

Audit Report



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LOGISTICS RESPONSE TIME FOR THE DIRECT VENDOR
DELIVERY PROCESS, DEFENSE SUPPLY CENTER, COLUMBUS

Report Number 99-101

March 4, 1999

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Acronyms

DAAS	Defense Automatic Addressing System
DLA	Defense Logistics Agency
DPACS	DLA Pre-Award Contracting System
DSCC	Defense Supply Center, Columbus
DVD	Direct Vendor Delivery
LMARS	Logistics Metric Analysis Reporting System
LRT	Logistics Response Time
OSD	Office of the Secretary of Defense
RDD	Required Delivery Date
SAMMS	Standard Automated Materiel Management System
UMMIPS	Uniform Materiel Movement and Issue Priority System



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March 4, 1999

MEMORANDUM FOR ASSISTANT DEPUTY UNDER SECRETARY OF
DEFENSE (MATERIEL AND DISTRIBUTION
MANAGEMENT)
DIRECTOR, DEFENSE LOGISTICS AGENCY

SUBJECT: Audit Report on the Logistics Response Time for the Direct Vendor
Delivery Process, Defense Supply Center, Columbus
(Report No. 99-101)

We are providing this report for review and comment. This is the first in a series of reports on logistics response time. We performed this audit in response to a concern by the Office of the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management) about whether the direct vendor delivery process is unfavorably affecting the logistics response time. We considered management comments on a draft of this report in preparing the final report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. Therefore, we request that the Defense Logistics Agency provide additional comments on Recommendation B.2. by May 3, 1999.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. Raymond D. Kidd at (703) 604-8828 (DSN 664-8828) (rkidd@dodig.osd.mil) or Mr. Hassan A. Soliman at (703) 604-8868 (DSN 664-8868) (hsoliman@dodig.osd.mil). See Appendix F for the report distribution. The audit team members are listed inside the back cover.

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Report No. 99-101

(Project No. 8LH-0012)

March 4, 1999

Logistics Response Time for the Direct Vendor Delivery Process, Defense Supply Center, Columbus

Executive Summary

Introduction. This is the first in a series of reports on logistics response time. This report covers the logistics response time for direct vendor delivery at the Defense Supply Center, Columbus, Ohio. Subsequent reports will cover the logistics response time for direct vendor delivery at the Defense Supply Center, Richmond, Virginia, and various other topics impacting logistics response time. The audit was requested by the Office of the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management).

DoD corporate goals in response to the Government Performance and Results Act included goals to reduce inventories through adopting commercial practices and to decrease logistics response time by 50 percent by the year 2000. Those goals were reflected in the 1996/1997 and 1998 DoD Logistics Strategic Plans. Direct vendor delivery emulates a commercial practice by procuring materiel with direct delivery to customers of the DoD supply system. The Defense Logistics Agency is the primary manager for procuring consumable hardware items. From FY 1996 through the first 5 months of FY 1998, the Defense Logistics Agency used direct vendor delivery for about 17 percent of its total consumable hardware procurements. To monitor achievement of the DoD goal to reduce logistics response time, the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management) initiated efforts that led to the establishment of the Logistics Metric Analysis Reporting System.

Objectives. The overall audit objective was to evaluate the effectiveness and efficiency of direct vendor delivery in improving logistics response time. This audit addressed supply center requisition processing time, which is a subset of logistics response time. We also reviewed the management control program as it applied to the audit objective.

Results. Direct vendor delivery was not effectively implemented by the Defense Logistics Agency and the Defense Supply Center, Columbus, Ohio.

- Direct vendor delivery was effective in reducing consumable hardware inventory; but, as implemented by the Defense Logistics Agency and the Defense Supply Center, Columbus, it did not optimize logistics response time. As a result, the Defense Supply Center, Columbus, prolonged logistics response time for 39 direct vendor delivery purchase requests in two of our samples by an average of 45 days (Finding A).
- Although DoD established a corporate goal to reduce logistics response time and to implement a system to monitor achievement of that goal, improvements were needed to assist in accomplishing the corporate goal and measuring results. As a result, there was no assurance that direct vendor delivery would

contribute to achieving the DoD goal to reduce logistics response time. Additionally, measuring progress toward achieving the DoD goal may be hampered (Finding B).

See Appendix A for details on the management control program.

Summary of Recommendations. We recommend that the Commander, Defense Supply Center, Columbus, establish procedures that require its buyers to consider cost-effectiveness and responsiveness to customers' requirements before performing price analyses for small purchases; emphasize consolidation and followup procedures for purchase requests referred to technical operations personnel; establish goals to improve logistics response time for direct vendor delivery; and use an appropriate method to ensure use of direct vendor delivery when it is cost-effective and responsive to customers' requirements.

Management Comments. The Defense Logistics Agency agreed to consider the effectiveness of performing pre-award price analysis for automated small purchases, stating it will consider business tradeoffs in performing the analysis and will evaluate and implement changes that reduce LRT. The Defense Logistics Agency also concurred with improving management of the referral of hard-to-fill items to the technical and supply operations personnel, stating that the Defense Supply Center, Columbus, rewrote its acquisition guide and reorganized its personnel to ensure sharing of information and consolidation of purchase requests. The Defense Supply Center, Columbus, also required its personnel to use available automated tools to manage the referral process. The Defense Logistics Agency did not agree to make software changes to automatically notify buyers of opportunities for purchase request consolidation, stating the actions it took and the ones it plans to take negate the need for the change. The Defense Logistics Agency concurred with establishing goals for logistics response time of direct vendor delivery and establishing procedures to optimize direct vendor delivery cost and responsiveness to customer needs. The Defense Supply Center, Columbus, will train its personnel on using available cost optimization models. See Part I for a discussion of management comments and Part III for the complete text of management comments.

Audit Response. The Defense Logistics Agency actions were responsive to the recommendation on software changes because of the actions taken and planned by the Defense Supply Center, Columbus, such as changing guidance and reorganizing personnel structures. Although the Defense Logistics Agency agreed to establish procedures for optimizing DVD cost and responsiveness to customer needs, the comments were only partially responsive. For reasons discussed in Part I of the report, we believe that the recommendation requires additional actions. We request that the Defense Logistics Agency provide additional comments on that recommendation by May 3, 1999.

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Part I - Audit Results

Introduction

This audit was performed because the Office of the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management) expressed concern about the impact of direct vendor delivery (DVD) on logistics response time¹ (LRT) in response to a General Accounting Office audit report.² The General Accounting Office reported that Defense Logistics Agency (DLA) records disclosed that the average LRT for DVD in FY 1996 was 54 days, compared to 25 days when DLA used its own stock to fill customer orders. DVD is a method to fill a customer's order for supplies by delivering them directly from the vendor to the customer, without DoD having to stock them. This is the first in a series of reports on DoD efforts to shorten LRT. This report covers LRT for DVD at the Defense Supply Center, Columbus (DSCC), Ohio. Subsequent reports will cover LRT for DVD at the Defense Supply Center, Richmond, Virginia, and various other topics impacting logistics response time. This report addresses supply center requisition processing time, which is a subset of LRT. LRT also includes requisition processing at the requisitioning installation and shipping times.

Background

DLA uses three types of DVD processes: planned, unplanned, and for items not stocked by DLA. DLA stated that all three types were incorporated in the 54-day average included in the General Accounting Office report. Of the total DVD shipments completed in FY 1997, planned DVD was used for 38 percent, and unplanned DVD and DVD for non-stocked items were each used for 31 percent. The planned DVD process has a shorter processing time than the other two DVD processes.

Planned DVD Process. Planned DVD usually is used for items that DLA knows in advance will be needed in sufficient quantities to warrant establishing long-term contracts. When a DLA supply center receives requisitions for such items, the center fills the requisition using existing long-term contracts that have been pre-negotiated by DLA. Other types of contracts are also used for planned DVD. The average DLA supply center processing time was 8.3 days for shipments completed in FY 1997 using the planned DVD process.

Unplanned DVD Process. Unplanned DVD may be used when DLA depots run out of stock for requisitioned items. When depots run out of stock, supply centers may use the unplanned DVD process to fill the requisition or hold the requisition in a backorder status until the stock is replenished. To fill requisitions through unplanned DVD, DLA supply centers usually order against a blanket purchase agreement. Because terms for blanket purchase agreements are not fully negotiated, supply centers must issue an order, receive and evaluate vendors' offers, and award a purchase order. The average supply center processing times for unplanned DVD are longer than processing times for planned

¹ LRT is the total elapsed time between the date of the customer requisition and the closeout of the requisition. Closeout of the requisition means the item is delivered to the requisitioner.

² Report No. NSIAD-98-47, "Defense Inventory Management--Expanding Use of Best Practices for Hardware Items Can Reduce Logistics Costs," January 20, 1998.

DVD. Additionally, supply centers often do not immediately begin the unplanned DVD process because the requisitioned item is already on backorder, which further increases processing time. The average DLA supply center processing time was 94.3 days for shipments completed in FY 1997 using the unplanned DVD process.

DVD Process for Non-Stocked Items. When DLA supply centers do not receive enough requests to justify stocking a supply item, they intentionally do not stock it and fill requisitions for such items through the DVD process for non-stocked items. Generally, no contracts or purchase agreements are in place for non-stocked items, so when a supply center receives a requisition for such an item, the center must issue a solicitation, receive and evaluate vendors' proposals, and award a contract. Like unplanned DVD procurements, DVD procurements for non-stocked items usually take longer to process than planned DVD procurements. The average supply center processing time was 67.9 days for shipments completed in FY 1997 using the DVD process for non-stocked items.

The 1996/1997 DoD Logistics Strategic Plan. Two guiding principles in the 1996/1997 DoD Logistics Strategic Plan were that performance will be measured in relation to the impact on customers and that not only performance metrics, but also performance measurement methods must be sharpened. One goal was to reduce average LRT from 24 days experienced in the first quarter FY 1996 to 16 days by September 1997. The goal applied to all sources of supply, whether from DoD stock or DVD procurements. The plan included separate goals for each of the Services.

The 1998 DoD Logistics Strategic Plan. The 1998 DoD Logistics Strategic Plan emphasizes the need to maintain optimum inventory levels that will rapidly meet customer support objectives, to improve the logistics process, and to adopt best business practices. In the plan, the LRT baseline is 36 days in February 1997, and the goals are:

30 days	February 1998
24 days	February 1999
18 days	February 2000

According to the Office of the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management), the baseline in the 1998 plan was increased to 36 days because consumable and reparable³ supply items from all DoD sources were included, not just DLA supply items, as was the case in the 1996/1997 plan. Additionally, the information provided by the Logistics Metric Analysis Reporting System (LMARS) was more comprehensive and accurate than the initial data provided by the Military Supply and Transportation Evaluation Procedures.⁴

³Consumable items of supply are those that are normally expended or used up beyond recovery in the use for which they were designed or intended. Categories of consumable items include hardware such as automotive, electrical and construction items (bolts, brake shoes, wires, etc.), and non-hardware items such as clothing and food. Reparable inventory items are subject to economical repair.

⁴LRT statistics were reported by the Military Supply and Transportation Evaluation Procedures before the introduction of the Logistics Metric Analysis Reporting System.

Objectives

The overall audit objective was to evaluate the effectiveness and efficiency of DVD in improving LRT. The specific audit objectives were to evaluate factors that might limit achieving the goal of optimum LRT for DVD and to evaluate the effectiveness of the DVD process in supporting the goal of improved LRT. We also reviewed the management control program as it applied to the audit objectives. See Appendix A for a discussion of the audit scope and methodology and the review of the management control program. See Appendix B for a summary of prior coverage and Appendix C for additional audit coverage related to LRT.

Finding A. Effectiveness and Efficiency of Direct Vendor Delivery in Improving Logistics Response Time

DVD was effective in reducing consumable hardware inventory; but, as implemented by DLA and DSCC, it did not optimize LRT. LRT for DVD was not optimized because procurement personnel at DSCC conducted time-consuming price analyses for automated small purchases when the potential cost of doing so exceeded the difference of the total offer price over the total Government target price. Also, outstanding purchase requests for hard-to-fill items were not properly consolidated or monitored. As a result, DSCC prolonged LRT for 39 DVD purchase requests in two of our samples by an average of 45 days.

Use of DVD

Using DVD to fill customer requisitions for materiel is discussed in the National Defense Authorization Act for FY 1996 and DoD Regulation 4140.1-R, "DoD Materiel Management Regulation" (DoD Regulation 4140.1-R), January 1993. The National Defense Authorization Act for FY 1996 (Public Law 104-106, Section 352) requires DoD to implement a system under which, to the maximum extent possible, vendors deliver consumable hardware inventory items directly to military installations throughout the United States. Additionally, DoD Regulation 4140.1-R states that DoD should use DVD whenever it is cost-effective and responsive to user requirements. In May 1998, DoD Regulation 4140.1-R was reissued and extended supply alternatives to other commercial practices in addition to DVD.

Effectiveness and Efficiency of DVD

Review of Selection Criteria. To review the effectiveness and efficiency of DVD in improving LRT, we judgmentally selected DSCC and the Defense Supply Center, Richmond, to perform the audit work. Of the three DLA supply centers, DSCC and Defense Supply Center, Richmond, reported the largest number of consumable hardware requisitions filled through DVD processes in FY 1997. Table 1 shows the distribution of requisitions filled in FY 1997 using the DVD process.

Finding A. Effectiveness and Efficiency of Direct Vendor Delivery in Improving Logistics Response Time

Table 1. Distribution of Consumable Hardware Requisitions Filled in FY 1997 Using the DVD Process

	<u>Total</u>	<u>Planned</u>	<u>Unplanned</u>	<u>Non-Stocked</u>
Columbus	234,942	141,123	44,729	49,090
Philadelphia	150,733	76,523	25,001	49,209
Richmond	259,407	199,825	20,041	39,541
Total	645,082	417,471	89,771	137,840

We selected the DLA supply centers for our review because DLA is the main buyer of consumable hardware items for DoD, and the DLA supply centers significantly impact LRT. We focused our review on consumable hardware items because, in FY 1996, those items accounted for 3.9 million, or 97 percent, of the 4 million items managed by DLA.⁵ Also, consumable hardware items accounted for \$2.6 billion of the \$5.5 billion worth of materiel⁵ purchased by DLA in FY 1996. Table 2 shows the sales distribution, by center and DVD process, of consumable hardware items that were shipped in FY 1997.

Table 2. Sales Distribution of DVD Consumable Hardware Shipped in FY 1997 (in millions)

	<u>DVD Sales</u>	<u>Planned</u>	<u>Unplanned</u>	<u>Non-Stocked</u>
Columbus	\$185.8	\$47.1	\$89.2	\$49.5
Philadelphia	151.0	67.2	34.5	49.3
Richmond	187.4	86.4	38.1	62.9
Total	\$524.2	\$200.7	\$161.8	\$161.7

Implementation of DVD Processes by DSCC. DVD was effective in reducing consumable hardware inventory; but, as implemented by DLA and DSCC, it did not optimize LRT. Using DVD, supplies are delivered directly from the vendor to the user, bypassing the DLA warehousing and distribution system and eliminating the need to stock inventory. However, unless the DLA supply centers executed a DVD process in an efficient manner, the supply centers' processing time for consumable hardware requisitions filled through DVD processes lagged behind the processing time for requisitions filled from DLA stock. Table 3 compares the supply centers' average processing time for filling a requisition from DLA stock with average processing times for filling a requisition through DVD processes,

⁵ Excluding fuels.

Finding A. Effectiveness and Efficiency of Direct Vendor Delivery in Improving Logistics Response Time

based on information captured by the Virtual Logistics Information Processing System. Those DVD processing times include both manual and automated processing.

**Table 3. Comparison of Average Processing Times
for FY 1997 Consumable Hardware Requisitions
(in days)**

	<u>DLA Stock</u>	<u>All DVD</u>	<u>Planned</u>	<u>Unplanned</u>	<u>Non-Stocked</u>
Columbus	2.2	39.5	8.1	98.9	75.5
Philadelphia	2.0	42.8	12.9	91.5	64.6
Richmond	2.4	21.4	6.6	87.5	62.7
All centers	2.2	33.0	8.3	94.3	67.9

Analysis of the procurement process identified two areas where the processing time for all DVD procurements could be reduced. Procurement personnel at DSCC conducted time-consuming price analyses for automated small purchases that extended LRT by an average of 20.3 days for 24 of 30 purchase requests reviewed. Also, outstanding purchase requests for hard-to-fill items were not properly consolidated or monitored, which extended LRT by an average of 84 days for 15 purchase requests reviewed. As a result, DSCC prolonged LRT for 39 DVD purchase requests in two of our samples by an average of 45 days. See Appendix A for details on our samples.

Inclusion of national stock numbers on the Exception Files, which enables a requisition to bypass automatic processing, is another factor that extends LRT. However, DSCC had made significant progress in reducing the number of national stock numbers on the Exception Files by thoroughly reviewing the Exception Files and establishing management controls that would prevent unnecessary additions to the Exception Files. For details on the Exception Files, see Appendix C.

Review of Small Purchases for Price Reasonableness

LRT for DVD was not optimized because procurement personnel at DSCC conducted price analyses for small purchases when the potential cost to do so exceeded the difference of the total offer price over the total Government target price. DSCC uses an automated system for processing small purchases. If certain parameters are not met, the system refers the purchase request to procurement personnel (buyers) for review, which includes price analyses, and possibly manual processing.

The Standard Automated Materiel Management System (SAMMS) Automated Small Purchase System Phase I automatically issues orders up to \$2,500 against blanket purchase agreements and up to \$25,000 against indefinite-delivery

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contracts. To communicate Phase I orders to vendors, DSCC uses the SAMMS subsystem known as the SAMMS Procurement by Electronic Data Exchange. Vendors respond electronically with price offers and are electronically notified by the SAMMS Procurement by Electronic Data Exchange of the acceptance of the offer if it meets purchase requirements, including price variance. If an offer does not meet purchase requirements, SAMMS Procurement by Electronic Data Exchange will refer the purchase request to a buyer for review.

Requirements for Buyer Review. The DSCC practice for Phase I procurements requires the referral of purchase requests to buyers for review when vendor price offers exceed Government target prices by a given percentage. According to DSCC practice, acceptable price variances for electronics buys are unit prices within 10 percent of the most representative price stored in the SAMMS Procurement by Electronic Data Exchange database. For construction buys, acceptable variances are within 20 percent of the most representative price stored in the SAMMS Procurement by Electronic Data Exchange database.

During the initial review, the buyer researches the records of past procurements and then decides whether to accept the vendor's price or have the procurement processed manually. Manual processing involves competing a procurement among vendors and may increase both the cost of processing the procurement and its LRT. Price analyses and manual processing prolonged LRT for 24 purchase requests in our sample of 30 offers made in response to orders against blanket purchase agreements by an average of 20.3 days, and the cost to manually process those procurements exceeded the potential savings.

Conducting Price Analyses. DSCC conducted price analyses that were not cost-effective and prolonged LRT for 24 purchase requests in our sample. To determine whether price analyses resulted in cost-effective and responsive procurement decisions, we selected a judgmental sample of 30 vendor offers made in response to orders against blanket purchase agreements. Our sample consisted of DVD purchase requests that the SAMMS Procurement by Electronic Data Exchange had referred to buyers as requiring review because of price variances. The purchase requests in our sample had been referred to buyers from June 18 through July 22, 1998, and were still being processed as of July 22, 1998. In July 1998, DSCC issued an average of 347 orders against blanket purchase agreements per day.

Cost-Effectiveness of Price Analyses. The 10 percent and 20 percent thresholds for unit price variance appear to be cost controls built into the procurement system. Materiality of the total price variance compared to the cost of manual processing and the effect on LRT were not programmed into those controls. According to activity-based cost records at DSCC, the cost to manually process a procurement of \$2,500 or less is about \$345. Of the 30 purchase requests in the sample, the total price variance of offers on 24 purchase requests did not exceed the cost of manual processing. The median total price variance of offers on the six remaining purchase requests was about \$729. See Appendix D for the price variances of all offers in our sample. DSCC needed to consider the

Finding A. Effectiveness and Efficiency of Direct Vendor Delivery in Improving Logistics Response Time

financial cost and benefit of performing price analyses. The following are examples of cases for which pre-award price analyses were performed:

- An order for two tube reducers (sample no. 2 in Appendix D) was requested as Uniform Materiel Movement and Issue Priority System (UMMIPS) priority three, issue priority group one.⁶ The purchase request dropped out of automated processing for manual review because the vendor offered a price of \$5.81 per unit for a total of \$11.62, compared to the Government target price of \$3.61 for a total of \$7.22. Although the price variance was 61 percent of the Government target price, the total variance amount was only \$4.40. Due to the price variance analysis, the contract took an additional day to be awarded.
- An order for one filter element (sample no. 4) was requested as UMMIPS priority 13, issue priority group 3. The purchase request was sent for manual review because the vendor offered a price of \$14.56 compared to the Government target price of \$4.75. Although the price variance was 206 percent of the Government target price, the total variance amount was only \$9.81. Due to the price variance analysis, the contract took an additional 4 days to be awarded.
- An order for one pre-formed hose (sample no. 6) was requested as UMMIPS priority four, issue priority group two. The vendor offer price was \$106.25 and the Government target price was \$82.10. Although the price variance was 29 percent of the Government target price, the total variance was only \$24.15. Due to the price variance analysis, the contract took an additional 35 days to be awarded.

Consideration of Responsiveness to Customer Requirements. There was no indication that buyers considered the impact of price analyses or manual processing on meeting customers' required delivery dates (RDDs). Review and manual processing increased the time to process purchase requests. For example, a June 1998 DSCC report showed that processing time for orders against blanket purchase agreements that were automatically processed averaged 12.5 days;

⁶ UMMIPS is a structure which establishes time standards, based on the mission and urgency of need of the requestor, for the supply of materiel from the time of origination of the requirement (date of the requisition) to the time that the acknowledgment of physical receipt is posted to the requisitioner's inventory record. The UMMIPS has 15 priority designators that define the priority to fill customer requisitions. Issue priority group one includes UMMIPS priorities one, two, and three and requires delivery in 8 days (12 to 13 days for overseas). Issue priority group two includes priorities four through eight and requires delivery in 12 days (16 to 17 days for overseas). Issue priority group three includes priorities 9 through 15 and requires delivery in 31 days (69 to 84 days for overseas). In May 1998, DoD Regulation 4140.1-R recognized UMMIPS standards by transportation priority, instead of issue priority group.

Finding A. Effectiveness and Efficiency of Direct Vendor Delivery in Improving Logistics Response Time

those that were manually processed averaged 89 days.⁷ Our review disclosed that because of delays associated with performing price analyses for 24 offers, 17 purchase requests passed their RDDs while being processed. As a result of purchase requests being referred to buyers because of price variances, LRT for 24 purchase requests in our sample was increased by an average of 20.3 days as of August 14, 1998. However, because 11 of the sample purchase requests were still being processed as of August 14, 1998, the negative effect on processing time would increase until a purchase order was awarded. Moreover, the offers on those 11 purchase requests had price variances less than \$345.

Consolidating Buys of Hard-to-Fill Items with Current Buys

LRT for DVD was not optimized because purchase requests for hard-to-fill items were not properly consolidated or sufficiently monitored. Buyers at DSCC allowed purchase requests (for both DVD and stock items) to remain in referral to technical operations personnel past their RDDs while subsequent purchase requests for the same items were successfully placed on contract. Buyers did not use resources available to optimize procurement consolidation. Also, both buyers and technical operations personnel who received the referrals did not use resources available to properly manage purchase requests aging in referral. As a result, LRT for 15 purchase requests in our sample of hard-to-fill items was extended by an average of 84 days, and none of the purchase requests met the customers' RDDs.

Referral to Technical Operations Personnel. Buyers refer purchase requests for hard-to-fill items to technical operations personnel for a number of reasons. Common reasons for referral include evaluation of alternative offers, such as vendors offering substitute or surplus items; the item requested is an obsolete part number; or there is no vendor available for an item. Under some circumstances, one purchase request may be referred while another purchase request for the same item is not. For example, a vendor may offer a surplus item that must be validated by technical operations personnel for acceptability, while another vendor for a subsequent purchase request offers an exact item that does not require technical review. The purchase request in the second case will be processed and placed on contract, while the first purchase request remains in referral.

Management Controls and Existing Guidance. DLA and DSCC have a system of controls that, when followed, should ensure purchase requests remaining in referral for extended periods are kept to a minimum. Buyers, item managers, and technical operations personnel can track referrals through a reporting system in SAMMS and through the DLA Pre-Award Contracting System (DPACS). When

⁷ Blanket purchase agreements are primarily used for unplanned DVD and DVD for non-stocked items. The time for processing blanket purchase agreements includes time for SAMMS to prepare a purchase request, transmit the requirement to a vendor, receive and evaluate the vendor offer, obtain funding, and award the purchase order. Also, because items procured through unplanned DVD were often on backorder, DSCC did not immediately begin the DVD process.

Finding A. Effectiveness and Efficiency of Direct Vendor Delivery in Improving Logistics Response Time

DPACS is used, it automatically updates SAMMS. Those two systems can produce reports that allow continuous monitoring of purchase requests in referral. Also, the following guidance applies to managing the referral process:

- The DLA Internal Procedures Memorandum No. 97-0029, "Requirements Guidance and Recommended Buy Policy" (DLA Internal Procedures Memorandum No. 97-0029), November 13, 1997, Attachment 13, directs buyers and item managers to assess other open purchase requests for the same item and to consolidate the requisition with an open purchase request rather than generate another purchase request for the same item.
- The DLA Internal Procedures Memorandum No. 97-0029, Attachment 14, directs item managers to contact buyers to discuss aging open purchase requests.
- The DPACS Users Manual, January 25, 1993, Chapters 3 and 5, provides buyer work load and purchase request management options. Chapters 6 and 16 of the same manual provide instructions for referring purchase requests to technical operations personnel using DPACS and for producing management reports.
- The Electronics Acquisition Guide (Paragraph 13.103, (E2)(a)(1)) and the Construction Small Purchase Desk Guide (Section IV, Paragraph B19) provide guidance to consolidate purchase requests without unduly delaying buys.

Management of the Referral Process. Buyers at DSCC allowed purchase requests (for both DVD and stock items) to remain in referral status past their RDDs while subsequent purchase requests for the same items were successfully placed on contract. To review management of the referral process, we requested personnel at DSCC to identify purchase requests that remained in referral while subsequent purchase requests for the same items were placed on contract. DSCC personnel identified 88 DVD purchase requests in referral as of July 30, 1998, meeting those conditions. We judgmentally selected 15 of the 88 for further review. Then, in a separate effort to review the status and average age of all purchase requests in referral, we requested an aging report of all purchase requests in referral. As of July 24, 1998, 5,933 purchase requests, of which 42 percent were DVD, were aging in referral at DSCC. We examined the status of 20 purchase requests listed on the aging report.

Consolidation of Purchase Requests in Referral. Although consolidation of purchase requests could reduce average LRT, reduce unit cost, or motivate a vendor to bid for a larger order, none of the buyers interviewed considered consolidation of the 15 purchase requests we examined. Some of the buyers we interviewed stated they did not consider consolidation of their purchase requests with other purchase requests being handled by buyers outside of their section. Buyers stated that purchase requests for identical items are frequently handled by buyers in different sections because of recent reorganizations and redistribution of excessive work loads. Buyers also stated they felt a commitment to be fair to vendors offering substitute items, even when acting on that

Finding A. Effectiveness and Efficiency of Direct Vendor Delivery in Improving Logistics Response Time

commitment might result in not meeting a customer's RDD. Other buyers stated they were reluctant to consolidate their purchase requests with purchase requests in referral out of concern for delaying their own purchase requests. As a result, LRT was prolonged by a range of 9 to 140 days, with an average of 84 days and a median of 104 days, for the sample of 15 purchase requests.

Although resources and guidance were available to provide a prompt for consolidation, consolidation did not occur in some cases. For example, three purchase requests for a pump assembly (YPC 973337001087, November 29, 1997; YPC 97363000886, December 29, 1997; and YPC 98063001387, March 4, 1998) were each referred to technical operations personnel with a request to identify additional sources of supply due to an obsolete part number. However, while those purchase requests, for a total quantity of nine pumps, remained in referral, a subsequent purchase request (YPC 98106000453, April 16, 1998), for a quantity of one pump was successfully placed on contract (SPO70098ABN041532, April 17, 1998). The other purchase requests were still in referral as of July 30, 1998. In another case, four purchase requests for a total quantity of 18 windshield wiper blades were received on January 23, 1998 (YPC 98023000400, YPC 98023000401, YPC 98023000402, and YPC 98023000403). Those purchase requests, with RDDs ranging from January 31, 1998, to February 19, 1998, were sent to referral to validate a superceding part number. A subsequent purchase request for windshield wiper blades (YPC 98070000376, March 11, 1998) was successfully placed on contract (SPO70098ABN670045, March 12, 1998) for a quantity of five blades. The earlier purchase requests were still in referral as of July 30, 1998.

Monitoring of Purchase Requests in Referral. Although buyers and item managers are assigned responsibility to follow up on open purchase requests for items assigned to them, buyers did not follow up on purchase requests in referral to technical operations personnel as a standard practice. Buyers with aging purchase requests who we interviewed cited excessive work load as the reason they did not follow up on referrals. They also stated that if the customer inquired or increased the priority of the item, then they followed up. Also, the buyers stated they perceived that responsibility for the purchase request transferred to the technical operations personnel upon referral. In addition to prolonging LRTs for referred purchase requests, the lack of followup allowed purchase requests to be lost, misplaced, or neglected. Of the 20 aging purchase requests we reviewed, neither the buyers nor the technical operations personnel could account for 12.

- Purchase request YPC 97311000035, an issue priority group one, UMMIPS priority two order for an F-15 aircraft rotary vane pump, was received on November 7, 1997. The purchase request was referred to supply operations personnel on January 12, 1998, because the sole-source vendor questioned the packaging requirements. The purchase request was assigned to an individual who subsequently went on disability leave. That circumstance was not discovered until our inquiry on August 4, 1998, because no followup occurred on the purchase request.

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- Purchase request YPC 97125002113, an issue priority group one, UMMIPS priority three order for a valve stem, was received on May 5, 1997. The purchase request was referred to technical operations personnel on September 2, 1997, to identify a new source of supply, because the coded source of supply was no longer in business. The purchase request was transferred from the originally assigned technician to another technician in January 1998. The newly assigned technician took no action and conducted no followup on this purchase request because he thought it was being researched at the Engineering Support Activity. When he did follow up as a result of our inquiry on August 4, 1998, he discovered that the purchase request had not been sent to the Engineering Support Activity. He sent the request to the Engineering Support Activity on August 7, 1998.
- Purchase request YPC 97147000838, an issue priority group one, UMMIPS priority two order for a pressure gauge, was received on May 27, 1997. The purchase request was referred to technical operations personnel on August 12, 1997, for evaluation of an alternative part number offered by the vendor. The purchase request was misfiled and, due to an absence of followup, was not located until our inquiry on August 5, 1998.
- Purchase request YPC 97069000346, an issue priority group one, UMMIPS priority two order for a vehicle window, was received on March 10, 1997. The purchase request was referred to technical operations personnel on September 10, 1997, because the manufacturer could not identify the part number. No action was taken on the purchase request until after our inquiry on August 5, 1998, when, in fact, the file could not even be located. On August 7, 1998, the technical operations personnel located the purchase request, identified a vendor, and the buyer sent out a solicitation.

Compliance with Existing Management Controls. DSCC management needed to emphasize compliance with the existing system of management controls, including guidance and system tools. The DLA Internal Procedures Memorandum No. 97-0029 and both the Electronics Acquisition Guide and Construction Small Purchase Desk Guide provide sufficient consolidation guidance. Additionally, tools such as the SAMMS R-33 report, "Buyer Workload Listing," and the DPACS provide buyers with the necessary visibility of open purchase requests to support consolidation decisions and monitoring of purchase requests aging in referral. However, those tools do not automatically notify buyers when an order for the same item is issued. Most buyers were not using the DPACS to refer purchase requests to technical operations personnel and, as a result, a valuable resource was not available to properly manage referred purchase requests. Emphasizing compliance with the existing controls would assist DSCC management in improving LRT for both DVD and non-DVD procurements.

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Summary

Decisions to perform price analyses when total vendor offer prices exceeded the allowed variance from target prices should consider the cost of manual processing and the effect on LRT. We believe that minimizing manual processing of orders against blanket purchase agreements, through minimizing price variance analyses that are not cost-effective, would improve LRT. DSCC should issue guidance to buyers that includes guidelines on the tradeoff between the potential savings to be gained by conducting price variance analyses and the associated administrative cost and effect on LRT. Additionally, LRT could be reduced by maximizing consolidation opportunities and making better use of existing resources to manage purchase requests aging in referral.

Recommendations, Management Comments, and Audit Response

A. We recommend that the Commander, Defense Supply Center, Columbus:

1. Establish procedures to ensure that, before performing price analyses when the offered price exceeds the target price for automated small purchases, buyers consider the potential savings and cost to manually process the purchase request in addition to the negative effect on logistics response time.

Management Comments. DLA partially concurred, stating that it will consider the tradeoffs associated with price analyses on small purchases, evaluate potential lapse in implementing its procedures, and implement effective changes to reduce LRT. DLA also cited the need to avoid criticism from other Inspector General, DoD, reports for paying higher prices than previously paid. DLA also stated that the procedures were in place to avoid "price creep" in its automated system and delays for a few of many thousands of automated acquisitions was not a material weakness.

Audit Response. Although DLA only partially concurred with the recommendation, the actions that DSCC will take on considering the potential savings and cost of manually processing purchase requests, in addition to the negative effect on LRT are responsive to the intent of the recommendation. We reviewed the Inspector General, DoD, Report No. 96-035, "Price Challenges on Selected Spare Parts," December 12, 1995, and found no contradiction between the applicable findings and recommendations in the two reports.

2. Emphasize the requirement for buyers to assess and maximize opportunities to consolidate purchase requests for the same item and for buyers to follow up with technical operations personnel at periodic intervals to determine status and disposition of referred purchase requests.

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Management Comments. DLA concurred, stating that to increase the potential for consolidation, purchase requests are no longer referred to technical operations personnel; instead, purchase requests are now handled by teams that consist of contracting, supply, and technical experts. DLA also stated that DSCC rewrote its acquisition guide to strongly encourage purchase request consolidation and status followup with technical operations personnel. The estimated completion date for the review and approval process of the changed guidance was January 31, 1999.

3. Establish controls to ensure that when research of a purchase request by technical operations personnel causes delays in meeting the required delivery date and an alternative vendor is successfully identified for a subsequent purchase request for the same item, then the buyer terminate research on the original purchase request aging in referral and either consolidate it with the subsequent purchase request or redirect it to the new vendor.

Management Comments. DLA concurred, stating that the rewritten DSCC acquisition guide in response to the previous recommendation, including withdrawal of referred purchase requests and consolidation with purchase requests available for award, will eliminate or reduce delays in meeting customer RDDs. The estimated completion date for corrective actions was January 31, 1999.

4. Make software changes to ensure that buyers with purchase requests aging in referral are automatically notified if an order is issued for the same item.

Management Comments. DLA nonconcurred, stating that changes made or in progress in response to the previous recommendations will reduce the difficulty of consolidation and the number of unconsolidated purchase requests and will avoid the cost associated with the recommended software changes. Also, as supply items will be assigned consistently to the same buyer, it will be easier for buyers to consolidate purchase requests.

Audit Response. Although DLA nonconcurred with the recommendation, the alternative actions that DSCC has taken and the actions that are in progress satisfy the intent of the recommendation. No further comments are required.

5. Direct buyers to use the Defense Logistics Agency Pre-Award Contracting System to refer purchase requests to technical operations personnel and for technical operations and supervisory personnel to use the Defense Logistics Agency Pre-Award Contracting System to manage work load for referred purchase requests.

Management Comments. DLA concurred, stating Commodity Applications personnel are using DPACS for purchase request referral and management. However, use of DPACS by Weapon Systems Applications personnel was limited because DPACS processed technical assignment codes, but not referral reason codes. DSCC, however, is changing its policy to require buyers to use DPACS in

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its current configuration; at the same time, DSCC will recommend system changes to enhance the technical capabilities of DPACS. The estimated completion dates are February 28, 1999, for the policy changes and April 2000 for the DPACS system changes.

Finding B. Logistics Response Time Goals and Performance Measurement

Although DoD established a corporate goal to reduce LRT and to implement a system to monitor achievement of that goal, improvements were needed to assist in accomplishing that goal and measuring results. Specifically, DLA and DSCC did not establish goals to reduce LRT for DVD; DSCC did not use the Method of Support Model to properly optimize cost-effectiveness and responsiveness to customer requirements of DVD processes; and LMARS, the LRT performance measurement reporting system, needed improvement. As a result, there was no assurance that DVD would contribute to achieving the DoD goal to reduce LRT. Additionally, deficiencies in LMARS may hamper measurement of progress toward achieving the DoD goal.

Corporate Goals and Performance Reporting

Corporate and Functional Goals. In response to the Government Performance and Results Act, DoD established corporate goals to reduce LRT and supply inventory. To support the DoD corporate goals, the DoD Logistics Strategic Plans included two objectives: reduce logistics cycle time and streamline logistics infrastructure through implementing best business practices that result in reductions of minimally required inventory levels. The DoD Logistics Strategic Plans were developed to implement the logistics-related goals.

Establishing LMARS. DoD implemented a system to monitor accomplishing the goal to reduce LRT. In response to a November 1995 request from the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management), LMARS was developed by a joint group that consisted of representatives from the Office of the Assistant Deputy Under Secretary of Defense for Materiel and Distribution Management (hereafter referred to as OSD), DLA, the Services, and the U.S. Transportation Command. The joint group, now called the LMARS Committee, was charged with developing the appropriate procedures and report format based on directions issued by the Deputy Under Secretary of Defense (Logistics). While the LMARS Committee has oversight of LMARS, the Defense Automatic Addressing System (DAAS) Center manages and maintains the LMARS databases. The DAAS Center processes logistics transactions for each Service and Federal agency that uses the DoD supply system. The DAAS Center uses the Logistics On-line Tracking System, an automated information system, to maintain life-cycle information for logistics transactions processed by the DAAS Center. The DAAS Center obtains information for LMARS from the Logistics On-line Tracking System and produces monthly management reports. The DAAS Center released the initial LMARS report in May 1997 for February 1997 transactions.

LMARS Reports. LMARS provides information on 12 logistics pipeline segments (see Appendix E for details about the segments). Those segments

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measure specific time intervals throughout the procurement process, beginning with the date of the customer's requisition and ending with the customer's receipt posting date of the requisitioned items. For each pipeline segment, LMARS reports the average processing time for five UMMIPS delivery areas.⁸ For each UMMIPS delivery area, the average processing time is reported for three processing groups representing priority designators. The number of transactions processed for each UMMIPS delivery area is also reported.

To accomplish the corporate goal to reduce LRT and to monitor that goal:

- DSCC needed to establish goals to reduce LRT for DVD;
- DSCC needed to improve its efforts to optimize cost-effectiveness and responsiveness to customers' requirements of DVD processes; and
- LMARS reporting needed to be improved.

LRT Goals for DVD

DLA and DSCC did not establish goals to reduce LRT for DVD. To determine whether goals for improving LRT for DVD were established, we reviewed the "Defense Logistics Agency FY 1997/1998 Performance Plan" (DLA Performance Plan) and discussed the establishment of those goals with personnel at DSCC. Because DoD corporate goals included an emphasis on using commercial practices, such as DVD, along with a goal to reduce LRT, we considered establishing goals to reduce LRT for DVD a reasonable management control to support DoD goals.

DLA Performance Plan. DLA and DSCC did not establish and implement goals for reducing LRT for requisitions filled through DVD. The materiel management program indicators in the DLA Performance Plan state the LRT goals for DVD processes were to be determined. In FY 1997, DVD was used to fill requisitions worth \$533.3 million (16.3 percent) of the total DLA consumable hardware sales of \$3.3 billion. DLA personnel stated that focus for the future is on other commercial practices, such as the Prime Vendor⁹ initiative, that would result in cost-effective and responsive customer service.

DSCC LRT Goals for DVD. DSCC did not have LRT goals for requisitions filled through DVD. DSCC management stated it did not have LRT goals for DVD because DLA had not set goals. Further, DSCC management stated that because DLA was transitioning to LMARS from a DLA reporting system for LRT, DSCC did not have accurate LRT reports with which to monitor goal accomplishment. However, because reducing LRT is a corporate goal and DVD

⁸ The delivery areas are geographic areas defined by UMMIPS.

⁹ A Prime Vendor buys inventory from a variety of suppliers and stores the inventory in its own warehouse.

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is a commercial practice encouraged in the DoD Logistics Strategic Plan, we believe DSCC should have established LRT goals for DVD and monitored goal accomplishment.

New Best Business Practices Adopted. The DLA planned business volume for new inventory practices, not including DVD, was very small. Based on our review of the DLA Performance Plan, the business volume for new practices in FY 1997 was three-tenths of 1 percent of total DLA consumable hardware sales of \$3.3 billion. For FY 1998, DLA projected consumable hardware sales of \$3.2 billion, of which it anticipated the new practices would account for \$70.1 million (2.2 percent). Those figures indicate that the new practices are in their early stages. The new practices included the Virtual Prime Vendor method for weapon system maintenance and the Maintenance, Repair and Operations Materials Program for procuring facilities maintenance supplies. However, because those practices were new, sufficient data to determine their effectiveness in improving LRT was not available. We believe establishing goals to reduce LRT for DVD and placing emphasis on the proper use of DVD would assist in accomplishing the DoD goal to reduce LRT.

Cost-Effectiveness and Responsiveness of DVD Processes

DSCC did not use the Method of Support Model (the Model) to properly optimize cost-effectiveness and responsiveness to customer requirements of DVD processes. Additionally, although the Model measures the cost-effectiveness of DVD processes, its ability to measure the effectiveness of DVD processes to meet customers' RDDs was limited. However, there was no evidence that DSCC used the Model. As a result, there was no assurance that opportunities to effectively use DVD processes were identified or that responsiveness to customers' RDDs was effectively considered.

Balancing DoD Goals to Reduce Inventories and Shorten LRTs. Achieving the DoD corporate goals to both reduce inventories and shorten LRTs requires maximizing the benefits intended by both goals. The Fundamental Principles of Operations in the 1998 DoD Logistics Strategic Plan require that performance be measured based on improving customer support and reducing total logistics costs. The Customer Needs Statement in the plan states that customers require materiel and logistics services to be priced competitively, based on "best value." Also, Logistics Management Imperatives in the plan require management to shorten LRT and to apply best business practices. DoD Regulation 4140.1-R formalizes the requirements for DVD, stating that DoD should use DVD whenever it is cost-effective and responsive to customer requirements. The Regulation also states that timely satisfaction of customer requirements shall be a primary factor, along with the anticipated cost and benefits in determining whether initiation of new procurements are in the best interest of the Government. In view of those concepts, a method is needed to optimize cost-effectiveness and responsiveness.

Practices to Optimize Cost-Effectiveness and Responsiveness. DSCC used a three-step process to determine the cost-effectiveness and responsiveness of a potential planned DVD procurement. DSCC first identified supply items suitable

Finding B. Logistics Response Time Goals and Performance Measurement

for long-term contracts that had high business volume and value. Then, DSCC determined the potential vendor's ability to respond to a standard delivery period. Finally, DSCC tested the cost-effectiveness of a potential DVD procurement.

Selecting Supply Items for DVD. To determine whether procurements should be filled from DSCC stock or through DVD, DSCC prioritized national stock numbers by assigning Selective Management Category Codes that reflected the relative importance of each national stock number to the overall mission of DSCC. The codes were assigned to a national stock number based on the annual demand frequency, the weapon system supported, and the annual dollar value of requisitions. DSCC determined that about 16,000 of 1.9 million national stock numbers in Selective Management Category Codes 1 and 3 should be further examined as candidates for DVD. DSCC then evaluated whether those national stock numbers could be placed on long-term contracts. Finally, to determine whether a national stock number would be a stocked item or a planned DVD item, DSCC tested responsiveness to customer requirements and cost-effectiveness.

Determining Responsiveness to Customer Requirements. To determine responsiveness to customer requirements, DSCC managers informed us that DSCC used UMMIPS standards and the Military Standard Requisitioning and Issue Procedures Priority Codes as guides; both criteria require delivery within 30 days. If potential vendors could meet those delivery requirements, DSCC buyers then considered cost-effectiveness.

Determining Cost-Effectiveness. To determine cost-effectiveness of a potential DVD procurement, DLA established the Model to measure savings from converting an item from stocked to non-stocked status. The Model produces the break-even price for stock and DVD alternatives and the percentage that a DVD price could increase above the most current representative price and still result in savings.

Review of DSCC Performance. DSCC did not use the UMMIPS standards and did not consider customers' RDDs when negotiating DVD contracts, which could erode customer confidence in the timeliness of the supply system. Additionally, there was no evidence that DSCC used the Model to measure cost-effectiveness.

Negotiated Delivery Periods. We judgmentally selected 79 of 123 contracts to review DSCC use of the UMMIPS standards in negotiating delivery dates. Table 4 compares the delivery periods negotiated by DSCC and the UMMIPS standards that DSCC personnel stated were used as a guide for DVD contracts.

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Table 4. Comparison of Negotiated Delivery Periods and UMMIPS Standards

<u>Contract Type</u>	<u>No. of Contracts</u>		<u>Delivery Periods (days)</u>	
	<u>In the Sample</u>	<u>Not Meeting UMMIPS</u>	<u>Median Negotiated</u>	<u>Median UMMIPS Standards</u>
Blanket purchase agreement	16	16	70	12
Indefinite delivery	29	24	70	12
Long-term, corporate	34	8	10	31
Total	79	48		

As shown in Table 4, the negotiated delivery periods for 48 of the 79 contracts in the sample exceeded the UMMIPS standards. Of those 48 contracts, 27 were for planned DVD.

DSCC management informed us that it did not consider customers' RDDs when negotiating delivery periods for DVD contracts because RDDs were usually overstated. Personnel we interviewed at DSCC also stated that customers' RDDs often had already passed when DSCC received the requisition. We reviewed a judgmentally selected sample of 123 DVD contracts for responsiveness to RDDs. In our sample, the RDD had passed before DSCC received the requisition for only four contracts. Also, although DSCC negotiated delivery dates that exceeded RDDs for 109 contracts, vendors delivered before the negotiated delivery dates for 89 contracts. Nevertheless, items were delivered after RDDs for 91 contracts. Table 5 shows the results of our analysis.

Table 5. Responsiveness to Required Delivery Dates

<u>Analysis Issue</u>	<u>No. of Contracts</u>	<u>Median Days</u>	<u>Range Days</u>
RDD passed before DSCC received requisition	4	16	2-91
Negotiated delivery date exceeded RDD	109	67	1-841
Shipment made after RDD	91	61	4-817
Shipment made on or before negotiated delivery date	89	29	0-288

DoD Customer Confidence in Timeliness of the DLA Supply System.
As customers lose confidence in the ability of the DLA supply system to deliver requisitioned materiel by the RDD, they may build up retail inventories as a

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safeguard. Customers may also shorten RDDs in an effort to ensure timely delivery. A future audit will review RDDs for reasonableness and for proper application of priority designators.

Cost-Effectiveness Measurement. We found no evidence that DSCC personnel were using the Model to measure cost-effectiveness of potential DVD contracts. Instead they considered a DVD contract cost-effective if it was not more than 20 percent higher than the most current representative price. DSCC management said that in the past the Model had consistently predicted the cost-effectiveness threshold to be 20 percent. Therefore, if the vendor price exceeded the most current representative price by more than 20 percent, the item was not procured through DVD. DSCC management confirmed that DSCC no longer used the Model, but used the 20 percent rule instead. Further, DSCC management stated DSCC stopped using the Model because its use was not mandated by DLA. Our review of DSCC files for a judgmentally selected sample of nine DVD contracts showed that the 20 percent rule had been applied. However, we could not examine non-DVD contracts to verify whether the 20 percent rule was used, and we could not validate that 20 percent was the correct threshold because DSCC personnel did not record and retain the information needed to apply the Model. The Model's User's Guide states that buyers are responsible for maintaining Model history in a logical and timely manner. Also, in a June 8, 1998, memorandum to DLA supply centers, the Commander, Defense Logistics Support Command:

- emphasized the proper use of DVD;
- stated that DVD is a method to allow DLA to provide responsive, best value supplies to its customers;
- expressed concern that planned DVD was not meeting or beating depot support; and
- stated that tools, such as the Vendor Stock Retention Model and the Method of Support Model, were available to the DLA supply centers to verify that customer requirements are not adversely affected by DVD contracts and that costs are reduced.

LMARS Capabilities

LMARS needed continued improvement. As of August 1998, LMARS was reporting LRT performance indicators for DoD managers to identify areas that needed improvement. However, improvements were needed in capturing and reporting complete LRT data, calculating actual LRT statistics, and reporting LRT for DVD.

Capturing and Reporting Complete LRT Data. The LMARS-reported statistics for elapsed time by segment could be improved. LMARS reported total elapsed time for each segment of the logistics pipeline based on data submitted to the DAAS Center by several DoD organizations, such as consolidation

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containerization points, depots, supply centers, Services, and transportation agents. Because those organizations did not always provide transaction data to the DAAS Center, there was no assurance that LMARS captured and reported complete segment statistics. When the DAAS Center does not receive data required to report the elapsed time for a segment, statistics for that segment are incomplete and inaccurate. The three segments that were most affected by lack of data were the storage activity time (segment 4), continental United States in-transit time (segment 7), and the receipt take-up time (segment 12). Shipping information to be received from the Global Transportation Network system will play a major role in correcting this problem. OSD and the LMARS Committee realized the importance of capturing and reporting complete data, and included the issue in the list of LMARS priority improvements for correction.

Calculating Actual LRT Statistics. Using LMARS reports, OSD calculated the weighted average composite LRT¹⁰ and the total elapsed time per pipeline segment for the five UMMIPS delivery areas. OSD calculated the composite LRT based on the average LRT for the three processing groups without considering the number of transactions in each group because the LMARS report did not explicitly include transaction counts by processing group. Each pipeline segment's total elapsed time was based on the transactions reported for the first pipeline segment instead of the specific transactions for each segment. If OSD used actual processing group and segment transactions, it would improve the accuracy of the reported composite LRT and elapsed time for each segment. Transaction counts for each segment are available at the DAAS Center. The need to improve the accuracy of calculated LRT and elapsed time statistics was recognized by the LMARS Committee and was already on the list of LMARS priority improvements for correction.

Reporting LRT for DVD. The LMARS reporting of LRT for DVD needed improvement because LMARS did not provide separate performance statistics for each DVD process.

Combining Performance Statistics of Three DVD Processes. The LMARS report combined all three DVD processes in the "Composite--Direct Vendor Deliveries" section of the report, although DSCC processing times for unplanned DVD and DVD for non-stocked items were considerably longer than processing times for planned DVD. While it took DSCC an average of 8.1 days to process planned DVDs during FY 1997, DSCC took an average of 98.9 days to process unplanned DVDs and 75.5 days to process DVDs for non-stocked items, based on DLA data. We judgmentally selected a sample of 37 DSCC unplanned DVD procurements to identify potential causes for the long LRT associated with unplanned DVD. Of the 37 unplanned DVD procurements, 22 were for items that were backordered, and DSCC had taken an average of 20.6 days before it began the DVD process to fill the requisitions. That waiting period extended LRT for unplanned DVD, although DSCC used many of the same contracting methods for items procured through both unplanned DVD and DVD for non-stocked items.

¹⁰ The composite LRT consists of LRTs reported for all organizations and is used for comparison with the LRT goal in the DoD Logistics Strategic Plan.

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Use of Reported DVD Performance Statistics. Because the longer processing times for unplanned DVD and DVD for non-stocked items were combined with the shorter time for planned DVD, LMARS reports distorted the appearance of the effectiveness of DVD as a supply method. Judging by the composite statistics, it would appear that DVD was not effective. Additionally, DoD managers may not want to consider unplanned DVD and DVD for non-stocked items in evaluating whether DVD is an effective supply method as those DVD processes result either from a supply system failure or from requests for items that are not cost-effective for DoD to stock.

Improvements Made to LMARS. The LMARS Committee chairperson, personnel at OSD, and personnel at the DAAS Center were aware of the improvements needed for LMARS and reflected those improvements in a priority list that was being executed.

- In its efforts to enhance the reliability of LMARS, the Committee issued 70 taskings to improve collecting, processing, and reporting of transaction data. Some examples include identifying date-related errors and, beginning in March 1998, reporting LRT for the DLA supply centers. Date-related errors are a significant issue for LMARS because it is a date-dependent system.
- In January 1998, LMARS started reporting LRT data by DVD process for DLA, using DLA business rules, to assist DLA in monitoring its LRT for DVD. Those statistics included the average DLA supply center processing times, the most common processing time, and the middle processing time for DVD procurements included in the reporting period. The reports provide a clearer picture of LRT behavior for DVD procurements and will improve the understanding of processing times for DVD procurements for DLA. Further, UMMIPS standards reissued by DoD in May 1998 included DLA supply center processing standards for planned DVD. DLA can now use the LMARS reports to evaluate whether DLA supply centers are meeting those new standards.

Planned Improvements to LMARS. Additional planned improvements entail ensuring the DAAS Center receives and reports complete data, increasing the accuracy of LRT statistics calculations, and providing more detailed DVD data in LMARS reports. The LMARS program manager at the DAAS Center informed us that reporting performance statistics by DVD process using LMARS business rules would be accomplished in September 1998. Other improvements include completing the interface between the Global Transportation Network and the DAAS Center and using the specific processing group and segment transaction counts in calculating average times. Planned improvements to the LRT measurement program were reflected, in part, in the "Compendium of Proponent Implementation Plans," published in the "DoD Acquisition Reform--A National Partnership for Reinventing Government High Impact Agency" report and updated quarterly. We believe the changes made and those planned, when properly implemented, will improve the accuracy and usefulness of reported LRT statistics.

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Summary

DLA and DSCC did not establish LRT goals for consumable hardware items procured through DVD; there was no evidence that DSCC used the existing systems to ensure the effective and responsive use of DVD processes to satisfy customer requirements; and LMARS, the system that reports DoD LRT statistics, needed improvements. As a result, there was no assurance that DVD would contribute to achieving the DoD goal to reduce LRT. Additionally, deficiencies in LMARS may hamper measurement of progress toward achieving the DoD goal. Establishing LRT goals for DVD would highlight the importance of DVD to helping achieve the DoD goal of reducing LRT. DLA took clear action to emphasize the importance of the proper use of DVD by issuing guidance to its supply centers. However, DSCC should place more emphasis on the proper application of an approach to optimize cost-effectiveness and responsiveness of DVD procurements. Improvements to the LMARS reporting capabilities are underway to maximize the data input to the DAAS Center, improve computations of DoD composite LRT, and improve reporting of LRT for DVD.

Recommendations, Management Comments, and Audit Response

B. We recommend that the Commander, Defense Supply Center, Columbus:

1. Establish goals for logistics response time for direct vendor delivery for consumable hardware items.

Management Comments. DLA concurred, stating that it will provide guidance to DSCC by March 1, 1999. DSCC will have 1 month to implement guidance.

2. Establish procedures to ensure that cost-effectiveness and responsiveness to customer requirements of the direct vendor delivery process are optimized through the use of the Method of Support Model or an alternative method.

Management Comments. DLA concurred, stating that DSCC will train its personnel in using the Method of Support or the Vendor Stock Retention Models, or both, and will discuss those models in its upcoming Acquisition Council and Acquisition Forum meetings. DLA also stated that the two models do not address responsiveness of DVD, which is addressed in separate guidance letters issued by DLA. The estimated completion date for DLA actions was January 31, 1999.

Audit Response. Although DLA concurred, the comments are not fully responsive. DLA stated it will use the Method of Support or the Vendor Stock Retention Models, but did not address how those models and the guidance letters

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cited would be used together to optimize the cost and responsiveness variables to achieve best value. We request that DLA provide additional comments on the recommendation in response to the final report.

Part II - Additional Information

Appendix A. Audit Process

Scope

We performed the audit at DoD organizations with responsibilities for establishing, accomplishing, and monitoring execution of goals for LRT and DVD. The organizations included the Office of the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management); DLA; DSCC; the DAAS Center; and Service logistics offices. Our analysis focused on DVD procurements. We reviewed applicable laws, DoD regulations, and other documents, including:

- National Defense Authorization Act for FY 1996 (Public Law 104-106, Section 352);
- DoD Regulation 4140.1-R, "DoD Materiel Management Regulation," January 1993;
- DoD Regulation 4140.1-R, "DoD Materiel Management Regulation," May 1998;
- DoD Logistics Strategic Plans, Editions 1996/1997 and 1998;
- DLA Manual 4715.1, "SAMMS Contracting Subsystem Operating Procedures," January 1998;
- DLA FY 1997/1998 Performance Plan;
- DLA performance report for FY 1996;
- DSCC requisition history interrogations for the sample items;
- DSCC solicitations, contracts, and award-related documents for the sample items;
- DSCC blanket purchase agreement transactions referred by SAMMS Procurement by Electronic Data Exchange for review as of July 22, 1998;
- DSCC purchase requests placed on contract from November 18, 1997, through July 30, 1998, that had purchase requests for identical items aging in referral;
- DSCC purchase requests aging in referral as of the July 24, 1998, SAMMS F-31 report, "Purchase Requests Returned to Supply/Technical/(or Others)";
- DLA reports prepared by the DAAS Center for May and June 1998;

- LMARS reports for February 1998;
- LMARS business rules, January 30, 1998;
- LMARS anomalies reports for February and March 1998;
- DLA statistics on requisitions filled through DVD in FY 1997; and
- other miscellaneous management reports related to DVD and LRT dated from October 1997 through July 1998.

DoD-Wide Corporate Level Goals. In response to the Government Performance and Results Act, the DoD has established 6 DoD-wide corporate level performance objectives and 14 goals for meeting these objectives. This report pertains to achievement of the following objectives and goals:

- **Objective:** Maintain highly ready joint forces to perform the full spectrum of military activities. **Goal:** Maintain high military personnel and unit readiness. (DoD-5.1)
- **Objective:** Fundamentally reengineer the Department and achieve a 21st century infrastructure. **Goal:** Reduce costs while maintaining required military capabilities across all DoD mission areas. (DoD-6)

DoD Functional Area Reform Goals. Most major DoD functional areas have also established performance improvement reform objectives and goals. This report pertains to achievement of the following functional area objectives and goals:

- **Acquisition Functional Area. Objective:** Deliver great service. **Goal:** Achieve visibility of 90 percent of DoD materiel assets, while resupplying military peacekeepers and warfighters and reducing average order to receipt time by 50 percent. (ACQ-1.2)
- **Logistics Functional Area.** The logistics functional area included two objectives in support of the DoD-wide corporate level performance objectives:

Objective: Reduce logistics cycle times.
Goal: Reduce average LRT by one-third by September 1997 (based on the first quarter of FY 1996 averages), and reduce average age of backordered items to 30 days by October 2000. (LOG-1.1)

Objective: Streamline logistics infrastructure.
Goal: Implement most successful business practices (resulting in reductions of minimally required inventory levels). (LOG-3.1)

High-Risk Area. The General Accounting Office has identified several high-risk areas in the DoD. This report provides coverage of the Defense Inventory Management high-risk area.

Methodology

At the Office of the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management), we reviewed DoD goals for LRT, dissemination of those goals to DoD Components, and monitoring of plans to accomplish those goals. At DLA, we reviewed plans to accomplish DoD LRT goals, policy on using DVD, and how those plans and policies were disseminated to DLA supply centers. At DSCC, we reviewed the determination of delivery dates for DVD contracts and management of the DSCC segment of LRT. We analyzed requisitions filled through DVD processes by DLA in FY 1997 to determine the characteristics of DVD procurements. Additionally, we reviewed the effect of different contracting methods on LRT. While we selected the supply centers based on FY 1997 shipments, our review was primarily based on judgmental samples of purchase requests for requisitions that DSCC filled through DVD processes during FY 1997.

To determine whether price analyses resulted in cost-effective and responsive procurement decisions, we reviewed DLA Manual 4715.1, "SAMMS Contracting Subsystem Operating Procedures," January 1998, for policy on the requirement to perform price analyses; DSCC practices for performing price analyses; and reports that contained data on purchase requests referred to buyers for price analyses. We reviewed a non-statistical sample of 30 offers made in response to blanket purchase agreement orders to determine the effectiveness and efficiency of price analyses.

To examine management of purchase requests for hard-to-fill items in referral to technical operations personnel, we examined relevant DSCC policies and controls, interviewed buyers, supervisors, and technical operations personnel. We also examined the potential for consolidation of a non-statistical sample of 15 purchase requests in referral, and we reviewed how long purchase requests stayed in referral for 20 purchase requests from an aging report.

To assess the DSCC practices for using DVD processes, we reviewed the Model's User's Guide, updated June 1996; evidence of using the Model; how a customer's RDD was considered in negotiating delivery times with vendors; and how the issues of cost and responsiveness were optimized. To examine DSCC practices, we reviewed a non-statistical sample of five long-term corporate requirement contracts and four indefinite-delivery contracts. Those contracts were awarded between 1994 and 1998. We reviewed a non-statistical sample of 123 procurements to test responsiveness of negotiated delivery periods to customers' RDDs. We also interviewed DSCC personnel about the DSCC decision process for using DVD.

Use of Computer-Processed Data. We relied on computer-processed data from SAMMS and LMARS to determine which DLA supply centers to visit, to determine audit sample selection, and to determine accuracy of the LRT statistics. To test the reliability of the computer-processed data obtained from SAMMS, using our sample, we verified the accuracy of the requisition receipt dates, purchase request processing dates, and contract award dates. The DAAS Center uses the Logistics On-line Tracking System, an automated information system, to extract information from logistics transactions. The relational database

component of the Logistics On-line Tracking System portrays the complete life cycle of logistics transactions processed by the DAAS Center. LMARS extracts data from the Logistics On-line Tracking System database and produces the monthly LMARS reports. We performed a limited review of the reliability of the LMARS-reported data. We reviewed the LMARS business rules and interviewed the LMARS Committee chairperson, the program manager, and staff members at DSCC and the Office of the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management). Additionally, we performed limited tests to verify the completeness and accuracy of the LMARS-reported data, the method of computing the weighted average from the reports, and the treatment of backorders in the DVD section of the reports. We used the LMARS reports and data extracted from the Logistics On-line Tracking System to perform those tests. DoD Components did not transmit to the DAAS Center complete data needed to calculate better statistics. Although the incomplete data precluded us from determining the accuracy of the DoD composite LRT and the accuracy of pipeline segments' processing times, the incomplete data did not preclude us from meeting the audit objectives.

Universe and Sample. We used judgmental techniques to select several samples of DSCC procurement information to evaluate the effectiveness and efficiency of DSCC management of the DVD process. The samples used to conduct separate tests were extracted from various universes, as shown in the following table.

Appendix A. Audit Process

Judgmental Samples

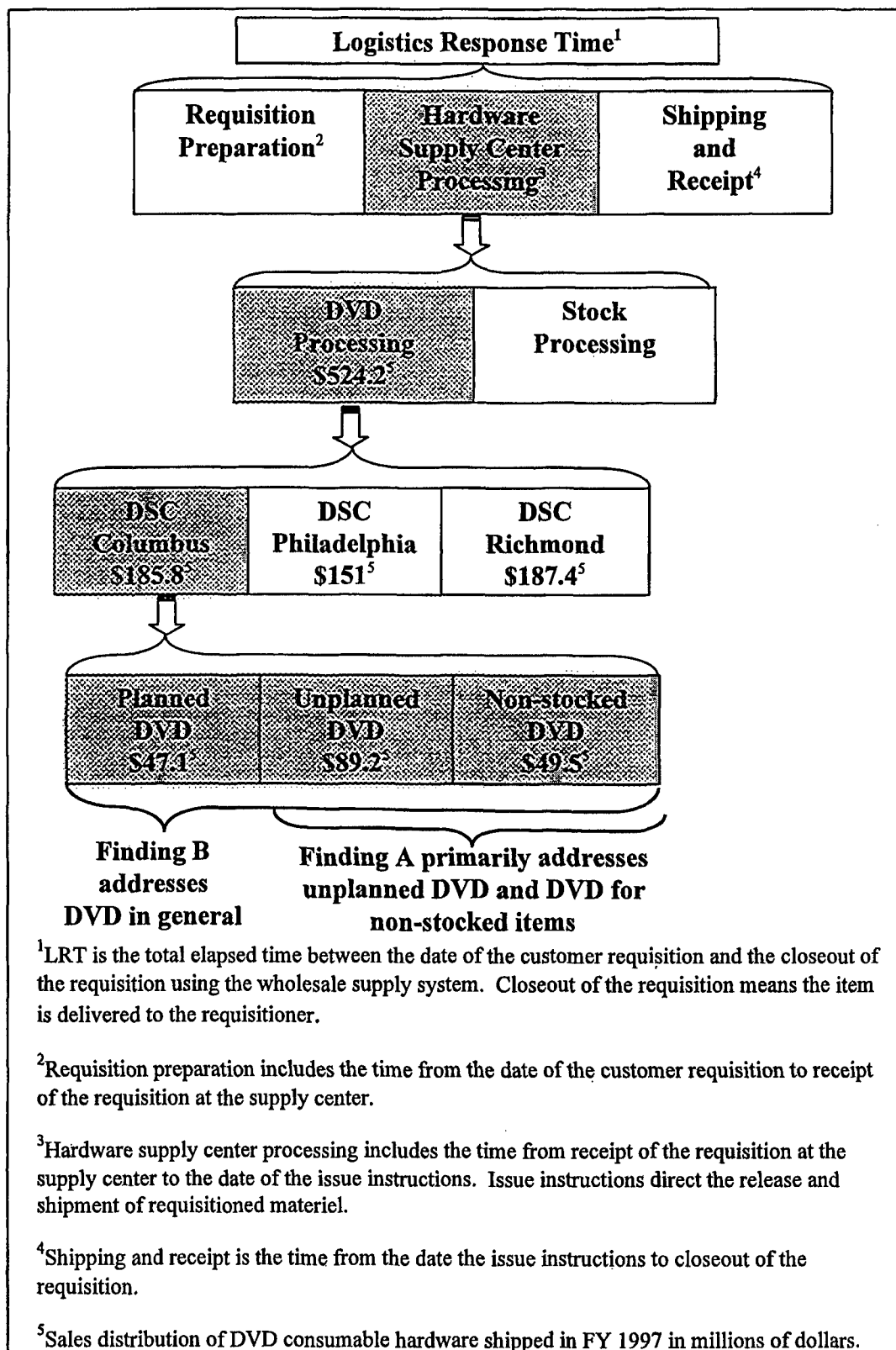
Sample Size by DVD Process

<u>Issue Tested</u>	<u>Sample Size</u>	<u>Planned</u>	<u>Unplanned and Non-Stocked</u>	<u>Universe</u>
Price variance analysis	30		30	Note 1
Referral of hard-to-fill items	15		15	Note 2
Aging of hard-to-fill items	20		20	Note 3
DVD process cost-effectiveness	9	9		Note 4
DVD process responsiveness	123	60	63	Note 5
Unplanned DVD reporting	13		13	Note 6

Notes.

1. No total accounting of records was available to select from. The sample consisted of DVD purchase requests that the SAMMS Procurement by Electronic Data Exchange had referred to buyers as requiring review because of price variance of offers received in June and July 1998 in response to orders against blanket purchase agreements.
2. Total of 88 DVD and non-DVD contract awards for purchase requests for items that were also in other purchase requests in referral to technical operations personnel.
3. Total of 5,933 purchase requests in referral to technical operations personnel listed in a July 24, 1998, aging report.
4. No total accounting of contracts was available to select from. The sample comprised four indefinite-delivery contracts and five long-term corporate requirements contracts awarded between 1994 and 1998.
5. Total of 234,942 DVD procurements completed in FY 1997. The sample was used to test whether DSCC used the UMMIPS standards to determine negotiated delivery dates, and to test responsiveness to RDDs. Sample items were used to perform more than one test. Of the 123 items in the sample, only 79 long-term contracts were used to test whether the UMMIPS standards were used to determine negotiated delivery dates.
6. The actual sample comprised 37 items, which were selected from the same universe as the sample to test DVD process responsiveness (Note 5); 24 of the 37 items were used in both samples.

Use of Technical Assistance. The Audit Followup and Technical Support Directorate, Quantitative Methods Division, provided assistance in evaluating the effectiveness of the method that the Office of the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management) used to calculate the weighted average LRT from data in the LMARS report.



Appendix A. Audit Process

Audit Type, Dates, and Standards. We performed this economy and efficiency audit from January through September 1998 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. Accordingly, we included tests of management controls considered necessary.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD. Further details are available on request.

Management Control Program

DoD Directive 5010.38, "Management Control Program," August 26, 1996, requires DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of Review of the Management Control Program. At DSCC, we reviewed the adequacy of management controls over manual and automated contracting procedures. At the DAAS Center and the Office of the Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management), we performed a limited review of management controls over procedures to ensure LMARS processed complete and accurate data. We also reviewed the results of management's self-evaluation of those management controls.

Adequacy of Management Controls. We identified material management control weaknesses for DSCC as defined by DoD Directive 5010.38. DSCC management controls for DVD procurements were not adequate because they allowed purchase requests to be excluded from the automated process or to be delayed while performing unnecessary price analyses when a vendor's offer exceeded the Government target price by 10 percent to 20 percent without considering the cost and benefits of the exclusion or the price analyses; they did not provide for effective consolidation and tracking of purchase requests for hard-to-fill items; and they did not emphasize the proper use of procedures to determine cost-effectiveness and responsiveness of potential DVD procurements. All recommendations, if implemented, will improve the DSCC LRT for DVD. A copy of the report will be provided to the senior officials responsible for management controls in DLA and DSCC.

Adequacy of Management's Self-Evaluation. DSCC officials did not identify contracting procedures for DVD as an assessable unit, and DLA did not identify LRT monitoring as an assessable unit; therefore, neither organization identified or reported the material management control weaknesses identified by this audit.

Appendix B. Summary of Prior Coverage

During the last 5 years, the General Accounting Office and the Inspector General, DoD, issued five audits related to DVD. The audits only briefly mentioned LRT.

General Accounting Office

Report No. NSIAD-98-47 (OSD Case No. 1485), "Defense Inventory Management--Expanding Use of Best Practices for Hardware Items Can Reduce Logistics Costs," January 20, 1998.

Inspector General, DoD

Report No. 98-064, "Commercial and Noncommercial Sole-Source Items Procured on Contract N000383-93-G-M111," February 6, 1998.

Report No. 97-220, "Direct Vendor Delivery and Just-In-Time Management Initiatives," September 24, 1997.

Report No. 97-018, "The Patriot Advanced Capability-3 Program," November 4, 1996.

Report No. 96-035, "Price Challenges on Selected Spare Parts," December 12, 1995.

Report No. 95-107, "Controls Over Materiel Procured for Direct Vendor Delivery," February 10, 1995.

Appendix C. Management of Exception Files

DSCC was improving its management controls over its national stock number/federal supply class Exception Files. Improvements were initiated to rectify insufficient control over the processes and procedures used to exclude purchase requests from being processed by the SAMMS Automated Small Purchase System. As a result, DSCC limited the potential for misuse of the Exception Files and the potential negative effect on LRT.

Introduction. DSCC recognized that the Exception Files process extends LRT because of the time associated with manually processing purchase requests. The function of the Exception Files is to identify national stock numbers that need to be excluded from SAMMS Automated Small Purchase System processing. DSCC was incorporating management controls that would limit the growth of the Exception Files and provide visibility and reporting for purchase requests that are manually processed because of the Exception Files.

DLA Guidance for Exception Files Maintenance. Chapter 15 of DLA Manual 4715.1 states that certain national stock numbers and entire federal supply classes must be excluded from the SAMMS Automated Small Purchase System for various reasons, including national stock numbers that are on mandatory General Services Administration schedules and federal supply classes that are not conducive to contracting through the automated system. However, DLA Manual 4715.1 does not provide detailed guidance on maintaining the Exception Files.

DSCC Exception Files Policies and Procedures. DSCC did not have official guidance for using and maintaining Exception Files. The Acquisition Systems Integration Team at DSCC was responsible for managing the Exception Files and was developing guidance for maintaining them, but the guidance was in draft form. The draft guidance provides some management control procedures for adding and removing national stock numbers on the Exception Files, but does not include an itemized listing of valid reasons for adding national stock numbers to the Exception Files and does not establish policies and procedures for reviewing the Exception Files. Management controls over the Exception Files process should require establishment of effective policies and procedures that are properly implemented. Without those policies and procedures, DSCC will not have assurance that Exception Files are effectively maintained, will risk unnecessarily processing purchase requests manually, and may consequently increase LRT.

DSCC Review of Exception Files. DSCC had an on-going effort to research reasons why purchase requests bypassed processing through the SAMMS Automated Small Purchase System, Phase I and Phase II. Phase I is an automated method of processing orders against blanket purchase agreements for up to \$2,500 and indefinite-delivery contracts up to \$25,000. Phase II is an automated process of requesting quotations for contracts up to \$25,000. DSCC used the Exception Files process to exclude items from automated processing through Phases I and II. National stock numbers and federal supply classes that had to be excluded from the SAMMS Phases I and II processes because of special conditions were recorded properly in the Exception Files. The majority of the national stock numbers were in the DSCC Exception Files because the national

stock numbers were associated with long-term contracts or had requirements pertaining to first article testing or to specifications, standards, and drawings.

Review of the Exception Files. To review the Exception Files, we compared the national stock numbers in the July 1998 Exception Files for construction to the national stock numbers associated with DVD contracts for procurement of construction items for FY 1997. The Exception Files included 3,078 national stock numbers associated with more than 66,000 DVD contracts. However, more than 64,000 of those contracts had been automatically processed. Therefore, for FY 1997, manual processing was required for only about 2 percent of the DVD contracts for construction items with national stock numbers that were included in the Exception Files.

Processing Time. We identified the DSCC processing time for manual and automated contract awards for the construction items that DSCC procured. The average time for automatic processing of orders against blanket purchase agreements under Phase I for FY 1997 was 19.3 days compared to 134.4 days for manual processing. We believe that appropriate maintenance of the Exception Files is essential to ensuring that LRT does not increase through unnecessarily processing purchase requests manually.

Manually Processed Purchase Requests. Despite its on-going review of the Exception Files, DSCC did not report on purchase requests that were manually processed because they included national stock numbers contained in the Exception Files. By not reporting this information, DSCC did not have visibility over potential increases in manually processed purchase requests resulting from unnecessary exclusions. Despite the low percentage of manual processing for the DVD contracts in our review, a complete review of the reasons why purchase requests bypass Phases I and II automatic processing requires DSCC management to have visibility of the purchase requests processed manually as a result of the Exception Files.

Exception Files Reduction. In September 1997, the construction Exception Files contained nearly 115,000 national stock numbers. However, as of July 1998, DSCC had reduced the number of national stock numbers in the construction Exception Files to 24,945. The reduction resulted from removing national stock numbers that had been transferred to other supply centers, that belonged in the electronics Exception Files, that were no longer appropriate for Phase I exclusion, and that had been excluded for reasons that were not valid or no longer applicable. DSCC had not completed its review, but continued to identify and remove invalid reason codes that could erroneously cause purchase requests to bypass Phase I or II processing.

Summary. DSCC made substantial improvements to managing its Exception Files. DSCC draft guidance provides some management control procedures for adding and removing national stock numbers from the Exception Files. However, the draft guidance does not include an itemized listing of valid reasons for adding national stock numbers to the Exception Files, and it does not establish policies and procedures for reviews. DSCC needs to continue incorporating management controls that will limit the growth of its Exception Files and provide visibility and reporting for purchase requests that are manually processed because of the Exception Files.

Appendix D. Sample of Purchase Requests Referred to Buyers for Review

To analyze the effect of conducting reviews of vendor offers that are outside price variance parameters, we selected a judgmental sample of 30 vendor offers made in response to orders against blanket purchase agreements. The sample consisted of DVD purchase requests that the SAMMS Procurement by Electronic Data Exchange had referred to buyers for review because of price variances from June 18 through July 22, 1998, and that were still being processed as of July 22, 1998. The table lists the offers by purchase request number, sorted on variance in ascending order of value. Standard and offer prices listed are for the entire purchase request, not price per unit.

Price Variances of Offers in Sample				
Sample No.	Purchase Request No.	Standard Price	Offer Price	Variance
1	YPC98163000404	\$ 49.68	\$ 6.60	\$(43.08)
2	YPC98176000160	7.22	11.62	4.40
3	YPC98170000400	4.75	14.56	9.81
4	YPC98170000399	4.75	14.56	9.81
5	YPC98201000683	34.74	48.78	14.04
6	YPC98198000488	82.10	106.25	24.15
7	YPC98201000549	44.50	69.52	25.02
8	YPC98195000368	4.66	35.00	30.34
9	YPC98190000156	52.26	84.96	32.70
10	YPC98198000419	23.75	64.60	40.85
11	YPC98191000396	34.32	85.27	50.95
12	YPC98173000537	4.28	106.42	102.14
13	YPC98163000405	20.12	128.18	108.06
14	YPC98195000371	14.95	125.00	110.05
15	YPE98201000248	1,005.00	1,122.00	117.00
16	YPC98198000418	95.00	223.40	128.40
17	YPC98173000556	380.00	590.62	210.62
18	YPC98173000332	380.00	590.62	210.62
19	YPE98201000133	1.62	230.48	228.86
20	YPE98201000134	1.62	230.48	228.86
21	YPE98202000156	51.52	283.13	231.61
22	YPC98189000274	71.95	330.60	258.65

Appendix D. Sample of Purchase Requests Referred to Buyers for Review

Price Variances of Offers in Sample (cont'd)				
<u>Sample No.</u>	<u>Purchase Request No.</u>	<u>Standard Price</u>	<u>Offer Price</u>	<u>Variance</u>
23	YPC98177000361	\$ 80.45	\$ 390.00	\$ 309.55
24	YPC98173000357	335.00	725.00	309.55
25	YPC98194000536	799.00	1,090.96	309.55
26	YPC98198000321	1,672.00	2,188.70	516.70
27	YPC98168000333	614.10	1,246.65	632.55
28	YPC98189000404	452.20	1,277.08	824.88
29	YPE98201000249	412.00	1,659.25	1,247.25
30	YPC98181000182	657.83	2,266.49	1,608.66

The table shows that the range of price variances was between \$43 under standard price and \$1,608 over standard price. However, 25 of the 30 offers in the sample had variances less than the \$345 cost of processing a purchase request manually.

Appendix E. Pipeline Segments of the Logistics Metric Analysis Reporting System

LMARS reports on 12 logistics pipeline segments. Those segments measure total order-to-receipt time for the procurement process.

Segment 1. Requisition submission time is the elapsed time from the requisition date to the DAAS receipt date.

Segment 2. DAAS initial processing time is the elapsed time from DAAS receipt of a requisition to its release to a wholesale Defense Supply Center.

Segment 3. Defense Supply Center processing time is the elapsed time from DAAS release of a requisition to DAAS receipt of issue status. An issue status is any type of materiel release order or issue instruction.

Segment 4. Storage activity processing time is the elapsed time from DAAS receipt of issue status to the date the materiel is shipped from the storage activity.

Segment 5. Storage activity to consolidation containerization point is the elapsed time from the date of shipment to the date of receipt at the consolidation containerization point.

Segment 6. Consolidation containerization point activity processing time is the elapsed time from consolidation containerization point receipt date to consolidation containerization point shipped date.

Segment 7. CONUS¹ in-transit time is the elapsed time from storage activity shipped date to CONUS customer receipt date. For OCONUS² customers, it is either the elapsed time from storage activity shipped date to port of embarkation receipt date or consolidation containerization point shipped date to port of embarkation receipt date.

Segment 8. Port of embarkation activity processing time is the elapsed time from port of embarkation receipt date to port of embarkation shipped date.

Segment 9. Port of embarkation to port of debarkation is the elapsed time from port of embarkation shipped date to port of debarkation receipt date.

Segment 10. Port of debarkation activity processing time is the elapsed time from port of debarkation receipt date to port of debarkation shipped date.

¹ Continental United States.

² Outside of CONUS.

Appendix E. Pipeline Segments of the Logistics Metric Analysis Reporting System

Segment 11. In-theater in-transit time is the elapsed time from port of debarkation shipped date to OCONUS customer receipt date. If a commercial door-to-door carrier is used, it is the elapsed time from storage activity shipped date to OCONUS customer receipt date.

Segment 12. Receipt take-up time is the elapsed time from CONUS/OCONUS customer receipt date to the receipt posting date.

Appendix F. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
Deputy Under Secretary of Defense (Logistics)
Assistant Deputy Under Secretary of Defense (Materiel and Distribution Management)
Director, Defense Logistics Studies Information Exchange
Under Secretary of Defense (Comptroller)
Deputy Chief Financial Officer
Deputy Comptroller (Program/Budget)
Assistant Secretary of Defense (Public Affairs)

Joint Staff

Director, Joint Staff

Department of the Army

Deputy Chief of Staff for Logistics (Supply Policy Division)
Auditor General, Department of the Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
Deputy Chief of Naval Operations for Logistics (Supply Programs and Policy)
Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Deputy Chief of Staff for Installations and Logistics (Directorate of Supply)
Auditor General, Department of the Air Force

Defense Organizations

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
Commander, Defense Supply Center, Columbus
Director, National Security Agency
Inspector General, National Security Agency
Inspector General, Defense Intelligence Agency

Non-Defense Federal Organizations

Office of Management and Budget
General Accounting Office
National Security and International Affairs Division
Technical Information Center

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Committee on Armed Services
House Committee on Government Reform
House Subcommittee on Government Management, Information, and Technology,
Committee on Government Reform
House Subcommittee on National Security, Veterans Affairs, and International Relations,
Committee on Government Reform

Part III - Management Comments

Defense Logistics Agency Comments



DEFENSE LOGISTICS AGENCY
HEADQUARTERS
8725 JOHN J. KINGMAN ROAD, SUITE 2533
FT. BELVOIR, VIRGINIA 22060-6221

IN REPLY
REFER TO

DDAI

11 January 1999

MEMORANDUM FOR DIRECTOR, READINESS AND LOGISTICS SUPPORT,
INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

SUBJECT: Draft Audit Report on the Logistics Response Time for the Direct Vendor
Delivery Process, Defense Supply Center, Columbus
(Project No. 8LH-0012)

Enclosed are DLA comments in response to your 2 November 1998 request. If
you have any questions, please contact Ms. Mimi Schirmacher, DDAI, 767-6263.

Encl


JEFFREY GOLDSTEIN
Chief (Acting), Internal Review

cc
DLSC-B
DLSC-L
DLSC-P
DSCC-DI

Defense Logistics Agency Comments

SUBJECT: Logistics Response Time for the Direct Vendor Delivery Process, Defense Supply Center, Columbus (Project No. 8LH-0012)

FINDING A: Effectiveness and Efficiency of Direct Vendor Delivery in Improving Logistics Response Time. DVD was effective in reducing consumable hardware inventory; but, as implemented by DLA and DSCC, it did not optimize LRT. LRT for DVD was not optimized because procurement personnel at DSCC conducted time-consuming price analyses for automated small purchases when the potential cost of doing so exceeded the difference of the total offer price over the total Government target price. Also, outstanding purchase requests for hard-to-fill items were not properly consolidated or monitored. As a result, DSCC prolonged LRT for 39 DVD purchase requests in two of our samples by an average of 45 days.

DLA COMMENTS: The draft audit report states that the objective was to evaluate the effectiveness and efficiency of DVD in improving LRT. The DoDIG identified three types of DVD: Planned, unplanned, and non-stocked items. The DoDIG correctly points out that for planned DVD, where a conscious effort was made to include items on long term contracts that provided for DVD with significantly reduced LRT, the average supply center processing time was 8.3 days, well within acceptable standards. The DoDIG also recognized that unplanned DVD and the DVD process for non-stocked items is used when DLA depots run out of stock or when the supply centers do not receive enough requests to justify stocking the item. The report discusses these two types of DVD purchases and actually focuses on simplified acquisition Procurement Administrative Lead Time (PALT), in lieu of LRT. DLA recognizes that absent depot stock or a planned DVD long term contract, these two types of DVD purchases, by their very nature, cannot succeed in reducing LRT since each acquisition must be solicited and awarded independently without the benefit of pre-established terms/conditions and prices. These DVDs are usually issued to mitigate the increased LRT associated with bringing material into stock and then issuing a material release order to the customer. DLA continuously reviews items for placement on planned DVD contracts to alleviate the need for unplanned DVD purchases. Consistent with DLA's Strategic Plan, reengineering our business practices to include more items on planned DVD contracts will improve LRT, customer support, and reduce PALT.

INTERNAL MANAGEMENT CONTROL WEAKNESS:

(X) Nonconcur.

ACTION OFFICER: Eleanor Holland, DSCC-BPP, DSN 850-7624

REVIEW/APPROVAL: Tom Ray, Assistant Executive Director, Procurement Management

COORDINATION: Althea Norman, DLSC-BR

Amy Sajda, DLSC-PPB

Pierson Kemp, FOP

Mimi Schirmacher, DDAI

Defense Logistics Agency Comments

RECOMMENDATION A.1: Recommend that the Commander, Defense Supply Center, Columbus establish procedures to ensure that, before performing price analyses when the offered price exceeds the target price for automated small purchases, buyers consider the potential savings and cost to manually process the purchase request in addition to the negative effect on logistics response time.

DLA COMMENTS: Partially concur. The business tradeoffs associated with extensive price analysis on low dollar value purchases will be taken into consideration. However, care must be exercised to avoid contradictory criticisms levied by the DoDIG on several recent audits critical of DLA for paying prices higher than previous prices paid. The 10 percent and 20 percent thresholds for unit price variance were established as cost controls to avoid automatic award at substantially higher prices than previous prices paid. While these purchases are low in value, and the administrative costs to manually process the awards sometimes exceed the value of the material being purchased, prudence demands that we exercise sound business judgment to guarantee the best price for our customers. Sound business judgment is subjective in nature. It can be facilitated by analytical tools and policies that augment automated system purchases when exceptions occur, such as excessive price quotes. The controls and processes in place ensure that the integrity of the automated system itself, and more importantly, the integrity of the procurement system, is free of fraud, waste or mismanagement, thereby ensuring that a material weakness does not exist. The procedures established to prevent "price creep" in DLA's automated system that results in increased PALT for a few of the many thousands of automated simplified acquisition does not constitute a material weakness. It may signify a lapse in procedural implementation that DSCC will evaluate and implement changes as appropriate to more effectively use the Phase I System to reduce LRT. These changes will be monitored under the Management Control Program to assure that anticipated savings materialize and that potential risks are mitigated.

DISPOSITION:

(X) Action is complete.

RECOMMENDATION A.2: Recommend that the Commander, Defense Supply Center, Columbus emphasize the requirement for buyers to assess and maximize opportunities to consolidate purchase requests for the same item and for buyers to follow up with the technical operations personnel at periodic intervals to determine status and disposition of referred purchase requests.

DLA COMMENTS: Concur. Phase I purchase requests (PRs) that were previously referred to technical operations personnel are now rejected to the manual areas for processing. The buyers that work these PRs in Phase I have also been moved into teams on the floor. This allows the PR to be worked in a setting that includes a team of contracting, supply and technical experts, and will also increase the potential for consolidation of PRs.

Policy in the DSCC Acquisition Guide (DAG) has been rewritten to more strongly encourage buyers to consolidate purchase requests and to follow up with technical operations personnel at periodic intervals to determine status and disposition of referred purchase requests. The following language will be available to buyers after the current review and approval process is complete:

13.106-1 Soliciting Competition

(a) Upon receipt of a new PR, check the PR trailer sheet for open PRs. If open PRs are listed as assigned to another buyer, contact the other buyer for status. If the open PR is in review status for technical, quality or supply reasons, inquire as to the status. The issues or problems associated with the referred PR may provide valuable insight into how to proceed with the new PR. It is the policy of this center to combine PRs for the same NSN when practical, however, not at the sacrifice of ALT. Good judgement, based on the dollar threshold reached if the requirements are combined, the SMCC and backorder status of the NSN, the required delivery date, and other extenuating circumstances should be used to decide if the PRs should be combined. Document the file with the status of the open PR, and rationale if decision is made not to combine. During the acquisition process, share information received with the assigned buyer of the open PR. Prior to awarding the PR, contact the buyer of the open PR to determine the possibility of combining for one award. If the open PR is still in referral status, coordinate with the office handling the referral as well as the assigned buyer to determine the possibility of withdrawing the referral and combine PRs for one award. Maintain thorough file documentation throughout the acquisition process.

DISPOSITION:

(X) Action is ongoing. ECD: January 31, 1999

ACTION OFFICER: Renee Fredrick, DSCC-BPP, 767-3505

REVIEW/APPROVAL: Tom Ray Assistant Executive Director, Procurement Management

COORDINATION: Mimi Schirmacher, DDAI

RECOMMENDATION A.3: Recommend that the Commander, Defense Supply Center, Columbus establish controls to ensure that when research of a purchase request by technical operations personnel causes delays in meeting the required delivery data and an alternate vendor is successfully identified for a subsequent purchase request for the same item, then the buyer terminate research on the original purchase request aging in referral and either consolidate it with the subsequent purchase request or redirect it to the new vendor.

DLA COMMENTS: Concur. As in Recommendation A.2. above, revised DAG coverage assures that delays in meeting required delivery dates are eliminated or reduced when other vendors are available.

DISPOSITION:

(X) Action is ongoing. ECD: January 31, 1999

ACTION OFFICER: Renee Frederick, DSCC-BBP, DSN 850-4987

REVIEW/APPROVAL: Tom Ray Assistant Executive Director, Procurement Management

COORDINATION: Mimi Schirmacher, DDAI

Defense Logistics Agency Comments

RECOMMENDATION A.4: Recommend that the Commander, Defense Supply Center, Columbus make software changes to ensure that buyers with purchase requests aging in referral are automatically notified if an order is issued for the same item.

DLA COMMENTS: Nonconcur. Current policy requires that the buyer with the newest purchase request (who already has visibility of older PR) consolidate them or consider consolidation. To implement the recommendations would require costly, time consuming, and unnecessary new programming. By strengthening and reiterating current policy (see A.2), fewer instances of unconsolidated PRs will occur in the future. In addition, the ongoing reorganization of the buyers and the items will better assure that, in the future, the same NSNs are assigned consistently to the same buyer, reducing the difficulty of consolidation.

DISPOSITION:

(X) Action is complete.

ACTION OFFICER: Jeff Curtis, DLSC-POA, 767-1433

REVIEW/APPROVAL: Tom Ray Assistant Executive Director, Procurement Management

COORDINATION: Mimi Schirmacher, DDAI

RECOMMENDATION A.5: Recommend that the Commander, Defense Supply Center, Columbus direct buyers to use the Defense Logistics Agency Pre-Award Contracting System to refer purchase requests to technical operations personnel and for technical operations and supervisory personnel to use the Defense Logistics Agency Pre-Award Contracting System to manage work load for referred purchase requests.

DLA COMMENTS: Concur. Currently, buyers and technicians in the Commodity Applications use DPACS to refer PRs. Supervisory personnel have access to associates' workloads through DPACS and can use DPACS to monitor and manage referrals. Associates in the Weapon Systems Applications use DPACS for technical referrals on a sporadic basis. This is due to shortcomings in DPACS concerning how workload is broken down in the Weapon Systems environment. DPACS is not currently configured to allow both a technical assignment code and a referral reason code. Even though this situation exists, it has been determined to direct associates to use DPACS as it is currently configured to refer and return most PRs with technical issues. When a turnaround time of 24 hours or less is anticipated, the teams will still be allowed the flexibility of bypassing DPACS in order to coordinate directly with the personnel involved. Supervisory personnel in the Weapons Systems Applications will be able to utilize DPACS to monitor and manage workload of referred purchase requests, except that the specific referral reason will not be available in DPACS. The center will recommend changes to DPACS that will enhance its future technical referral capabilities within the Weapons Systems Application environment.

DISPOSITION:

(X) Action is ongoing. ECD: February 28, 1999 for policy change; April 2000 for DPACS system changes

Defense Logistics Agency Comments

ACTION OFFICER: Gary Nettler, DSCC-BDT, DSN 850-1464
Eleanor Holland, DSCC-BPP, DSN 850-7264

REVIEW/APPROVAL: Tom Ray, Assistant Executive Director, Procurement Management
COORDINATION: Mimi Schirmacher, DDAI

FINDING B: Logistics Response Time Goals and Performance Measurement. Although DoD established a corporate goal to reduce LRT and to implement a system to monitor achievement of that goal, improvements were needed to assist in accomplishing that goal and measuring results. Specifically, DLA and DSCC did not establish goals to reduce LRT for DVD; DSCC did not use the Method of Support Model to properly optimize cost-effectiveness and responsiveness to customer requirements of DVD processes; and LMARS, the LRT performance measurement reporting system, needed improvement. As a result, there was no assurance that DVD would contribute to achieving the DoD goal to reduce LRT. Additionally, deficiencies in LMARS may hamper measurement of progress toward achieving the DoD goal.

DLA COMMENTS: Specific comments and actions associated with goals to reduce LRT for DVD and the use of the Method of Support Model are addressed in B1 and B2 below. The deficiencies in the DLA LMARS system, the LRT performance measurement reporting system, have been recognized by DLSC-LP (Special Programs Team).

ACTION OFFICER: Jack Marshall, DLSC-LP, 767-3505

REVIEW/APPROVAL: Tom Ray, Assistant Executive Director, Procurement Management
COORDINATION: Mimi Schirmacher, DDAI

RECOMMENDATION B.1: Recommend that the Commander, Defense Supply Center, Columbus establish goals for logistics response time for direct vendor delivery for consumable hardware items.

DLA COMMENTS: Concur. DLSC guidance to be provided. ECD: March 1, 1999. Once guidance is received from DLSC, DSCC will have one month to implement.

DISPOSITION:

(X) Action is ongoing. ECD: 30 days from receipt of DLSC policy.

ACTION OFFICER: Eleanor Holland, DSCC-BPP, 850-7264

REVIEW/APPROVAL: Tom Ray, Assistant Executive Director, Procurement Management
COORDINATION: Mimi Schirmacher, DDAI

RECOMMENDATION B.2: Recommend that the Commander, Defense Supply Center, Columbus establish procedures to ensure that cost-effectiveness and responsiveness to customer requirements of the direct vendor delivery process are optimized through the use of the Method of Support Model or an alternative method.

Defense Logistics Agency Comments

DLA COMMENTS: Concur. DSCC will train or re-train personnel in the use of the Method of Support Model and/or Vendor Stock Retention Model, including how and when to apply the models. In addition, information about this model(s) will be included in an upcoming meetings of the Acquisition Council (which includes senior acquisition personnel from all the application groups) and Acquisition Forum (includes acquisition personnel at all levels for monthly briefings on important acquisition topics). It should be noted that neither of the above models addresses responsiveness. However, DLA/DLSC has issued multiple letters of guidance on proper responsiveness of DVDs. Further, the most recent letter on this topic has directed the ICPs to provide explanation of contracts with excessive DVD LRT.

DISPOSITION:

(X) Action is ongoing. ECD: January 31, 1999

ACTION OFFICER: Mike Fauris, DSCC-PCD, DSN 850-1751

REVIEW/APPROVAL: Tom Ray Assistant Executive Director, Procurement Management

COORDINATION: Mimi Schirmacher, DDAI

DLA APPROVAL:



F.R. CHAMBERLIN
Rear Admiral, SC, USN
Deputy Director

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