

SUPPLY CHAIN OPERATIONS AND MANAGEMENT AWARD EVALUATION CRITERIA

Section 1 -- General Information and Project Complexity

1. Name of submitting organization:

Headquarters, Defense Logistics Agency, 8725 John J. Kingman Road, Fort Belvoir, VA
22060-6221

2. Identify the responding organizational unit (site, function etc.)

Logistics Operations, Business Management Office, Business Development and Supply
Chain Integration Division (J-381)

3. Provide a brief mission description of the overall business objectives, product lines, and mission of the organization:

DLA is the primary manager of consumable material for the Department of Defense and:

- Is responsible for management of over 3.7 million items
- Has locations world-wide manned by over 24,000 personnel
- Is primary material manager for over 95% of DoD spares and repair parts
- Manages 100% of fuels and packaged petroleum
- Manages 100% of subsistence
- Manages 100% of medical supplies, medical equipment, and pharmaceuticals
- Manages 100% of clothing and textile items
- Manages weapon system and non-weapon system spare parts as well as construction supplies

Total sales in FY 2001 were \$15.8 billion. DLA also is the primary distribution manager for DoD, which role encompasses 18 CONUS and 3 OCONUS distribution centers. DLA processes 83% of materiel requisitions throughout the DoD.

DLA serves as the primary cataloging activity for DoD and handles all disposal, reutilization, and reuse services. It was designated the DOD lead agency for Joint Total Asset Visibility Program. It is also the lead agency for Automated Information Technology.

Expanding the Mission

Under the National Inventory Management Strategy (NIMS) and use of best commercial practices, DLA is expanding its control over supply chains by assuming ownership of DLA managed retail stocks currently owned by the Military Services. It has

accomplished this for some commodities and is working to complete the process for Class IX spare parts. By singling up management of these items we expect to:

- Improve responsiveness to customer requirements
- Reduce overall DoD inventories
- Improve system efficiency .

4. Indicate the award category of submission (operations, academic, technology):

Award for Supply Chain Operational Excellence

5. Provide a brief description of the supply chain and the processes the submission spans (Plan, Source, Make, Deliver, Return):

Under NIMS, DLA will expand its management into the retail level, yielding a vertically integrated supply chain from the commercial source of the products to the point of consumption and back to disposal or reutilization. Supply chain processes includes:

- Receipt of customer requirements and determination of stock policy/stock levels for items (PLAN)
- Sourcing for needed material and associated supply services (SOURCE)
- Contracting/purchasing for stock, direct vendor delivery, or Prime Vendor support (MAKE, DELIVER)
- Satisfaction of requisitions via depot distribution or by direct commercial shipment (DELIVER)
- Reutilization, reuse, or disposal of material when not required or obsolete (RETURN)

DLA efforts to expand its management of the supply chain cover all key areas as noted above. This is important due to the wide range of customers it supports--Army, Navy, Air Force, Marines Corps, other federal agencies, and state and local Governments. Individual customers within the Military Services include maintenance depots, flight operations, port operations, mobile fighting units, education centers, and base operations around the globe. NIMS entails working closely with customers to specify the level of support required (through Service Level Agreements), determining appropriate stock levels, maintaining those at primary, secondary, and certain customer depot sites, providing rapid deliveries from stock or commercial suppliers, and managing excess stocks via redistribution, reutilization, or disposal.

6. Provide the names of the supply chain partner organizations (external) involved in the project. Indicate the number of people involved from each partner organization and the functional category of each:

- a. United States Army: Deputy Chief of Staff for Logistics
Directorate for Sustainment
Supply Policy Division, DALO-SM, Room 2E554
Army Pentagon
Washington, DC 20350
- b. United States Navy: Chief of Naval Operations
Directorate of Logistics
OPNAV-4, Room 4E606
2000 Navy Pentagon
Washington, DC 20350-2000
- c. United States Marine Corps:
Deputy Chief of Staff (I&L)
Directorate of Logistics Plans & Strategic Mobilization
Policy
Code LPC, Pentagon
Washington, DC 20350
- d. United States Air Force: Deputy Chief of Staff (I&L)
Supply/Fuels Policy & Procurement Division (AF/ILSP)
Room 4A276, Pentagon
Washington, DC 20350
- e. United States Transportation Command
Operations & Logistics, J-4
Scott Air Force Base, IL 62225

The number of personnel involved from the above sites varies considerably.

7. Provide the names of the functional organizations (internal) involved in the project and indicate the number of people involved from each functional organization and the functional category of each:

The supply chain support provided by DLA is arranged and managed primarily by three major supply centers or inventory control points (ICPs) along with the Defense Distribution Center. The ICPs communicate with customers on requirements, determine supply levels, manage stocks, award contracts, and issue material release orders to depots. Each of these activities have established an organization that focuses on Supply Chain efforts.

- a. Defense Supply Center Columbus, OH (DSCC)

- b. Defense Supply Center Philadelphia, PA (DSCP)
- c. Defense Supply Center Richmond, VA (DSCR)
- d. Defense Distribution Center, New Cumberland, PA (DDC)

The Defense Distribution Center is responsible for determining stock locations, managing warehouses, receiving and stowing material, and pulling, packing, and shipping material based on customer orders routed through the ICPs. In FY 01 it responded to approximately 15 million material release orders. The Supply Chain organizations are generally staffed with from four to eight individuals; however, these efforts can only be accomplished with help from a variety of personnel assisting throughout each activity.

8. Provide a point of contact for each supply chain partner (name, mailing address, commercial telephone #, DSN and e-mail address).

DSCC:

Mr. Steve Rodocker
P.O. Box 3990, Columbus, OH 43216-5000
Ph: 614-692-2192, DSN: 850-2192
Email: Stephen.Rodocker@dsc.dla.mil

and--

Mr. Frankie Stewart (retired December 2001)

DSCR:

CAPTAIN A. B. Sligh, Jr., SC, USN
8000 Jefferson Davis Highway, Richmond, VA 23297-5000
Ph: 804-279-4711, DSN:695-4711
Email: asligh@dscr.dla.mil

DSCP:

Colonel Phil Liller, USAF
Bldg 3, DSCP-I, 700 Robbins Avenue, Philadelphia, PA 19111-9096
Ph: 215-737-9151, DSN: 444-9151
Email: paa0048@exmail.dscp.dla.mil

DDC:

Mr. Pat McCormick
ATTN: DDC-T, 2001 Mission Drive, New Cumberland, PA 17070
Ph: 717-770-8602, DSN: 977-8602
Email: PMcCormick@ddc.dla.mil

DLA HQs:

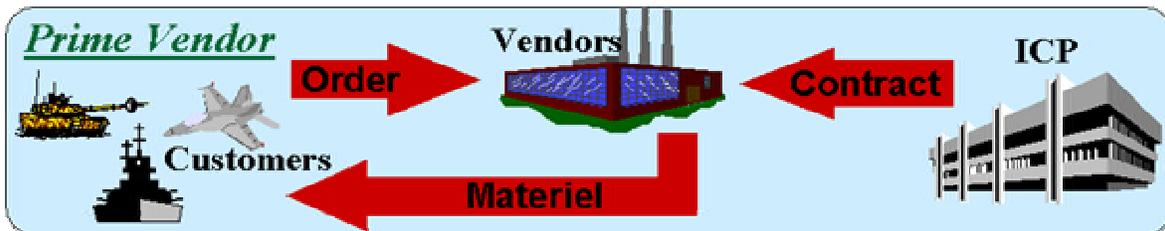
CAPTAIN Stephen A. Prince, SC, USN
ATTN: J-381, 8725 John Kingman Rd., Fort Belvoir, VA
Ph: 703-767-3782, DSN: 427-3782
Email: tony_prince@hq.dla.mil

Section 2--Implementation

1. Explain why the supply chain initiative was undertaken and how it was selected:

In the late 1980s DLA was faced with increased competition for its more commercial product lines, particularly subsistence, medical material, and clothing and textiles. This competition came from Government activities, such as the Veterans Administration and the Defense Commissary Agency, and from the commercial sector where emergence of the Government Purchase Card began to make it easier for personnel to buy from a wide range of sources. DLA moved to incorporate commercial practices in the more commercial commodities first, by making arrangements for long term contract support and associated support services. This took the form of long term contracts (LTCs) and corporate contracts for many different items where vendors could ship directly to customers or to depots. Goals were set by DLA for all the ICPs and the use of LTCs grew. Now dollars obligated under LTC arrangements exceed 90% for troop support commodities and are at 100% for fuels/energy. Potential growth remains for spares where we are currently at 30%.

DLA efforts gave rise to the widespread use of “Prime Vendor” (PV) contracts. Under PV a long term contract was set up, but customer requirements were submitted directly to the PV by electronic means. In some cases this resulted in PVs filling bins at maintenance sites as material was needed, i.e., “pushing” material to customers as it was needed. Data on material ordered and a contractor’s ability to meet them flowed through the ICP to allow careful monitoring of performance.



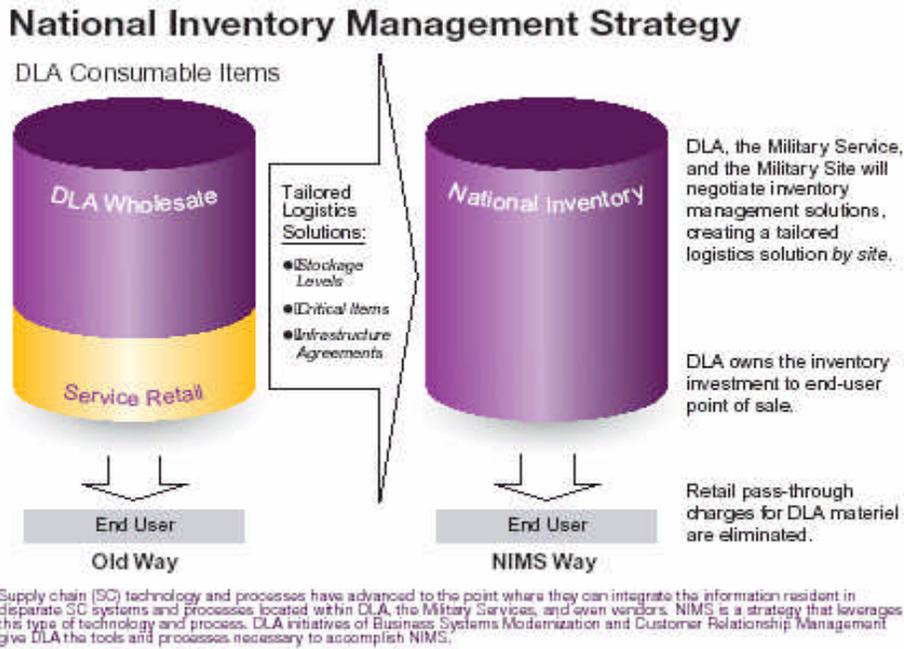
PVs were extensively used in the subsistence arena where well established commercial supply chains were already in place. DSCP pursued PVs to take advantage of these supply chains and speed item delivery while increasing item selection, a particularly desirable feature for food items.

In 1999 the Army single stock fund initiative resulted in a request to assume management for additional medical material items. This was accomplished largely through the increased use of Prime Vendors which used commercial supply chains to speed the delivery of material to customers.

Repair parts. DLA was also approached by the Navy in mid-1999 because of funding constraints in their retail inventory account. Spare parts availability at NAS Lemoore,

California, and NB Yokosuka, Japan, was an acute problem. Extending DLA's supply chain management responsibilities vertically to the point-of-sale was a logical and efficient solution. DLA already had personnel and infrastructure in place to work with the suppliers, materiel, and the customers in the retail level of the supply chain. Using a NIMS approach DLA replaced 11,000 NSNs in Yoko with DLA materiel in 2000-2001.

These initiatives moved DLA thought processes beyond the standard wholesale provider paradigm. Under NIMS DLA will increasingly replace distinct wholesale and retail inventories with a national inventory that can be managed in a more integrated manner.



DLA decided a national inventory process was better because:

- For commercial type material use of established supply chains provides the best combination of timely delivery, market prices, and product choice.
- A single national inventory will provide complete demand visibility and allow redistribution or reduction of stocks in the most efficient manner.
- This approach will require close customer interface and tailored logistics support arrangements, capabilities the new DLA Enterprise Resource Program (BSM) and the new Customer Relationship Management organization can support.

- It allows DLA to focus on its core competency--consumable item management and distribution, while the Military Services focus on their core competencies--warfighting and management of complex, reparable material or major end items.

2. Indicate the duration of the project. Note if the project was a pilot that is being rolled out. Note if the project is ongoing or still in development:

DLA's expanded control of the supply chain has been ongoing since the early 1990's. The transition to total management of fuels, energy, and subsistence is largely complete. It is also quite advanced in the area of medical material. However, as noted above, this accelerated in 1999 as the Army, a major customer, moved to a single stock fund system, which caused DLA to assume total management of many additional medical items.

As for Clothing and Textile items, a similar transition has been underway since the mid 1990's. This is largely complete for C&T items at Troop Induction Centers, but progress is still underway for other C&T users.

The move to expand the supply chain for Class IX spare parts is of much more recent origin and is an ongoing series of initiatives with multiple pilot programs. It entails the following:

- Concept Development
- Planning and Coordination with the Military Services
- Testing
- NIMS Rollout

Certain NIMS projects, such as NAS Lemoore and NB Yokosuka are still being revised. Others, such as tests at Camp Lejeune, NC, and Fort Riley, KS, are in the very early stages. An effort to forward stock fast moving items at Sigonella, Italy, is just underway. The bulk of NIMS for spare parts is in the late Concept Development phase and has required high level coordination with senior logisticians at the Military Services.

3. Describe, in detail the process used to complete the initiative:

Implementing NIMS requires extensive teaming with the customers and with the contractors that support them through new arrangements DLA has established. Major steps include:

- a. Identification of commodities where use of established commercial supply chains are most feasible. This often required extensive visits with customers in the field and at their Headquarters.
- b. Documentation of customer needs relative to delivery, price, and selection.

c. Determination of automated system requirements. An emphasis was placed on the use of Electronic Data Interchange processes initially, although Internet applications were added in the early 1990's as soon as that technology was available.

d. Extensive market research as to vendor capabilities. Special contracting tools such as the use of Broad Agency Announcements (BAAs) were used to obtain the most innovative ideas industry could offer.

e. Extensive use of automated ordering systems to speed the delivery of material and to reduce data errors. The DLA Paperless Order Placement System (POPS) and SAMMS Procurement by Electronic Data Exchange (SPEDE) were pioneers in the use of EDI to get orders to vendors. STORES (Subsistence Total Order and Receipt Electronic System) is a follow on to these earlier systems and allows rapid, direct submission of customer food orders from legacy systems and their subsequent fulfillment by commercial vendors.

NIMS for class IX repair parts. The following concept of operations have recently been briefed to senior logisticians at all four military services:

- Adjusting consumer level inventories to reflect the range and depth of customer requirements at individual sites.
- Continued use of Service legacy systems for inventory management but interface them with DLA systems--both SAMMS and the new BSM.
- Base stocking criteria on regional usage and customer input after transfer of retail inventories. Position material to provide the best total support while optimizing transportation.
- Adjustment of DLA national inventory levels as necessary to meet specific warfighter needs.
- Establishment and monitoring of performance measures jointly by MILSVC and DLA.

The next step is designation of test sites, although this process was reversed somewhat due to problems at Lemoore and Yokosuka. Due to the large number of potential activities that may be affected, and the workload on DLA, it was determined a phased roll-out was the only practical approach. Also, automated systems impact will be very significant and the extent we can implement will be largely determined by systems changes.

DLA is currently involved in multiple programs. Examples include:

Fleet Prime Vendor (Medical)

The DSCP Medical PV program has been expanded to provide pharmaceutical and medical/surgical products to the Navy Fleet, regardless of location, and allows customers to take advantage of commercial business practices while still addressing their military

unique requirements. This program offers the Fleet the same products available to other Military Services, along with providing low prices and consistent deliveries. DSCP accommodates the requirements of the Navy by furnishing a single source for ordering so that supply operations and legacy systems aboard ship remain intact. The Fleet PV provides mobilization support to hospital ships with the mission of providing mobile, flexible and rapidly responsive acute-care during any national emergency. Upon notification of activation, pharmaceutical supplies are delivered to these ships within three days. FY 00 Activity for Fleet PV accounted for \$8.1 million in sales and over 80,000 orders delivered to the Fleet.

Medical Tracking System

DSCP and the United States Transportation Command (USTRANSCOM) are implementing a Direct Vendor Delivery (DVD) In Transit Visibility (ITV) prototype that tests new prime vendor business practices and technologies. The DVD ITV prototype team includes Bindley Western Industries, USTRANSCOM, the Military Traffic Management Command, US Bank, Emery Worldwide, and the Department of Transportation's Volpe National Transportation Systems Center. The prototype calls for Bindley Western, a DLA medical prime vendor, to generate shipment information in American National Standards Institute (ANSI) X12 electronic data interchange (EDI) formats and forward that information electronically to various military and commercial trading partners. This effort will result in improved warfighting readiness by providing visibility of pharmaceuticals in USTRANSCOM's Global Transportation Network (GTN) as they move to overseas locations through the commercial and military transportation systems.

Subsistence

Four food service equipment Prime Vendor Contracts were awarded in June of 1999. The four contracts are based on four regions covering Military and Federal customer throughout the world. These contracts cover all commercial and shipboard food service equipment, as well as incidental services related to that equipment. These regional awards are broken down as follows:

- East Coast and European Theater land based activities: Lankford-Sysco, Pocomoke City MD
- East Coast Navy Ships: The Source, Hampton, VA
- Central Region U.S.: Dietary Equipment, Columbia, SC
- West Coast and the Pacific: Gill Marketing, Phoenix, AZ

Contract implementation for all pilot areas was completed in early FY01. New customers are being continually added as the word spreads. The estimated sales dollar volume for fiscal year 2001 is \$24 million. National Stock Numbers are not used for orders under these contracts, since customers designate the make and model number of the equipment they order.

Class IX Spare Parts

As noted above, initial sites were Lemoore, CA, and Yokosuka, Japan. Different approaches were utilized to reflect the particular problems each site faced. For Lemoore altered requisition processing and increased use of dedicated truck deliveries from

San Joaquin, CA, were used. For Yokosuka, DLA assumption of material ownership and changes in the DLA inventory management system were completed to allow increased use of Pacific stocks to fill fleet requisitions, shortening customer wait time and reducing transportation costs.

4. Identify significant challenges encountered, the process for resolution, and the solutions. Identify any best practices employed or developed:

Expanding the DLA role to encompass the entire supply chain have been challenging. Significant problems have included:

- Internal management buy-in for major process changes. There has been considerable resistance to moving away from the traditional DLA mission of wholesale stocking of material at depots and filling all requisitions from that source. However, in some cases this still is a very efficient method for filling orders.
- Vendor willingness to try new support arrangements, particularly when they assume risk for supply availability of items they supply. When vendors assume risk they expect to be paid to do so, which affects pricing.
- Employee acceptance and adoption of new practices. Learning new methods of support is always a challenge for a large organization.
- Automated systems changes. These are often the major choke point in getting new processes fielded.
- Acceptance by and adaptation to changes by major customers, which often require some adaptation by their legacy systems. Customers are often cautious--if support has not met expectations they fear it will worsen and if it has been good they fear it will go in the other direction.

Overcoming Concerns

Customers. Moving to manage the entire supply chain rightly engenders concern--the best way to allay these is to bring in customers early and explain the changes; getting their input relative to establishing the measures of performance helps considerably. IT interfacing is usually a sticking point and to overcome this DLA was required to institute as many changes on its end as possible, minimizing programming that was required by customer IT personnel. The best results come from changing DLA systems, where necessary, to accept the output from the customers as is.

Vendors. Vendor interest is largely tied to expected sales and profits. The use of long term and corporate contracts, which tend to increase sales to vendors who receive such awards, is one key to attracting interest. Pre-solicitation conferences were an aid so vendors could become familiar with the planned changes. Providing them the best possible estimates of future potential business also helped. The BAA process noted

above gave vendors an opportunity to propose PV approaches that fit in with their current, and new, ways of doing business. It also encouraged them to propose value added services they felt would attract business and earn profits.

Employees. The key was to bring in groups of employees early to help them design new processes and then sell them to co-workers. The concept of “managing suppliers” not just supplies was emphasized as was the need for additional skills in market research, marketing, and the award and management of larger dollar value, complex contracts. In many cases the prospect of higher grade levels commensurate with the need for additional skills was a major motivator. Indeed, grade levels at ICPs that have done the most to extend the supply chain have increased.

Management. In some ways this has been the most difficult problem. These changes have required a great deal of hard work for managers in particular with less likelihood of increases in grade as an incentive. However, concerns about the future of DLA without such changes proved to be a major motivator. Managers were aware of other Government agencies’ interest in DLA customers as well as the fact that customers had more choices than ever as credit cards and the internet became normal ways of locating and ordering supplies. Also, encouragement from the highest levels of the Agency and challenging goals relative to establishment of long term, corporate, and PV contracts helped cement managers’ commitments to make the new processes work.

5. Indicate the metrics used to measure (a) progress and (b) success:

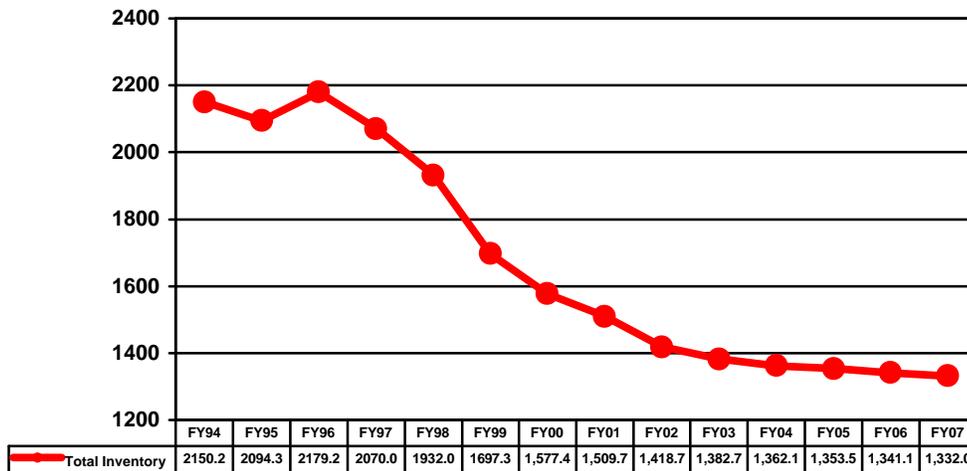
The primary metrics for medical, subsistence, and C&T commodities are supply availability (percent of time when requisitions for stock items are filled immediately), backorders, and customer wait time. For those items supplied by Prime Vendors the key indicator is delivery time since items they supply are always supposed to be available. For medical and subsistence material mean logistics response time has stabilized at two days due to prime vendor arrangements.

Metrics for the more recent NIMS implementation pilots for spares are focused on customer readiness and DoD cost avoidance. Customer readiness is measured by stock availability and average customer wait time when available. Two measures of stock availability are in stock percentage and net effectiveness. In stock percentage looks at how many we agreed to stock are on hand at the customers site at any point in time. Net effectiveness measures the number of customer requisitions filled over the total received for a specific population of items. For DDYJ Yokosuka, Japan, and NAS Sigonella, Italy, in stock percentage and net effectiveness are tracked and reported monthly.

At Yokosuka supply availability is nearly 90%, about 5% above DLA’s internal goal. DLA increased their materiel investment from \$7M to \$40M and monthly sales on those items replaced have increased due to increased availability from \$190K to \$4M. At Lemoore requisition processing was streamlined and dedicated truck deliveries were added. Significant parts availability improvements at Lemoore resulted. From a baseline of 8.7 days average customer wait time at NAS Lemoore was reduced over 50%.

In terms of overall DoD cost avoidance, the Service managed working capital reductions caused by redistribution of DLA assets closer to the customer are counted as a cost avoidance. Since the Defense Working Capital Fund (DWCF) was not augmented for initial NIMS efforts the entire amount of Service working capital fund reductions are counted. Using this methodology, a \$12M overall cost avoidance was seen in Yokosuka, Japan. As the NIMS expands, cost avoidance/savings calculations will include Service working capital fund reductions net of any DWCF increases.

6. Document and quantify cost and performance benefits, including the projects return on investment and changes in the value of one or more of the SCOR Level 1 metrics (not all metrics must be captured or reported:



DSCP Inventory Levels

Expanded control of the supply chain and the associated use of long term contracts and prime vendors has had significant effects on inventories. Initial effects are substantial as the chart above shows for DSCP, where commercial type items predominate. Levels have dropped considerably and are expected to slowly level out. However, as DLA assumes responsibility for retail spares inventories stocks may increase, at least initially.

As noted previously, the customer wait time, or logistics response times, for medical and subsistence commodities have stabilized at about two days. Overall logistics response time for all commodities during FY 01 averaged about 10-11 days.

7. Outline how the success of this effort supports the organizational objectives described in Section 1, Item 3:

The approaches and methods described above have provided the following benefits to DLA customers:

- Reduced overall customer wait times for most items.
- Stabilized prices. Studies have demonstrated that entering into long term arrangements with vendors significantly stabilized prices. When inflation is taken into account this essentially results in price decreases, assuming other factors remain equal.
- Reduced the need for internal resources as workload has shifted to commercial vendors. For example, total personnel have moved from over 65,000 in 1992 to 24,000 in 2001. (Note, 12,363 transferred to the new Defense Contract Management Command.) ICPs have been reduced from six to four; distribution depots went from 27 to 21.
- Customer choice has often been increased substantially, particularly for more commercial commodities.

Key Agency goals of high quality material, reduced customer wait times, and reduced DLA investment in material have been largely accomplished. However, the time and effort required to accomplish many of these initiatives have resulted in a lack of resources to perform traditional item management, resulting in increased backorders for certain class IX repair part items. Through diligent efforts these backorders have been substantially reduced in the past year. For example, spare parts backorders at the end of September 2000 peaked at about 500K. By February 2002 they had been reduced to 388K or about 22 percent.

As we expand NIMS to spare parts we expect to experience some increase in inventory levels since customers will be reluctant to part with local inventories they have grown to depend on. We expect over time to draw down total DoD inventories and to position stocks more efficiently, taking advantage of major stock positioning initiatives like the Strategic Distribution Management Initiative. However, if we are able to use Prime Vendors to a significant degree to help manage the supply chain for spares, we will be able to near term drive down inventories.

Section 3--Knowledge Transfer

1. Describe the efforts to share lessons from this effort with other internal organizations.

In 1999 DLA HQs formed a Supply Chain Integration Office which was tasked to help develop, coordinate, and field promising supply chain projects. This office reported directly to the Director of Material Management and later moved under the current Logistics Operations Business Management Office. It helps integrate and coordinate numerous supply chain initiatives. Field level activities have formed similar supply chain organizations where a primary mission is the coordination of such efforts within DLA.

DLA has also put in place a formally chartered Supply Chain Management Council (SCMC) which meets every six weeks to discuss the success of initiatives that are largely complete and to review and critique proposed changes for the future, such as the NIMS initiative. The SCMC has upper level managers from each major field activity and results of meetings are posted on a new SCMC website to facilitate exchange of data with DLA personnel, OSD, and other military or federal organizations. Results of recommended programs are briefed to a Business Resources Board and subsequently to senior level management at the field activities and Headquarters.

Industry publications such as "Government Executive" and "Government Computer News" have contained articles on several DLA supply chain initiatives. These serve to help share data both within and outside of DLA.

In addition, the Director, DLA, holds periodic "Town Hall Meetings" at the headquarters where he personally explains programs like NIMS to the entire staff.

2. Explain how this initiative can be transferred to other organizations and specify the likely candidates for transference.

DLA has developed a wide range of briefings, fact sheets, and papers on the initiatives noted above as well as personnel expertise in the field and at Headquarters. Many of these can be obtained from:

- DLA Headquarters and field activity websites
- Points of contact in the field activities
- DLA Business Development and Supply Chain Integration Office (J-381)
- The DoD Supply Chain website under contractor development

Programs are also briefed at numerous industry supply chain conferences as well as at annual DLA Customer Expositions. They are outlined in DLA publications such as

“Dimensions Magazine” and the regular customer publication “Loglines.” The new web based publication “DLA Today and Tomorrow” is also used.

The most likely candidates for this information are logistics personnel at both field and Headquarters levels of Defense logistics organizations. Any personnel interested in improving supply chain efficiency by streamlining all the processes inherent in meeting customer supply requirements would also benefit. For example, DLA has experienced visits from several foreign governments in the last two years by logistics personnel interested in our supply chain initiatives. Prominent among these visits were military personnel from Russia, Italy, the Defence Logistics Organization of the United Kingdom, and from the Defence Ministry in Canada.