



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

IN REPLY
REFER TO DLMSO

October 23, 2008

MEMORANDUM FOR SUPPLY PROCESS REVIEW COMMITTEE (PRC) MEMBERS

SUBJECT: Approved Defense Logistics Management System (DLMS) Change (ADC) 305,
Administrative Revision to DOD 4000.25-M, DLMS Manual, Volume 3 -
Transportation

The attached administrative change to DOD 4000.25-M, Defense Logistics Management System (DLMS), is approved for implementation. The updated Volume 3 - Transportation will be posted to the Defense Logistics Management Standards Office (DLMSO) Website located at <http://www.dla.mil/j-6/dlms/eLibrary/manuals/dlms/v3.asp> within **10** days from the above date.

Addressees may direct questions to either the DLMSO point of contact, Ms. Heidi Daverede, 703-767-5111, DSN 427-5111, e-mail: Heidi.Daverede@dla.mil, or Ms. Ellen Hilert, Chair, Supply Process Review Committee, 703-767-0676; DSN 427-0676; or email: ellen.hilert@dla.mil. Others must contact their Service or Agency designated representative.

A handwritten signature in black ink, appearing to read "Donald C. Pipp".

DONALD C. PIPP
Director
Defense Logistics Management
Standards Office

Attachment

cc:
DUSD(L&MR)SCI

ADC 305
Administrative Revision to the DLMS Manual, Volume 3 - Transportation

1. ORIGINATOR:

a. Service/Agency: Defense Logistics Agency

b. Originator: Heidi Daverede, DLMSO, 703-767-5111, DSN 427-5111, e-mail : heidi.daverede@dla.mil.

2. FUNCTIONAL AREA: Primary: Transportation; **Secondary:** Supply/MILSTRIP

3. REFERENCE: DoD 4000.25-M, Defense Logistics Management System (DLMS), Volume 3 - Transportation.

4. REQUESTED CHANGE:

a. Description of Changes: This administrative change establishes a Table of Contents and Chapter 1 - Introduction, which provides instructions applicable to the use of Volume 3 - Transportation. The change also establishes a Chapter 3 - Passive RFID Transactions, previously approved in ADC 296 and published as DoD 4000.25-M, Volume 2, Chapter 24.

b. Background: Volume 3 provides DoD standard procedures, data and transactions for the interchange of information between the logistics and transportation domains. As the DoD continues its efforts to operate a seamless, interoperable supply chain, it is necessary to establish procedures and standards governing interchanges between transportation and other supply chain domains.

c. Procedures: Update Volume 3 as follows:

(1) Replace current Volume 3 cover page with enclosure 1.

(2) Insert Table of Contents from enclosure 2.

(3) Replace current Chapter 1 with enclosure 3.

(4) Insert Chapter 2 placeholder from enclosure 4. Chapter 2 is in staffing under Proposed DLMS Change 324 – Transportation and Supply Receipt and Acknowledgement Transactions.

(5) Move Volume 2, Chapter 24 to Volume 3, Chapter 3 per enclosure 5.

5. REASON FOR CHANGE: To establish Volume 3 as a functional manual and republish Volume 2, Chapter 24 - Passive RFID Transactions, into Volume 3, Chapter 3. The procedures and transactions for Passive RFID transactions apply to both the retail supply and transportation communities. Including Passive RFID Transactions in Volume 3 now

provides the necessary guidance in a specific publication for reference and use by both the logistics and transportation domains.

6. ADVANTAGES AND DISADVANTAGES:

a. Advantages: Provides updated information for users of Volume 3 - Transportation.

b. Disadvantages: None identified.

7. Impact: Provides updates to DOD 4000.25-M DLMS, Volume 3 – Transportation.

Enclosures

1. Volume 3 Cover Page
2. Volume 3 Table of Contents
3. Volume 3 Chapter 1
4. Volume 3 Chapter 2 – Reserved
5. Volume 3 Chapter 3



DEFENSE LOGISTICS MANAGEMENT SYSTEM
(DLMS)

VOLUME 3

TRANSPORTATION

October 2008

DEPUTY UNDER SECRETARY OF DEFENSE
ACQUISITION, TECHNOLOGY AND LOGISTICS
(LOGISTICS & MATERIEL READINESS)

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C1. CHAPTER 1

INTRODUCTION

C1.1. GENERAL.

C1.1.1. Purpose. This volume provides DoD standard procedures, data and transactions for the interchange of information between the logistics and transportation domains. Electronic Data Interchange Implementation Conventions use American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 transactions. Implementation of these guidelines facilitates seamless entry of material from the supply domain into the Defense Transportation System (DTS). It also enhances Intransit Visibility (ITV) and improves data quality.

C1.1.2. Defense Logistics Management System (DLMS) Volume Access. Use of this volume requires simultaneous access to DLMS Manual Volume 1 “front matter:” the full Table of Contents; the only listings of acronyms and abbreviations, definitions, and references; instructions for acquiring access to the DLMS standards data base; Defense Logistics Management System (DLMS) to Defense Logistics Standard System (DLSS) cross-references and conversion guides; specific guidance that applies to all implementation conventions; and both functional and technical information that is relatively stable and applies to the DLMS as a whole.

C1.2. POLICY. The corresponding DoD Directives, DoD Instructions, DLMS Manuals, Defense Transportation Regulation, and any other applicable references will be cited in the individual Transportation Volume chapters as appropriate. At a minimum, these references include:

C1.2.1. DoD Directive 4140.1, Supply Chain Materiel Management Policy.

C1.2.2. DoD 4140.1-R, DoD Supply Chain Materiel Management Regulation.

C1.2.2. DTR 4500.9-R, Defense Transportation Regulation (DTR).

C1.3. APPLICABILITY. This manual applies to the Office of the Secretary of Defense; the Military Services (Army, Navy, Air Force, and Marine Corps, including their National Guard and Reserve Components and including the U.S. Coast Guard (USCG) (both when it is and when it is not operating as a Military Service in the Navy and, by agreement with the Department of Transportation, when it is operating as a Military Service of that Department); the Chairman of the Joint Chiefs of Staff (CJCS) and Joint Staff; the Unified and Specified Commands, and the Defense Agencies (hereafter referred to collectively as “the DoD Components”). Additionally, the manual applies, by agreement, to other external organizational entities conducting logistics business operations with DoD including (a) non-Government organizations, both commercial and

nonprofit; (b) Federal agencies of the U.S. Government other than DoD; (c) foreign national governments; and (d) international government organizations. Finally, the procedures in this volume apply in those instances when DoD logistics and transportation systems need to exchange standardized business information about material and shipments. This includes, for example, warehouse operations, vendor shipments, and reference tables where electronic transactions are exchanged “across the seams” of the logistics and transportation domains. The use of standardized DLMS transactions in this interchange process, where supply and transportation business processes intersect, helps improve asset visibility and the communications process related to cargo movement operations.

C1.4. COMMITTEES. A coordination process will be conducted for the implementation and use of electronic transactions exchanged between the supply and transportation domains. The committees listed below, in addition to any others as required, will participate in the coordination and subsequent standardization process. Each of the committees below has a designated member serving as a representative on the other committee.

C1.4.1. The Defense Transportation Electronic Business (DTEB). The DTEB identifies and resolves issues and recommends management actions that support the accelerated implementation of the electronic exchange of business information. As the focal point for all defense transportation e-business development efforts, it coordinates e-business standards and requirements with defense and federal organization and commercial industry. The committee represents transportation interests at all levels of the federal government. The United States Transportation Command (USTRANSCOM) serves as chair of the DTEB Committee; the Defense Logistics Management Standards Office (DLMSO) is a member of the DTEB.

C1.4.2. The Supply Process Review Committee (PRC). The Supply PRC is the forum through which the DoD Components and other participating organizations participate in the development, expansion, improvement, maintenance, and administration of supply requirements for the DLMS. DLMSO serves as chair of the Supply PRC; USTRANSCOM/DTEB is a member of the Supply PRC.

C1.5. NONCOMPLIANCE. If reasonable attempts to obtain compliance with prescribed procedures or resolution of DLMS supply-related problems are unsatisfactory, the activity having the problem will request assistance from either their DLMS Supply PRC representative or DTEB representative, depending on the nature of the problem. For transportation issues, contact the DTEB representative; for supply issues, contact the Supply PRC representative. The request will include information and copies of all correspondence pertinent to the problem; including the transaction set number, the transaction number, the date of the transaction involved, and any applicable DLMS Manual and DTR Regulations references. The representative will take the necessary actions to resolve the issue or problem. The actions may include requesting assistance from either the DTEB chairperson, for transportation issues, or the Supply PRC chairperson, for supply issues.

C2. CHAPTER 2

RESERVED

C3. CHAPTER 3

PASSIVE RADIO FREQUENCY IDENTIFICATION

(RFID) TRANSACTIONS

C3.1. **GENERAL**. This chapter provides procedures for reader registration and visibility processing supporting the Department of Defense (DoD) RFID implementation. The Department of Defense requires integration of passive RFID (pRFID) technology in the DoD Supply chain. Visibility is a critical component of this requirement. The Defense Logistics Management System (DLMS) includes the establishment of data requirements that support shipment visibility across the DoD supply chain. The detailed procedures pertaining to this requirement are provided in this chapter. DoD policy regarding this passive RFID implementation is located on the DoD AIT website (URL): <http://www.transcom.mil/ait/>.

C3.2. **APPLICABILITY AND SCOPE**. This guidance is applicable to DoD passive RFID system implementations. The scope includes systems that send, receive, and/or collect supply and transportation data and the business processes used to generate that data, technologies to collect new data, software to integrate the data, and tools to visualize the information.

C3.3. **PROCESS OVERVIEW**.

C3.3.1. Participating activities shall register pRFID Readers, per the guidance in paragraph C3.4, for the purpose of identifying the location of the Reader.

C3.3.2. Once registered, scanned tag reads shall be reported either by a DoD system or middleware to the Defense Automatic Addressing System (DAAS) using the Visibility Transaction which provides both the pRFID tag and Reader identification. The purpose of this process is to associate the tag identification and location with previously transmitted logistics transactions containing pRFID, e.g., DLMS Supplement (DS) 856S, Shipment Status, Defense Transportation Electronic Business (DTEB) Implementation Convention (IC) 856A, Receipt/Shipment Consolidation/Due-in Notice, and any others defined in the future.

C3.3.3. If the middleware fails to associate the tag with a previously transmitted logistics transaction, the activity will ask for a follow-up by sending a Visibility Transaction to DAAS with Reader Function Code of F (Follow-Up), and DAAS shall transmit a Visibility Response transaction containing the data elements defined in C3.9.

C3.3.4. There are three transactions¹ to support this process; one is used for sending Reader Registration data, a second for sending Visibility data, and a third for DAASC to respond to inquiries for unmatched tag reads. The transaction details are

¹ The schema files (XSD) can be viewed at:
<http://www.dla.mil/j-6/dlmsso/elibrary/TransFormats/formats.asp>

covered in the following paragraphs.

C3.4. READER REGISTRATION PROCESS

C3.4.1. The Reader Registration transaction is applicable to handheld or fixed pRFID devices for the purpose of identification of its location and role in the supply chain. The term "READER" refers to a specific Reader, group of Readers, or all Readers at a site, depending on how a specific site chose to register its Readers.

C3.4.2. The registering site shall provide to DAAS the location registration data, defined in Table C3.T.1. via the site's middleware application (Savi Site Manager, Globe Ranger, etc.) or via the worldwide web (to be determined). DAAS shall establish that Reader in a location table and assign a location control number. The location control number shall be used on every subsequent transaction sent to DAAS from the field.

C3.4.3. After a Reader is successfully registered, sites are responsible for updating point of contact (POC) information and deleting the Reader when no longer required. POC information is for restricted use and shall not be displayed in routine queries. Only registered Readers can be updated or deleted. A previously deleted Reader cannot be re-registered with the same location control number nor can it be updated.

C3.4.4. Anytime a Reader or group of Readers is updated, moved, or retired, the site shall send the update transaction to DAAS using the same location registration transaction with a delete in the action taken field. If the Reader or group of Readers is just being updated or moved and will be used at a different location, the Reader or group of Readers, after deletion, shall be registered again and receive a new location registration number.

C3.4.5. Registration actions which are not successfully processed by DAAS shall be rejected and a response sent with the applicable reader registration action code.

C3.5. READER REGISTRATION DATA REQUIREMENTS. Passive RFID Reader Registration shall encompass the data requirements identified in Table C3.T1 located on the next page.

Table C3.T1. Passive RFID Reader Registration Data Requirements

Element	Description	Man/ Opt/ Con ²	Mini- mum Lgth	Maxi- mum Lgth	Values
RFID Location Control Number (LCN)	DAAS-assigned upon initial registration	C	16	16	<u>From site to DAAS:</u> - Blank for initial registration request - LCN for update requests <u>From DAAS to site:</u> - LCN
Reader Registration Action	Describes purpose of registration action or DAAS response to the registration action	M	2	2	<u>From Site to DAAS:</u> E-establish reader U-update reader info D-delete reader <u>From DAAS to Site:</u> CE-establish reader confirmed CU-update reader confirmed CD-delete reader confirmed NE-establish reader not accepted NU-update reader not accepted ND-delete reader not accepted
Reader Type	Location's reader is fixed or mobile	M	1	1	F = Fixed M = Mobile
Reader ID Number	Number assigned to this reader or group of readers by the site	M	10	10	
Location	DoDAAC, CAGE, Water Port or Aerial Port code for this location	M	5	6	
Location Text	Further description of this location	O	1	50	Free form text; Possible entries would be Area xxx, Bldg. xxx, Post xxx, Door xxx
Type of Location	Code to identify type of location	M	1	1	D = DoDAAC V = Cage Code A = Aerial Port W = Water Port
Element	Description	Man/ Opt/ Con	Mini- mum	Maxi- mum	Values

² "Man" means "Mandatory;" "Opt" means "Optional;" and "Con" means "Conditional."

		Con	Lgth	Lgth	
Effective Date/Time	Date/Time reported action took place	M	12	12	ZULU CCYYMMDDHHmm (example: 200612051459)
Latitude	Latitude of this location	M	4	9	CRIF ³ or degrees, minutes, seconds, and direction
Longitude	Longitude of this location	M	4	9	CRIF or degrees, minutes, seconds, and direction
POC Name and Other Information	Name and other information of POC at site	M	20	100	
POC Commercial Telephone Number	Commercial telephone number of POC at site	M	10	15	
POC DSN Telephone Number	DSN telephone number of POC at site	M	7	7	
POC E-Mail Address	Email address of POC at site	M	10	50	

C3.6. VISIBILITY TRANSACTION PROCESS.

C3.6.1. When a shipment with pRFID arrives, departs or is observed at a registered Reader location, the Reader shall communicate with the middleware, which shall send the Visibility Transaction to DAAS with a Reader Function Code of A (Arrived), D (Departed) or O (Observed). If the Reader has an assigned role (e.g., receiving or shipping) the transaction shall be used to report that action (e.g. arrived or departed) using the appropriate action codes. If the device cannot determine arrival or departure, the action code for Observed shall be used.

C3.6.2. At those sites electing to provide pRFID support for local deliveries, use the new Reader Function Codes in Table C3.T2. For local delivery with pRFID, the reader shall either record a delivery event or an undelivered (e.g., attempted delivery) event. Delivered is defined as the customer accepting the material from the shipping entity. Undelivered is defined as during normal operating hours and at no fault of the shipping entity, a shipment is not able to be delivered. When a local delivery with pRFID is delivered or undelivered using a mobile handheld Reader, the Reader information shall be uploaded to the middleware at the home base, which shall send the Visibility transaction to DAAS with a Reader Function Code of X (Delivered) or U (Undelivered/Attempted Delivery).

C3.6.3. If the middleware fails to associate the tag with a previously transmitted logistics transaction, the activity will ask for a follow-up by sending a Visibility

³ Enter "CRIF" for undisclosed locations.

Transaction to DAAS with a Reader Function Code of F (Follow-Up).

C3.6.4. Valid Visibility Transactions shall be accepted and stored in DAAS. Visibility Transactions from non-registered readers or with an invalid location control number shall be returned to the sender with an 'N' in the sending location action indicating the transaction had an error and was not recorded at DAAS.

C3.7. VISIBILITY TRANSACTION DATA REQUIREMENTS. Passive RFID Visibility Transactions shall contain the data requirements identified in Table C3.T2.

Table C3.T2. Passive RFID Visibility Transaction Data Requirements

Element	Description	Man/ Opt/ Con	Minimum Lgth	Maximum Lgth	Values
Passive RFID Tag	Tag ID Value	M	24	50	Expressed in hexadecimal
RFID Location Control No.	DAAS assigned during the registration process	M	16	16	
Reader Function Code	Describes process associated with this Reader	M	1	1	<u>From site to DAAS:</u> A – Arrived D – Departed O – Observed F – Follow-up X – Delivered U – Undelivered/ Attempted Delivery <u>From DAAS to site:</u> N – Not recorded
Tag Read Date/Time	Date/Time reported action took place	M	12	12	ZULU CCYYMMDDHHmm (example: 200612051459)

C3.8. VISIBILITY RESPONSE TRANSACTION PROCESS.

C3.8.1. If the middleware fails to associate the tag with a previously transmitted DS 856S or DTEB IC 856A, the activity will send a Visibility Transaction to DAAS with a Reader Function Code of F (Follow-Up).

C3.8.2. If the requested information is found, DAAS shall transmit a Visibility Response transaction containing the data elements defined in paragraph C3.9.

C3.8.3. If DAAS does not have the information, DAAS shall transmit to the sender a Visibility Response Transaction with an 'N' in the Reader Function Code field indicating the corresponding DS 856S or DTEB 856A transaction was not recorded at DAAS.

C3.9. VISIBILITY RESPONSE TRANSACTION DATA REQUIREMENTS. Passive RFID Visibility Response Transactions shall contain the data requirements identified in Table C3.T3.

Table C3.T3. Passive RFID Visibility Response Transaction Data Requirements

Element	Description	Man/ Opt/ Con	Mini- mum Lgth	Maxi- mum Lgth	Values
RFID Location Control No.	DAAS assigned during the registration process	M	16	16	
Tag Read Date Time	Date/Time reported action took place	M	12	12	ZULU CCYYMMDDHHmm (example: 200612051459)
Reader Function Code	Describes process associated with this Reader	M	1	1	<u>From DAAS to Site:</u> F – Follow-up Information N – No Information Found If N, the conditional fields will not be populated.
Passive RFID Tag	Tag Identification Value	M	24	50	Expressed in hexadecimal
Shipment Notice Type	X12 Transaction Type Code	M	3	4	If F, enter “SHIP” If N, enter “NONE”
Document Number	Requisition Number	C	14	14	
Suffix	Requisition Number suffix	C	1	1	Populated only if Document No. has it
Transportation Control Number	TCN from Shipment notice	C	17	17	
Shipment Date	Date/Time from Shipment Notice	C	12	12	ZULU CCYYMMDDHHmm (example: 200612051459)
NSN/Part Number	Stock Number/Part Number cited in Shipment notice	C	13	15	
Ship Quantity	Quantity Shipped cited in Shipment Notice	C	5	9	

C3.10. DATA STORAGE PROCESS.

C3.10.1. DAAS shall store both the Reader Registration transaction and the

passive RFID Visibility Transaction, in addition to the “R table” data.

C3.10.2. All error-free Visibility Transactions arriving at DAAS shall be stored upon arrival for approximately 7 months.

C3.10.3. All error-free device registrations shall be stored until a Reader Registration Action value of “D” (Delete Reader) is received by DAAS in a Reader Registration transaction ‘cancelling’ the device.

C3.10.4. Figure C3.F.1 (next page) is a diagram which provides a summary of the general transaction process flow between a passive RFID system and DAASC.

Passive RFID Data Flow (Between Site and DAASC)

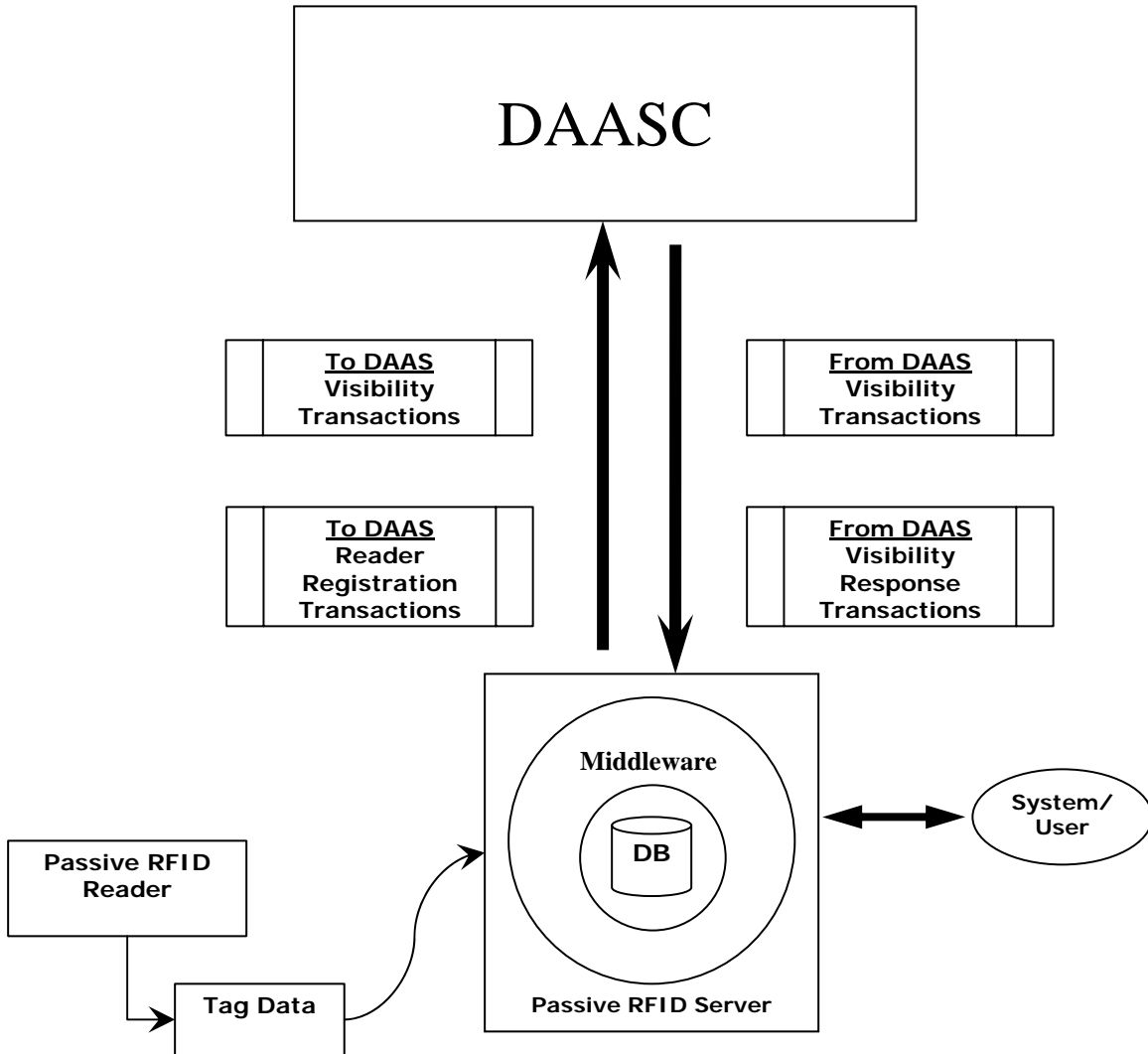


Figure C3.F1. Passive RFID Data Flow