation dates/by quarter, that will be replaced or modernized to employ ASC X12 for transaction exchange.	App C Tab 1 #58 App F, para F.2.2.	4QFY00
53	Components	Identify the status of systems that: will not use transactional exchange; are being phased out and not replaced; or will be modernized using other EB/EC capabilities.	App C Tab 1 #59 App F, para F.2.2.	4QFY00
54	Components	Identify and discuss, as part of implementation planning, additional business functions that could benefit by conforming to ASC X12.	Sec 2, para 2.3.1. (5 th bullet) App A, para A.5.3. App C Tab 1 #61 App F, para F.2.2.	4QFY00
55	Components	Identify and discuss Component-unique transactions/data not included in the DLMS process, and plans for working with DLMSO to transition unique transactions to ASC X12.	App A, para A.5.3. App C Tab 1 #62 App F, para F.2.2.	4QFY00
56	Components	Identify and discuss the translation software distribution scenario to be used during ASC X12 implementation.	App A, para A.3.3. App C Tab 1 #63 App F, para F.2.3.	4QFY00
57	Components	Identify and discuss translation management interfaces currently in place between DAAS/DEBX and the Component.	App A, para A.3.3. App C Tab 1 #76 App F, para F.2.3.	4QFY00
58	Components	Forecast future corporate translation requirements.	App C Tab 1 #54 App F, para F.2.3.	4QFY00
59	Components	Identify and discuss software testing management strategy for modernizing legacy systems or bringing a new system online.	Sec 3, para 3.3.5. App C Tab 1 #65 App F, para F.2.3.	4QFY00
60	Components	Forecast future external corporate testing requirements for the Corporate Implementation Plan.	App C Tab 1 #66 App F, para F.2.3.	4QFY00

<i>Number</i>	<i>Responsible Activity</i>	<i>Action</i>	<i>Reference</i>	<i>Milestone</i>
61	Components	Identify and discuss strategy for defining and identifying DLMS and ASC X12 training requirements.	Sec 3, para 3.3.2. App C Tab 1 #68 App F, para F.2.3.	4QFY00
62	Components	Identify and discuss strategy to ensure DLMS and ASC X12 training courses are incorporated into Service schools and training materials.	App C Tab 1 #69 App F, para F.2.3.	4QFY00
63	Components	Forecast future training requirements for the Corporate Implementation Plan.	App C Tab 1 #70 App F, para F.2.3.	4QFY00
64	Components	Identify and discuss costs that will be incurred as a result of implementing ASC X12.	App C Tab 1 #71 App F, para F.2.4.	4QFY00
65	Components	Identify and discuss key implementation issues and discuss how they will be resolved.	Sec 2, para 2.3.3. App C Tab 1 #72 App F, para F.2.5.	2QFY01/ Ongoing
66	Components	Identify and discuss concept of operations and EB/EC architecture.	App C Tab 1 #73 App F, para F.2.6.	4QFY00
67	Components	Identify and discuss risk and risk mitigation factors relating to successfully implementing ASC X12.	App C Tab 1 #74 App F, para F.2.6.	4QFY00
68	Components	Identify and discuss Component implementation plan responsibilities, actions, and milestones.	App C Tab 1 #75 App F, para F.2.6.	4QFY00
69	Components	Provide a semiannual ASC X12 implementation status report to DLMSO.	Sec 2, para 2.3.3. App C Tab 1 #40	2QFY01/ Ongoing
70	Components	Assist in identifying and developing policies and guidance to effect use of ASC X12 standards.	Sec 2, para 2.3.1. (2 nd bullet) App C Tab 1 #18	Ongoing

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ID	Task Name	2000				2001				2002				2003				2004		
		Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	
1	OSD approve Corporate Plan																			
2	Implement Policy to end DLSS changes																			
3	DLMSO draft policy memorandum for DUSD(L&MR) (App C #11)																			
4	DUSD(L&MR) approve/issue policy (App C #1)																			
5	Components end submission of changes to DLSS (App C #44)																			
6	DLMSO/Components develop non-critical DLSS change screening process (App C #13)																			
7	Manage implementation of ASC X12																			
8	DLMSO develop/execute POA&M to capture & maintain corporate cost data (App C #19)																			
9	DLMSO develop/execute POA&M to validate DLMS "100 enhancements" (App C #14)																			
10	JECPO draft organizational structure to sustain ASC X12 (App C #6)																			
11	Components replace DLSS with ASC X12 transactions (App C #42)																			
12	DLMSO report implementation progress quarterly to Deputy CIO & Dir, Defense Reform & LIB (App C #5)																			
13	Implement centralized data management & administration policy																			
14	DLMSO develop/execute POA&M for centralized logistics data administration program (App C #15)																			
15	DLMSO draft centralized data management/admin policy memorandum for DUSD(L&MR) (App C #37)																			
16	DUSD(L&MR) approve/issue policy (App C #2)																			

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 IMPLEMENTATION RESPONSIBILITIES, ACTIONS, AND MILESTONES

ID	Task Name	2000			2001				2002				2003				2004								
		Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3						
17	Components designate & report to DLMSO a single ASC X12 oversight organization (App C #43)						◆ 05/12																		
18	Components assist in identifying/developing ASC X12 policies/guidance (App C #70)				04/03	—————														09/30					
19	DAASC replace proprietary conversion programs with "any-to-any" capability (App C #38)				01/03	—————												03/30							
20	DLMSO develop/execute POA&M to evaluate security tools (App C #23)				03/31	—————			09/29																
21	DLMSO/DAASC/DISA develop/execute POA&M for use of compression/encryption software (App C #39)				04/04	—————						09/29													
22	DLMSO develop DoD 4000.25-M procedures for revising business practices (App C #21)				05/01	—————			09/29																
23	DLMSO develop/execute POA&M to leverage LIB oversight (App C #12)			10/05	—————				05/30																
24	DLMSO update DoD 4000.25-M addressing external standards bodies (App C #20)				05/01	—————			09/29																
25	DUSD(L&MR)LSM transition Y2K logistics system database to DLMSO (App C #3)				◆ 02/01																				
26	DLMSO publish ASC X12 training guidance (App C #18)				01/04	—————		05/15																	
27	DLMSO publish ASC X12 testing guidance (App C #25)						07/03	—————		09/29															
28	JECPO publish common operational architecture to support DLSS to ASC X12 (App C #9)				01/04	—————			09/29																
29	DUSD(L&MR) issue logistics systems ASC X12 modernization policy (App C #4)																			◆ 09/28					
30	Components develop/execute POA&M for managing 3d party logistics partnerships (App C #45)				03/31	—————			09/29																
31	DLMSO publish semiannual implementation status reporting requirements (App C #31)						08/01	—————				03/30													
32	DLMSO publish ASC X12 technical implementation procedures guide/handbook (App C #28)				02/01	—————			09/29																

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ID	Task Name	2000			2001				2002				2003				2004				
		Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3		
33	DLMSO develop/execute POA&M to standardize Component-unique transactions/data (App C #32)				02/01	[Bar]			09/29												
34	DLMSO develop/execute POA&M for eliminating redundant/outdated DLSS data (App C #22)				02/01	[Bar]		06/30													
35	DLMSO update DoD 4000.25-M guidance for resolving implementation issues (App C #29)				02/01	[Bar]			09/29												
36	DLMSO/DAASC/DISA publish/execute POA&M for Component corporate ASC X12 testing (App C #41)				03/31	[Bar]					09/28										
37	DLMSO/DAASC/DISA develop/execute POA&M to maintain logistics data conversion quality (App C #40)				04/03	[Bar]		09/29													
38	DLMSO develop/execute POA&M for corporate implementation support services (App C #27)					06/15	[Bar]		09/30												
39	DLMSO publish composite DoD systems/services implementation/phasing schedule (App C #34)						10/02	[Bar]		03/30											
40	Components report semiannual ASC X12 implementation status to DLMSO (App C #69)								04/01	[Bar]							09/30				
41	Reinvigorate DLMS business change process				10/05	[Bar]					03/30										
42	DLMSO evaluate use of XML within DLMS (App C #30)				10/05	[Bar]			07/31												
43	DLMSO develop/execute POA&M to reinvigorate DLMS business rules change processes (App C #24)				02/01	[Bar]			09/29												
44	JECPO review EDISMC/DLMS PRC functional work groups to eliminate redundancies (App C #7)				03/13	[Bar]		06/30													
45	JECPO develop/execute POA&M for adopting new EB/EC data exchange capabilities (App C#8)				03/31	[Bar]			09/29												
46	DLMSO publish common logistics IC configuration management procedures (App C #16)				03/13	[Bar]		06/30													
47	DLMSO update DoD 4000.25-M PRC/TRC ASC X12 implementation responsibilities (App C #17)				03/31	[Bar]			09/29												
48	DLMSO publish DoD 4000.25-M "future DLMSO" concept of operations (App C #33)				03/31	[Bar]			09/29												

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 IMPLEMENTATION RESPONSIBILITIES, ACTIONS, AND MILESTONES

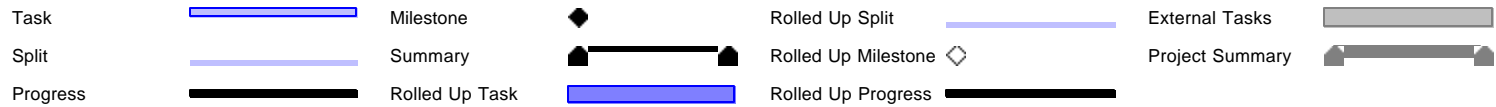
ID	Task Name	2000			2001				2002				2003				2004			
		Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	
49	DLMSO develop/execute POA&M for approving critical IC modifications pending approval (App C #26)				03/13			05/19												
50	LCM develop LIB approved funding mechanism for approved DLMS changes (App C #10)			11/01				09/29												
51	DLMSO develop/execute POA&M to reinvigorare inter-Component exchange partnerships (App C #35)						10/02													
52	DLMSO develop/execute POA&M for including other DoD business functions (App C #36)						10/02													
53	Components develop individual implementation plans																			
					03/31															09/30
54	Forecast future corporate translation requirements (App C #58)				04/14			10/16												
55	Define the management process to ensure systems employ ASC X12 (App C #49)				04/14			06/13												
56	Array legacy systems using the Y2K data base (App C #51)				06/13			10/13												
57	Array, by implementation date, new systems that will use ASC X12, by quarter (App C #50)				06/13			10/13												
58	Identify & array systems to be replaced/modernized with ASC X12, by quarter (App C #52)				06/13			10/13												
59	Identify status of systems that will not use ASC X12; or replaced/phased out/modernized (App C #53)				06/13			10/13												
60	Define the management process to identify other functions to benefit from ASC X12 (App C #48)				04/14			10/16												
61	Identify/discuss additional business functions that may benefit by using ASC X12 (App C #54)				04/14			10/16												
62	Identify/discuss unique transactions/data not in DLMS for transition to ASC X12 (App C #55)				04/14			10/16												
63	Identify/discuss software distribution scenario during ASC X12 implementation (App C #56)				04/14			10/16												
64	Develop system testing requirements																			
					04/14			10/16												

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 IMPLEMENTATION RESPONSIBILITIES, ACTIONS, AND MILESTONES

ID	Task Name	2000			2001				2002				2003				2004			
		Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	
65	Identify/discuss software testing management strategy (App C #59)				04/14				10/16											
66	Forecast future external corporate testing requirements (App C #60)				04/14				10/16											
67	Develop training requirements				Develop training requirements															
					04/14				10/16											
68	Identify/discuss management strategy for defining DLMS/ASC X12 training requirements (App C #61)				04/14				10/16											
69	Identify strategy for incorporating DLMS/ASC X12 into Service schools/materials (App C #62)				04/14				10/16											
70	Forecast future training requirements (App C #63)				04/14				10/16											
71	Identify/discuss ASC X12 implementation costs (App C #64)				03/31											09/30				
72	Identify/discuss key implementation issues and their resolution (App C #65)				03/31				12/29											
73	Identify/discuss concept of operations and EC architecture (App C #66)				04/14				10/16											
74	Identify/discuss risk & risk mitigation factors (App C #67)				04/14				10/16											
75	Identify/discuss plan responsibilities, actions, & milestones (App C #68)				04/14				10/16											
76	Identify/discuss translation management interfaces currently in place (App C #57)				04/14				10/16											
77	Estimate common corporate services requirements (App C #47)				04/14				10/16											
78	Develop/publish implementation plan (App C #46)				04/14				10/16											

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IMPLEMENTATION RESPONSIBILITIES, ACTIONS, AND MILESTONES

Project: DRID#48 Implementation Plan
Date: Tue 04/25/00



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IMPLEMENTATION RESPONSIBILITIES, ACTIONS, AND MILESTONES

- 1 OSD approve Corporate Plan**
JECPO will obtain DUSD(L) and Deputy CIO endorsements of the Implementation plan.
- 3 DLMSO draft policy memorandum for DUSD(L&MR) (App C #11)**
DLMSO will draft, in coordination with DOD and Components, a memorandum for DUSD(L&MR) signature to end non-critical changes to DLSS transactional exchange.
- 4 DUSD(L&MR) approve/issue policy (App C #1)**
DUSD(L) will issue policy for ending non-critical changes to DLSS transactional exchanges.
- 5 Components end submission of changes to DLSS (App C #44)**
Components will end submission of non-critical changes to DLSS.
- 8 DLMSO develop/execute POA&M to capture & maintain corporate cost data (App C #19)**
DLMSO will develop, publish, and execute a POA&M to capture and maintain corporate costing data (pilot programs, conversion, training, testing, etc.).
- 9 DLMSO develop/execute POA&M to validate DLMS "100 enhancements" (App C #14)**
DLMSO will develop, publish, and execute a POA&M for validating (adding to or deleting) Component and DoD "100 enhancement" requirements.
- 10 JECPO draft organizational structure to sustain ASC X12 (App C #6)**
JECPO will develop a draft organizational structure, in coordination with DUSD(L), which supports ASC X12 implementation and sustainment.
- 11 Components replace DLSS with ASC X12 transactions (App C #42)**
Components will replace DLSS with ASC X12 transaction exchanges as the standard for new replacement and legacy systems under going major modification/process improvements.
- 14 DLMSO develop/execute POA&M for centralized logistics data administration program (App C #15)**
DLMSO will develop, publish, and execute a POA&M for centralized logistics data administration and management as part of the ASC X12 implementation.
- 15 DLMSO draft centralized data management/admin policy memorandum for DUSD(L&MR) (App C #37)**
DLMSO develop, in coordination with DoD and Components, a policy memorandum for DUSD(L&MR) signature for centralized data administration and management.
- 17 Components designate & report to DLMSO a single ASC X12 oversight organization (App C #43)**
Components designate and report to DLMSO a single organization to oversee migration to ASC X12.
- 19 DAASC replace proprietary conversion programs with "any-to-any" capability (App C #38)**
DAASC will replace proprietary conversion programs with an "any-to-any" program mapping capability, maintaining proprietary conversion programs during replacement.
- 20 DLMSO develop/execute POA&M to evaluate security tools (App C #23)**
DLMSO will develop and publish a POA&M to evaluate use of security tools, as they become available.
- 21 DLMSO/DAASC/DISA develop/execute POA&M for use of compression/encryption software (App C #39)**
DLMSO/DISA/DAASC will develop, publish, and execute, in coordination with Components, a POA&M for use of compression and encryption software for logistics data.
- 22 DLMSO develop DoD 4000.25-M procedures for revising business practices (App C #21)**
DLMSO develop and publish in DoD 4000.25-M procedures for revising business practices such as unique-item tracking.
- 23 DLMSO develop/execute POA&M to leverage LIB oversight (App C #12)**
DLMSO will develop, publish, and execute a POA&M for leveraging the LIB to oversee progress of DLMS implementation.
- 25 DUSD(L&MR)/LSM transition Y2K logistics system database to DLMSO (App C #3)**
DUSD(L&MR)/LSM will transition the DoD Y2K database to become the standard logistics systems database to support logistics systems modernization and ASC X12 implementation.
- 26 DLMSO publish ASC X12 training guidance (App C #18)**
DLMSO will develop and publish ASC X12 training guidance (availability, opportunity, procedures, etc.)
- 27 DLMSO publish ASC X12 testing guidance (App C #25)**
DLMSO, in coordination with JITC, will publish ASC X12 testing guidance (availability, opportunity, procedures, etc.)
- 28 JECPO publish common operational architecture to support DLSS to ASC X12 (App C #9)**
JECPO will develop and publish, in coordination with DUSD(L), a common operational architecture to support the DLSS to ASC X12 migration include ASC X12 implementation and sustainment (include DAAS & DEBX operational relationships).
- 29 DUSD(L&MR) issue logistics systems ASC X12 modernization policy (App C #4)**
DUSD(L&MR)/LSM will develop and issue logistics systems modernization policy that supports ASC X12 implementation.
- 30 Components develop/execute POA&M for managing 3d party logistics partnerships (App C #45)**
Components will develop, publish, and execute a POA&M for managing third-party partnerships

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ADOPTION OF COMMERICAL ELECTRONIC DATA INTERCHANGE STANDARDS
IMPLEMENTATION RESPONSIBILITIES, ACTIONS, AND MILESTONES

- 31 DLMSO publish semiannual implementation status reporting requirements (App C #31)**
DLMSO will develop, publish, and execute a POA&M, in coordination with Components, semiannual implementation status reporting requirements.
- 32 DLMSO publish ASC X12 technical implementation procedures guide/handbook (App C #28)**
DLMSO will develop and publish an ASC X12 technical implementation procedures guide/handbook that focuses on the program manager level (include the DAASC/DEBX relationships/services offered).
- 33 DLMSO develop/execute POA&M to standardize Component-unique transactions/data (App C #32)**
DLMSO will develop, publish, and execute a POA&M for consolidating and standardizing "Component-unique" transactions and data.
- 34 DLMSO develop/execute POA&M for eliminating redundant/outdated DLSS data (App C #22)**
DLMSO will develop, publish, and execute a POA&M for eliminating redundant and outdated DLSS data.
- 35 DLMSO update DoD 4000.25-M guidance for resolving implementation issues (App C #29)**
DLMSO will update and promulgate in DoD 4000.25-M guidance for collecting, sharing, and resolving implementation issues and problems among Components. Identify which PSA will resolve specific issues.
- 36 DLMSO/DAASC/DISA publish/execute POA&M for Component corporate ASC X12 testing (App C #41)**
DLMSO/DISA/DAASC will develop, publish, and execute a POA&M for integration testing of Component systems during ASC X12 implementation, into the corporate level transaction process.
- 38 DLMSO develop/execute POA&M for corporate implementation support services (App C #27)**
DLMSO will develop, publish, and execute a POA&M for coordinating, synchronizing, and providing common user implementation support services.
- 39 DLMSO publish composite DoD systems/services implementation/phasing schedule (App C #34)**
DLMSO will develop and publish, in coordination OSD and Components, a composite implementation/phasing schedule for systems and common requirements.
- 40 Components report semiannual ASC X12 implementation status to DLMSO (App C #69)**
Components will provide a semiannual ASC X12 implementation status report to DLMSO.
- 42 DLMSO evaluate use of XML within DLMS (App C #30)**
DLMSO evaluate use of XML within the DLMS.
- 43 DLMSO develop/execute POA&M to reinvigorate DLMS business rules change processes (App C #24)**
DLMSO will develop, publish, and execute a POA&M to reinvigorate the DLMS business rules change processes.
- 44 JECPO review EDISMC/DLMS PRC functional work groups to eliminate redundancies (App C #7)**
JECPO will review and eliminate redundancies between the EDISMC and DLMS PRC functional working groups.
- 45 JECPO develop/execute POA&M for adopting new EB/EC data exchange capabilities (App C#8)**
JECPO will develop, publish, and execute, in coordination with DLMSO, and present to DUSD(L), a POA&M for adopting new EB/EC methods that support logistics data exchanges.
- 46 DLMSO publish common logistics IC configuration management procedures (App C #16)**
DLMSO will develop and publish, in coordination with DUSD(L&MR), common logistics IC configuration management procedures for inclusion in regulatory guidance.
- 47 DLMSO update DoD 4000.25-M PRC/TRC ASC X12 implementation responsibilities (App C #17)**
DLMSO will update and promulgate in DoD 4000.25-M PRC and TRC ASC X12 implementation responsibilities.
- 48 DLMSO publish DoD 4000.25-M "future DLMSO" concept of operations (App C #33)**
DLMSO will update, in coordination with the Components, and publish in DoD 4000.25-M a "future DLMSO" concept of operations to include other EB/EC capabilities.
- 49 DLMSO develop/execute POA&M for approving critical IC modifications pending approval (App C #26)**
DLMSO will develop, publish, and execute a POA&M for approving critical IC modifications pending federal approval.
- 50 LCM develop LIB approved funding mechanism for approved DLMS changes (App C #10)**
The LCM will develop for LIB approval a mechanism for funding approved DLMS change proposals.
- 51 DLMSO develop/execute POA&M to reinvigorate inter-Component exchange partnerships (App C #35)**
DLMSO will develop, publish, and execute a POA&M to reinvigorate the inter-Component logistics data exchange partnerships, and include in update/promulgation to DoD 4000.25-M.
- 52 DLMSO develop/execute POA&M for including other DoD business functions (App C #36)**
DLMSO will develop, publish, and execute a POA&M for including other DoD business functions in the ASC X12 implementation process (maintenance and munitions).
- 53 Components develop individual implementation plans**
Components will develop and publish (Component approved) ASC X12 implementation plans in coordination with the JECPO-chartered IPT
- 54 Forecast future corporate translation requirements (App C #58)**
Components will forecast future corporate translation requirements.

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IMPLEMENTATION RESPONSIBILITIES, ACTIONS, AND MILESTONES

- 55 **Define the management process to ensure systems employ ASC X12 (App C #49)**
Components will define the management process that ensures, new, replacement, legacy systems undergoing major modifications, or systems under development, will employ ASC X12 for transaction exchange.
- 56 **Array legacy systems using the Y2K data base (App C #51)**
Components will using the Y2K database, array legacy systems.
- 57 **Array, by implementation date, new systems that will use ASC X12, by quarter (App C #50)**
Array, by implementation date, new systems that will employ ASC X12 for transaction exchange.
- 58 **Identify & array systems to be replaced/modernized with ASC X12, by quarter (App C #52)**
Components will identify and array by implementation date, by quarter, systems that will be replaced or modernized employing ASC X12 for transaction exchange.
- 59 **Identify status of systems that will not use ASC X12; or replaced/phased out/modernized (App C #53)**
Components will identify the status of systems that: will not use transactional exchange; are being phased out and not replaced; or will be modernized using other EB/EC capabilities.
- 60 **Define the management process to identify other functions to benefit from ASC X12 (App C #48)**
Components will define the management process used to identify additional business functions that could benefit by conforming to ASC X12
- 61 **Identify/discuss additional business functions that may benefit by using ASC X12 (App C #54)**
Components will identify and discuss, as part of implementation planning, additional business functions that could benefit by conforming to ASC X12.
- 62 **Identify/discuss unique transactions/data not in DLMS for transition to ASC X12 (App C #55)**
Components will identify and discuss Component-unique transactions/data not included in the DLMS process, and discuss plans for working with DLMSO to transition unique transactions to ASC X12.
- 63 **Identify/discuss software distribution scenario during ASC X12 implementation (App C #56)**
Components will identify and discuss the translation software distribution scenario to be used during ASC X12 implementation.
- 65 **Identify/discuss software testing management strategy (App C #59)**
Components will identify and discuss software testing management strategy for modernizing legacy systems or bringing a new system online.
- 66 **Forecast future external corporate testing requirements (App C #60)**
Components will forecast future external corporate testing requirements.
- 68 **Identify/discuss management strategy for defining DLMS/ASC X12 training requirements (App C #61)**
Components will identify and discuss strategy for defining and identifying DLMS and ASC X12 training requirements.
- 69 **Identify strategy for incorporating DLMS/ASC X12 into Service schools/materials (App C #62)**
Components will identify and discuss the strategy to ensure DLMS and ASC X12 training courses are incorporated into Component schools and training materials.
- 70 **Forecast future training requirements (App C #63)**
Components will forecast future training requirements.
- 71 **Identify/discuss ASC X12 implementation costs (App C #64)**
Components will identify and discuss costs that will be incurred as a result of implementing ASC X12.
- 72 **Identify/discuss key implementation issues and their resolution (App C #65)**
Components will identify and discuss key implementation issues and how they will be resolved.
- 73 **Identify/discuss concept of operations and EC architecture (App C #66)**
Components will identify and discuss concept of operations and EC architecture.
- 74 **Identify/discuss risk & risk mitigation factors (App C #67)**
Components will identify and discuss risk and risk mitigation factors relating to successfully implementing ASC X12.
- 75 **Identify/discuss plan responsibilities, actions, & milestones (App C# 68)**
Components will identify and discuss implementation plan responsibilities, actions, and milestones.
- 76 **Identify/discuss translation management interfaces currently in place (App C #57)**
Identify and discuss translation management interfaces currently in place between DAAS/DEBXs and Components.
- 77 **Estimate common corporate services requirements (App C #47)**
Components will estimate, as part of implementation planning requirements, common corporate services.
- 78 **Develop/publish implementation plan (App C #46)**
Develop and publish, in coordination with the JECPO-chartered IPT, Component approved ASC X12 implementation plans. Execute plans upon approval.

APPENDIX D SUPPORTING DOCUMENTATION

TAB 1	DRID #48
TAB 2	Policy Guidance for Department of Defense (DoD) Use of Electronic Data Interchange (EDI) Standards in Logistics Applications



DEPUTY SECRETARY OF DEFENSE

1010 DEFENSE PENTAGON
WASHINGTON, DC 20361-1010

- 9 DEC 1998



MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARIES OF DEFENSE
GENERAL COUNSEL OF THE DEPARTMENT OF DEFENSE
INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE
DIRECTOR, OPERATIONAL TEST AND EVALUATION
ASSISTANTS TO THE SECRETARY OF DEFENSE
DIRECTOR, ADMINISTRATION AND MANAGEMENT
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTORS OF THE DOD FIELD ACTIVITIES

SUBJECT: Department of Defense Reform Initiative Directive #48 - Adoption of Commercial EDI Standards for DoD Logistics Business Transactions

A Joint Service/Agency Committee was established in response to Management Reform Memorandum #11 to address issues and concerns relating to the conversion of DoD business systems to use of commercial identifiers. The Joint Service/Agency Committee recommended that the scope of the commercial identifier initiative be modified to implement American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 commercial electronic data interchange (EDI) standards in lieu of current proprietary DoD logistics information exchange standards. The rationale being that the existing DoD-unique transaction formats are impediments to the critical business process changes required to support the war-fighting mission. Adopting these commercial EDI standards supports the Department's process improvement and reengineering goals to adopt commercial practices and increase our reliance on the commercial sector for logistics support. Further, replacing DoD's proprietary logistics transaction formats with the ANSI ASC X12 EDI standards serves as a necessary stepping-stone to move our automated systems towards international open systems standards.

To ensure that the Department exploits available commercial standards through an integrated approach to its business system upgrades, I direct that the Joint Electronic Commerce Program Office (JECPO) form an Integrated Product Team (IPT) to develop a comprehensive implementation plan in conjunction with the Military Services and Defense Agencies. The plan shall identify a phased implementation approach to migrate the Department's logistics transactions to the use of ANSI ASC X12 EDI standards, or other commercial EDI standards identified in Federal Information Processing Standard (FIPS) 161-2 as appropriate, to simplify DoD interfaces with the private and federal civilian sectors, and to enable the required changes to the Department's logistics business processes.

Services and Agencies will support the JECPO in developing the phased implementation plan. IPT points of contact shall be identified to the JECPO within thirty days. Services and Agencies shall program, fund, and execute the plan's implementation through process improvements and business system upgrades. Within ninety days, the Under Secretary of Defense (Acquisition and Technology), in coordination with the DoD Chief Information Officer, shall issue policy and procedures to effect use of FIPS 161-2 approved commercial EDI standards for transaction exchanges for all new and planned business systems. The JECPO shall report progress on these efforts monthly to the DoD Deputy Chief Information Officer, and the Director, Defense Reform Initiative. This directive supersedes Management Reform Memorandum #11.


John J. Hamre

ACQUISITION AND
TECHNOLOGY

THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-3010



14 SEP 1998

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARIES OF DEFENSE
GENERAL COUNSEL OF THE DEPARTMENT OF DEFENSE
INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE
DIRECTOR, OPERATIONAL TEST AND EVALUATION
ASSISTANTS TO THE SECRETARY OF DEFENSE
DIRECTOR, ADMINISTRATION AND MANAGEMENT
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTORS OF THE DOD FIELD ACTIVITIES

SUBJECT: Policy Guidance for Department of Defense (DoD) Use of Electronic Data
Interchange (EDI) Standards in Logistics Applications

The purpose of this memorandum is to establish DoD-wide policy for the integration of EDI standards into logistics business systems. The December 9, 1998, DoD Reform Initiative Directive #48 -- *Adoption of Commercial EDI Standards for DoD Logistics Business Transactions* directed the issuance of this policy. The attached *Policy and Guidance for DoD Logistics Use of Electronic Data Interchange Standards* requires the use of approved EDI standards for logistics business transactional data exchange as authorized by the Federal Information Processing Standards (FIPS) 161-2.

The adoption of this standard supports the Department's process improvement reengineering goals, which in-turn embrace commercial practices. As directed in the policy guidance, DoD Components will employ FIPS 161-2 for transactional data exchange formats in all planned and new logistics information systems. The policy does not direct the replacement and modification of transactional data formats in logistics legacy systems. However, in the future when making major modifications to legacy systems, Components will transition to FIPS 161-2 EDI standards. This policy shifts, from individual programs to the Defense-wide enterprise, the responsibilities for data mapping and other services that support logistics data exchanges and data conversion between military and commercial standards.

This policy is effective immediately.

J. S. Gansler

Attachment



**Policy and Guidance for DoD Logistics
Use of Electronic Data Interchange (EDI) Standards**

1. PURPOSE

This policy guidance:

1.1. Implements Defense Reform Initiative Directive (DRID) #48 - Adoption of Commercial EDI standards for DoD Logistics Business Transactions. Requires DoD Components to incrementally implement the Defense Logistics Management System (DLMS) as a by-product of ongoing and planned business process modernization programs. DLMS is a process improvement enabler, which supports the Department's reengineering goals to adopt commercial practices and increase reliance on the private sector for logistics support.

1.2. Effects the use of approved EDI standards for DoD logistics business transactional data exchange as authorized by the Federal Information Processing Standard (FIPS) 161-2, Electronic Data Interchange.

1.3. Assigns responsibilities for the direction, management, coordination, and control of the process to replace DoD-unique logistics data exchange standards with FIPS 161-2 EDI standards.

2. APPLICABILITY

This policy guidance applies to the Office of the Secretary of Defense (OSD), Department of Defense Inspector General, Military Departments, Joint Staff, Combatant Commands, Defense Agencies, and DoD Field Activities (hereafter referred to collectively as "DoD Components").

3. SCOPE

This policy acknowledges the existence of other EDI standards and non-transactional data interchange methods. However, the primary focus is on implementing American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 (hereafter referred to as "ASC X12") standards for DoD logistics business transaction

Attachment 1

interchange as a stepping-stone to open international transaction standards. As such, this policy does not preclude the use of other data interchange and data sharing techniques. However, when transactional exchange is the chosen method of data interchange, the transactions will be formatted in accordance with ASC X12 standards.

4. DEFINITIONS: (See attachment).

5. POLICY

It is the policy of the DoD to:

5.1. Replace DoD-unique logistics data exchange standards with ASC X12 standards as a stepping-stone to move transactional-based logistics business processes towards the use of international open system standards.

5.2. Use only FIPS 161-2 EDI standards for electronic business transaction exchanges in new and planned logistics business processes to include major modifications to existing legacy systems.

5.3. Use the DLMS as a process improvement enabler in new, replacement, and legacy logistics business systems as a part of their ongoing and planned modernization programs. Internal communications among DoD systems will use FIPS 161-2 EDI standards and Federally approved implementation conventions (ICs). External communications between DoD systems and the private sector, other Federal agencies, or foreign governments will use FIPS 161-2 EDI standards (or other appropriate standards) and Federally approved ICs appropriate for the agencies, industries, or governments involved.

5.4. Propose the adoption of commercial ICs when it is in the best interest of the Department.

5.5. Modify legacy logistics business systems to employ new functionality, where cost beneficial, in order to meet the total requirements of the Department's migration to approved EDI standards.

5.6. Program for, fund, and execute implementation of the DLMS through process improvements and business system upgrades.

5.7. Implement the EB/EC program policy guidance contained in DoD Directive 8190.X, The DoD Electronic Business/Electronic Commerce (EB/EC) Program, when migrating DoD logistics business processes to use of FIPS 161-2 EDI standards.

5.8. Develop and apply corporate services and processes to minimize duplication and ensure interoperability.

6. RESPONSIBILITIES

6.1. The Deputy Under Secretary of Defense (DUSD) for Logistics (L) shall:

6.1.1. Serve as the Department's Principal Staff Assistant (PSA) responsible for the management and implementation of approved EDI standards for DoD logistics business processes.

6.1.2. Issue logistics data exchange policies and directives, and ensure that those policies are coordinated with external trading partners (e.g., finance, acquisition, etc.) when appropriate.

6.1.3. Advocate DoD Component initiatives that will migrate logistics business processes to the use of approved EB/EC methods.

6.1.4. Ensure DoD Component logistics business modernization efforts comply with the policies and guidance contained herein.

6.1.5. Promote logistics business process improvement by issuing logistics guidance that is complementary to this policy.

6.2. The DoD Chief Information Officer (CIO) shall ensure that the Joint Electronic Commerce Program:

6.2.1. Provides for the development of a DoD EC architecture that accommodates DLMS implementation in coordination with DISA.

6.2.2. Advocates the improvement of DoD logistics business processes so that electronic business practices and information technology can be exploited successfully.

6.2.3. Forms an integrated product team (IPT), under Joint Electronic Commerce Program Office (JECPO) leadership, to develop, with DoD Component assistance, a comprehensive implementation plan to support migrating DoD logistics business systems to FIPS 161-2 EDI standards.

6.2.4. Reports on progress toward implementation of approved EDI standards into DoD logistics business processes to the Deputy CIO; the Director, Defense Reform Initiative; and the Defense Logistics Information Board.

6.3. The DoD Components shall:

6.3.1. Promote and promulgate the application of ASC X12 principles and practices within their respective logistics business processes through implementation of the DLMS standards. Identify additional logistics business areas (e.g., maintenance, munitions, etc.) that do not currently have DLMS processes in place. Immediately, DLMS is the standard for new, replacement, and major modifications to logistics business processes. Legacy logistics business systems will not be replaced or modified solely for the purpose of implementing commercial standards. DoD automated information systems will be replaced or modified based on sound functional requirements and supporting economic justification.

6.3.2. Establish single focal points, in coordination with their respective EB/EC focal points, to serve as members of the IPT chartered to develop and publish a plan that will guide DoD in the implementation of FIPS 161-2 adopted EDI standards throughout the Department's logistics processes.

6.3.3. Provide all plans for implementing new, replacement, or major modifications to systems that will use DLMS. Submit DoD Component plans in accordance with the milestone schedule in the approved DRID #48 Implementation Plan.

6.3.4. Estimate corporate service resource requirements to support plans called for in paragraph 6.3.3. above. Submit these requirements in accordance with the milestone schedule in the approved DRID #48 Implementation Plan.

6.3.5. Designate a single organization, in coordination with their respective EB/EC focal points, to oversee the migration of logistics business processes to the DLMS.

6.3.6. Consider the migration from the Defense Logistics Standard Systems (DLSS) to DLMS each time a legacy system is modified to identify targets of opportunity.

6.3.7. Support the Under Secretary of Defense for Acquisition and Technology (USD(A&T)) and the DoD CIO in the development of policies and procedures to effect use of approved EDI standards in lieu of DoD-unique logistics data exchange standards.

6.3.8. Report on major milestones semiannually (Reference DLMSO Reports Control Symbol (RCS): DD-A&T(Q&SA) 1419) to the JECPO/Defense Logistics Management Standards Office (DLMSO) on the progress in migrating logistics business processes to the DLMS.

6.4. The Defense Logistics Management Standards Office (DLMSO), as the Department's executive agent for logistics data interchange, shall:

6.4.1. Support legacy system interoperability with new and emerging systems subject to this policy.

6.4.2. Describe and justify the requirements for technology and process to support the Department's transition to DLMS EDI standards and the continuous improvement of logistics processes through efficient adoption of logistics data interchange business rules.

6.4.3. Serve as the logistics configuration manager for the development of business rules and implementation conventions supporting process improvements.

6.4.4. Develop (in coordination with the Department's logistics stakeholders), publish, document, and maintain the logistics data interchange business rules and implementation conventions, supporting the Department's migration to and operation of a commercial EDI-based, optimized logistics process.

6.4.5. Coordinate representation on all industry logistics EDI standards groups with the DoD EDI Standards Management Committee for the purpose of ensuring a common face to industry and a coordinated Department position.

7. EFFECTIVE DATE

This Policy and Guidance for the DoD logistics use of EDI standards is effective immediately.

DEFINITIONS:

1. American National Standards Institute: A national coordinator of voluntary standards for the United States. ANSI approves a standard only when it has verified evidence presented by the standards developer that those materially affected by the standard have reached substantial agreement (consensus) on its provisions. Source: ANSI Standing Document 2: Operations Manual

2. Accredited Standards Committee X12 (ASC X12): Accredited by ANSI in 1979, ASC X12, Electronic Data Interchange, is a voluntary standards group charged with developing American National Standards for electronic data interchange. Source: ANSI Standing Document 2: Operations Manual

3. Defense Logistics Management System (DLMS): A broad base of business rules to include uniform policies, procedures, time standards, transactions, and data management designed to meet DoD's requirements for total logistics support. The DLMS is founded upon ANSI ASC X12 EDI and will be expanded to support emerging EB/EC capabilities such as: data sharing, automated identification technology, object-oriented user interfaces, electronic malls, web-based technology, and electronic funds transfer, as appropriate. Source: Developed by IPT Support Group

4. Defense Logistics Standard Systems (DLSS): A broad base of logistics transactions and standards consisting of fixed-length DoD-unique standards designed to meet DoD's requirements for logistics support. Source: Developed by IPT Support Group

5. Electronic Business (EB): The application of electronic commerce techniques and solutions to the business processes of the DoD to include the entire range of the DoD functional areas. For the purpose of this document, functions are those defined in Joint Pub 1-02 (i.e., appropriate or assigned duties, responsibilities, missions, tasks, functions, powers or duties of an individual office or organization. A functional area is comprised of one or more functional activities, each of which consists of one or more functional processes).

Attachment 1

Source: DoD Directive 8190.X, The DoD Electronic Business/Electronic Commerce (EB/EC) Program.
Attachment

6. Electronic Commerce (EC): The interchange and processing of information using electronic techniques for accomplishing transactions based on the application of commercial standards and practices. Further, an integral part of implementing electronic commerce is the application of process improvements to enhance business processes, normally but not necessarily, prior to the incorporation of technologies facilitating the electronic exchange of business information.

Source: DoD Directive 8190.X, The DoD Electronic Business/Electronic Commerce (EB/EC) Program

7. Electronic Data Interchange (EDI): The computer-to-computer exchange of business data in a standardized format between trading partners.

Source: Appendix A of "Electronic Commerce for Buyers and Sellers" A Strategic Plan for Electronic Federal Purchasing and Payment, President's Management Council's Electronic Processing Initiatives Committee, March 1998.

8. Federal Information Processing Standards

Publications (FIPS PUBS): Issued by the National Institute of Standards and Technology (NIST) after approval by the Secretary of Commerce pursuant to Section 111(d) of the Federal Property and Administration Services Act of 1949, as amended by the Computer Security Act of 1987, Public Law 100-235. May be accessed on Web location: <http://www.itl.nist.gov/fipspubs/>.

Source: NIST

9. Implementation Conventions (IC): Defines the structure and content of a transaction and maps application data requirements into a specific transaction set for implementation.

Source: DoD 4000.25-M (DLMS Manual)

10. Legacy Systems: Information systems currently performing a logistics function. These systems may be candidates for phase-out, upgrade, or replacement.

Source: Developed by IPT Support Group

11. Logistics Business Systems: Applies to planned, new, and legacy DoD logistics systems identified in the DoD Year 2000 (Y2K) database.

Source: Developed by IPT Support Group.

APPENDIX E ASC X12 IMPLEMENTATION SUCCESS STORY

E.1. INTRODUCTION

Presently, ASC X12 is being widely used in the procurement community, especially in their prime vendor programs. DoD organizations requiring food, medicines, or other prime vendor products initiate transactions that become ASC X12 purchase orders transmitted through DAAS to the appropriate prime vendor. The Defense Finance and Accounting Service (DFAS) is using ASC X12 for commercial invoicing and electronic payment. Although many other DoD organizations are also selectively using ASC X12, the primary logistics process improvement success story is outlined below.

E.2. THE DEFENSE MEDICAL LOGISTICS STANDARD SUPPORT (DMLSS)

The DMLSS program is a recent example of successful logistics business process reengineering using ASC X12. DMLSS produced a dramatic turnaround in the support provided to 250 medical treatment facilities throughout the U.S., Europe, and Pacific areas of operations. The DMLSS prime vendor program uses ASC X12 to support just-in-time inventory management of pharmaceutical and medical-surgical supplies and has produced the following customer advantages:

- Orders are confirmed within 24 hours with a 95 percent fill rate
- Pharmaceutical prices average 25 percent lower than when the program began
- The number of available pharmaceutical and medical-surgical products available to DoD increased from approximately 15,000 to more than 180,000
- The system changed from being a costly, unresponsive medical depot system where:
 - Order-to-receipt time declined from 20 days to one day, and
 - DoD medical inventories decreased from 380 days to ten days

DMLSS also uses ASC X12 to provide electronic invoicing and payment. Other initiatives dealing with exchanging financial information between medical treatment facilities and DFAS and the expansion of ordering supplies via the WWW resulted in estimated savings of \$10.6 million and \$6 million, respectively.

APPENDIX F COMPONENT ASC X12 IMPLEMENTATION PLAN OUTLINE

F.1. INTRODUCTION

Components will develop individual plans to facilitate the smooth implementation of ASC X12. These plans will focus on Component new system development, legacy system modernization, and legacy business process improvement initiatives. In addition, these plans will address key implementation issues and discuss how identified issues will be resolved. The DoD Y2K logistics systems database will form the basis for legacy system identification.

F.2. COMPONENT ASC X12 IMPLEMENTATION PLAN OUTLINE (minimum requirements)³⁴

F.2.1. Introduction

- Identify the organization that will oversee this plan (point-of-contact, organization name and mailing address, phone and fax numbers, and email address)
- Identify and discuss current ASC X12 implementation initiatives to include third-party logistics arrangements using ASC X12 (description of processes being improved, current status, anticipated or known benefits of initiative)

F.2.2. Component Implementation Strategy

- New and planned systems
 - Define the Component management process that ensures new, replacement, or systems undergoing major modifications will employ ASC X12 for transaction exchange, to include systems under development
 - Array by implementation date new systems that will employ ASC X12 for transaction exchange. Dates should be expressed in quarters, e.g., 1QFY01
- Legacy systems - using the DoD Y2K logistics systems database

³⁴ Components will update their implementation plans and provide copies to DLMSO, as part of the semiannual reporting requirements.

- Array Component legacy systems
- In accordance with Section 2, paragraph 2.2. and Figure 2-1 of this plan, identify systems that will be replaced or modernized employing ASC X12 for transaction exchange
- Identify the status of systems not included, e.g., will not use transactional exchange; being phased out and not replaced; will be modernized using other EB/EC capabilities; etc.
- For systems being replaced or modernized employing ASC X12 for transaction exchange, identify the phasing sequence³⁵ that will be employed. Dates should be expressed in quarters, e.g., 1QFY01
- Process improvement initiatives
 - Discuss the Component management process for identifying additional business functions that could benefit by conforming to ASC X12
 - Identify additional business functions that could benefit by conforming to ASC X12. Discuss Component plans to work with DLMSO to implement ASC X12
 - Identify and array Component-unique transactions/data not included in the DLMS process. Discuss Component plans to work with DLMSO to transition unique transaction data to ASC X12

F.2.3. Common Corporate Service Requirements

- Translation
 - Identify and discuss the translation software distribution scenario (Appendix A, paragraph A.3.3.) that the Component will employ during implementation of ASC X12
 - Identify and discuss translation management interfaces currently in place between the DAAS/DEBX and the Component (identify organizations and points-of-contact)

³⁵ Additional phasing information can be found in *A Business Case and Strategy for Defense Logistics Electronic Data Interchange*. An electronic copy is available at: <http://www.log.edi.migration.hq.dla.mil/Documents/document/LogisticsEDIRreport.pdf>.

- Based on system analysis, (Section F.2.2.), develop Component future corporate translation requirements forecast
- Testing
 - Identify and discuss the Component management strategy for testing the software for modernizing internal legacy systems or bringing a new system on line
 - Based on system analysis, develop Component external future corporate testing requirements forecast; see Section 3, paragraph 3.3.4. of this implementation plan
- Training
 - Identify and discuss the Component management strategy for defining and identifying DLMS and ASC X12 training requirements
 - Conduct Component-unique training for Component-specific systems and process revisions
 - Identify the strategy the Component will employ to ensure DLMS and ASC X12 training courses are incorporated into Service schools and training materials
 - Based on system analysis, develop Component future training requirements; see Section 3, paragraph 3.3.3. of this corporate implementation plan

F.2.4. Cost - estimate and discuss Component costs that will be incurred as a result of implementing ASC X12

F.2.5. Implementation issues - identify key Component implementation issues and discuss how identified issues will be resolved

F.2.6. Appendices

- Component concept of operations – identify and discuss Component concept of operations and EB/EC architecture
- Risk and risk mitigation – identify and discuss risk and risk mitigation factors relating to the Component successfully implementing ASC X12
- Component implementation responsibilities, actions, and milestones
- Others at the discretion of the Component

APPENDICES G-P COMPONENT IMPLEMENTATION PLANS

APPENDIX G	ARMY
APPENDIX H	NAVY
APPENDIX I	AIR FORCE
APPENDIX J	MARINE CORPS
APPENDIX K	COAST GUARD
APPENDIX L	DEFENSE LOGISTICS AGENCY
APPENDIX M	USTRANSCOM
APPENDIX N	DEFENSE SECURITY COOPERATION AGENCY
APPENDIX O	DEFENSE FINANCE AND ACCOUNTING SERVICE
APPENDIX P	OTHER PARTICIPANTS

APPENDIX Q GLOSSARY

1. *American National Standards Institute (ANSI)*. A national coordinator of voluntary standards for the United States. ANSI approves a standard only when it has verified evidence presented by the standards developer that those materially affected by the standard have reached substantial agreement (consensus) on its provisions.
Source: ANSI Standing Document 2: Operations Manual
<http://www.x12.org/x12/x12pp/ascproc/x12-proced-web.html>
2. *Accredited Standards Committee X12 (ASC X12)*. Accredited by ANSI in 1979, ASC X12, EDI, is a voluntary standards group charged with developing American National Standards for electronic data interchange.
Source: ANSI Standing Document 2: Operations Manual
3. *Architecture*. The structure of components, their relationships, and the principles and guidelines governing their design and evolution over time. It is composed of three major perspectives: operational, systems, and technical views.
Source: C4ISR Architecture Framework
4. *Automated Information System (AIS)*. An assembly of computer hardware, software, firmware, or any combination of these, configured to accomplish specific information-handling operations, such as communication, computation, dissemination, processing, and storage of information.
Source: Software Design Description for Electronic Commerce Processing Node, Version 2.2
5. *Central Design Activity (CDA)*. An activity that has been assigned standard automated information system development and maintenance responsibilities.
Source: DoD 4000.25-M (DLMS)
6. *Commercial (public) EDI Standards*. A collection of approved FIPS 161-2-adopted EDI standard data elements and data segments arranged in logical groups of standard transaction sets that are commonly used to pass transactional data from one entity to other interested entities.
Source: Developed by IPT
7. *Computer*. An electronic device that can store, retrieve, and process data.
Source: Webster's
8. *Computer-to-computer*. Exchange of data between computers using standardized messages taken from a predetermined set of message types. (It is this standardization of message formats using a standard syntax, and the standardization of data elements within the messages that makes possible the assembling, disassembling, and processing of data elements by computer.)
Source: FIPS 161-2

9. *Conversion.* The process of changing data from a DLSS EDI format to a DLMS EDI format and back to a DLSS EDI format.
Source: Developed by IPT
10. *Data.* Representation of facts, concepts, or instructions in a formalized manner suitable for communication, interpretation, or processing by humans or by automatic means. Any representations such as characters or analog quantities to which meaning is or might be assigned.
Source: Federal-Standard 1037C: <http://ntia.its.blrdoc.gov/fs-1037/>
11. *Database.* 1. A set of data that is required for a specific purpose or is fundamental to a system, project, enterprise, or business. Note: A database may consist of one or more data banks and be geographically distributed among several repositories.
2. A formally structured collection of data. Note: In automated information systems, the database is manipulated using database management systems.
Source: Federal-Standard 1037C
12. *Data Exchange.* Transfer of data by means other than database access. EDI is a form of data exchange.
Source: Developed by IPT
13. *Data Interoperability.* The ability to use timely, authoritative, trusted, and semantically consistent data when needed, without regard to its location or syntactical constraints, in an open and controlled automated environment.
Source: Developed by IPT
14. *Defense Information Infrastructure (DII) Common Operating Environment (COE).* The DII COE is a Joint Technical Architecture (JTA) standards-based computing and communications infrastructure composed of support services and facilities.
Source: Defense Information Infrastructure (DII) Common Operating Environment (COE) Configuration Management Plan, Version 2, April 1, 1998
http://dod-ead.mont.disa.mil/cm/cm_page.html
15. *Defense Logistics Management System (DLMS).* A broad base of business rules, to include uniform policies, procedures, time standards, transactions, and data management, designed to meet DoD's requirements for total logistics support. The DLMS is founded upon ANSI ASC X12 EDI and will be expanded to support emerging EB/EC capabilities such as: data sharing, automated identification, object-oriented user interfaces, electronic malls, web-based technology, and electronic funds transfer, as appropriate.
Source: Developed by IPT

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16. *Defense Logistics Standard Systems (DLSS)*. A broad base of logistics transactions and standards consisting of fixed-length DoD-unique standards designed to meet DoD's requirements for logistics support.
Source: Developed by IPT
17. *Electronic Business (EB)*. The application of EC techniques and solutions to the business processes of DoD, to include the entire range of the DoD functional arenas. For the purpose of this document, functions are those defined in JCS Joint Pub 1-02, i.e., appropriate or assigned duties, responsibilities, missions, tasks, functions, powers, or duties of an individual office or organization. A functional area is comprised of one or more functional activities, each of which consists of one or more functional processes.
Source: Department of Defense Chief Information Officer (CIO) Memorandum, subject: *Guidance and Policy Memorandum No. 2-8190-031199 - Defense-wide Electronic Business/Electronic Commerce (EB/EC)*, March 11, 1999
18. *Electronic Commerce (EC)*. The interchange and processing of information using electronic techniques for accomplishing business transactions based upon the application of commercial standards and practices. Further, an integral part of implementing electronic commerce is the application of process improvements to enhance business processes, normally but not necessarily, prior to the incorporation of technologies facilitating the electronic exchange of business information.
Source: Department of Defense Chief Information Officer (CIO) Memorandum, subject: *Guidance and Policy Memorandum No. 2-8190-031199 - Defense-wide Electronic Business/Electronic Commerce (EB/EC)*, March 11, 1999
19. *Electronic Data Interchange (EDI)*. EDI is the computer-to-computer interchange of strictly formatted messages that represent documents other than monetary instruments. EDI implies a sequence of messages between two parties, either of whom may serve as originator or recipient. The formatted data representing the documents may be transmitted from originator to recipient via telecommunications or physically transported on electronic storage media. The computer-to-computer exchange of business data in a standardized format between trading partners.
Source: Appendix A of "*Electronic Commerce for Buyers and Sellers, A Strategic Plan for Electronic Federal Purchasing and Payment*," President's Management Council's Electronic Processing Initiatives Committee, March 1998
Source: FIPS 161-2: <http://www.itl.nist.gov/fipspubs/fip161-2.htm>
20. *Executive Agent (EA)*. A term used in DoD and Service regulations to indicate a delegation of authority by a superior to a subordinate to act on behalf of the superior. An agreement between equals does not create an executive agent. For example, a Service cannot become a DoD executive agent for a particular matter with simply the agreement of the other Services; such authority must be delegated by the Secretary of Defense. Designation as executive agent, in and of itself, contains no authority. The exact nature

and scope of the authority delegated must be stated in the document designating the executive agent. An executive agent may be limited to providing only administration and support or coordinating common functions or it may be delegated authority, direction, and control over specified resources for a specified purpose.

Source: JCS Joint Pub 1-02: http://www.dtic.mil/doctrine/jel/new_pubs/jp1_02.pdf

21. *Functional Requirement.* A set of goals, objectives, policies, or other documented considerations that describe, in non-automatic data processing terminology, and without regard to automatic data-process equipment or capabilities, new or revised tasks to be accomplished.
Source: DoD 4000.25-M (DLMS)
22. *Implementation Convention (IC).* ICs define the structure and content of a transaction and map application data requirements into a specific transaction set for implementation.
Source: DoD 4000.25-M (DLMS)
23. *Infrastructure.* Basic information technology capabilities, including communications, computers, information assurance, network and systems management, and information dissemination, that enable applications and data.
Source: Developed by IPT
24. *Interoperability.* The ability of systems, units, or forces to provide services to and accept services from other systems, units, or forces and to use the exchanged services to enable them to operate effectively together. The condition achieved among communications-electronics systems or items of communications-electronic equipment when information or services can be exchanged directly and satisfactorily between them or their users.
Source: JCS Joint Pub 1-02
25. *Legacy Systems.* Information systems currently performing a logistics function. These systems may be candidates for phase-out, upgrade, or replacement.
Source: Developed by IPT
26. *Logistics Business Systems.* Applies to planned, new, and legacy DoD logistics systems identified in the DoD Y2K database.
Source: Developed by IPT
27. *Logistics.* The science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense, those aspects of military operations that deal with designing, developing, acquiring, storing, moving, distributing, maintaining, evacuating, and disposing of materiel.
Source: JCS Joint Pub 1-02

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28. *Logistics On-Line Tracking System (LOTS)*. All information related to processing Military Standard Requisitioning and Issue Procedures (MILSTRIP) transactions is captured and stored in the LOTS database. It can be used by DAASC customers to support logistics management, information query, transaction tracking, and reporting requirements. It can be accessed by other DAASC tools, such as the Virtual Logistics Information Processing System (VLIPS) query systems to allow tracking and retrieval of requisitions and excess transactions through their entire life cycle. These tools also provide access to addressing and stock number information stored at DAASC, linking that information to the MILSTRIP transaction stored in LOTS.

Source: Developed by IPT

29. *Trading Partner*. A trading partner is an organization or individual with whom information is accessed or exchanged. The term “trading partner” includes private industry, academia, and government entities.

Source: Department of Defense Chief Information Officer (CIO) Memorandum, subject: *Guidance and Policy Memorandum No. 2-8190-031199 - Defense-wide Electronic Business/Electronic Commerce (EB/EC)*, March 11, 1999

30. *Trading Partner Agreement*. A written instrument of understanding negotiated between trading partners that specifies contractual matters and protocols for the electronic interchange of business.

Source: DoD 4000.25-M (DLMS)

31. *Transactional-based System*. A system employing electronic data interchange capabilities.

Source: Developed by IPT

32. *Transaction Set*. The electronic data interchange equivalent of a paper business document composed of data elements and data segments

Source: DoD 4000.25-M (DLMS)

33. *Translation*. The process of changing data from, to, and/or between user-defined files and approved electronic commerce standards to facilitate EDI.

Source: Developed by IPT

34. *Value-added Network (VAN)*. A VAN generally is a commercial entity (similar to a long-distance telephone company or a computer on-line service) that provides communications services, electronic storage, mailboxes, or other related services for EDI transactions.

Source: Developed by IPT

APPENDIX R ABBREVIATIONS AND ACRONYMS

AFMC	Air Force Materiel Command
AFLIF	Air Force Logistics Information File
AIS	automated information system
AIT	automatic identification technology
ALT	administrative lead-time
ANSI	American National Standards Institute
APADE	automated purchase and accounting data entry
ASC	Accredited Standards Committee
Async	asynchronous
ATAC	Advanced Traceability and Control
ATM	Asynchronous Transfer Mode
AUTODIN	Automatic Digital Network
Bisync	Bisynchronous
C4ISR	command, control, communications, computers, intelligence, surveillance, and reconnaissance
CAGE	Contractor and Government Entity
CAV	commercial asset visibility
CBL	Commercial Bill of Lading
CC	CAGE code
CCR	Central Contractor Registration
CDA	Central Design Agency
CFM	CONUS Freight Management
CIO	Chief Information Officer
CMOS/I2P	Cargo Movement Operations System-Industry Information Processor
COE	Common Operating Environment
CONUS	continental United States
COOP	Continuity of Operations Plan
COTS	commercial-off-the-shelf

CSC	computer system component
CUI	common user interface
CWT	customer wait time
DAAS	Defense Automatic Addressing System
DAASC	Defense Automatic Addressing System Center
DCMD	Defense Contract Management Division
DEBX	DoD Electronic Business Exchange
DFAMS	Defense Fuel Automated Management System
DFAS	Defense Finance and Accounting Service
DFSC	Defense Fuel Supply Center
DII	Defense Information Infrastructure
DISA	Defense Information Systems Agency
DLA	Defense Logistics Agency
DLIS	Defense Logistics Information Service
DLMS	Defense Logistics Management System
DLMSO	Defense Logistics Management Standards Office
DMLSS	Defense Medical Logistics Standard Support
DLSS	Defense Logistics Standard Systems
DoD	Department of Defense
DOI	Department of Interior
DRID	DoD Reform Initiative Directive
DSC	Defense Supply Center
DSS	Distribution Standard System
DTS	Defense Transportation System
DUSD (L)	Deputy Under Secretary of Defense (Logistics)
DVD	Direct Vendor Delivery
EA	Executive Agent
EB	electronic business
EC	electronic commerce

ECAT	EC Acquisition Team
ECI	EB/EC Infrastructure
ECRC	Electronic Commerce Resource Center
EDA	electronic document access
EDI	electronic data interchange
EDISMC	EDI Standards Management Committee
EEOC	Equal Employment Opportunity Commission
EMALL	electronic mall
EPA	Environmental Protection Agency
ER	exchange request
ETA	Electronic Transportation Acquisition
FESMCC	Federal EDI Standards Management Coordinating Committee
FIPS	Federal Information Processing Standard
FMSO	Fleet Material Support Office
FOC	full operational capability
FTP	File Transfer Protocol
GBL	Government Bill(s) of Lading
GCSS	Global Combat Support System
GSA	General Services Administration
GTN	Global Transportation Network
GW	gateway
HHS	Health and Human Services
HL7	Health Level 7
HTML	Hyper Text Markup Language
IC	implementation convention
ICP	inventory control point
IPT	integrated product team
IT	information technology
ITIMP	Integrated Technical, Item Management and Procurement

JCS	Joint Chiefs of Staff
JTA	Joint Technical Architecture
JECPO	Joint Electronic Commerce Program Office
JITC	Joint Interoperability Test Command
LAN	local area network
LCM	Logistics Community Manager
LIB	Logistics Information Board
LOTS	Logistics On-Line Tracking System
M	million
MADES	Menu Assisted Data Entry System
MILSTRIP	Military Standard Requisitioning and Issue Procedures
MIS	Management Information System
MOCAS	Mechanization of Contract Administration Services
MRM	Management Reform Memorandum
NAVSUP	Naval Supply Systems Command
NECO	Navy Electronic Commerce Online
NIMA	National Imagery and Mapping Agency
NSA	National Security Agency
NIPRNET	Non-secure Internet Protocol Router Network
OPM	Office of Personnel Management
OSD	Office of the Secretary of Defense
POA&M	plan of action and milestones
PPP	Point-to-Point Protocol
PRC	Process Review Committee
PSA	Principal Staff Assistant
PW	password security
QFY	Quarter of Fiscal Year
RCS	Reports Control Symbol
RFQ	Request for Quote/Quotation

SAACONS	Standard Army Automated Contracting System
SAMMS	Standard Automatic Material Management System
SMTP	Simple Mail Transfer Protocol
SPS	Standard Procurement System
SPVI	Subsistence Prime Vendor Interpreter
STANFINS	Standard Financial System
STARS	Standardized/Standard Accounting and Reporting System
STARFIARS	Standard Army Financial Inventory and Reporting System
STORES	Subsistence Total Order and Receipt Electronic System
TACOM	Tank-automotive and Armament Command
TBD	to be determined
TP	trading partner
TRC	Technical Review Committee
UDF	User Defined File
UN/EDIFACT	United Nations/EDI for Administration, Commerce, and Transport
URL	Uniform Resource Locator
USA	U.S. Army
USAF	U.S. Air Force
USD(AT&L)	Under Secretary of Defense (Acquisition, Technology & Logistics)
USD(C)	Under Secretary of Defense (Comptroller/Chief Financial Officer)
USMC	U.S. Marine Corps
USN	U.S. Navy
USTRANSCOM	U.S. Transportation Command
VAN	Value-added Network
VPN	Virtual Private Network
WAWF	wide-area work flow
WWW	World Wide Web

XML	eXtensible Mark-up Language
Y2K	year 2000

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