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IN REPLY
REFER TO DLA J-627

September 28, 2010


MEMORANDUM FOR SUPPLY PROCESS REVIEW COMMITTEE MEMBERS

SUBJECT: Approved Defense Logistics Management System (DLMS) Change (ADC) 388, Automated Method of Detecting System Downtime or Excessive Processing Times in Air Force BRAC SS&D/IMSP Expedited Requisition Process and Associated Dual Function Materiel Release Order (MRO) Process (Staffed as PDC 407)

The attached change to DOD 4000.25-M, DLMS, is approved for implementation. The updated DLMS Supplements will be posted to the DLA Logistics Management Standards web site <http://www.dla.mil/j-6/dlmso/elibrary/TransFormats/formats.asp> within 10 days from the above date for implementation planning.

This change is associated with a Defense Logistics Agency (DLA) Enterprise Business System (EBS), Defense Automated Addressing System (DAAS), and AFMC Stock Control System (SCS) release to support BRAC Supply, Storage, and Distribution (SS&D)/Inventory Management and Stock Positioning (IMSP).

Addressees may direct questions to Ms. Ellen Hilert, email: Ellen.Hilert@dla.mil. Others must contact their Component designated Supply Process Review Committee representative.


DONALD C. PIPP
Chief
DLA Logistics Management
Standards

Attachment

cc:
ODASD(SCI)

Attachment to ADC 388
Automated Method of Detecting System Downtime or Excessive Processing Times
in AF BRAC SS&D/IMSP Expedited Requisition Process
and Associated Dual Function MRO Process

1. ORIGINATOR: Service/Agency: United States Air Force, 401 SCMS/GUMC, 937-257-2713 (DSN 787)

2. FUNCTIONAL AREA: Primary: Supply/ Logistics.

3. REFERENCES: Teleconferences held January through March 2010 jointly with members of the BRAC Supply, Storage, and Distribution (SS&D) Inventory Management and Stock Positioning (IMSP) implementation team, including representation for Air Force Materiel Command (AFMC) Stock Control System (SCS), Enterprise Business System (EBS), DLA Transaction Services (formerly DAASC), and DLA Logistics Management Standards.

4. REQUESTED CHANGE: Revisions subsequent to staffing are highlighted in yellow.

a. Description of Change: This change request is for the use of Requisition Inquiry (DLMS 869A/AF1) and Supply Status (DLMS 870S/AE1) transactions in order to determine whether data systems are processing Air Force (AF) BRAC SS&D/IMSP expedited requisitions within the required timeframe. When excessive processing time is detected a unique dual function materiel release order (MRO) process will be initiated. A new Downtime Detection Indicator and business rules are established for this process. This proposal also documents the dual function MRO used by the AF to issue DLA assets to the AF (recorded on a post-post MRO requisition) and immediate issue of these assets as AF-owned to the maintenance unit.

b. Background:

(1) As a result of the 2005 BRAC decision, retail supply, storage and distribution functions and associated infrastructure supporting the Air Force industrial/maintenance sites transferred to DLA. The intent of the directive is to significantly improve combat effectiveness while reducing costs by developing a world-class, cost-effective supply chain focused on readiness; taking every opportunity to eliminate waste, reduce touches, reduce cost, and improve readiness.

(2) AF maintenance requests for DLA-managed items are processed via the AFMC SCS data system. SCS (D035K subsystem) sends a requisition to EBS via DAAS. If stock is available, a MRO is transmitted from EBS via DAAS to the Distribution Standard System (DSS). If stock for the requisitioned item is co-located with the customer, DSS processes the MRO and shipment confirmation, and then “washes” the inventory to AF ownership automatically. This closes out the FB-series requisition and triggers billing in EBS. D035K then sources the depot maintenance backorder from AF inventory and requests delivery to

maintenance.

(3) A requirement of IMSP for AF depot maintenance orders of DLA-managed items that are stocked in co-located DLA storage, is that the time from when the mechanic places the order until the issue document is generated in the Distribution Standard System (DSS) must be five minutes or less. If data system downtime or excessive delay is detected along the requisitioning path, a switch can be set within D035K that will cause requisitions to transmit directly to DSS. This logic will allow issue of DLA-owned items to depot maintenance if materiel is available. It will generate post-post requisitions and wash MRO confirmations to EBS, and will generate wash receipt and maintenance MRO confirmation transactions to D035K.

(4) Since the SS&D/IMSP software was implemented at the AF sites, system downtime and excessive delays have been recurrent within SCS, DAAS, and EBS. System users cannot always detect the downtime/delay quickly, necessitating an automatic method of detecting this problem.

(5) The dual function MRO is already programmed and available between AF and DSS.

c. Detailed Procedures:

(1) A Requisition Inquiry transaction is generated by D035K at scheduled intervals to SMS. The transaction contains a unique Downtime Detection Indicator in the beginning segment of the transaction and a valid DLA-managed stock number. The document number contains the DoDAAC of the requisitioning activity. The document number date and serial number are values agreed upon by all involved systems and the same values are always used. The supplementary address contains "Y" in the first position, followed by a numeric five-position serial number to identify the specific transaction.

(2) D035K transmits the requisition inquiry transaction for expedited processing through the SCS Mid-Tier System to DAAS. DAAS sends the transactions to EBS. EBS recognizes the unique Downtime Detection Indicator (and, if necessary, the agreed-to document number) and responds with a supply status transaction that contains the Downtime Detection Indicator and Advice Code BF, indicating no record of the requisition. The status transaction flows will be transmitted through DAAS for expedited processing to the SCS Mid-Tier and D035K.

(3) D035K compares the date/time the inquiry transaction was transmitted to the date/time the status transaction was received. It uses this information to determine if the time elapsed is acceptable. The actual turn-around time will be based upon the DLA CONOPS with AF for expedited processing. It is envisioned that the AF will generate the Requisition Inquiry every 15 minutes using the expedited DAAS path, and when all is working properly responses will be returned within a 15 minute cycle.

(4) If the status transaction is not received within an acceptable timeframe, D035K automatically sets its switch to send future requisitions for DLA-managed items directly to DSS. When D035K starts to receive status transactions within an acceptable time elapsed since the inquiry, the switch will automatically be re-set to route new requisitions as normal through DAASC to EBS.

(5) When D035K detects excessive downtime, the system will use its direct connection with DSS (Customer Information Control System (CICS) interface) to direct release of DLA-owned assets. D035K will send to DSS a Material Release Order (MRO) requesting material issue to depot maintenance using the maintenance (M-series) document number¹. Appended to the MRO are an Air Force depot retail supply document number (FB in positions 1-2) and the DLA Routing Identifier SMS. These additional data elements allow DSS to issue the requested asset quantity from the co-located DLA-owned stock. If the requested quantity is available in the DLA owner balance, DSS will generate a Post-Post Directed MRO Requisition (511R/C0_) to DLA EBS, using the FB document number appended to the D035K MRO. **Note: the AF has no visibility of DLA-owned assets in DSS, so there may be a higher than normal risk of DSS denials (will need to be evaluated for impact on depot performance metrics).** Detail data content (e.g., fund code, priority designator, etc) required for construction of the 511R will be hard coded within DSS by agreement with the AF. The post-post action will trigger an inventory “wash” (issue/receipt in-place with no visual inspection moving assets into AF inventory). **Successful completion of this action will result in DSS generation of a Materiel Release Confirmation (945A) to DLA for the quantity released to the AF.**

(6) A receipt transaction is returned by DSS to D035K on the FB document number. DSS also returns to D035K a materiel release confirmation on the maintenance document number for the immediate release to support the maintenance customer using assets purchased from DLA.

(7) If there is insufficient DLA-owned stock available on the owner record balance, DSS will deny the requested action and return a Materiel Release Order Denial (Warehouse Refusal) (MILSTRIP A6_) **on the maintenance document number** to D035K via CICS. The denial to D035K will contain the DLA Routing Identifier SMS in order to alert the AF application that a denial occurred on the initial purchase/post-post action. In response, D035K will backorder the maintenance requirement and generate a requisition (511R) to DLA through the normal IMSP path.

(8) If there is insufficient AF-owned stock to satisfy the maintenance order when the depot attempts to pick the materiel purchased through the post-post action (inventory wash), DSS will deny the request as above, this time using the appropriate AF Routing Identifier-To. A warehouse refusal citing Denial Management Code 1 (stock exhausted) or 2 (materiel not available in condition requested) will trigger the D035K automatic Supply Discrepancy Report (SDR) process allowing the AF to systemically request reimbursement for materiel purchased in the initial action.

(9) **In the scenario above where an AF denial is created at time of pick due to an**

¹ Air Force use of maintenance document numbers containing pseudo DoDAACs beginning with M is not consistent with DoD procedures because the Service/Agency Code M is reserved for the Marine Corps. Originally these document numbers were retained within Air Force applications and didn't interact with DoD systems causing mis-identification of the Service. That is no longer true. Alternatives are being investigated; however, due to the legacy system constraints this practice may persist until modernization.

inconsistency between the DSS accountable record and the actual quantity/condition of material in storage, depot personnel will prepare the appropriate balance affecting transaction to update the DSS accountable record. DLA will be notified of the change to their asset position based on MILSTRAP end-of-day inventory reconciliation. **Note:** DLA will be unaware of the inconsistency until processing end-of-day reconciliation because there was no denial to DLA triggered by the AF release order. Under current EBS processing, DLA may actually perform end-of-day reconciliation as a weekly process.

(10) Update DLMS Supplements as shown at Enclosure 1.

(11) Update DLMS Procedures. Add the following paragraph associated with submission of requisition inquiry.

AIR FORCE (AF) BRAC SS&D/IMSP INDUSTRIAL ACTIVITY (IA) REQUISITION INQUIRY USED TO DETECT SYSTEM DOWNTIME OR EXCESSIVE DELAYS AND ALTERNATIVE MATERIEL RELEASE ORDER (MRO) PROCEDURES.

Under a DLA-AF industrial/maintenance site agreement, the AFMC depot retail supply activities are authorized use of the requisition inquiry (869A/AF1) transactions to determine if any systems in the expedited processing path for requisitioning DLA-managed items are experiencing downtime or excessive delays. The time standard for expedited processing is currently within 10 minutes. The requisition inquiry transactions will be automatically generated by the AF Stock Control System in agreed-upon intervals (planned as a 15 minute cycle time). These transactions will always contain a unique Downtime Detection Indicator and the same agreed-upon DLA-managed stock number and a document number with the same date and serial number. The document number DoDAAC reflects the requisitioning activity (FB2029 for Hill Air Force Base, FB2039 for Tinker Air Force Base, or FB2065 for Robins Air Force Base). The supplementary address contains "Y" in the first position, followed by a numeric five-position serial number to identify the specific transaction. DLA's Enterprise Business System (EBS) always responds to such inquiries with supply status (870S/AE1) transactions that contain advice code BF (no record of requisition document). The AF SCS uses the time elapsed between generation of the inquiry and the status response to determine if the automated post-post requisition process should be initiated. Once initiated, the automated post-post requisition process will be terminated when the response time returns to the acceptable range.

When D035K detects excessive downtime, the system will use its direct connection with DSS (referred to as the Customer Information Control System (CICS) interface) to direct release of DLA-owned assets. D035K will use a dual function materiel release order for the maintenance customer (M-series document number²) requirement appended with the AF FB DoDAAC document number and DLA Routing Identifier. This will indicate to DSS that

² *Air Force use of maintenance document numbers containing pseudo DoDAACs beginning with M is a not consistent with DoD procedures because the Service/Agency Code M is reserved for the Marine Corps. Alternatives are being investigated; however, due to the legacy system constraints this practice may persist until modernization.*

materiel is to be issued from DLA-owned stock. If materiel is available, DSS will generate a Post-Post Directed Materiel Release Order (MRO) Requisition (511R/C0_) to DLA EBS perpetuating the AF FB document number. Detail level data content (e.g., fund code, priority designator, etc) required for construction of the 511R/C0 will be hard coded within DSS by agreement with the AF. The post-post action will trigger an inventory “wash” (issue/receipt in-place without physical inspection) moving assets to AF inventory. Successful completion of this action will result in DSS generation of a Materiel Release Confirmation (945A) to DLA for the quantity released to the AF. DSS will receipt the materiel to the AF under the FB document number and instantaneously issue the materiel under the maintenance document number.

a. If DLA assets are unavailable on the owner record balance, DSS will deny the request and return a Materiel Release Order Denial (Warehouse Refusal) (MILSTRIP A6_) on the maintenance document number to D035K via CICS. The denial to D035K will contain the DLA routing identifier in to alert the AF application that a denial occurred on the initial action. In response, D035K will backorder the maintenance requirement and generate a Requisition (511R) to DLA through the normal IMSP path.

b. If AF assets are unavailable to satisfy the maintenance issue when the depot attempts to pick the materiel, DSS will deny the request using the appropriate AF routing identifier-to. A warehouse refusal citing Denial Management Code 1 (stock exhausted) or 2 (materiel not available in condition requested) will trigger the D035K automatic Supply Discrepancy Report (SDR) process allowing the AF to systemically request reimbursement for materiel on record, but not physically available.

c. In the scenario above where an AF denial is created at time of pick due to an inconsistency between the DSS accountable record and the actual quantity/condition of material in storage, depot personnel will prepare the appropriate balance affecting transaction to update the DSS accountable record. DLA will be notified of the change to their asset position based on MILSTRAP end-of-day inventory reconciliation.

5. Alternatives: None identified.

6. REASON FOR CHANGE: In order to provide the proper level of support to depot maintenance activities, the AF SCS requires the ability to automatically detect excessive delays or downtime within the systems required to process requisitions. Currently these delays and downtime are not always recognized quickly enough to prevent interruptions in parts supply.

7. ADVANTAGES AND DISADVANTAGES:

(a) Advantages:

(1) Improves responsiveness to AF depot maintenance by allowing agreed-upon expedited supply of DLA-managed parts. BRAC IMSP software changes dismantled the timely ordering process previously provided by AFMC depot retail supply activities. This change will restore the data systems’ ability to quickly issue DLA-managed items residing in co-located storage locations.

(2) If required, the down-time detection technique may be replicated for variants of expedited processing by other Component IMSP sites. (The post-post requisition/release order would not be applicable to other Components.)

(b) Disadvantages: Potential for increased number of denials due to both DLA and AF issuing from DLA-owned stock stored at the ALC co-located depot. Lack of visibility within D035K of DLA assets means that denials could occur more frequently than would normally be anticipated.

8. IMPACT:

(a) Implementation Schedule: December 2010

(b) Policy/Procedures: This change authorizes the Air Force to direct issue of DLA-owned assets under conditions described in the above change.

(c) Publications: DLMS manual update is required.

(d) DAAS: DAAS must process these transactions using the expedited processing path created for BRAC IMSP. DAAS must recognize the new transaction set purpose code so that the query and associated supply status response are not recorded in DAAS as live transactions.

(e) Integrated Data Environment (IDE)/Global Transportation Network (GTN) Convergence (IGC). This is a new business process and must be recognized as such by IGC.

(f) DLMS Data: This change establishes a new code value for the Transaction Set Purpose Code for use in the 869A and 870S:

Downtime Detection Indicator (X12 EDI Qualifier 41, Temporary Record). A code used in requisition queries and supply status to ensure these transactions are recognized as non-production/live data. The code indicates the transaction purpose is for system downtime detection associated with expedited transaction processing under DLA-Service agreement. The initiating application will track elapsed response time between the requisition query and the corresponding supply status so that alternative processing may be initiated if warranted.

Enclosure 1, DLMS Supplement Updates

| Item # | Location | DS 869A Requisition Inquiry/Supply Assistance Request Revision | Reason |
|--------|-------------------------|--|--|
| 1. | DLMS Introductory Notes | <p><u>Add ADC 388 to DLMS Introductory note 5:</u></p> <p><i>- ADC 388, Automated Method of Detecting System Downtime or Excessive Processing Times in Air Force BRAC SS&D/IMSP Expedited Requisition Process and Associated Dual Function Materiel Release Order (MRO) Process</i></p> | Identifies DLMS Changes included in the DLMS Supplement |
| 2. | 1/BSI07/20 | <p><u>Add qualifier and DLMS note:</u></p> <p>42 Temporary Record DLMS Note: <i>Use as a Downtime Detection Indicator to alert processing systems that this requisition query is used for system testing to determine elapsed response time between the query and the responding supply status. This transaction contains a pseudo document number. Authorized DLMS enhancement by agreement with DLA only. Refer to ADC 388.</i></p> | Code to indicate this is not a “live” requisition query. All other data content and processing will mirror standard procedures |

DS 870S Supply Status

| # | Location | DS 870S Supply Status Revision | Reason |
|----|-------------------------|--|--|
| 1. | DLMS Introductory Notes | <p><u>Added ADC 388 to DLMS Introductory note 4:</u></p> <p><i>- ADC 388, Automated Method of Detecting System Downtime or Excessive Processing Times in Air Force BRAC SS&D/IMSP Expedited Requisition Process and Associated Dual Function Materiel Release Order (MRO) Process</i></p> | Identifies DLMS Changes included in the DLMS Supplement |
| 2. | 1/BSR11/20 | <p><u>Add qualifier and DLMS note:</u></p> <p>42 Temporary Record DLMS Note: <i>Use as a Downtime Detection Indicator to alert processing systems that this supply status is used for system testing to determine elapsed response time between the query and the responding supply status. This transaction contains a pseudo document number. Authorized DLMS enhancement by agreement with DLA only. Refer to ADC 388.</i></p> | Code to indicate this is not a “live” requisition supply status. All other data content and processing will mirror standard procedures |