DEFENSE LOGISTICS MANAGEMENT SYSTEM

VOLUME 3

TRANSPORTATION

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DEPUTY ASSISTANT SECRETARY OF DEFENSE
(SUPPLY CHAIN INTEGRATION)

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C1. CHAPTER 1

INTRODUCTION

C1.1. <u>GENERAL</u>

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

C1.1.2. <u>Defense Logistics Management System (DLMS) Volume Access</u>. Use of this volume requires simultaneous access to the DLMS Manual Volume 1 administrative items such as the lists of, acronyms and abbreviations, terms and definitions, and references; instructions for acquiring access to the DLMS standards data base; DLMS-to-Defense Logistics Standard System (DLSS) cross-references and ***DoD/ASC X12 Conversion Guides***; specific guidance that applies to all implementation conventions; and functional and technical information that is relatively stable and applies to the DLMS as a whole.

C1.2. <u>POLICY</u>. The corresponding DoD Directives, DoD Instructions, Defense Logistics Manuals (DLMs), 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 Instruction 4140.01, "DoD Supply Chain Materiel Management Policy", December 14, 2011.

C1.2.2. DoD Manual 4140.01, "DoD Supply Chain Materiel Management Procedures".

C1.2.3. DTR 4500.9-R, "Defense Transportation Regulation (DTR)."

C1.3. <u>APPLICABILITY</u>. This volume applies to the Office of the Secretary of Defense, the Military Departments, the Joint Staff, the Combatant Commands, and Defense Agencies. The manual applies, by agreement, to external organizations 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. The procedures in this volume apply in those instances when DoD logistics and transportation systems need to exchange standardized business information about materiel 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 communications related to cargo movement operations.

C1.4. <u>COMMITTEES</u>. 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. <u>The Defense Transportation Electronic Business (DTEB) Committee</u>. The DTEB Committee, usually referred to as "the DTEB", identifies and resolves issues and recommends management actions that support the accelerated implementation of electronic business information exchange. As the focal point for all defense transportation e-business development efforts, it coordinates e-business standards and requirements with defense and federal organizations 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; Defense Logistics Management Standards is a member of the DTEB.

C1.4.2. <u>The Supply Process Review Committee (PRC)</u>. 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. DLA Logistics Management Standards serves as chair of the Supply PRC; USTRANSCOM/DTEB is a member of the Supply PRC.

C1.5. <u>NONCOMPLIANCE</u>. If reasonable attempts to obtain 1) compliance with prescribed procedures or 2) resolution of DLMS supply-related problems are unsatisfactory, the activity having the problem ***will*** request assistance from either its 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 references. The representative will take the necessary actions to resolve the issue or problem. The actions may include requesting assistance from the DTEB chairperson (for transportation issues) or the Supply PRC chairperson (for supply issues).

C2. CHAPTER 2

RETAIL SUPPLY AND TRANSPORTATION INTERCHANGE – STOCK SHIPMENTS

C2.1. <u>GENERAL</u>. This chapter provides procedures for use in retail transportation and supply processes related to the transportation in-check of cargo from a supply warehouse and subsequent outbound shipment by the servicing transportation activity. These procedures create a virtual warehouse between supply and transportation by standardizing a supply-transportation interchange, and provide in-transit visibility and accountability of government assets shipped in the Defense Transportation System (DTS). The transactions provide users with an electronic method of obtaining shipment data and status on specific line items upon inquiry.

C2.2. <u>BACKGROUND</u>. This section documents a standardized interchange of information between retail transportation and supply through the use of Electronic Data Interchange (EDI) transactions. For materiel requirements processed using Military Standard Requisitioning and Issue Procedures (MILSTRIP) legacy 80 record position transactions and Defense Logistics Management Standards (DLMS) procedures, the standardized interchange employs DLMS 940R, Materiel Release and DLMS 945A, Materiel Release Advice. This standard provides retail supply systems the ability to pre-position release order data in transportation, to submit follow-up status messages to transportation requesting updated shipment status, and to submit cancellation requests to transportation for release orders already turned over to transportation for shipment planning and execution. The standard also provides retail transportation systems the capability to provide supply status messages to supply, to provide cancellation response messages to supply, and to submit materiel release confirmation messages to supply when the materiel has shipped.

C2.3. <u>STOCK SHIPMENT PROCEDURES</u>

C2.3.1. <u>Supply and Transportation Systems</u>. *T*here are *six* Automated Information Systems (AISs) that use this standardized interchange between retail transportation and supply activities. They are the Defense Medical Logistics Standard Support (DMLSS), Global Combat Support System – Marine Corps (GCSS-MC), USAF Expeditionary Combat Support System (ECSS), and the *Integrated Logistics Solution—Supply (ILS—S; formerly* Standard Base Supply System (SBSS)*)*, which represent the supply systems for their respective business areas, and the Cargo Movement Operations System (CMOS), *as well as the Distribution Standard System (DSS)*, which represents the transportation system. Systems other than the *six* systems above, planning to use these standardized interchange transactions to implement a similar capability must coordinate with *the Defense Enterprise Data Standards Office (DEDSO)* prior to attempting to implement the interchange.

C2.3.2. <u>Retail Supply Activity</u>. This paragraph provides general procedures for retail supply activities related to the delivery of items to the servicing transportation activity for further shipment.

C2.3.2.1. <u>Pre-Positioned Release Order</u>. For designated supply trading partners, the Defense Automatic Addressing System (DAAS) will transmit copies of the DLMS 940R, Materiel Release Order/Disposal Release Order/Redistribution Order (Document Identifier Codes (DIC) A2_/A5_/A4_) transactions to the designated transportation system to be pre-positioned awaiting actual arrival of cargo from the supply warehouse.

C2.3.2.1.1. For designated supply trading partners (currently limited to the SBSS—CMOS interface) the DLMS 940R, Materiel Release will be used to pass Federal Logistics Information System (FLIS) National Stock Number (NSN) item data (as identified in the 940R) that is not otherwise available to CMOS. This is an interim measure pending establishment of a FLIS interface.

C2.3.2.1.2. For designated supply trading partners (currently limited to the SBSS—CMOS interface), the DLMS 940R, Materiel Release will be used to support the unique item tracking (UIT) program for Positive Inventory Control (PIC) Nuclear Weapon Related Materiel (NWRM). A unique item identifier (UII) and the associated serial number will be passed in the DLMS 940R for each item meeting the PIC NWRM program criteria. For legacy items where the UII has not been marked in accordance with Item Unique Identification (IUID) policy, the serial number alone will be passed. This is an interim measure pending transition to tracking by UII and associated IUID business rules/transactions. DLMS Volume **2**, Chapter 19, UIT Procedures applies (with exceptions as noted). Future CMOS releases will include the serial number/UII in the DLMS 945A, Materiel Release Advice transaction.

C.2.3.2.1.3. For designated supply trading partners (currently limited to the SBSS—CMOS interface), an information copy (image) of the Materiel Release 940R will be used in support of Air Force PIC Fusion program data requirements. The routing of an additional information-only copy of the DLMS standard transactions (940R) is authorized for forwarding PIC Fusion data needed for the Air Force UIT registry. This is a specific authorized use with unique identifiers to flag the transaction as information only.[1]

C2.3.2.1.4. <u>Item Unique Identification</u>. For designated trading partners, when NSNs containing an IUID indicator Yes (Y), indicating that DoD IUID Supply Policy is required, the DLMS 940R Materiel Release must contain the UII and/or serial number for each item when available.[2]

C2.3.2.1.5. <u>Updated Pre-Positioned Release Order</u>. In the event required UII and/or serial number information is not transmitted in the initial DLMS 940R

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[1] Refer to ADC 316C.
[2] Refer to DLM 4000.25 Volume 2, Chapter 5, Status Reporting, and ADC 1030

to transportation, an updated DLMS 940R citing the value R at 1/W0502/0200 must be sent prior to sending the materiel to transportation.

C2.3.2.1.6. When authorized by the trading partners, the materiel release may include identification of a pre-designated carrier and the carrier account number for the applicable shipment. When provided, this information will be perpetuated to the materiel release confirmation.[3]

C2.3.2.2. Delivery and In-Check. The supply activity will make local deliveries of the items to be shipped to the servicing transportation activity. The line items will be in-checked by the transportation activity based on the cargo and the documentation received from the supply activity.

C2.3.2.3. Shipment Documentation. The materiel for shipment will be delivered to the servicing transportation activity by the retail supply activity accompanied by a DD Form 1348-1A, Issue Release/Receipt Document, (IRRD). DLM 4000.25, Volume 2, Chapter 29 documents procedures for the use and generation of the IRRD.

C2.3.2.4. Follow-up Requests. The supply system will initiate DLMS 940R, Materiel Release Inquiry/Disposal Release Inquiry (DIC AF6/AFJ) message for follow-up requests. Based upon elapsed time from either the initial release of the Materiel Release Order/Disposal Release Order/Redistribution Order or the estimated shipping date from the Materiel Release Advice/Disposal Shipment Advice, the supply system will initiate the inquiry using normal follow-up procedures as documented in DLM 4000.25, Volume 2, Chapter 4. The only exceptions relate to multi-packs (see paragraph C2.3.6. below) and assemblages (e.g., medical (see paragraph C2.3.7. below)).

C2.3.2.5. Cancellation Requests. The supply system will initiate DLMS 940R, Materiel Release Cancellation/Disposal Release Cancellation (DIC AC6/ACJ) message for cancellation requests. DLM 4000.25, Volume 2, Chapter 4 prevails; the only exceptions relate to multi-packs (see paragraph C2.3.6. below) and assemblages (e.g., medical (see paragraph C2.3.7. below)).

C2.3.2.6. Shipment Status Messages

C2.3.2.6.1. Initial Shipment Status Message. When the retail supply activity receives the Materiel Release Confirmation for a multi-pack, the activity must associate it with all the document numbers that were contained in the initial Materiel Release Order, generate the required DLMS 856S, Shipment Advice (DIC AS_) shipment status transactions for the multipack, and transmit to DAAS for distribution per existing procedures and trading partner profiles. When the retail supply activity receives the Materiel Release Confirmation for an assemblage (e.g., medical), the activity will generate the required DLMS 856S Shipment Status transaction at the Assemblage Identification Number (AIN) level. For all Materiel Release Confirmations, the retail supply activity will insert the original distribution code assigned to the Materiel Release

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[3] *Refer to ADC 1164*

Order/Disposal Release Order/Redistribution Order in lieu of the special distribution code used to denote the retail transportation and supply interchange when generating the shipment status transactions.

C2.3.2.6.2. <u>Shipment Status Message Updates</u>. In the event a shipment does not get lifted as originally intended (e.g., shipment is left off the truck) and the retail supply activity receives an updated DLMS 945A, Materiel Release Confirmation message from the retail transportation activity, then the retail supply activity will generate an updated DLMS 856S, Shipment Status transaction to convey the changed transportation information. See DLM 4000.25, Volume 2, Chapter 5 for detailed procedures. Examples of changed transportation information would include transportation method code, standard carrier alpha code (SCAC), ship date, bill of lading information, and tracking information.

C2.3.2.6.3. <u>Unique Item Identification.</u>[4] Shipment Status for NSNs containing an IUID indicator Yes (Y), indicating that DoD IUID Supply Policy is required, must contain the UII and/or serial number for each item when available. Refer to DLM 4000.25 Volume 2, Chapter 5, Status Reporting; paragraph C5.1.3.5. contains specific shipment status requirements for IUID.

C2.3.3. <u>Servicing Transportation Activity</u>. This paragraph provides general procedures for servicing transportation activities following ***receipt of the materiel release order (MRO) from the retail supply systems and subsequent*** local delivery of items for shipment (received from retail supply).

C2.3.3.1. <u>Initial Transportation Account Code Validation</u>.[5] Following receipt of the MRO from the retail supply system, transportation will validate the transmitted transportation account code (TAC). In case of an invalid or missing TAC, the transportation system will generate a DLMS 945A (AE6), Materiel Release Advice transaction with Shipment Hold Code S, Invalid or Missing Transportation Account Code (TAC), and send it back to the retail supply system. This provides visibility for possible delays in processing a shipment due to an invalid or missing TAC and gives the supply activity the option to resend the DLMS 940R with the correct TAC. If the supply activity sends an updated MRO, the transportation activity will validate the TAC and append the MRO. Figure C2.F1 depicts the transaction account code validation process.

C2.3.3.***2***. <u>In-Check</u>. Upon local delivery of the item (from retail supply) to the transportation activity customer service area, transportation personnel will in-check the items as follows:

C2.3.3.***2***.1. Either scan the DD Form 1348-1A, IRRD using a handheld scanner or manually in-check the document numbers into the transportation system.

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[4] Refer to DLM 4000.25 Volume 2, Chapter 5, Status Reporting, and ADC 1030
[5] ***Refer to ADC 1206 for detailed procedures.***

C2.3.3.**2**.2. Generate DLMS 945A, Materiel Release Advice/Disposal Shipment Advice (DIC AE6/AEJ) in-check status message and send it to the supply activity electronically.

C2.3.3.**2**.3. When CMOS is the servicing transportation activity, the in-check status message will include the transportation in-checker identification code (three position numeric value) and the associated in-checker full name in the format of First Name Middle Initial Last Name, with no special characters (e.g., periods, commas) to separate the components of the full name. If there is no middle initial, then insert NMN (no middle name) in place of the middle initial. Optional contact information may include phone numbers (e.g., commercial, DSN, international, and fax) and electronic mail. If more than three types of contact information are required, repeat the X12 PER segment, not to exceed two repetitions.

C2.3.3.3. Transportation Account Code Validation on Shipping Documents. Verify that the TAC on the DD Form 1348-1A matches the TAC on the MRO. If the TAC on the DD Form 1348-1A is either missing or there is a mismatch, then coordinate with the supply activity. Upon receipt of a valid TAC from the supply activity, update historical records and shipping documentation to reflect the correct TAC citation. Figure C2.F1 depicts the transaction account code validation process.

C2.3.3.**4**. Hold Status. Subsequent to in-check and prior to materiel release confirmation, if the cargo is placed in transportation hold status, additional DLMS 945A, Materiel Release Advice/Disposal Shipment Advice (DIC AE6/AEJ) status messages will be sent by transportation to supply.

C2.3.3.**5**. Status/Follow-up Response. The transportation system will respond to a follow-up request using DLMS 945A, Materiel Release Advice/Disposal Shipment Advice (DIC AE6/AEJ) supply status message.

C2.3.3.**6**. Cancellation Response. The transportation system will generate a DLMS 945A, Materiel Release Advice/Disposal Shipment Advice (DIC AE6/AEJ) status message with applicable status code indicating acknowledgement of the cancellation requirements.

C2.3.3.**7**. Materiel Release Confirmation

C2.3.3.**7**.1. Initial Materiel Release Confirmation. After the shipment is processed and shipped, the transportation activity generates a DLMS 945A, Materiel Release Confirmation/Disposal Release Confirmation, and sends it to the supply activity, where the shipment status message will be generated and transmitted.

C2.3.3.**7**.2. Materiel Release Confirmation Changes/Updates. In the event a shipment does not get lifted as originally intended (e.g., shipment is left off the truck), the transportation activities that originate the DLMS 945A Materiel Release Confirmation will send an updated MRC transaction with all of the changed transportation information to the supply activity to enable the supply activity to prepare
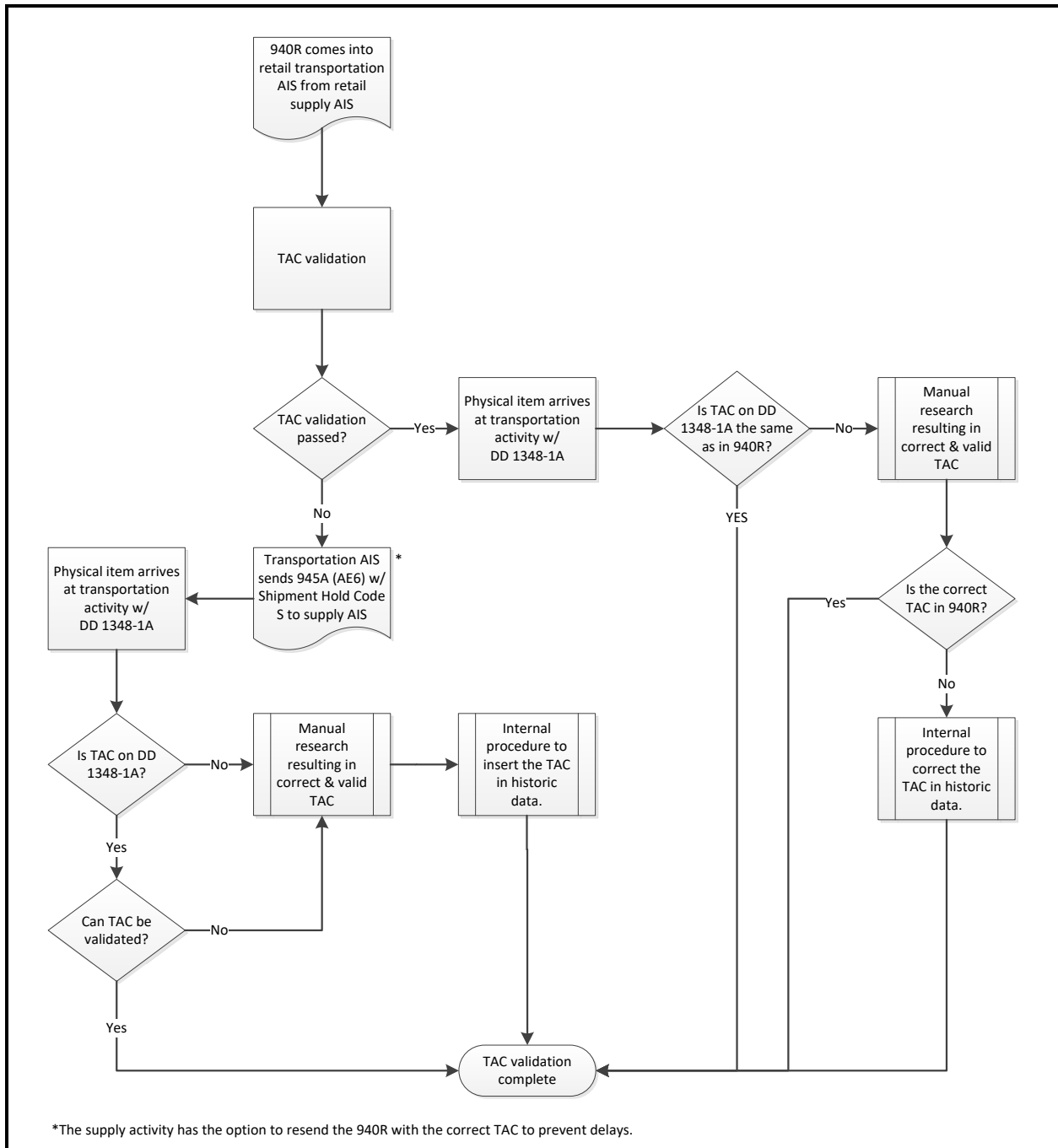
an updated DLMS 856A Shipping Status message. See DLM 4000.25 Volume 2, Chapter 4 for detailed procedures for preparation of the MRC change/update message. Examples of changed transportation information would include transportation method code, SCAC, ship date, bill of lading information, and tracking information.

   C2.3.3.**7**.3. <u>Item Unique Identification</u>. When the DLMS 940R contains IUID data content (e.g., UII and/or serial number), perpetuate the IUID content in the DLMS 945A Materiel Release Confirmation to clearly delineate which UIIs/serial numbers were shipped under a particular TCN. When a shipment contains IUID content and is shipped in multiple freight pieces, shippers are <u>NOT</u> authorized to execute the movement of the shipment using multiple freight piece procedures (e.g., citing the same TCN for all boxes). Those shipments must be "partialled" by using the 16th position of the TCN to uniquely identify each freight piece. A separate DLMS 945A MRC will be transmitted for each document number – partial TCN pair, identifying the contents of each freight piece, to include pRFID tag(s) and UII(s) and/or serial numbers.

   C2.3.3.**8**. <u>Transaction Information Copy</u>. For designated supply trading partners (currently limited to the SBSS–CMOS interface), an information copy (image) of the DLMS 945A, Materiel Release Advice will be used in support of Air Force PIC Fusion program data requirements. The routing of an additional information-only copy of the DLMS 945A, Materiel Release Advice transaction is authorized for forwarding PIC Fusion data needed for the Air Force UIT Registry. This is a specific authorized use with unique identifiers to flag the transaction as information only.

   C2.3.3.9. <u>***Transportation Account Code Validation Process Flow***</u>***. Figure C2.F1 depicts the transaction account code validation process.***

Figure C2.F1 – Transportation Account Code (TAC) Validation Process Flow

*The supply activity has the option to resend the 940R with the correct TAC to prevent delays.

C2.3.4. <u>DAAS Processing</u>. DAAS will route transactions between designated supply and transportation systems based on mutual agreements between the trading partners. This includes both DLMS compliant and MILSTRIP legacy transaction compliant systems.

C2.3.4.1. ***Transportation*** System***s***. The Cargo Movement Operations System (CMOS) ***and Distribution Standard System (DSS) are*** capable of receiving

DLMS compliant DLMS 940R, Materiel Release and transmitting DLMS 945A, Materiel Release Advice messages.

C2.3.4.2. <u>Supply Systems</u>. Depending on whether the supply system is DLMS compliant, DAAS will process the transactions as follows:

C2.3.4.2.1. <u>DLMS Compliant Systems</u>. If the supply system is DLMS compliant, DAAS will not transform the transactions to/from MILSTRIP legacy transactions, based on established trading partner profiles held by DAAS. If the supply system is DLMS compliant and is exchanging information about multi-packs, the W0507 data element in the DLMS 940R, Materiel Release and W0612 data element in the DLMS 945A, Materiel Release Advice will carry Action Code CN. For assemblages (e.g., medical), the W0507 data element in the DLMS 940R, Materiel Release and W0612 data element in the DLMS 945A, Materiel Release Advice will carry Action Code ME. For interchanges other than multi-packs and assemblages, the W0507 data element in the DLMS 940R, Materiel Release and the W06112 data element in the DLMS 945A, Materiel Release Advice will carry Action Code A6. Additionally, DLMS 940R and DLMS 945A will have Distribution Code 111. These action codes and Distribution Code 111 will denote the applicability of special procedures authorized under this Chapter and authorize the use of selected EDI segments and loops to denote contents of multi-packs and assemblages.

C2.3.4.2.2. <u>MILSTRIP Legacy Transaction Compliant Systems</u>. If the supply system is MILSTRIP legacy transaction compliant, Distribution Code 111 will be identified to denote the applicability of special procedures authorized under this Chapter. Normally DAAS will transform the transactions to/from MILSTRIP legacy formats based on existing maps, except when there is a Distribution Code 111 in DLMS 945A, Materiel Release Advice/Disposal Shipment Advice messages from the transportation system. Distribution Code 111 authorizes the following actions: use of DIC AE6/AEJ for unsolicited supply status responses by the transportation system; use of transportation hold and delay codes in DIC AE6/AEJ (rp51) by the transportation system in addition to its normal usage in the Materiel Release Confirmation; and use of DIC AE6/AEJ in lieu of DIC AG6/AGJ as a cancellation response by transportation system to facilitate usage of the supply status and transportation hold and delay codes.

C2.3.5. <u>Retail Transportation and Supply Interchange</u>. Figure C2.F1 shows the standard transactions that will occur between retail supply and the transportation activity for the business processes covered in this chapter.

Figure C2.F*2* – Retail Transportation and Supply Data Interchange
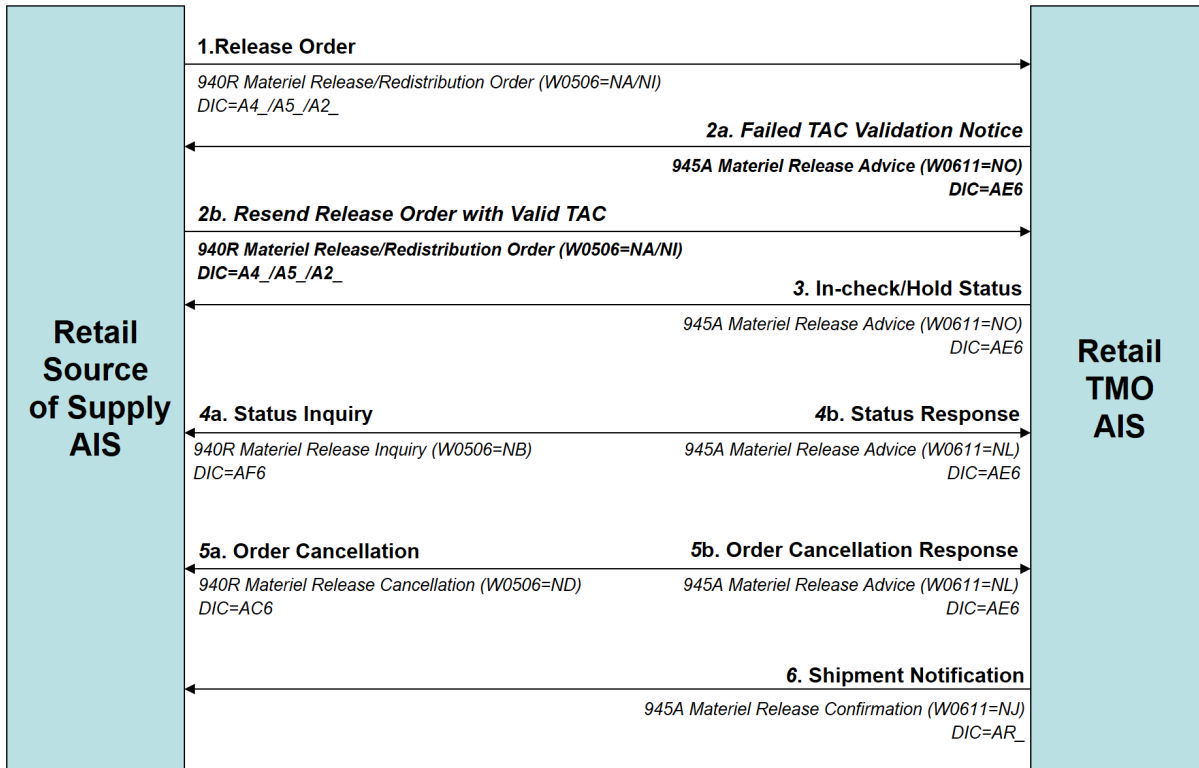
Note: This process also applies to disposal transactions
with their applicable DLMS qualifiers and DIC codes

C2.3.5.1. <u>DLMS and MILSTRIP Legacy Transaction Designations</u>. To denote a transaction is in support of the Retail Transportation and Supply Receipt and Acknowledgement Interchange, it will contain the designated action code and/or distribution code as delineated below:

C2.3.5.1.1. <u>Action Code (Other than Multi-packs and Assemblages (e.g., Medical))</u>

C2.3.5.1.1.1. DLMS 940R (W0507) = A6

C2.3.5.1.1.2. DLMS 945A (W0612) = A6

C2.3.5.1.2. <u>Action Code (Multi-Packs and Assemblages (e.g., Medical))</u>

C2.3.5.1.2.1. <u>Multi-Packs</u>. DLMS 940R (W0507) = CN and DLMS 945A (W0612) = CN

C2.3.5.1.2.2. Assemblages. DLMS 940R (W0507) = ME and DLMS 945A (W0612) = ME

C2.3.5.1.3. Distribution Code

C2.3.5.1.3.1. DLMS 940R and DLMS 945A LQ01 = AK and LQ02 = 111

C2.3.5.1.3.2. MILSTRIP legacy transaction distribution code = 111.

C2.3.5.2. Pre-Positioned transactions from Supply. For designated supply trading partners, DAAS will transmit copies of DLMS 940R, Materiel Release Order/Disposal Release Order/Redistribution Order (DICs A2_/A5_/A5J/A4_) transactions to the designated transportation system to be pre-positioned awaiting actual arrival of cargo from the supply warehouse. The applicable transactions can be readily identified by use of Distribution Code = 111. Additionally, the action code in DLMS 940R (W0507) and DLMS 945A (W0612) will be either A6, CN, or ME.

C2.3.5.3. Transportation Account Code Validation.[6] Following receipt of the DLMS 940R MRO transaction from the supply system, transportation will perform a validation of the transmitted TAC. If the provided TAC proves to be invalid or is missing, the transportation system generates a DLMS 945A (AE6), Materiel Release Advice transaction with Shipment Hold Code S, Invalid or Missing TAC, and sends it back to the supply system. The supply activity then has the option to resend the DLMS 940R MRO with the correct TAC to prevent delays in processing the shipment for release.

C2.3.5.3.1. If the supply activity sends an updated MRO, the transportation activity will validate the TAC and append the MRO.

C2.3.5.3.2. If the supply activity does not send an updated MRO, the transportation activity will validate the TAC following in-check of the materiel by comparing the DD 1348-1A to the MRO. If there is a mismatch, the transportation activity will coordinate with the supply activity to identify a valid TAC, at which time the transportation activity will update its records and process the shipment for release.

C2.3.5.*4*. Receipt/In-Check of Cargo by Transportation. Upon physical receipt/in-check of cargo by transportation, the transportation system will self-initiate a DLMS 945A, Materiel Release Advice/Disposal Shipment Advice (DIC AE6/AEJ) supply status response message to notify the supply activity via DAAS that the property has been received. Since there was no initial DLMS 940R, Materiel Release Inquiry/Disposal Release Inquiry (DIC AF6/AFJ) follow-up request prompting the status message, the American National Standards Institute, Accredited Standards Committee X12 (X12) Code NO will be inserted in the W0611 data element to denote that this is being used by transportation to report cargo processing status prior to materiel release confirmation, and

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[6] Refer to ADC 1206 for detailed procedures.

X12 code A6 will be inserted in the W0612 data element to denote that the supply status response is part of the Retail Transportation and Supply Receipt and Acknowledgement Interchange. To facilitate mapping of the DLMS 945A, Materiel Release Inquiry/Disposal Release Inquiry to a MILSTRIP legacy DIC AE6/AEJ transaction, the Distribution Code will carry a value of 111 to inform DAAS of the special routing and generation of an unsolicited supply status message and to authorize the use of the transportation hold and delay code in lieu of a signal code for a supply status response, in addition to the Materiel Release Confirmation where it normally is reported. If the materiel is later placed into a transportation hold status, such as awaiting air clearance, a self-initiated DLMS 945A, Materiel Release Advice/Disposal Shipment Advice supply status message will be generated for every reportable status change prior to shipment. The W06, LQ, and G62 segment values in the DLMS 945A, Materiel Release Advice/Disposal Shipment Advice for this step are as follows:

      C2.3.5.*4*.1. <u>In-Check Reporting</u>. To report in-check of cargo, W0611 = NO and W0612 = A6; LQ01 = AK and LQ02 = 111; LQ01 = 81 and LQ02 = BA; G6201 = 17 and G6202 = estimated shipping date in CCYYMMDD format.

      C2.3.5.*4*.2. <u>Transportation Hold and Delay Reporting</u>. To report a transportation hold and delay status, W0611 = NO and W0612 = A6; LQ01 = AK and LQ02 = 111; LQ01 = BC and LQ02 = authorized code values from ***DLM 4000.25, Volume 2, Appendix 7.17, Shipment Hold Codes;*** G6201 = 17 and G6202 = estimated shipping date in CCYYMMDD format.

      C2.3.5.*5*. <u>Status Inquiry and Response</u>. The supply system will initiate a DLMS 940R, Materiel Release Inquiry/Disposal Release Inquiry (DIC AF6/AFJ) message for follow-up requests to inquire on the status of a release order turned over to transportation for shipping; the W0507 data element will carry an A6 to denote that the follow-up request is part of the Retail Transportation and Supply Receipt and Acknowledgement Interchange. Based upon elapsed time from either the initial release of the Materiel Release Order/Disposal Release Order/Redistribution Order or the estimated shipping date from the Materiel Release Advice/Disposal Shipment Advice, the supply system will initiate the inquiry using normal follow-up procedures, with communications via DAAS. The transportation system will respond to a follow-up request with a DLMS 945A, Materiel Release Advice/Disposal Shipment Advice supply status response message with an A6 in the W0612 data element and Distribution Code 111 to denote that the supply status response is part of the Retail Transportation and Supply Receipt and Acknowledgement Interchange. Distribution Code 111 also authorizes the use of the transportation hold and delay code in lieu of the signal code, as applicable for a supply status response, in addition to the Materiel Release Confirmation where it normally is reported. The W06, LQ, and G62 segment values in the DLMS 945A, Materiel Release Advice/Disposal Shipment Advice for this step are as follows:

      C2.3.5.*5*.1. <u>Materiel Release Order</u>

         C2.3.5.*5*.1.1. W0611 = NL

C2.3.5.**5**.1.2. W0612 = A6

C2.3.5.**5**.1.3. LQ01 = AK and LQ02 = 111

C2.3.5.**5**.2. <u>Disposal Release Order</u>

C2.3.5.**5**.2.1. W0611 = NQ

C2.3.5.**5**.2.2. W0612 = A6

C2.3.5.**5**.2.3. LQ01 = AK and LQ02 = 111.

C2.3.5.**5**.3. To report the applicable supply status code, LQ01 = 81 and LQ02 = authorized code values from DLM 4000.25-1, Appendix 2.16. Typical status codes that may be reported by transportation are BA to denote the item is being processed for release and shipment (in-checked) or BF to denote that transportation has no record of the document for the follow-up request, or BX to indicate that pre-positioned data on the item from shipment was received from supply but the item has not yet arrived at the transportation activity for in-check. When providing a BA status, G6201 = 17 and G6202 = estimated shipping date in CCYYMMDD format.

C2.3.5.**5**.4. To report a transportation hold and delay status, LQ01 = AK and LQ02 = 111; LQ01 = BC and LQ02 = authorized code values ***from DLM 4000.25, Volume 2, Appendix 7.17, Shipment Hold Codes;*** G6201 = 17 and G6202 = estimated shipping date in CCYYMMDD format.

C2.3.5.**6**. <u>Cancellation Requests and Responses</u>. The supply system will initiate a DLMS 940R, Materiel Release Cancellation/Disposal Release Cancellation (DIC AC6/ACJ) message when it wants to issue a cancellation request to the transportation system for release orders that have already been turned over to transportation for shipping; the W0507 data element will carry an A6 to denote that the cancellation request is part of the Retail Transportation and Supply Receipt and Acknowledgement Interchange. Normal cancellation request procedures will apply. The transportation system will respond to the cancellation request with a DLMS 945A, Materiel Release Advice/Disposal Shipment Advice message, with an A6 in the W0612 data element. The distribution code will carry a value of 111 to inform DAAS of the use of the supply status response (MILSTRIP legacy DIC AE6/AEJ format) as part of the Retail Transportation and Supply Interchange. In addition to Distribution Code 111 identifying the retail interface, it also authorizes the use of supply status codes, as a response to the cancellation request. DLMS 945A, Materiel Release Advice/Disposal Shipment Advice (W0611), (W0612), and LQ01/02 data element values for this step are as follows:

C2.3.5.**6**.1. <u>Materiel Release Order</u>

C2.3.5.**6**.1.1. W0611 = NL

C2.3.5.**6**.1.2. W0612 = A6

C2.3.5.**6**.1.3. LQ01 = AK and LQ02 = 111

C2.3.5.**6**.2. <u>Disposal Release Order</u>

C2.3.5.**6**.2.1. W0611 = NQ

C2.3.5.**6**.2.2. W0612 = A6

C2.3.5.**6**.2.3. LQ01 = AK and LQ02 = 111.

C2.3.5.**6**.3. To report the applicable supply status code associated with the cancellation response, LQ01 = 81 and LQ02 = authorized code values from DLM 4000.25, Volume 2, Appendix 7.16. Typical status codes that may be reported by transportation are BF to denote that transportation has no record of the document for the cancellation request, BQ to denote that the cancellation request is confirmed and the release order is no longer being processed for shipment, and B8 to denote that the quantity requested for cancellation cannot be processed because the item has already been shipped.

C2.3.5.**7**. <u>Shipment Notification (Materiel Release Confirmation)</u>. Once the materiel is shipped, the transportation system will initiate a DLMS 945A, Materiel Release Confirmation/Disposal Release Confirmation (DIC AR_) message to notify the supply system via DAAS that the materiel has been shipped. The W0612 data element will contain an A6 and Distribution Code 111. Upon receipt of a DLMS 945A, Materiel Release Confirmation/Disposal Release Confirmation (DIC AR_), the supply system will transmit, via DAAS, the required DLMS 856S, Shipment Advice (DIC AS_) messages to the designated recipients following normal supply business rules. Note: the retail supply system will apply the original distribution code in lieu of the specially assigned code value of 111 in the shipment status messages. The W06, LQ, and G62 segment values in the DLMS 945A, Materiel Release Confirmation/Disposal Release Confirmation for this step are as follows:

C2.3.5.**7**.1. <u>Materiel Release Order</u>

C2.3.5.**7**.1.1. W0611 = NJ

C2.3.5.**7**.1.2. W0612 = A6

C2.3.5.**7**.1.3. LQ01 = AK and LQ02 = 111

C2.3.5.**7**.2. <u>Disposal Release Order</u>

C2.3.5.**7**.2.1. W0611 = NM

C2.3.5.**7**.2.2. W0612 = A6

C2.3.5.**7**.2.3. LQ01 = AK and LQ02 = 111.

C2.3.5.**7**.3. Partial Transportation Control Numbers. If the shipment is partialed into multiple TCNs (e.g., alpha character other than X in record position 16), the W12 sub-loop will be repeated for each related partial TCN (e.g., record positions 1-15 are identical) with the TCN and the document number for the shipment identified in the N9/0040 segment.

C2.3.6. Multi-Pack Processing Procedures. This paragraph provides procedures for use when processing multi-packs.

C2.3.6.1. DLMS Compliant Supply Systems

C2.3.6.1.1. DLMS 940R, Materiel Release. DLMS 940R will be used as a multi-line document transaction to identify the lead document number for a multi-pack and the document numbers contained within the multi-pack. The authorization to do this will be carried in the W0507/0200 data element with a value CN. For materiel and disposal release orders and redistribution orders, the N9/0900 segment will contain the lead document number assigned to the multi-pack, from which the transportation control number will be derived/assigned. The W01 Loop (Loop ID 0310) will be repeated for each document number associated with the multi-pack including the lead document number identified in N9/0900. Follow-up requests will only be at the lead document number level, with it identified in the N9/0400 segment in the W01 loop; no looping of the W01 is required; however, the following values will be used to satisfy X12 syntax compliance: W0101 = 1, W0102 = MX, W0104 = ZZ, and W0105 = MIXED. Cancellation requests will contain the single line Materiel Release Order document number, and the transportation system will recognize that the document number being used may not be the lead document number, but may still be part of a multi-pack. Cancellation will be attempted for all items/quantities for which a DD Form 1348-1A has been released and there is no record of transportation release, unless the dollar value of a single line packed in a consolidated shipment unit is less than $200, per DLM 4000.25, Volume 2, Chapter 4.

C2.3.6.1.2. DLMS 945A, Materiel Release Advice. DLMS 945A will be used as a multi-line document transaction to identify the transportation control number (and partial TCNs) and lead document number associated to it. The authorization to do this will be carried in the W0507/0200 data element with a value CN. Status responses will only be at the lead document number level, with it identified in the W12 loop in the N9/0040 segment and the W1207 data element will carry a ZZ with the word "MIXED" in the W1208 data element to denote a multi-pack with mixed commodities. For cancellation responses, the response will be at the single line document number level. For materiel release confirmation when the multi-pack is not partialed into multiple TCNs, the transaction will be processed as a single line transaction with the TCN and the lead document number identified in the W12 sub-loop, and the W1207 data element will carry a ZZ with the word "MIXED" in the W1208 data element. If the multi-pack is partialed into multiple TCNs (e.g., alpha character other than X in record position 16), the W12 sub-loop will be repeated for each related partial TCN (e.g. record positions 1-15 are identical) with the TCN and the lead document number for the multi-pack identified in the N9/0040 segment and the W1207 data element will carry a ZZ with the word "MIXED" in the

W1208 data element. When the retail supply activity receives the Materiel Release Confirmation, the activity will associate it with all the document numbers that were contained in the initial Materiel Release Order, generate the required DLMS 856S, Shipment Advice shipment status transactions for the multi-pack, and transmit to DAAS for distribution per existing procedures and trading partner profiles.

C2.3.6.2. <u>MILSTRIP Legacy Compliant Supply Systems</u>

C2.3.6.2.1. <u>DLMS 940R, Materiel Release</u>. DLMS 940R will be transformed by DAAS from the MILSTRIP legacy transaction release order into a single line item order, as it is normally done today. The transportation system will in-check the multi-pack by either scanning or manually loading the lead document number; the transportation operator will then have to read the individual DD Form 1348-1A contained within the pack list to in-check the items individually and associate them to the lead document number. The TCN will be derived from the lead document number. Follow-up and cancellation requests will contain the single line Materiel Release Order document number. For cancellations, the transportation system will recognize that the document number used may not be the lead document number, but may still be part of a multi-pack. Cancellation will be attempted for all items/quantities for which a DD Form 1348-1A has been released and there is no record of transportation release, unless the dollar value of a single line packed in a consolidated shipment unit is less than $200, per DLM 4000.25, Volume 2, Chapter 4.

C2.3.6.2.2. <u>DLMS 945A, Materiel Release Advice</u>. For status and cancellation responses, the message will be originated by the transportation system at the single line item transaction, comparable to the single line item DLMS 940R, Materiel Release received from the supply system; it will be transformed by DAAS into a single line MILSTRIP legacy DIC AE6/AEJ transaction at the Materiel Release Order document number level. For materiel release confirmations, the transportation system will originate the transaction at the single line item level, comparable to the single line item DLMS 940R, Materiel Release received from the retail supply system; DAAS will transform the message into individual MILSTRIP legacy DIC AR_ transactions with the appropriate TCN (or partial TCN) mapped to the document numbers cited in the N9/0040 segment within the W12 sub-loop.

C2.3.7. <u>Assemblage (e.g., Medical) Processing Procedures</u>. This paragraph provides procedures for assemblage processing and the associated transactions between supply and transportation for shipment requirements. Refer to Volume 2, Chapter 20, Medical Unit Assembly Program, for related procedures used by the medical supply system to construct assemblages.

C2.3.7.1. <u>DLMS Compliant Supply Systems</u>

C2.3.7.1.1. <u>DLMS 940R, Materiel Release</u>. The DLMS 940R will be used as a multi-line document transaction to identify the Assemblage Identification Number (AIN) for an assemblage and the internal document numbers contained within the assemblage. The authorization to do this will be carried in the W0507/0200 data element

with a value ME. The N9/0900 segment will contain the AIN assigned to the assemblage, from which the transportation control number will be derived/assigned. The W01 (Loop ID 0310) loop will be repeated for each internal document number associated with the assemblage, with the information associated with the AIN being the first loop. Follow-up and cancellation requests will be only at the AIN level (no looping of the W01 is required); however, the following values will be used to satisfy X12 syntax compliance: W0101 = 1, W0102 = MX, W0104 = ZZ, and W0105 = "MIXED". The lead document number will be in the W01 loop in the N9/0400 segment.

C2.3.7.1.2. <u>DLMS 945A, Materiel Release Advice</u>. The DLMS 945A will be used as a multi-line document transaction to identify the transportation control number (and partial TCNs) and AIN associated to it. The authorization to do this will be carried in the W0612/0200 data element with a value ME. Status and cancellation responses will only be at the lead AIN level, with it identified in the W12 loop in the N9/0040 segment, and the W1207 data element will carry a ZZ with the word "MIXED" in the W1208 data element to denote an assemblage with mixed commodities; no looping of the W12 is required. For materiel release confirmation when the assemblage is not partialed into multiple TCNs, the transaction will be processed as a single line transaction with the TCN and the AIN identified in the W12 sub-loop, and the W1207 data element will carry a ZZ with the word "MIXED" in the W1208 data element. If the assemblage is partialed into multiple TCNs (e.g., alpha character other than X in record position 16), the W12 sub-loop will be repeated for each related partial TCN (e.g. record positions 1-15 are identical) with the TCN and the AIN for the assemblage identified in the N9/0040 segment, and the W1207 data element will carry a ZZ with the word "MIXED" in the W1208 data element. When the retail supply activity receives the Materiel Release Confirmation, the supply activity will generate the required DLMS 856S, Shipment Advice shipment status transaction at the AIN level for the assemblage.

C2.3.7.2. <u>MILSTRIP Legacy Compliant Supply Systems</u>

C2.3.7.2.1. <u>DLMS 940R, Materiel Release</u>. DLMS 940R will be transformed by DAAS from the MILSTRIP legacy release order into a single line item for the entire assemblage as a single unit. The transportation system will in-check the assemblage by scanning or manually loading the AIN and process the assemblage as a single shipment unit. The TCN will be derived from the AIN. Follow-up and cancellation requests must only be at AIN level; no looping of the W01 is authorized.

C2.3.7.2.2. <u>DLMS 945A, Materiel Release Advice</u>. For status and cancellation responses, the message will be originated by the transportation system at the single line item transaction, comparable to the single line item DLMS 940R Materiel Release received from the supply system; it will be transformed by DAAS into a single line MILSTRIP legacy DIC AE6/AEJ transaction at the AIN level. For materiel release confirmations, the transportation system will originate the transaction at the single line item level, comparable to the single line item DLMS 940R received from the retail supply system; DAAS will transform the message into individual MILSTRIP legacy equivalent DIC AR_ transactions with the appropriate TCN (or partial TCN) mapped to the AIN cited in the N9/0040 segment within the W12 sub-loop.

C3. CHAPTER 3

PASSIVE RADIO FREQUENCY IDENTIFICATION TRANSACTIONS

C3.1. <u>GENERAL</u>. This chapter provides procedures for reader registration and visibility processing supporting DoD Radio Frequency Identification (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 these requirements are provided in this chapter. DoD policy regarding this pRFID implementation is located on the DoD Automatic Identification Technology (AIT) Web site.

C3.2. <u>APPLICABILITY AND SCOPE</u>. This guidance is applicable to DoD pRFID 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. <u>PROCESS OVERVIEW</u>

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

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 the pRFID tag and Reader identification; the data elements for the Visibility Transaction are defined in Section C3.7. The purpose of this process is to associate the tag identification and location with previously transmitted logistics transactions containing pRFID, e.g., DLMS 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 F (Follow-Up), and DAAS shall transmit a Visibility Response Transaction containing the data elements defined in Section C3.9.

C3.3.4. There are three transactions[1] to support this process; one is used for sending Reader Registration data, a second for sending Visibility data, and a third for

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[1] The schema files (XSD) can be viewed on the DLMS IC page.

DAAS to respond to inquiries for unmatched tag reads. The transaction details are 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 identifying their 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 upon how the site chose to register its Readers.

C3.4.2. The registering site shall provide to DAAS the location registration data defined in Table C3.T1. via the site's middleware application (e.g., Savi Site Manager, Globe Ranger) or via the World Wide Web (to be determined). DAAS shall establish the Reader in a location table, assign a location control number (LCN), and send the Reader Registration Transaction back to the originator with the LCN. The LCN shall be used on every subsequent transaction sent to DAAS from the field.

C3.4.3. After a site has successfully registered a Reader's location, it is responsible for maintaining current 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 LCN, nor can it be updated.

C3.4.4 . Any time a Reader or group of Readers is updated, moved, or retired, the registering site shall send the update Reader Registration Transaction to DAAS using the original LCN 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, a new Reader Registration Transaction shall be transmitted to DAAS with the new registration data, at which DAAS will assign a new LCN and send a Reader Registration Transaction back to the originator with the new LCN.

C3.4.5. Registration actions that 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.

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	1	16	From site to DAAS: - Blank for initial registration request - LCN for update requests From DAAS to site: - LCN
Reader Registration Action	Describes purpose of registration action or DAAS response to the registration action	M	1	2	From Site to DAAS: E – establish reader U – update reader info D – delete reader From DAAS to Site: 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
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

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

Table C3.T1. Passive RFID Reader Registration Data Requirements

Element	Description	Man/ Opt/ Con[2]	Mini- mum Lgth	Maxi- mum Lgth	Values
Type of Location	Code to identify type of location	M	1	1	D = DoDAAC V = Cage Code A = Aerial Port W = Water Port
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.

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[3] Enter "CRIF" for undisclosed locations.

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 materiel from the shipping entity. "Undelivered" is defined as during normal operating hours and at no fault of the shipping entity, a shipment cannot 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 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 LCN 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. <u>VISIBILITY TRANSACTION DATA REQUIREMENTS</u>. Passive RFID Visibility Transactions shall contain the data requirements identified in Table C3.T2.

Table C3.T2. <u>Passive RFID Visibility Transaction Data Requirements</u>

Element	Description	Man/ Opt/ Con	Mini- mum Lgth	Maxi- mum Lgth	Values
Passive RFID Tag	Tag ID Value	M	24	50	
RFID Location Control No.	DAAS assigned during the registration process	M	1	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

Table C3.T2. Passive RFID Visibility Transaction Data Requirements

Element	Description	Man/ Opt/ Con	Mini- mum Lgth	Maxi- mum Lgth	Values
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 DLMS 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 Section C3.9.

C3.8.3. If DAAS does not have the information, DAAS shall transmit to the sender a Visibility Response Transaction with N in the Reader Function Code field, indicating that the corresponding DLMS 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	1	16	
Tag Read Date Time	Date/Time reported action took place	M	12	12	ZULU CCYYMMDDHHmm (example: 200612051459)

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

Element	Description	Man/Opt/Con	Mini-mum Lgth	Maxi-mum Lgth	Values
Reader Function Code	Describes process associated with this Reader	M	1	1	From DAAS to Site; 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	
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	National 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 the Reader Registration Transaction and the pRFID 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 seven 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 summarizes the general transaction process flow between a pRFID system and DAAS.

Figure C3.F1. <u>pRFID Data Flow (Between Site and DAAS)</u>
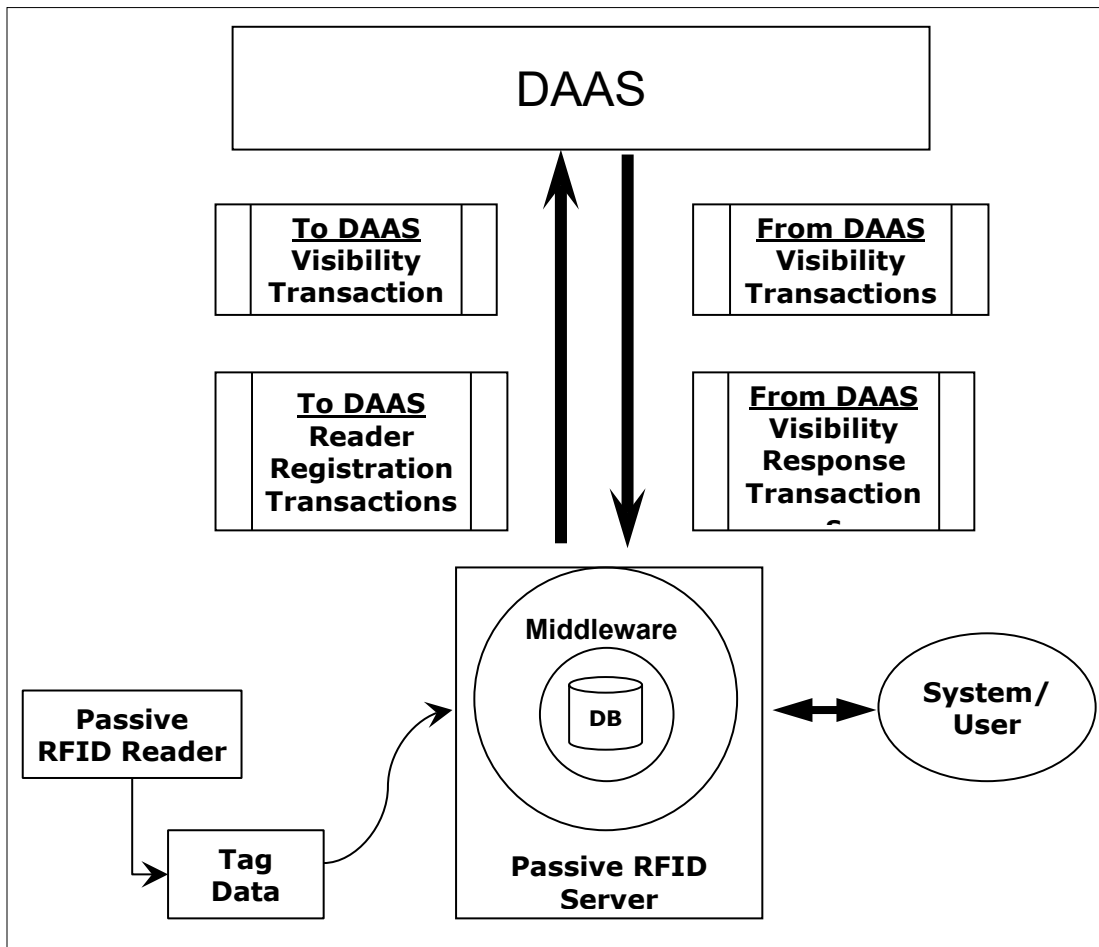
C3.11. <u>PASSIVE RFID AND SHIPMENT STATUS</u>

C3.11.1. <u>DAAS "L Table"</u>. All pRFID readers are required to be registered in DAAS. This is accomplished through use of the standard XML Reader Registration transaction, in which a unique LCN is assigned to the reader and its information is stored in the DAAS "L Table".

C3.11.2. <u>DAAS "R Table"</u>. When a shipment of DoD stocked materiel has pRFID tags applied to it, the association of the pRFID tag to a particular document number is identified in the DLMS 856S. For Materiel Returns Program, retrograde, and directed

returns with pRFID, the association of the pRFID tag to a particular document number is identified in the DLMS 856R. In addition to these transactions being routed under normal MILSTRIP business rules, a copy is stored in the DAAS "R Table" as extended shipment data.

C3.11.3. <u>DAAS "V Table"</u>. When the pRFID tag is subsequently read by a registered Reader, the standard XML Visibility Transaction is transmitted to DAAS to identify the LCN and the pRFID tag number that was read; this data is subsequently stored in the "V Table".

C3.11.4. The fusion of the data in the "L", "R", and "V" tables enables enterprise visibility systems (e.g., Asset Visibility and WebVLIPS) to provide in-transit visibility in response to queries by associating the pRFID tag read to an LCN and a particular document number and/or transportation control number.

C3.11.5. Customer supply receiving business processes can be triggered by the pRFID tag read, by fusing the pRFID tag number with the matching DLMS 856S or DLMS 856R.

C3.11.6. This process works well for stocked shipments and shipments moving through a DLA Containerization and Consolidation Point (CCP). However, the process delineated above has a gap when transportation offices are trans-shipping/cross-docking shipments for local delivery manifesting to on-base customers; deliveries to Materiel Processing Centers (MPC); outbound MILSTRIP shipments on behalf of on-base customers; re-warehousing actions between distribution depots; and outbound non-MILSTRIP shipments to off-base customers. For local delivery manifested shipments, deliveries to MPC, and outbound MILSTRIP shipments on behalf of on-base customers, the ICP may already have sent a shipment status message; however, the pRFID tag information and updated transportation data may be absent from the message. For re-warehousing actions and outbound non-MILSTRIP shipments, normally there is no supply shipment status message; therefore, the pRFID tag and transportation data are not transmitted to the receiving activity to facilitate use of pRFID tagging to trigger the receipt take-up process. For requirements when transportation offices are trans-shipping/cross-docking shipments, other shipment status reporting procedures are followed. These scenarios include local delivery manifesting to on-base customers; deliveries to MPC; outbound MILSTRIP shipments on behalf of on-base customers; re-warehousing actions between distribution depots; and outbound non-MILSTRIP shipments to off-base customers.

C3.11.6.1. For local delivery manifested shipments, deliveries to MPC, and outbound MILSTRIP shipments for on-base Customers, the DLMS 856S will need to use the transaction status reason code (BSN07 = "091" Trans-ship/Cross-dock Shipment Status (non-CCP)) to denote that the shipment status is being provided by a location performing trans-shipping/cross-docking subsequent to the original shipment. The RIC From will be the RIC of the activity executing the local delivery manifest. The remaining data elements for a shipment status message will be ascertained from the pack list/shipping documentation accompanying the shipment. If the shipment already

has a pRFID tag on it, no additional DLMS 856S is required; the existing pRFID tag will just need to be read and an XML Visibility Transaction sent to DAAS recording the tag read event. If there is no document number on either the inbound data or on the pack list/shipping documentation, then do not generate the DLMS 856S for conveying the pRFID tag. This is to preclude a data mismatch with the original DLMS 856S transmitted by the ICP, which will have a document number.

C3.11.6.2. For re-warehousing actions/transshipments between Distribution Depots in support of 'Home' Industrial Activity site and 'Forward Support' Industrial Activity site materiel requirements, a normal DLMS 856S should be generated and transmitted to DAAS. This transaction should carry the normal shipment status message data along with the pRFID tag identification numbers and any extended transportation data (e.g., bill of lading number, commercial carrier tracking numbers). Since there will never be a Materiel Receipt Acknowledgement (MRA) for these re-warehousing actions/transshipments between the Home and Forward Industrial Activities, a status reason code (BSN07="048" Industrial Activity Re-Warehousing/Trans-ship Shipment Status) shall be included so that DAAS can flag these DLMS 856S instances and prevent them from triggering the MRA Report.

C3.11.6.3. For Outbound Non-MILSTRIP shipments documented on a DD1149, a DLMS 856S will be created by the shipping activity. See the DLMS Manual, DLM 4000.25, Volume 2, Chapter 5, Status Reporting, Table C5.T.1. for the minimum data elements that should be included in the shipment status message; sources of the data are the DD1149 and pRFID tag information.

C4. CHAPTER 4

TRANSPORTATION REFERENCE TABLES
FOR DLMS TRANSACTIONS

C4.1. <u>GENERAL</u>. This chapter documents procedures for the use and maintenance of transportation reference tables used in Defense Logistics Management Standard (DLMS) Supply transactions. The USTRANSCOM Reference Data Management (TRDM) is the authorized data repository source for transportation reference tables. The Logistics Data Repository Management System (LOGDRMS) maintains a list of authorized DLMS Logistics Qualifiers that are associated to selected TRDM reference tables. To ensure synchronicity and ease of access to the code lists, this chapter outlines the transportation reference tables to be accessed in TRDM via LOGDRMS and documents the change management process for these tables.

C4.2. <u>APPLICABILITY AND SCOPE</u>

   C4.2.1. This guidance is applicable to DLMS Supply transactions that use certain transportation reference table information.

   C4.2.2. See Table C4.T1 for the list of the applicable qualifiers and DLMS Supplement number references.

Table C4.T1. <u>Transportation Reference Tables and DLMS Supply Transactions</u>

Qualifier	LOGDRMS Table Name (DLMS Logistics Qualifier Name)	DLMS Supplement Uses
33	Air Commodity and Special Handling Code	856N, 650A
34	Water Commodity and Special Handling Code	856N, 650A
35	Air Dimension Code	856N
36	Air Terminal Identifier Code	810L, 856S, 945A
37	Water Terminal Identifier Code	810L, 856S, 945A
38	Consolidation and Containerization Point Code	856S, 945A
*9	Transportation Method/Type Code Conversion Guide	180M, 527R, 810L, 856ASN, 856N, 856R, 856S, 940R, 945A.
40	Type Pack Code	856N
*A	Type of Pack Conversion Guide	None
42	Estimated Time of Arrival Code	527R
45	Standard Carrier Alpha Code (SCAC)	842P, 856, 856S, 940R, 945A
BD	Transportation Priority Code	511M, 511R, 856N, 856S, 869F, 870M, 940R

C4.3. <u>PROCESS OVERVIEW</u>. The DLMS logistics qualifier codes in Table C4.T1 are used in logistics DLMS transactions to identify transportation related information.

C4.3.1. LOGDRMS will maintain a list of authorized logistics qualifier codes associated with TRDM transportation reference tables. The metadata in LOGDRMS will define the DLMS data element name, the TRDM table name as the alias, a definition along with any special business rules associated with the construct/use of the table, and the TRDM URL and table name containing the list of authorized code values.

C4.3.2. LOGDRMS will maintain the Transportation Method/Type Code and Type of Pack Conversion Guides, both metadata as defined in C4.3.1. and the code lists.

C4.3.3. TRDM will maintain the transportation reference tables and a website that is accessible by users from the logistics domain.

C4.4. <u>CROSS REFERENCE OF LOGDRMS AND TRDM TABLE NAMES</u>

C4.4.1. Table C4.T2 establishes a cross reference of the LOGDRMS logistics qualifiers and table names to the TRDM table names.

Table C4.T2. <u>New TRDM Transportation Reference Table Names</u>

Qualifier	DLMS Qualifier Title (ATR)	TRDM Table Name(s)
33	Air Commodity and Special Handling Code	Air-Commodity Air-Special-Handling Mail-Air-Special-Handling Air-Commodity-Handling
34	Water Commodity and Special Handling Code	Water-Commodity Water-Type-Cargo Water-Special-Handling
35	Air Dimension Code	Shipment-Unit-Piece Air Dimension Code
36	Air Terminal Identifier Code	Aerial-Port
37	Water Terminal Identifier Code	Water-Port
38	Consolidation and Containerization Point Code	Consolidation-Containerization-Point
*9	Transportation Method/Type Code Conversion Guide	Transportation-Method
40	Type Pack Code	Type-Pack
*A	Type of Pack Conversion Guide	Type-Pack
42	Estimated Time of Arrival Code	Estimated-Time-of-Arrival Code
45	Standard Carrier Alpha Code (SCAC)	Standard-Carrier-Alpha
BD	Transportation Priority Code	Transportation-Priority

C4.4.2. The DLMS data element, Air Commodity and Special Handling Code, is a concatenation of the TRDM air commodity code and the applicable special handling code tables.

C4.4.3. The DLMS data element, Water Commodity and Special Handling Code is a concatenation of the TRDM water commodity, water type cargo, and water special handling codes.

C4.5. REFERENCE TABLE CHANGE MANAGEMENT PROCESS

C4.5.1. Logistics Domain-Requested Changes. The change management process for DLMS standards is contained in DLM 4000.25, Volume 1, Chapter 3, Change Management. The change management process for logistics domain-requested changes to these reference tables must be coordinated through the DLMS Supply Process Review Committee (PRC), USTRANSCOM and the TRDM Program Management Office (PMO). The requested changes will be subject to the Proposed DLMS Change (PDC) process, and provided for review by the Supply PRC members. USTRANSCOM is a voting member of the Supply PRC, and the TRDM PMO is on distribution for all DLMS changes. The general rules that apply to the change management process for review of the proposed changes are as follows:

C4.5.1.1. Proposed DLMS Changes (PDC) must be submitted to DEDSO for coordination and comment with the Supply PRC, USTRANSCOM, and TRDM.

C4.5.1.2. Defense Enterprise Data Standards Office (DEDSO) will evaluate proposed changes and provide comments and analysis or recommendations.

C4.5.1.3. Staffing progress and current status of the proposed changes will be shown on the DEDSO website.

C4.5.1.4. There will be a resolution process for objections or comments of note, subject to the review of the Supply PRC members.

C4.5.1.5. Upon completion of the comment resolution process, proposed changes must be coordinated with USTRANSCOM and the TRDM PM. Upon review and implementation approval by USTRANSCOM, an Approved DLMS Change (ADC) will be released to the Supply PRC, with concurrent configuration documentation released by the TRDM PMO to its stakeholders.

C4.5.2. Transportation Domain-Requested Changes. The change management process for TRDM standards is documented in USTRANSCOM standard operating procedures. Once the change is approved via the TRDM configuration management process and loaded into TRDM, DEDSO will receive an email notification from the TRDM website.

C4.5.2.1. <u>Minor Changes to the Reference Table</u>. DEDSO will not prepare an administrative ADC to the Supply PRC announcing the change. Logistics systems maintaining these tables for use by supply transactions may establish either a system-to-system interface or a subscription service to TRDM to ensure tables are kept current as TRDM publishes changes. An example of a minor change is the introduction of a new code value or code definition to a table.

C4.5.2.2. <u>Significant Changes to the Reference Table</u>. DEDSO will release a PDC to the Supply PRC for coordination. PRC comments/non-concurrences must be coordinated with USTRANSCOM and the TRDM PMO for resolution. Upon satisfactory resolution, DEDSO will release the ADC formally announcing the table changes to the Supply PRC. If the results of comment resolution require a change by the TRDM PMO, the ADC will be released concurrent with the TRDM change. An example of a significant change is a modification of the metadata (e.g., field length changed from two positions to three positions).

AP1. APPENDIX 1

USTRANSCOM REFERENCE DATA MANAGEMENT (TRDM) REPOSITORY INFORMATION

AP1.1. TRDM is a reference data repository operated by USTRANSCOM (Air Mobility Command - AMC), which stores and manages both standardized and approved non-standard transportation reference data. It provides a one-stop shopping capability for transportation reference tables, the distribution of reference data, and the synchronization of managed transportation data with defined sources.

AP1.2. TRDM users can view data and associated metadata with the codes. The information provided also includes logical name, physical name, definitions, table and field descriptions, and authoritative source information.

AP1.3. TRDM uses data stewards to update the transportation data on prescribed schedules. The data, reference tables, and associated metadata are published on web pages and made available through subscriptions as well. The subscription service automatically sends the transportation data to subscribing automated information systems and authorized end-users.

AP1.4. The web address for TRDM and user information is: (https://trdmws.maf.ustranscom.mil/trdm/index.html). A valid DoD issued Common Access Card (CAC) is required to access TRDM.

AP1.5. To self-subscribe to TRDM, go to https://trdmws.maf.ustranscom.mil/files/DD2875_TRDM_System_Access_Request.pdf. Click the link to request registration. The registration page requests citizenship status, email address, and a commercial phone number. Once registered, returning to the TRDM page will automatically log you in.