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LOGISTICS PLANNING

Opportunities for Enhancing DOD's Logistics Strategic Plan





United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-272661

December 18, 1996

The Honorable William J. Perry
The Secretary of Defense

Dear Mr. Secretary:

The Department of Defense (DOD) has recognized that its logistics system, designed decades ago to support the U.S. military in a global conflict, is slow, complicated, redundant, and costly. With the end of the Cold War and the advent of budgetary limitations, DOD's logistics system must now support a smaller, highly mobile, high-technology force with processes that are as efficient as possible. Thus, in 1994, DOD developed a logistics strategic plan with the goal of developing a better, faster, more reliable, highly mobile, less costly response capability to deliver logistics material and services to the user. We reviewed DOD's logistics strategic plan to identify opportunities for increasing the likelihood of implementing the plan's goals and objectives successfully.

Background

DOD uses its secondary inventories, such as spare parts, clothing, and medical supplies, to support its operating forces worldwide. However, its logistics system to acquire, store, and deliver these materials has frequently been criticized as cumbersome, inefficient, and costly. DOD's inventory management problems have been long-standing, characterized by the expenditure of billions of dollars on excess supplies and the failure to acquire sufficient tools and expertise to manage them effectively. DOD's culture has historically encouraged maintaining excessive inventories rather than managing with just the right amount of stock, and DOD has been slow to adopt new management practices, technologies, and logistics systems. Lately, however, DOD has taken several steps, such as developing a prime vendor for medical, food, and clothing supplies, to help change this culture.

In fiscal year 1994, DOD developed a logistics strategic plan, which it has updated annually, to provide an integrated logistics roadmap to support its warfighting strategy. The plan, which is prepared by the Office of the Deputy Under Secretary of Defense (Logistics) and approved by the Under Secretary of Defense (Acquisition and Technology), indicates senior leaders' commitment and support, which are important in overcoming barriers to changing DOD's culture. Its current plan states that DOD is striving to cut secondary inventories from the current \$70 billion to

\$53 billion or less by October 2001, or about 24 percent, and occupied storage space from 631 million cubic feet to 375 million cubic feet or less, or about 40 percent. DOD's data appear to indicate that, for the most part, DOD is on target in achieving these outcomes by the end of the decade. DOD also hopes to reduce logistics response times by one-third from its fiscal year 1996 first-quarter average by September 1997, and to reduce the average age for backordered items to 30 days by October 2001.

DOD's plan can further serve as a fundamental building block to creating a results-oriented organization as envisioned by the Government Performance and Results Act (GPRA) of 1993, which requires federal agencies, including DOD as a total entity, to develop strategic plans no later than September 30, 1997, for a 5-year period. In previous work, we have found that leading organizations that successfully implement results-oriented management have established clear hierarchies of performance goals and measures throughout all levels of their organizations. GPRA was designed to create a new results-oriented federal management and decision-making approach that requires agencies to clearly define their missions, set goals, link activities and resources to goals, measure performance, and report on their accomplishments. In crafting GPRA, Congress recognized that agencies must be alert to the environment in which they operate; in their strategic plans, they are required to identify the external factors that could affect their ability to accomplish their missions.

The cost of DOD's logistics system is larger than the budgets of some federal agencies that are required to submit their strategic plans to Congress under GPRA. Although DOD is required to develop and submit a DOD-wide plan to Congress, the GPRA approach to strategic planning is, in our opinion, a useful technique for larger efforts, such as DOD's logistics system.

Results in Brief

DOD's plan gives direction to improvements that are needed to reduce the costs of its logistics system (i.e., reducing logistics cycle times, developing a seamless logistics system, and streamlining the logistics infrastructure) and lays out specific objectives and strategies to produce these improvements. DOD could build on its plan and increase the likelihood of implementing its goals and objectives successfully, as well as be better prepared for implementing the requirements of GPRA, if the plan (1) linked its action plans to resources so that both DOD managers and Congress can make more informed decisions on the value and priority of logistics

system improvements; (2) better linked the services' and the Defense Logistics Agency's (DLA) plans to DOD's plan; and (3) identified interim approaches that can be developed and implemented when milestones of a priority strategy, aimed at achieving the plan's overall goals and objectives, have been extended. DOD's success in bringing these elements together hinges on its top-level managers' continued and visible support of efforts to remove institutional cultural barriers.

DOD's Logistics Strategic Plan

Recognizing that it needed an integrated logistics roadmap to support its warfighting strategy into the next century, DOD developed a strategic plan in 1994 to improve its logistics system. The plan does a good job setting out a vision of what DOD expects the logistics system to do, that is "provide reliable, flexible, cost-effective and prompt logistics support, information, and services to the warfighters; and achieve a lean infrastructure." DOD's vision is guided by several principles, which its plan highlights, such as the

- need for near real-time information on material and logistics support capabilities,
- need for both performance metric and performance measurement methods, and
- use of process reengineering and investment to reduce the operational and support cost burden on defense resources without reducing readiness.

The plan recognizes that the future logistics environment will require greater mobility, visibility of key assets, and more dynamic workload management to provide a rapid response to changing requirements and improved and accurate management information to better control logistics resources as defense budgets decline. The plan also points out that streamlining to a leaner logistics system can be achieved through greater integration of business and production processes but that performance of logistics processes must be continually assessed to identify opportunities for improvement through the adoption of new initiatives.

DOD's fiscal year 1996-97 edition of its plan reiterates the 1994 plan's goals and aims to achieve them by 2001. According to DOD's plan, its overall goals are to (1) reduce logistics cycle times, (2) develop a seamless logistics system, and (3) streamline the logistics infrastructure. The plan also sets forth the objectives and strategies for addressing these goals. In all, the plan lists a total of 95 specific strategies, including the identification of 12 priority strategies, such as the total asset visibility, battlefield distribution, and continuous acquisition and life-cycle support

(CALs) strategies. The strategies are to help accomplish the plan's goals and, as a result, "achieving world-class capabilities, while reducing the cost of DOD's logistics system."

DOD Has Opportunities to Enhance Implementation of the Plan's Goals

DOD reported that it has made progress in achieving all three of its goals. DOD recognized, however, that implementing certain strategies was often more complex than originally anticipated and that while most strategies included specific milestones, many actions do not happen just once but continue. As a result, DOD has adjusted its approaches to some of the strategies and its projected completion dates for others. DOD can further improve its planning process by (1) linking its priority strategies to resources, (2) better linking the services' and DLA's plans to its logistics strategic plan, and (3) identifying interim approaches when milestones of a priority strategy have been extended.

Linking Strategies and Action Plans to Resources

Although DOD's plan indicates that staffing and financing requirements are to be aligned to the planning, programming, and budgeting system's (PPBS) cycle, it does not indicate the magnitude and source of resources that are required to implement many of its strategies, particularly the priority strategies. By including the resources to carry out the plan's strategies, DOD could help ensure that a strategy based on priorities, and agreed to by those who must approve the resources to implement them, guides management actions and shapes the budget consistent with the direction and outcomes it wishes to achieve.

In this connection, logistics managers for one of DOD's priority logistics strategies—the CALS strategy—have not identified, either in DOD's plan or the CALS implementation plan, the magnitude and source of resources that are required to implement its many initiatives. CALS, which began in 1985, is intended to automate and integrate acquisition, engineering, manufacturing, and logistics data on weapons. If successfully implemented, this effort is expected to allow for more efficient management of weapon systems information by converting into digital format millions of technical manuals and engineering drawings used throughout a weapon's life cycle, linking databases, and providing access to users within and outside of DOD for managing this information. CALS managers acknowledged that there is no single point of funding accountability for implementing CALS and that DOD also does not know the total cost associated with this effort. Because CALS funding comes from many sources, such as weapon system budgets and CALS-related system

budgets, CALS managers further indicated that it is difficult to arrive at an estimated total cost to implement CALS.

We and the DOD Inspector General have reported over the years problems associated with implementing CALS. We recognize that it is difficult to arrive at a cost for CALS, but until resource requirements for CALS are clearly identified and tied to the PPBS cycle, DOD will continue to have difficulty implementing CALS.

Linking the Services' and DLA's Plans to DOD's Logistics Strategic Plan

Effective strategic planning helps guide members of an organization to envision their future and develop the necessary procedures and operations to achieve that future. Therefore, it is equally important that DOD's plan cascade through all its organizations so that responsible elements of those organizations work toward attaining the same goals. However, the Executive Steering Group, which is responsible for directing implementation of the plan, assessing progress, setting priorities, and developing plan updates, has not required the services and DLA to develop logistics strategic plans that link their individual goals and strategies to DOD's plan. Consequently, the services' goals, objectives, and strategies do not always support DOD's plan.

We did note that DLA is the only major defense agency to take the initiative to ensure that the goals and strategies of its corporate plan (similar to a strategic plan) link directly to DOD's plan. The Army's and the Air Force's logistics plans have evolved over the last several years to better reflect DOD's goals and objectives. The Navy has only recently begun to develop its first logistics strategic plan and expects to complete it by the end of the year. In our opinion, this is an opportune time for the Navy to ensure its plan ties directly to DOD's goals and objectives.

Identifying Interim Approaches

During this review, we noted that DOD's plan did not contain interim approaches that could be developed and implemented when milestones of a priority strategy have been extended. Interim approaches are particularly important in cases where other strategies outlined in the plan are interrelated and dependent on the success of the priority strategy, such as the corporate information management (CIM) initiative, to accomplish their goals and objectives. To illustrate, in 1989, DOD introduced the CIM strategy to improve business practices and the use of information technology and to eliminate redundant systems in medical, civilian payroll, and material management. According to DOD's plan, CIM's milestones have

been extended an additional 5 years because of operational difficulties.¹ But, the plan does not describe any interim approaches to achieve the objectives of the CIM strategy and continue furthering the goals and objectives of other priority strategies that depend on CIM to be successful.

There are several interrelated strategies in DOD's plan that depend on CIM for success, such as the joint battlefield distribution, the joint total asset visibility, and the in-transit visibility strategies. CIM migration systems are required to provide the communication links for transmitting logistics data to managers. For example, the joint battlefield distribution strategy, which is intended to improve delivery of supplies to fighting units, depends on improved battlefield communications and real-time asset information, which CIM was expected to provide, to be successful.

Similarly, the joint total asset visibility strategy is ultimately dependent on CIM migration systems to help it provide timely, accurate information on the location and movement of personnel, equipment, and supplies. Likewise, in-transit visibility, intended to track the identity, status, and location of cargo in transit, is also dependent on both total asset visibility and CIM migration systems to communicate the data. Therefore, until CIM migration systems are fully implemented, these dependant strategies may experience considerable difficulty achieving their goals and objectives.

These issues are in line with similar issues that we reported in September 1996 on problems with the development of materiel management systems, which are a part of the CIM initiative.² In that report, we stated that DOD had made a major change in its materiel management migration system policy and that it did so before critical steps were taken that would help ensure good business decisions were made and that risks were minimized. We concluded that DOD (1) may likely deploy systems that will not be significantly better than those already in place and (2) could waste millions of dollars resolving problems that result from a lack of developing and implementing a clear and cohesive strategy. We stated that, before proceeding with any new strategy, DOD needs to take the necessary steps to fully define its approach, plan for risks, ensure adequate oversight, and complete testing of new systems.

¹We have reported on several occasions fundamental weaknesses in CIM that have delayed its full implementation. See *Defense Management: Impediments Jeopardize Logistics Corporate Information Management* (GAO/NSIAD-95-28, Oct. 21, 1994) and *Defense Management: Stronger Support Needed for Corporate Information Management Initiative to Succeed* (GAO/AIMD/NSIAD-94-101, Apr. 12, 1994).

²Defense IRM: Critical Risks Facing New Materiel Management Strategy (GAO/AIMD-96-109, Sept. 6, 1996).

We also recently reported that weaknesses in the materiel management information system strategy were evident in the migration information systems strategies for the depot maintenance and transportation business areas, putting even more millions of information technology investment dollars at risk.³ For example, for depot maintenance systems, we found that even if the migration effort was successfully implemented as envisioned, the planned depot maintenance standard system would not dramatically improve depot maintenance operations principally because there were problems with the system that delayed reengineering efforts to make the improvements. For the transportation area, we found that had DOD followed its own regulations and calculated investment returns on its transportation migration selections, it would have found, based on data available when the systems were selected, that two of the systems would lose money.

We concluded that many of these systems' problems may have been prevented if DOD had employed a strategic information resources planning effort beforehand. Such planning would have helped DOD focus on meeting the objectives intended to dramatically improve operations for these areas rather than incrementally improving them. Strategic planning for information resources is supported by the Clinger-Cohen Act of 1996, which Congress recently passed, in part, to provide for the cost effective and timely acquisition, management, and use of effective information technology solutions.⁴ Moreover, strategic information resources planning is a critical step in the development of a strategic business plan, such as DOD's logistics strategic plan.

Recommendations

To build on DOD's existing strategic planning efforts and to have a better chance of achieving the major logistics system improvements that its plan envisions, we recommend that the Secretary of Defense direct the Deputy Under Secretary of Defense for Logistics to (1) ensure that future logistics plans include a recognition of the magnitude of the investment that is required to accomplish the plan's goals, objectives, and strategies and (2) issue specific guidance to the Secretaries of the Army, the Navy, and the Air Force and the Director of DLA instructing the services and DLA on how to link their goals and budgets to the DOD logistics strategic plan's overall goals and strategies.

³Defense IRM: Strategy Needed to Align Logistics Improvement Efforts With Business Objectives (GAO/AIMD-97-6, Nov. 14, 1996).

⁴This act was formerly known as the Information Technology Management Reform Act of 1996, Division E of Public Law 104-106, February 10, 1996.

Agency Comments and Our Evaluation

In its comments on a draft of this report, DOD generally agreed with the thrust of our report and partially concurred with our recommendations. DOD stated that the resourcing process for the logistics strategic plan needs to be strengthened, but it believed it is presently impractical to include the magnitude of the investment made to implement the plan's goals, objectives, and strategies in the plan itself. DOD stated that it relies on PPBS to cost and resource the plan's priority strategies. It pointed out that, under the current PPBS process, the magnitude of the investment of the plan's various alternatives is generally not known until the PPBS process is completed, long after the plan is issued.

DOD acknowledged, however, that resourcing the plan's requirements through PPBS may not be the best way for ensuring its accomplishment, but presently, there is not a better alternative. DOD's explanation has some merit, and we recognize the inherent difficulties it faces in identifying investment requirements for the plan that must compete with other requirements for scarce resources. However, we believe that future plans still need to recognize that trade-offs between and among the priority strategies must be made from time to time, often necessitating a reevaluation of the financial resources that are currently needed or will be available to fund them. In this regard, GPRA will require federal agencies, including DOD, to develop plans that link activities and resources to goals, starting next year. However, for purposes of the logistics strategic plan itself, we have revised our recommendation to encourage DOD to include a recognition of the difficulties involved in making these financial trade-offs in its plan, and DOD agreed to ensure that the next edition of the plan includes language to that effect.

DOD also stated that it will ensure the next edition of the plan includes specific guidance to the military services and DLA on linking their plans to DOD's plan. DOD pointed out that the Deputy Under Secretary of Defense for Logistics cannot issue specific budget guidance on which DOD requirements will be funded or not. Although we agree, the intent of our recommendation was not to be interpreted as a budget driven issue; rather, we are trying to alert DOD to one of the principles of effective strategic planning that will be strongly encouraged under GPRA. That is, DOD will need to ensure that lower level units focus their efforts on supporting the goals of the next level and, ultimately, to DOD's overall corporate goals. Without this basic tenet, organizations like DOD, which do not make sufficient progress toward achieving their goals, may neither know why the goals were not met nor what changes are needed to improve performance. DOD's comments are included in appendix I.

Scope and Methodology

We reviewed and analyzed DOD's logistics strategic plan to determine whether it was characteristic of generally accepted models that focused on the process of strategic planning. In analyzing DOD's plan, we applied fundamental strategic planning practices identified from our review of literature on this topic, including our prior reports that addressed the implementation of strategic management processes in government agencies. We also discussed the adequacy of DOD's logistics strategic planning efforts with a consultant (a retired high-ranking military officer) who is on our Logistics Advisory Panel. In addition, we reviewed selected services' logistics strategic plans to determine the extent to which their individual goals and objectives matched those contained in DOD's plan.

We selected six top-priority strategies contained in the plan to assess how well DOD was carrying out the plan's goals, objectives, and strategies—total asset visibility, CIM, mobility requirements study bottom-up review, battlefield distribution, CALS, and in-transit visibility strategies. Specifically, we spoke to officials responsible for developing the plan and monitoring its implementation. We also reviewed pertinent documents such as implementation plans, charters, status reports, and other related information. We did not independently verify the accuracy of this information.

In conducting our review, we held discussions with officials in the Office of the Deputy Under Secretary of Defense for Logistics (Materiel and Distribution Management); the Office of the Under Secretary of Defense for Acquisition and Technology; the Office of the Joint Chiefs of Staff; the Offices of the Air Force and Army Deputy Chiefs of Staff for Logistics, Washington, D.C.; DLA, Fort Belvoir, Virginia; the U.S. Transportation Command, Scott Air Force Base, Illinois; and the Office of the Chief of Naval Operations and the Naval Supply Systems Command, Arlington, Virginia.

We conducted our review from September 1995 through July 1996 in accordance with generally accepted auditing standards.

We are sending copies of this report to the appropriate congressional committees; the Secretaries of the Air Force, the Army, and the Navy; the Directors of DLA and the Office of Management and Budget; and other interested parties. We will make copies available to others upon request.

Please contact me on (202) 512-8412 if you or your staff have any questions concerning this report. The major contributors to this report are listed in appendix II.

Sincerely yours,

A handwritten signature in black ink that reads "David R. Warren". The signature is written in a cursive style with a long horizontal line extending to the right.

David R. Warren, Director
Defense Management Issues

Comments From the Department of Defense



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0 2 DEC 1996

(L/MDM)

Mr. David R. Warren
Director, Defense Management Issues
National Security and International Affairs Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Warren:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "LOGISTICS PLANNING: Opportunities for Enhancing DoD's Logistics Strategic Plan," dated November 7, 1996 (GAO Code 709164), OSD Case 1249. The DoD partially concurs with the report.

The DoD agrees with the thrust of the GAO report that the linkage between the DoD plan and DoD Components' plans should be strengthened to improve the likelihood the DoD plan will be adequately resourced and implemented. The Department will expand the implementation guidance in the next edition of the DoD plan for this reason. However, the Department does not believe that it is practical to identify the magnitude of the investment required for implementation within the plan itself, as the GAO recommended, primarily because the Department's Planning, Programming and Budgeting System (PPBS) determines this information long after the plan is issued. Additionally, the Deputy Under Secretary of Defense for Logistics is not authorized to issue budget guidance; rather, it is issued through the PPBS.

The detailed DoD comments on the draft GAO report recommendations are provided in the enclosure. The DoD appreciates the opportunity to comment on the draft report.

Sincerely,

John F. Phillips
Deputy Under Secretary
of Defense (Logistics)

Enclosure



Appendix I
Comments From the Department of Defense

GAO DRAFT REPORT - DATED NOVEMBER 7, 1996
(GAO CODE 709164), OSD CASE 1249

"INVENTORY MANAGEMENT: OPPORTUNITIES FOR ENHANCING DOD'S
LOGISTICS STRATEGIC PLAN"

RECOMMENDATIONS

RECOMMENDATION 1: To build on DoD's existing strategic planning efforts and to have a better chance of achieving the major logistics improvements that its plan envisions, the GAO recommended that the Secretary of Defense direct the Deputy Under Secretary of Defense for Logistics to ensure that future logistics plans include a recognition of the magnitude of the investment that is required to accomplish the plan's goals, objectives, and strategies. (p. 11/GAO Draft Report)

DOD RESPONSE: Partially concur. The Department agrees with the intent of the recommendation of strengthening the resourcing process for the DoD Logistics Strategic Plan but not with the specific action recommended. The Department agrees that the plan should recognize that the magnitude of the investment made to implement the plan's goals, objectives and strategies affects the likelihood of their accomplishment, and the Department will ensure that the next edition of plan includes language to that effect. However, the Department does not agree that it is presently practical to include the magnitude of the investments required in the plan itself.

The DoD Logistics Strategic Plan currently relies upon the Department's Planning, Programming and Budgeting System (PPBS) to cost and resource the plan's priority strategies. The DoD Logistics Strategic Plan is a primary source of the logistics planning guidance which the Deputy Under Secretary of Defense for Logistics proposes for inclusion in the Defense Planning Guidance, the first stage of the PPBS process. The subsequent stages of the PPBS process ultimately determine the magnitude of the investment required and the extent to which it is resourced. After the Defense Planning Guidance is issued, logistics investment requirements generally are identified and submitted individually by the Military Services and the Defense Logistics Agency as part of their Program Objective Memorandum and budget submissions. Throughout the PPBS process, investment requirements for the DoD Logistics Plan initiatives must compete with other requirements for scarce resources. Consequently, the magnitude of the investment associated with various initiatives in the plan is generally unknown until the PPBS process is completed, which is long after the DoD Logistics Strategic Plan

ENCLOSURE

Now on p. 7.

Appendix I
Comments From the Department of Defense

is issued. While the current methodology for resourcing the plan's requirements through PPBS may not be best way for ensuring its accomplishment, presently there is not a better alternative.

RECOMMENDATION 2: The GAO recommended the Secretary of Defense direct the Deputy Under Secretary for Logistics to issue specific guidance to the Secretaries of the Army, the Navy, and the Air Force and the Director of the Defense Logistics Agency (DLA) instructing the Services and DLA to link their goals and budgets to the DoD Logistics Strategic Plan's overall goals and strategies. (p. 11/GAO Draft Report)

DOD RESPONSE: Partially concur. The Department will ensure that the next edition of the DoD Logistics Strategic Plan includes specific guidance to the Military Services and Defense Logistics Agency on linking their plans to the DoD Logistics Strategic Plan. However, the Deputy Under Secretary of Defense for Logistics cannot issue specific budget guidance to the Military Services and Defense Logistics Agency. Rather, the Planning, Programming and Budgeting System process determines which DoD requirements will be funded and which will not.

Now on p. 7.

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