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Report of the
Defense Science Board Task Force
on
Department of Defense Business Practices



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TABLE OF CONTENTS

I. Overview	1
Introduction.....	1
Key Assessments	1
Five Major Recommendations	2
Consistent with Previous DSB Studies.....	2
Directionally Consistent with DoD Leadership.....	3
II. Business Planning	7
Current DoD Fiscal Position.....	7
Authority and Accountability	8
The Business Plan Construct	9
Joint Capability Requirements and Financing Process.....	10
The Business Plan – Relating Resource Allocation to Combatant Command Missions.....	11
Recommendations.....	12
III. Logistics.....	13
Logistics Transformation Progress	13
Strategic Imperative – Why Now?.....	17
The Logistics Opportunity	18
Performance Based Logistics (PBL).....	20
Transformation Best Practices	24
Summary and Recommendations	26
IV. Personnel.....	30
Civilian and Military Personnel.....	30
Recommendations.....	31
V. Management Information Systems	34
Business Management Information Systems.....	34
Lessons Learned on Implementation of New Enterprise IT Systems.....	34
Recommendations – Management Information Systems	36
Some Initial Thought on Implementation.....	36

VI. Agency Support	38
Reasons to Appoint and Utilize Board of Advisors	39
Recommendations	41
VII. Recommendations	42
Compelling Reasons for Moving Forward	43
General Observations	44
Appendices	44
A. Terms of Reference	46
B. Task Force Membership	50
C. Briefings Received	51
D. 1998 DMC Budget Breakdown	53
E. Memo on COO Duties	105
F. Memo on DBSMC	106
G. Department of Defense Appoints TransCom as Distribution Process Owner	110
H. Market-Based Sourcing Results	111
I. Acronyms	112

I. OVERVIEW

INTRODUCTION

One of the truly incredible benefits of Society in the United States has been the ability to create, stimulate, and propagate the continued efficiency and productivity of the industrial and business community, in the private sector, to power the economy. The Department of Defense (DoD) has a great opportunity to capitalize on the practices of this community. The Business Management processes of the Department are complicated and conflicting, and the systems that support them are inadequate, relative to the private sector. Improvement in this area offers a great opportunity for the Department to operate more effectively and efficiently to provide national security to its citizens.

The objective of the present study is to "Assess the Department's progress towards transformation in areas of business processes, their interrelationships, their management structures, and recommend actions for improvements". The business process areas considered by the Task Force began with the most critical area – Development of the strategy and objectives of the Department for the missions it has to support for the National Security objectives; and then moved to the Use and Management of the Department's Resources (money and people) to support those objectives. The Task Force's studies included the management and process systems that cover the areas of finance, acquisition, logistics, personnel, and medical.

Task Force membership is shown in Appendix B. The Task Force is composed of leaders with both private sector and government experience at senior levels.

KEY ASSESSMENTS

The Task Force's review concluded the following key assessments of the business processes and the systems that support them:

1. The Department does not have an effective multi-year business plan that aligns the resources of the Department, both personnel and financial, to its missions.
2. The capability-needs process continues to be dominated by the force providers and the Joint Staff, and is under-represented by the COCOM needs.
3. Logistics performance is well behind world-class standards in responsiveness, dependability, cost, and inventory management. The system is sub-optimized for each structural organization's accountability, and many items are lost or mishandled at organizational hand-offs.
4. The allocation of the personnel resources of the Department, both civilian and military, does not reflect on mission priorities.
5. The Department management does not focus on outputs and metrics of performance with the same energy and focus as it does on acquiring resources; and accountability for performance-to-objectives is weak.
6. The Department needs integrated business management systems to support the management of resources and tracking for their use. The current systems are not interoperable and they do not reflect best practices.

7. The Department needs better methods for measuring and assuring Defense Agencies' performance.

In the remainder of this report the Task Force reviews the status of the business management processes and systems in the Department; expands on the above observations; and makes key recommendations based on these assessments. The Task Force's recommendations are summarized below:

FIVE MAJOR RECOMMENDATIONS

The Department should:

1. Create a resource-constrained, output-metric-based, multi-year business plan (with effective COCOM involvement).
2. Create a Joint Logistics Command to assure end-to-end optimization of the management of the DoD supply chain.
3. Achieve better personnel resource utilization by shifting all non-inherently governmental support to competitive sourcing.
4. Achieve a horizontally-integrated Defense Management Information System using COTS systems and processes.
5. Enhance the use of customer feedback and commercial best practices for Defense Agency Management by establishing Agency Management Advisory Committees.

CONSISTENT WITH PREVIOUS DSB STUDIES

The current task force assessments and recommendations on business practices are consistent with previous Defense Science Board (DSB) studies. The problems of business process transformation have been long standing, and although conceptual solutions are well known, they have been very difficult to accept and implement in the DoD for reasons embedded in complexity, culture, and management.

The 2003 DSB Report on Enabling Joint Force Capabilities recommended changing the PPBE process to have a stronger role for joint priority setting. Three of its recommendations are as follows:

1. Assign and enforce clear responsibilities and accountability for force capabilities among the joint world (Joint Chiefs, Joint Staff, combatant commands); force providers (military departments and defense agencies); and the Office of the Secretary of Defense (OSD).
2. Strengthen the influence of the combatant commanders in identifying joint force needs and setting priorities for filling those needs.
3. This report also recommends that the DoD adopt a multi-year business plan with responsibilities and accountability for mission execution, and a baseline against which performance can be measured.

The 2002 DSB Report on The Impact of e-Business on DoD Acquisition Processes dealt with the IT infrastructure in the DoD and recommended the adoption of commercial software and practices. This study compared DoD systems and practices with those in industry, and concluded that there would be great benefits to having common, interoperable, commercial business software in the Department. Advantages would include lower initial cost, lower maintenance cost, and increased interoperability. Few systems were seen as needing to be service specific.

The 1996 DSB Report on Outsourcing and Privatization recommended shifting all non-inherently-governmental support to utilize competitive forces for better performance at lower costs. Among its conclusions, the report states, "The task force believes that all DoD support functions should be contracted out to private vendors except those functions which are inherently-governmental, are directly involved in warfighting, or for which no adequate private sector capability exists or can be expected to be established."

There have been three recent DSB studies on Logistics Transformation:

1. "Logistics Modernization", 1996;
2. "DoD Logistics Transformation", 1998; and
3. "Logistics Transformation Phase II", 2001.

In 1996, the DSB Task Force recommended providing "unified and specified" CINCs with the authority and resources to pull required support from the logistics system. In 1998, the DSB Task Force encouraged DoD to empower a logistics systems architect – an owner of the logistics process. The DSB Task Force in 2001 reiterated that unless the logistics system's architect controls the budget, real improvement will not be possible.

The Task Force's logistics recommendations are very consistent with these previous studies. Thus, the Task Force's recommendations are not totally new, as the DSB and others have recommended many before.

So then the question is: Why has none of this been done? First, there has been no perceived compelling reason to manage efficiently (similar to P&L in the private sector). Second, decision times are too long, driven in part by risk avoidance and diffusion of authority. Third, the system focuses on allocation of resources to the Service Providers, versus to the mission priorities. Finally, there is little incentive to use output metrics to monitor effective resource utilization. Sub-optimization is more consistent with organizational assignments. In fact, there is little consequence for not meeting – or even setting – targets.

In this report, the Task Force has sought ways to:

1. Focus resource allocation against mission priorities;
2. Implement resource constraints;
3. Implement a mission-based personnel allocation system;
4. Manage using output metrics; and
5. Assure clear accountability.

DIRECTIONALLY CONSISTENT WITH DOD LEADERSHIP

All of the major recommendations contained herein are completely consistent with prior DSB studies, and – very encouragingly – recent actions by the DoD have begun to take significant steps in the directions recommended by this report. Specifically:

1. At the overall management level, making it explicit that the Deputy Secretary of Defense is the COO of the DoD – as recommended by the "Defense Business Board" on June 13,

2005, with the clear delineation of responsibilities (that cover Business management systems modernization, integrated supply chain management, financial management and auditable financial data, DoD personnel, etc. – as shown in Appendix E).

2. Initiating steps toward a more top-down, resource-constrained, multi-year, mission (vs. supplier)-focused, business planning process – including a new PPBE calendar (that links programming and budgeting together).

It can be expected that this new process (initiated over the past year, in response to a 2003 Secretary of Defense-directed study of the DoD resource allocation process, chaired by former USD(AT&L) Pete Aldridge) will meet significant resistance; but it is clearly moving the DoD in the direction advocated by this report's proposed planning process.

3. Establishment of the "Defense Business Systems Management Committee," chaired by the DepSecDef and with the USD (AT&L) as the Vice Chair (see Appendix F for full membership and charter). This group of senior DoD leaders (Services, Agencies, OSD and JCS) will be responsible for assuring "world-class business operations in support of the warfighter." It is intended to be the "governing board" to assure "cross-Department, end-to-end interoperability of business systems and processes." Implementation of this "horizontally-integrated," Enterprise Management Information System (a revised version of the Business Management Modernization Program (BMMP)) has been made the responsibility (via DepSecDef memo dated March 28, 2005) of the USD(AT&L) – with the full support of the CIO, the Comptroller, the USD(P&R) and the Services and Agencies clearly going to be required for successful implementation.
4. Identifying TransCom as the responsible organization for DoD's "synchronized transportation, distribution, and sustainment." Officially announced on September 25, 2003, the U.S. Transportation Command was appointed as the "Distribution Process Owner" (see Appendix G for the announced purpose of this change).

While this doesn't cover the end-to-end full logistics process, since it is focused on distribution, it is an important, and necessary, step.

5. Secretarial direction to "shift non-warfighting military portions to civilians" (For example, refer to Secretary Rumsfeld's statement before the House Armed Services Committee, February 16, 2005). When combined with the DoD's response to President Bush's Management Initiative #5 (to shift all non-inherently-governmental work to competitive sourcing) these represent a clear step toward a major shift in personnel resources; resulting in a more effective and efficient focus on the DoD mission.
6. The DoD has recognized the value of having senior management advisory boards for its Defense Agencies, and has been working to establish one for the Defense Logistics Agency (which manages an annual budget of \$27 Billion).

However, over the past year, due to political pressure, a number of Defense Agencies have eliminated (or are in the process of eliminating) their advisory boards. Since effective and efficient management of the 14 Defense Agencies is so important to the DoD mission, this report recommends that an external advisory board can be of great value – and the members must be appointed solely on the basis of their expertise.

These six steps are explicitly recognized by the DoD and the desirability of this report's recommendations. In addition, these six steps are a sign of their necessity, and their achievability with leadership and perseverance. Initial steps are already underway, while recognizing the

possibility of encountering severe resistance, especially since they go further than the steps taken to date.

While these steps are directionally correct, this Task Force believes that they do not go nearly far enough to achieve significant transformation of the management of the Department's business processes to align resources with the Department's missions.



II. BUSINESS PLANNING

CURRENT DOD FISCAL POSITION

DoD is in the difficult fiscal position of having to do more with fewer available resources. There is a fiscal train wreck looming on the horizon – federal entitlements/non-discretionary funding is likely to grow in the out-years, which will adversely impact DoD's available topline. This "discretionary funding challenge" is further complicated by the Administration's commitment to "fix" (i.e. hold steady) other potential sources of available topline, e.g. tax cuts, as a means to halve the federal deficit by 2009. Given the rising nature of military personnel compensation costs, annual health care costs, and facilities programs, one discovers that a sizable portion of "defense discretionary" spending is not so discretionary. All these factors combine to produce a daunting fiscal environment for the Defense Department.

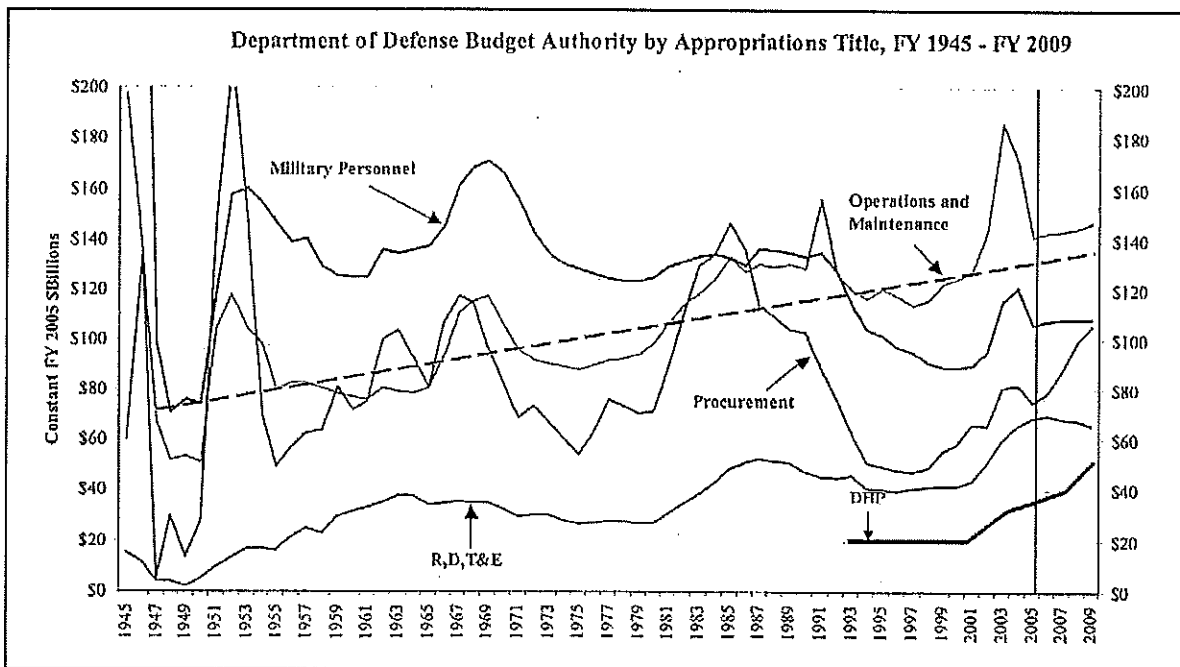


FIGURE 1. DoD Defense Budget Authority

As depicted by the chart, above, there are four pressures concerning DoD budget authority. The first is the fact that MILPERS accounts will be rising for the next decade. The cost of maintaining a highly qualified workforce in a competitive environment ensures that expenditures will continue steady growth. Second, O&M is growing at a rapid rate and will remain a significant expenditure over the near future. Third, RDT&E will continue to move along as weapons development costs increase and Congress receives pressure for continued spending on new programs in their respective districts. And, fourth, expenditures for the Defense Health Program (DHP) are rising rapidly. Conversely, procurement is trailing behind its necessary state and full recapitalization will not occur until at best 2018. And, long-term research continues to

be cut, to pay for the urgent, short-term needs of the Services. Herein, lays the burning platform for genuine transformation.

AUTHORITY AND ACCOUNTABILITY

Figure 2, below, simplistically presents the basic definitions of authority and accountability. Key responsibilities are underlined for emphasis. Responsibility and accountability overlap. As an example of that overlap, while it is OSD's responsibility to make overall priority solutions and allocate resources, the SecDef and his staff cannot do that competently without full access to the in-depth expertise of the force providers. Moreover, OSD should also interface closely with the customer, the Combatant Commanders, to determine force capabilities and needs.

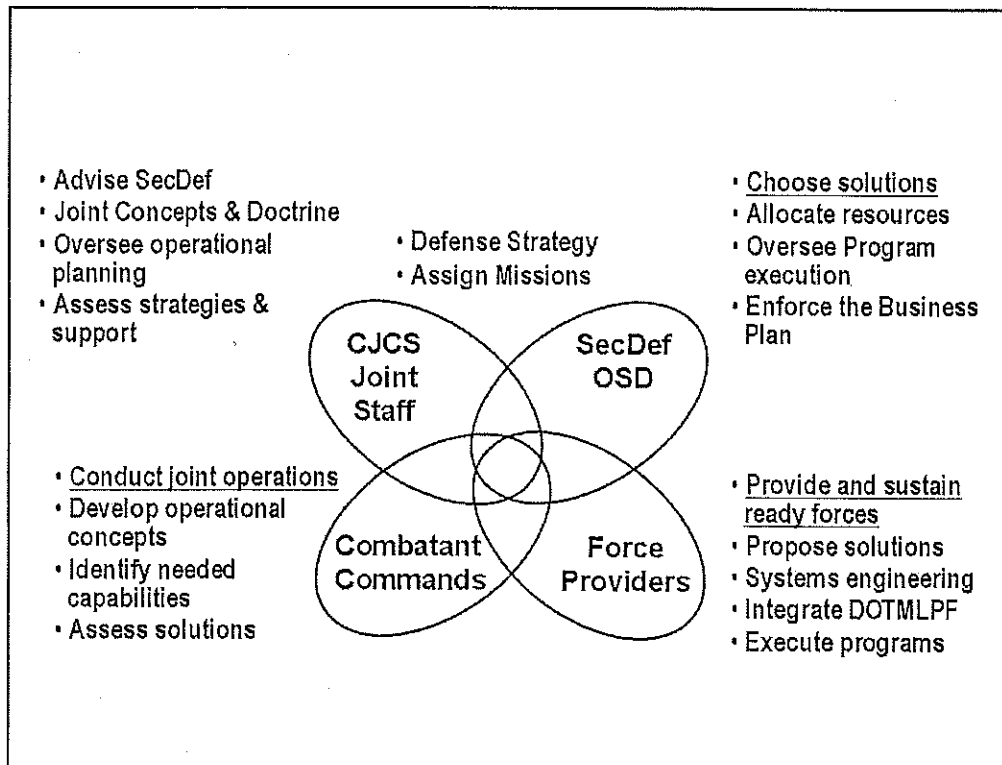


FIGURE 2. Defense planning and programming lead responsibilities

By contrast, and will be discussed further, the force providers dominate the current process for defining the right capabilities. While Figure 2 represents current state, in execution, the force providers collect “requirements,” translate them into recommended individual (and Service-centric) programs, aggregate the proposed programs into proposed budgets, and usher them through the joint, OSD, and Congressional gauntlet. During this process, Combatant Commanders’ views of their own capability needs and excesses have marginal impact on most major materiel program decisions. The issue is whether the major materiel programs that are identified as new requirements are the most appropriate platforms and weapons to execute an integrated, unified military approach to joint warfighting needs, rather than the approach of each

single Service. A similar problem exists regarding the allocation of human resources (as will be discussed later).

It seems clear that the Combatant Commanders need more influence on the priorities of needed capabilities and associated resources. Only the Combatant Commanders have operational requirements that employ all the armed forces as a joint team. The decisions over what to buy for that joint team must be made from a joint perspective, with OSD exercising far more authority on resource allocation, early in the process. The mechanism for ensuring programs deliver the expected value for the resources expended is a multi-year, output-driven DoD Business Plan.

THE BUSINESS PLAN CONSTRUCT

The interactive, resource-constrained construct for creating and executing the Business Plan is depicted in Figure 3.

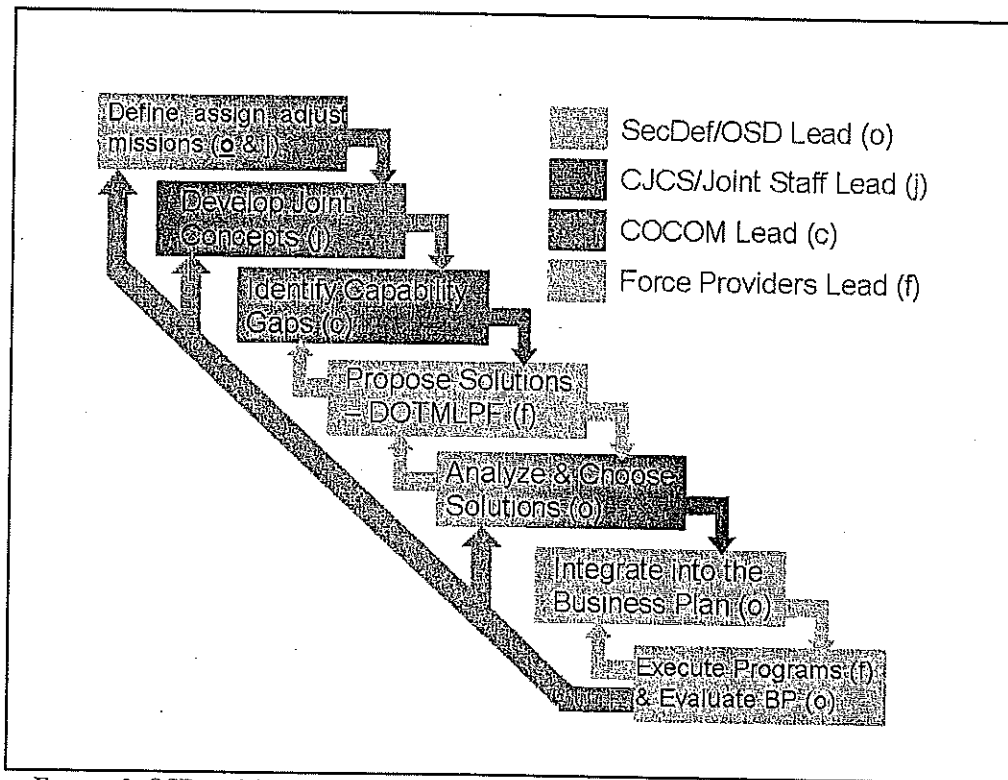


FIGURE 3. OSD multi-year, resource-constrained, output-based Business Plan construct.

The critical aspects of the figure include shared responsibilities for most of the activities. Although there is a clear lead role (as indicated by the bold underline font), feedback throughout the process, the thesis that must be all activities are conducted in a resource-constrained environment. The result is disciplined resource allocation to the missions promulgated in the national military strategy and the formulation of military requirements with a mechanism for coherent execution.

JOINT CAPABILITY REQUIREMENTS AND FINANCING PROCESS

To address the issues of an organization to identify, prioritize, and approve joint capability needs, it is useful to compare the old process, which had been dominated by the military departments and defense agencies, with a more balanced process that recognizes 'up-front and early' OSD/JCS resource-constrained decisions, as illustrated in Figure 4.

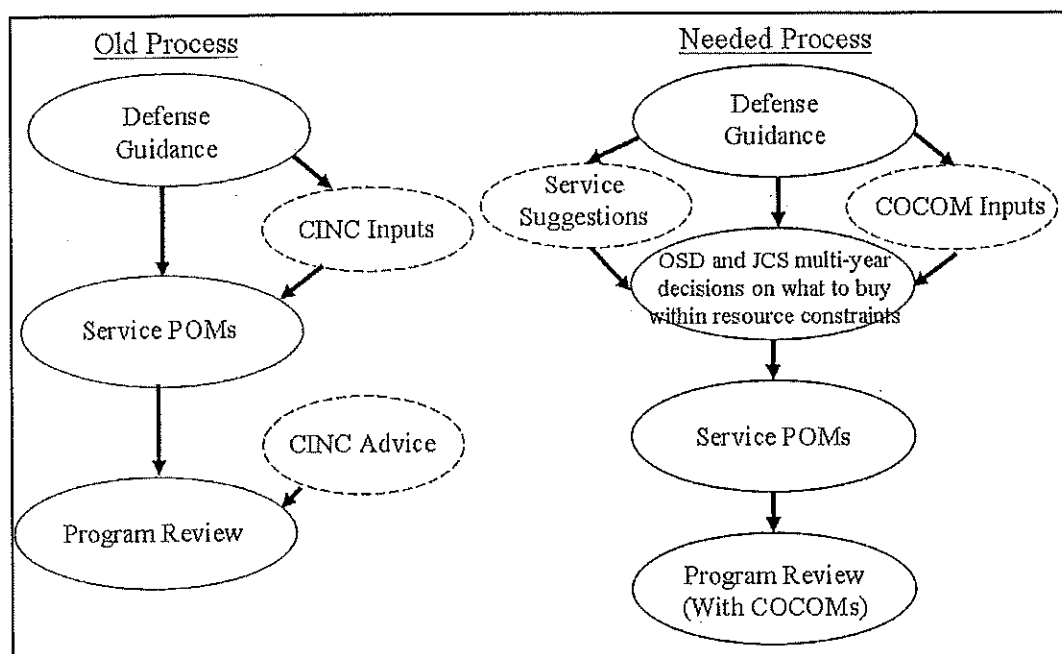


FIGURE 4. Moving to a Balanced Process

The "needed process" (to which the DoD has recently begun to move – as described later) retains the basic responsibility of the force providers to organize, train, and equip forces for deployment by combatant commands. As recognition of their expertise and institutional continuity, the force providers remain the principal source of proposed solutions for long range joint capability needs. The force providers also remain as the competent source of delivering the prioritized, approved capabilities. In this resource-constrained environment, the force providers also have a significant responsibility for providing rough-order costs to fill near-term capability shortfalls to the combatant commands to facilitate resource-informed priorities and trades.

The objective of this "needed process" is to make the combatant commands more equal partners with the force providers from the beginning of the process, particularly when identifying capabilities needed to carry out the Department's operational missions. The challenge is to create a process that makes these inputs sufficiently credible to (1) strongly influence force planning at all levels; (2) identify from the outset the joint warfighting areas in the Department's program and budgets so that the needed capabilities can be compared in value, cost, and schedule with single-Service programs; and (3) to do all of this in a resource-constrained environment – which forces the "tough decisions" to be made. This proposed approach also provides a process for translating individual combatant command priorities into a set of prioritized capability needs that are relevant to individual and multiple theater and global operations—that is, a process for aggregating and harmonizing joint capability needs and for producing a binding, resource-

constrained business plan that directs the force providers to create and field the approved capabilities.

THE BUSINESS PLAN – RELATING RESOURCE ALLOCATION TO COMBATANT COMMAND MISSIONS

The SecDef Business Plan describes agreed-upon capability needs and the means for meeting those needs. It portrays and aggregates the military capabilities – joint and component forces – needed to execute the combatant command missions across the range of contingencies covered in the National Defense Strategy. It explicitly identifies the resources allocated to each mission capability set, and to each program within a capability set.

It also provides the metrics, in value terms, which form the basis for overseeing program execution. The value assessment includes capability provided, resources required, and schedule. The value assessment will ultimately be expressed in terms of resources allocated to acquire the capability by a certain date.

The value-cost-schedule linkage is the underpinning for a mission-oriented Business Plan, and valid cost and schedule projections are the keys to executing and enforcing the Business Plan. Hence, those who identify capability gaps and advocate filling them will need access to at least rough estimates of the cost and schedule realities for various solutions to their capability needs. Because of the overall resource-constraint, will be required to identify and remove some alternative programs in order to insert theirs into the totals. As alluded to in discussing the “needed process” for joint capability requirements and financing, a closer interface between the combatant commanders and the force providers is necessary to support this iterative priorities and trades process.

The combatant commanders have an essential role in defining new capability needs. This role demands a structure and process that will allow the commanders to provide meaningful inputs regarding the capabilities required to accomplish their missions in the future. These inputs can be meaningful only if based on an understanding of the overall set of capabilities that contribute to a relevant set of missions.

The combatant commands need to go through a process that considers the set of capabilities directly relevant to the force structure needs of their future mission(s). As is the case with the military departments, associating program costs with an individual combatant command mission will be an imperfect approach, but it can be sufficient for the need. Even an imperfect allocation can serve the purpose of applying the combatant commanders’ special understanding to the tradeoff of resources within their allocated resource set. Figure 5 provides a suggested management approach, and Appendix F provides an example of a possible allocation.

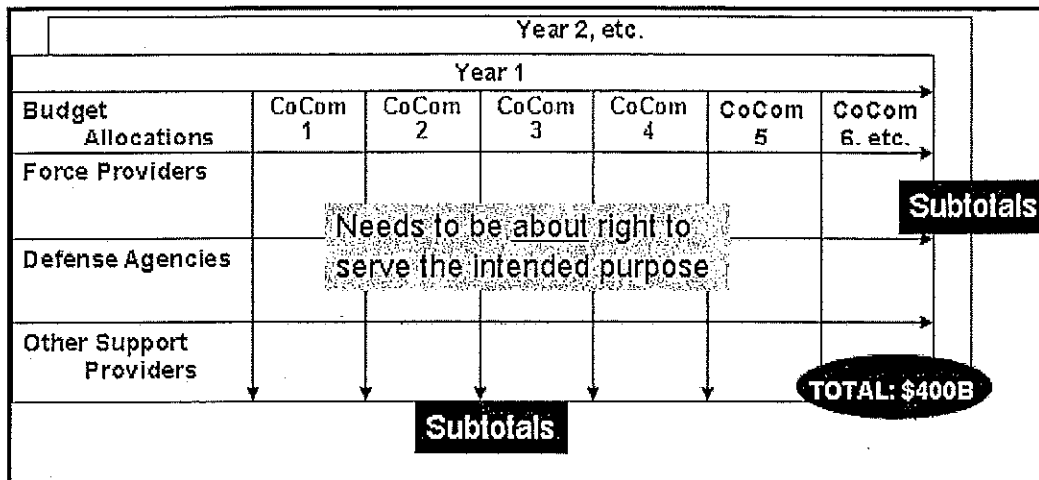


FIGURE 5. Multi-year, resource-constrained mission capability/resource matrix.

RECOMMENDATIONS

The Business Plan defines the responsibilities and accountability for mission execution in the Department and provides the baseline against which performance can be measured. The techniques for evaluation will include exercises, simulation, analysis, program progress reports, management assessment, and, occasionally, real combat.

The Secretary of Defense and Chairman of the JCS will need to establish a formal process for evaluating the performance of each of the combatant commands, military departments, and defense agencies against the assignments defined in the business plan. The mechanisms for doing this are largely in place: the JROC process, the Defense Acquisition Board milestone approval process, and some aspects of the Joint Capabilities Integration and Development System, to name a few. Hence the primary weakness in enforcing adherence to the current value-cost-schedule relationship is not due to process. It is due to inadequate discipline and the lack of a guiding Business Plan.

Development of a multi-year, output-driven, metric-based Business Plan, updated bi-annually, that accounts for each increment of capability to be acquired, the cost and schedule for that capability, and a process to measure performance against the plan's objectives will provide the discipline necessary to balance investment requirements against (a) available funding and (b) acceptable operational risk to get the greatest value for the taxpayers.

III. LOGISTICS

LOGISTICS TRANSFORMATION PROGRESS

Despite decades focused on logistics reform and improvement, DoD logistics has achieved only incremental progress – with logistics responsiveness (for items on the shelf) currently averaging 21 days (and still with considerable uncertainty), vs. best commercial practices that averages 1 to 3 days (with high confidence); and this is in spite of the fact that DoD logistics costs represent 20-22% or more of the Defense Budget, as compared to the best-practice commercial supply chains which range from 4 to 12% of sales per annum. Closing this performance and cost gap provides significant opportunities for DoD. A 21st century Defense supply chain for the DoD should focus on control, velocity, leverage, and on demand models; not supply-based and asset intense models (as has been the DoD approach).

In November 1996, the DSB endorsed several recommendations to facilitate systematic improvements in defense strategy pertaining to supply chain and logistics management for the DoD¹. However, while the Secretary of Defense acknowledged a need to right-size the DoD logistics system, a systematic approach has not been undertaken, despite many years of research findings, reports, and commercial best practices that support such an approach. The following represents key themes from previous reports highlighting the consequences of leaving critical logistics issues unresolved.

Four areas in particular require immediate attention. Specifically, the DoD must: 1) implement a single accountable authority to act as a leader; 2) empower this Chief with the ability to reform the logistics system to deploy and sustain forces; 3) reduce the logistics overhead required by DoD operations; and 4) assess and reduce the risk of logistics infrastructure vulnerabilities.

The following section outlines these four key areas requiring significant improvements, and provides supporting evidence from prior studies and recent DoD experiences to substantiate what needs to be addressed – through renewed aggressive transformation efforts.

- **Accountability and Oversight** – Designate an accountable focal point of authority².
 - Eliminate duplication of requisitions and circumvention of the supply system, by implementing unified modern systems and procedures to address asset visibility issues.
 - Cut costs and improve velocity of distribution to optimize redeployment and surge capabilities.
 - In Kuwait, hundreds of pallets, containers, and boxes of surplus supplies and equipment were shipped by units deploying to Iraq without required content descriptions and shipping documentation. In addition, materiel was found to be in disarray, spread over many acres; including a mix of broken and usable parts and unidentified items in containers that had not been inventoried.

¹ “Industry Week Value Supply Chain.” *Business and Defense Week*, 2003.

² United States. General Accounting Office. Operation Desert Storm: Lack of Accountability Over Material During Redeployment. GAO/NSIAD-92-258: Washington, DC: 23 September 1992.

- Create an effective theatre distribution capability to manage and transport large amounts of supplies and equipment.
- During 'Operation Iraqi Freedom' DoD did not have a sufficient distribution capability. Often, distribution of supplies to forward units was delayed because adequate transportation assets, such as cargo trucks and materiel handling equipment, were not available³.
- Develop an effective process for prioritizing cargo for delivery.
- During 'Operation Iraqi Freedom' most Army and Marine Corps logistics personnel and equipment did not deploy to the theatre in a timely manner – doing so well after combat troops arrived. In addition, a considerable number of logistics support personnel were not adequately trained in operating equipment and managing theatre distribution centers.
- Develop a centralized, lessons-learned knowledge-base to effectively disseminate lessons learned.
- During Desert Storm, military operations that were different than those trained for, contributed to the logistics support problems. Many such problems were documented by the GAO. For example, the September 1992 report concluded that the lack of container documentation and an inadequate transportation system hindered timely distribution of supplies. Also, logistics efforts were hindered by long processing time for supply requisitions, which resulted in the loss of confidence and discipline in the supply system; the abuse of the priority designation process; and the submission of multiple requisitions⁴. Additionally, recent after-action report from operations in Kosovo concluded that military leaders had limited visibility over supplies, due to the lack of communications support, which was needed to fuse data from multiple collection points⁵. Why did these problems have to be repeated in "Operation Iraqi Freedom"?
- "Empower a chief supply chain commander to define and enforce an integrated system⁶." The 1996 DSB Task Force recommended providing "unified and specified" CINCs with the authority and resources to pull required support from the logistics system.
- The 1998 DSB Task Force encouraged DoD to empower a logistics systems architect⁷. While USD (AT&L) and the Joint Staff J-4 supported the recommendation, it was not embraced by others in OSD.
- The 2001 DSB Task Force reiterated that unless the logistics systems architect controls the budget, real improvement will not be possible⁸. The Task Force went

³ United States. General Accounting Office. Operation Desert Storm: Lack of Accountability Over Material During Redeployment. GAO/NSIAD-92-258: Washington, DC: 23 September 1992.

⁴ United States. Department of Defense. Conduct of the Persian Gulf War: Final Report to the Congress. Washington, DC: April 1992).

⁵ United States. Department of Defense. Kosovo/Operation Allied Force After-Action Report: Report to the Congress. Washington, DC: 31 January 2000.

⁶ United States. Department of Defense. Defense Science Board Task Force on Logistics Modernization. Washington, DC: July 1996.

⁷ United States. Department of Defense. Defense Science Board 1998 Summer Study Task Force on Logistics Transformation Volume I. Washington, DC: December 1998. <<http://www.acq.osd.mil/dsb/reports/logtran.pdf>>.

⁸ United States. Department of Defense. Defense Science Board Task Force on Logistics Transformation Phase II. Washington, DC: January 2001. <<http://www.acq.osd.mil/dsb/reports/log2.pdf>>

on to state that “the position review and approve applicable service and agency logistics transformation projects.”

- **Deployment and Sustainment** – Improve the ability of the logistics system to deploy and sustain forces by resolving the following issues:
 - According to the 1992 DSB study, preliminary observations on the effectiveness of logistics activities during Desert Storm revealed significant operational problems:
 - Inadequate asset visibility and transportation constraints created a backlog of hundreds of pallets and containers of materiel at various distribution points.
 - \$1.2 billion materials discrepancy between what was shipped to the Army in the theater and the amount acknowledged they received.
 - Millions of dollars in late fees associated with leased containers or replacement of DoD-owned containers due to distribution backlogs or losses.
 - Cannibalization of vehicles and potential reduction of equipment readiness due to the unavailability of parts that either were not in DoD’s inventory or could not be located because of inadequate asset visibility.
 - Then, the 1995 DSB study found that current warfighting systems/processes have not crossed the ‘digital Rubicon’ and are inadequate⁹.
 - Although naval forces arrived in theater with self-sustained logistic support capabilities, inventories of laser guided bomb kits were limited, and the aviation fuels provided by USAF airborne tankers posed safety problems. Logistics messages were delayed by other operational traffic in the overworked communications system. These problems highlight the importance of balancing demand with a reform agenda requiring a smaller, more effective footprint for the combat logistics force (CLF)¹⁰.
 - The 1996 DSB study stated, “Enhance the deployment and sustainment capability of the logistics system”¹¹. But when the 2001 DSB Task Force reviewed current initiatives designed to improve the logistics system, they determined that the total effect of such efforts was “modest”. Both reports called on DoD to exploit commercial capabilities and accelerate the pace of change. In particular, recommendations were made to increase reliance on commercial lift in peacetime and during contingencies to improve performance and leverage a superior infrastructure¹².
- **Demand Reduction** – Reduce the logistics overhead required by DoD operations.
 - The 1992 GAO study identified that equipment supplied (by the logistics system) was not adequately configured to match unit needs. Frequently, parts in

⁹ United States. Department of Defense. Defense Science Board Task Force on Defense Mapping for Future Operations. Washington, DC: September 1995. <<http://www.acq.osd.mil/dsb/reports/defensemapping.pdf>>

¹⁰ “Desert Storm: Lessons Learned.” 17 September 1997. <<http://www.history.navy.mil/wars/dstorm/ds6.htm>>

¹¹ United States. Department of Defense. Defense Science Board Task Force on Logistics Modernization. Washington, DC: July 1996. <<http://www.acq.osd.mil/dsb/reports/logisticsmodernization.pdf>>

¹² United States. Department of Defense. Defense Science Board Task Force on Logistics Transformation Phase II. Washington, DC: January 2001. <<http://www.acq.osd.mil/dsb/reports/log2.pdf>>

inventories were not sufficient to meet the needs of the units that relied on them (but in other areas, supplies were excessive).

- The 1996 DSB report recommended increased operational flexibility and improved cost-cutting efforts through reducing the logistics demand¹³.
 - Subsequently, the 2001 Task Force identified significant logistics overhead in DoD operations; however, little was done to curb the inefficiencies. The problem stems from the lack of a long-term perspective that acknowledges full life-cycle and maintenance costs¹⁴.
- **Logistics Survivability** – Assess and reduce risk of logistics infrastructure vulnerabilities.
- Security at ports and distribution centers in theater were not always adequately secured. Army officials have identified numerous cases involving unauthorized access and theft of expensive communications and computer equipment from various distribution centers in Kuwait¹⁵.
 - The 1996 DSB Task Force recommendations included adding vulnerability assessments to the CINCs war plans and training exercises and to develop plans to minimize damage of attacks. The report provided a detailed assessment of chemical/biological threats, and reiterated the need to continue supporting the joint program for chemical/biological defense. The report highlighted potentially devastating effects of chemical/biological vulnerabilities in theater logistics.
 - It also recommended modifying war games and exercises to include courses of action to deal with the chemical and biological threats.¹⁶
 - The 2001 DSB Task Force noted that no action has been taken over the past three years to minimize systemic critical logistics infrastructure vulnerabilities. The Task Force advised the Chairman of the Joint Chiefs of Staff (CJCS) to review existing assessments and plans and ensure that prompt remedial actions be taken. In addition, the report stated that future exercises and simulations should include logistics. Conducting gaming and assessment efforts to predict and develop strategy for responding to warfare and chemical and biological weapons is compromised if incorrect assumptions are made that logistics support operates flawlessly.

The aforementioned examples, dating back through Desert Storm, highlight repetitive themes and accentuate fairly specific issues that require resolution/implementation: total asset visibility (implementation of RFID); increased transportation/distribution capacity (incentivize/revitalize CRAF/VISA programs); and inadequate communications system (implementation of Global Combat Support System (GCSS) and Enterprise Integrated Data Environment (EIDE)). Additionally, these examples reinforce the failure of DoD improvement

¹³ United States. Department of Defense. Defense Science Board Task Force on Logistics Modernization. Washington, DC: July 1996. < <http://www.acq.osd.mil/dsb/reports/logisticsmodernization.pdf> >

¹⁴ United States. Department of Defense. Defense Science Board Task Force on Logistics Transformation Phase II. Washington, DC: January 2001. < <http://www.acq.osd.mil/dsb/reports/log2.pdf> >

¹⁵ United States. General Accounting Office. Operation Desert Storm: Lack of Accountability Over Material During Redeployment. GAO/NSIAD-92-258: Washington, DC: 23 September 1992.

¹⁶ United States. Department of Defense. Defense Science Board Task Force on Logistics Modernization. Washington, DC: July 1996: page 59. < <http://www.acq.osd.mil/dsb/reports/logisticsmodernization.pdf> >

strategies to date, which have been primarily focused on incremental improvement within traditionally-defined logistics structures and organizations. Based on recent operational experience in Iraq, emerging transformational concepts of war (such as adaptive networks) and likely future budget limits, the nation can no longer afford this incremental strategy. Logistics is the combat enabler, and failure to transform logistics now will relegate DoD logistics to the Achilles heel of net-centric operations.

To move forward, the DoD must streamline command of the supply chain and logistics operation in order to ensure adequate visibility and authority to effectively orchestrate change. Once a chief supply chain commander (the new Director of the Joint Logistics Command) is appointed to lead both DLA and cover the traditional TransCom mission fully integrated with component logistics structures, a strategy can be developed to improve the logistics system to support and sustain the forces. Implementation of a unified supply chain system will minimize duplication of orders, thereby eliminating artificial demand. Finally, a comprehensive vision of the supply chain system will allow the assessment of risk across the supply chain, while providing flexibility and mitigation to these risks.

STRATEGIC IMPERATIVE – WHY NOW?

The transportation model utilized by DoD has remained virtually unchanged for the last several decades while global corporations such as FEDEX and UPS have shifted away from traditional logistics in favor of market-driven (“demand pull”) supply chain management. These efforts have significantly improved performance and reduced operating expenses to record lows (4-12% of budget). Conversely, as noted above, DoD operates under a high cost structure, exceeding 22% of budget. Clearly, DoD’s \$90 billion annual logistics business with over 1.1 million government personnel and 40,000 suppliers has considerable room for improvement.

In the past fifty years almost every military or humanitarian mission has suffered from insufficient logistics planning and execution. Consequently, Defense Secretary Donald H. Rumsfeld designated Air Force General John Handy, as the distribution process owner for DoD in 2003. However, General Handy’s oversight is limited to strategic infrastructure (vs. theater) and does not encompass the entire DoD logistics – or even distribution – system. Consequently this did not resolve longstanding logistics problems. Recently, General Handy stated that the “military lack an efficient supply chain and distribution system to support the warfighter¹⁷.” The root cause of DoD’s logistics problems is inherent lack of visibility throughout the pipeline; no simple, integrated process; and management of data across 600 disparate systems.

Unnecessary reprioritization of shipments, duplication of orders, and downstream bottlenecks represent several of the logistics imbalances DoD experiences. For example, “boxes of bubble wrap, filing cabinets and DVDs show[ed] up among ‘Triple Nine’ cargo – a number that designates DoD’s highest priority shipment that usually is assigned to military units in places like Iraq; while other soldiers wait for critical combat gear. Frequently, when supplies were shipped from the United States to Iraq, they arrived in Kuwait relatively quickly, but remained in containers until they could be sorted out and ground transportation could be coordinated. This undermined soldiers’ confidence in the distribution system, forcing them to

¹⁷ Sgt. 1st Class Doug Sample, “TRANSCOM Commander Addresses Supply Chain Problems.” *USA American Forces Press Service*, 6 August 2005.
<http://www.defense.gov/news/Dec2003/n12112003_200312111.html>.

work around the supply shortages, often by obtaining equipment from local vendors or cannibalizing parts from other vehicles.^{18,}

Therefore, it is a strategic imperative for the military to transform its logistics system to better support the warfighter. The old-fashioned military logistics infrastructure and policies cannot keep pace with critical requirements for an agile, responsive, resilient warfighter in our evolving world. In addition, the legacy infrastructure does not conform to industry-leading practices and is far from being cost-effective.

THE LOGISTICS OPPORTUNITY

As noted above, Department of Defense logistics is a \$90 billion annual business that involves over 1.1 million government personnel and 40,000 suppliers. DoD manages \$67 billion in inventory; however, supply data indicates considerable overcapacity and visibility problems. For example, 'Operation Iraqi Freedom', the largest recent US military action, consumed \$4 billion in inventory (\$2.5 billion used, \$0.5 billion disposed, \$1 billion condemned). Of the 1.5 million items in inventory, 923,000 of the supplies were not requested¹⁹. Fractionated business processes, supported by over 600 disparate information systems contributed to this problem and continue to impede transformation efforts. Databases supporting complex processes provide poor visibility into information and pipeline data across the entire distribution system. For example, distribution transactions related to procurement frequently can not be reconciled with the financial system. A modern, comprehensive inventory management system with a focus on process, people, and technology would address these impediments and provide support and visibility for all DoD operations; thereby improving responsiveness and lowering supply chain operating costs.

The US Air Force Procurement Supply Chain Management (PSCM) initiative designed to transform disjointed operations has achieved some success. However, additional cost savings can be realized by developing sustainment supply concurrent with initial weapon systems; and financial accountability can be improved if process visibility is enhanced. Clearly, commercially-available supply chain tools to properly manage inventories would be helpful.

Focused, performance-based logistics offers future, real-time net-enabled, integrated information systems, providing accurate, actionable visibility throughout the distribution system. The Focused Logistics Joint Functional Concept (FL JFC) serves as a model for DoD to effectively sustain the services. It delineates key attributes and capabilities; however, many of the components of the model are not feasible with the current logistics support infrastructure and configuration. By addressing these problems, DoD can resolve a considerable number of organization challenges and improve its cost structure.

A recent US Army report indicates that the following process, policy, technology and organizational challenges exist²⁰:

- Stakeholders lack visibility throughout the supply chain.

¹⁸ Erwin, Sandra I. "Logistics Reforms Aim to Fix Supply Bottlenecks." *National Defense*. January 2004. <<http://www.nationaldefensemagazine.org/issues/2004/Jan/Logistics.htm>>.

¹⁹ "Army Participation in the Defense Logistics Agency Weapon System Support Program." 8 November 2002. <http://www.army.mil/usapa/epubs/pdf/r711_6.pdf>.

²⁰ Paulus, Robert D. "Delivering Logistics Readiness to the Warfighter." <http://www.almc.army.mil/alog/issues/JanFeb04/Delivering_Logistics.htm>

- No single entity manages the supply base.
- Disjointed databases inhibit the creation of an integrated big picture.
- Acquisition practices are adversarial and do not promote development of long term relationships with more capable suppliers.
- Contract monitoring is reactive and organizationally separate since operational data are not linked to contracting data.
- Supply chain managers are responsible for supply chain performance, but are not empowered with the appropriate tools.
- Supply chain managers are not adequately trained in supply chain best practices.
- These process disconnects are symptoms of at least six underlying supply chain management issues.
- No one entity is responsible for managing the supply base and supplier relationships.
- Sourcing is largely tactical rather than strategic.

The supply chain management challenges highlighted above represent an interconnected class of problems that are related to culture, process and technology acceptance. Inherent disincentives created by the organizational structure cause both civilian and military personnel to make decisions without having adequate information. Often personnel portray weapon systems in an overly optimistic manner, which results in later increases in procurement expenses, additional asset management requirements, and a build up of excess inventory. These problems are compounded by inadequate inventory management tools. Lack of technology to track goods through the distribution network, prevents effective scheduling, notification of cargo arrival, and planning in order to ensure that shipments that are received are properly consumed, stored, or maintained. By addressing these limitations, DoD can eliminate many of the bottlenecks that prevent its distribution system from operating like a world-class enterprise. DoD can achieve metrics comparable to large commercial logistics enterprises through the applicable commercial best practices. Figure 6 depicts the differences in cycle times for procurement, distribution, and repairs for large commercial enterprises and the DoD. These large industrial corporations, including Motorola, Boeing, and Caterpillar, have achieved considerable performance advantages over the DoD even though, in many cases, the same or similar products are involved. In fact, Caterpillar's distribution system can turnover product in just a day, while the DoD requires nearly three weeks²¹.

²¹ <http://gbr.pepperdine.edu/032/supplychain.html>

Large Opportunity for Improved Performance at Lower Cost				
Process	DoD	Commercial Companies		
Distribution (for in-stock items)	21 days (DoD average)	1 day (Motorola)	3 days (Boeing)	2 days (Caterpillar)
Repair (cycle time)	4-144 days (DoD average)	3 days (Compaq)	14 days (Boeing electronics)	
Repair (shop time)	8-35 days (Army tank/truck)	1 day (Compaq)	10 days (Boeing electronics)	
Procurement (administrative lead time)	88 days (DLA)	4 days (Texas Inst.)	0.5 days (Portland General)	Minutes (Boeing, Caterpillar)

Source: RAND,
(some of this data are from 1996 DSB report)

FIGURE 6. Comparison of DoD and Commercial Supply Chain Performance

PERFORMANCE BASED LOGISTICS (PBL)

Historically, DoD's acquisition and sustainment metric focused on detailed logistics elements and internal processes, which often resulted in neglect of warfighter requirements. The Integrated Logistics Support model realigns DoD's strategy with military requirements in a coordinated approach. The PBL balanced approach – which focuses on output measures of weapon system availability for military operations (vs. internal logistics metrics), and utilizes contractor support wherever most effective – carefully considers acquisition requirements and sustainment-support issues creating a linkage between supportability measures and warfighter needs. PBL provides greater flexibility because it incorporates a hybrid approach—the best of DoD and the private sector.

Application of a lifecycle model firmly links acquisition and sustainment activities into an integrated process. The approach resolves many longstanding disincentives and short-term tactical maneuvering by creating a structure that shifts focus to long-term relationships. Ideally, according to the Center for the Management of Science and Technology, at the University of Alabama in Huntsville, PBL promises, “an integrated acquisition and sustainment strategy for enhancing weapon system capability and readiness, where the contractual mechanisms will include long-term relationships and appropriately-structured incentives with service providers, both organic and non-organic, to support the end user's (warfighter's) objectives.”²²

However, a combination of cultural, political, and structural problems has prevented many new and existing programs from successfully implementing PBL. Figures 7 and 8 indicate the leading obstacles obstructing PBL efforts, as well as those that enable it. Most PBL implementation failures are associated with one of the following problems: funding, regulatory,

²² Devries, Dr. Hank J. “Performance-Based Logistics—Barriers and Enablers to Effective Implementation.” <http://www.dau.mil/pubs/arq/2005arq/2005arq-37/DEVRIES.PDF>.

culture, infrastructure, data rights, inadequate training, and lack of depot incentives. DoD has already achieved over \$700 million in savings from the use of a prime vendor program and other inventory-related reduction efforts for defense medical supplies through PBL²³.

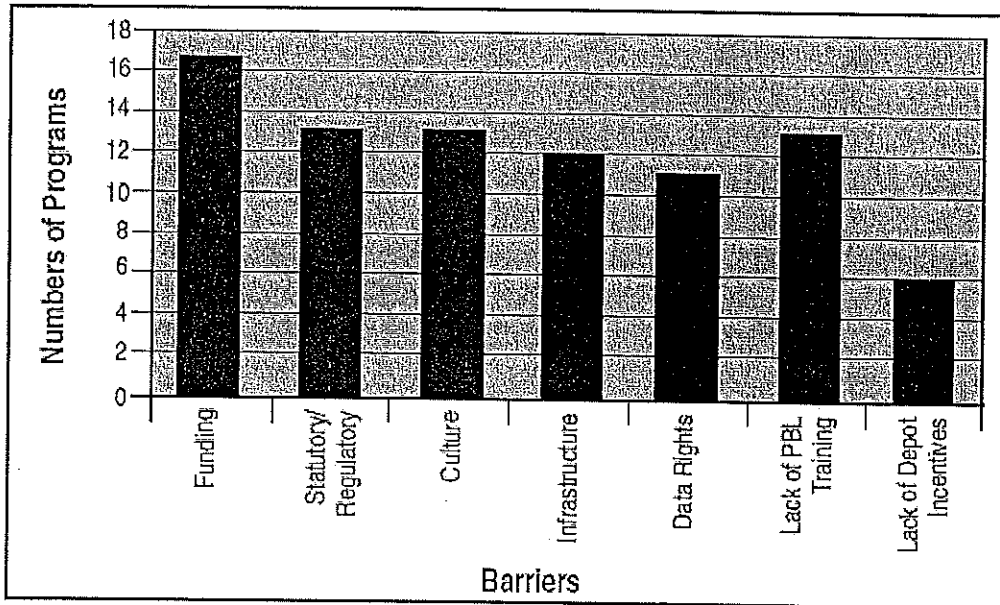


FIGURE 7. Barriers to PBL

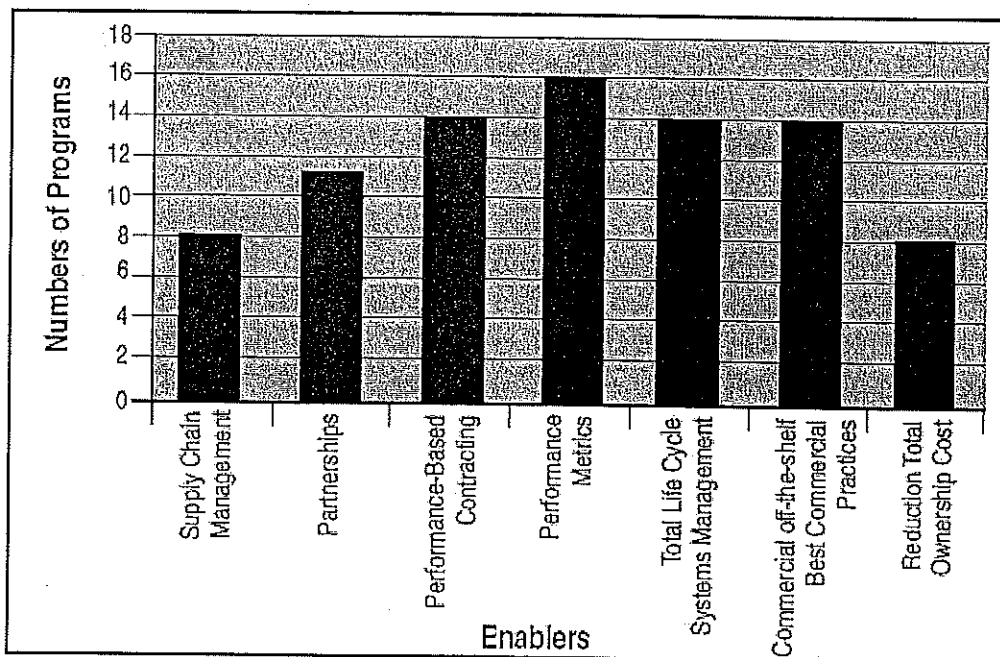


FIGURE 8. Enablers to PBL

²³ Outsourcing DOD Logistics: Savings Achievable But Defense Science Board's Projections Are Overstated (Letter Report, 12/08/97, GAO/NSIAD-98-48).

<<http://www.globalsecurity.org/military/library/report/gao/nsiad98048.htm>>

DoD has conducted several PBL pilot projects. The Navy has undertaken an aggressive program to demonstrate the effectiveness of PBL. The Services are working in conjunction with each other to implement PBL on some joint programs; and the Navy is leading this effort. Thus far, implementation of this new logistics strategy has significantly increased product availability and reliability through technology insertion and obsolescence management, while (simultaneously) significantly lowering total cost. Applying this set of commercial practices – such as common packaging and shipping, technology, and augmenting existing support structures – has proven the benefits of utilizing contractors, and is an initial step towards a Contractor Logistics Support (CLS) model. PBL significantly improved results because suppliers gained inventory management control and visibility (including monitoring of stock levels, configuration control, orders/receipts/stocks/issues). In these cases, the Navy closely monitors supplier performance to ensure contract requirements are achieved²⁴.

The Navy's success with PBL serves as a model for other programs in the Navy and the other Services to follow. Figure 9 illustrates significant improvements in five Navy programs. Prior to implementation of PBL, confidence in materials availability resulted in cannibalization of materials as well as aggressive acquisition practices by military personnel. However, in the post-PBL environment, supplies were more accessible, with availability rates exceeding 85%. In addition, logistics response time was reduced from months to days²⁵.






Navy Program	Material Availability		Logistics Response Time	
	Pre-PBL	Post-PBL	Pre-PBL	Post-PBL
 F-14 LANTIRN	73%	90%	56.9 Days	5 Days
 F-30A Avionics	71%	85%	52.7 Days	8 Days
 F/A-18 Stores Mgmt System (SMS)	65%	98%	42.6 Days	2 Days CONUS 7 Days OCONUS
 Tires	70%	85%	28.9 Days	2 Days CONUS 4 Days OCONUS
 ARPU	65%	90%	35 Days	6.5 Days

FIGURE 9. Performance Based Logistics Availability and Response Time

²⁴ Implementation of Performance Based Logistics (PBL). 16 November 2000.
<<http://www.dtic.mil/ndia/systems/Kuehn.pdf>>

²⁵ 2005 Defense Science Board Summer Study: Current Logistics Systems Assessment.

Piloting PBL has resulted in a number of successes for the Navy; but a logistics transformation that optimizes enterprise-wide resources requires organizational, process and technological changes. Nonetheless, significant performance improvements, such as advanced “sense and respond” capabilities are achievable to meet the warfighter’s needs, while reducing inventory maintenance and related costs. “Sense and Respond Logistics”²⁶, aligns decision makers with strategic goals. Accordingly, stable supply operations can be maintained to maximize distribution from the national to field level. In addition, a responsive national sustainment base can be monitored, and the distribution pipeline can be managed from factory to foxhole, and back to warehouse for storage. The Army diagram below, Figure 10, details the value of an integrated DoD distribution system that would apply sense and response capabilities.

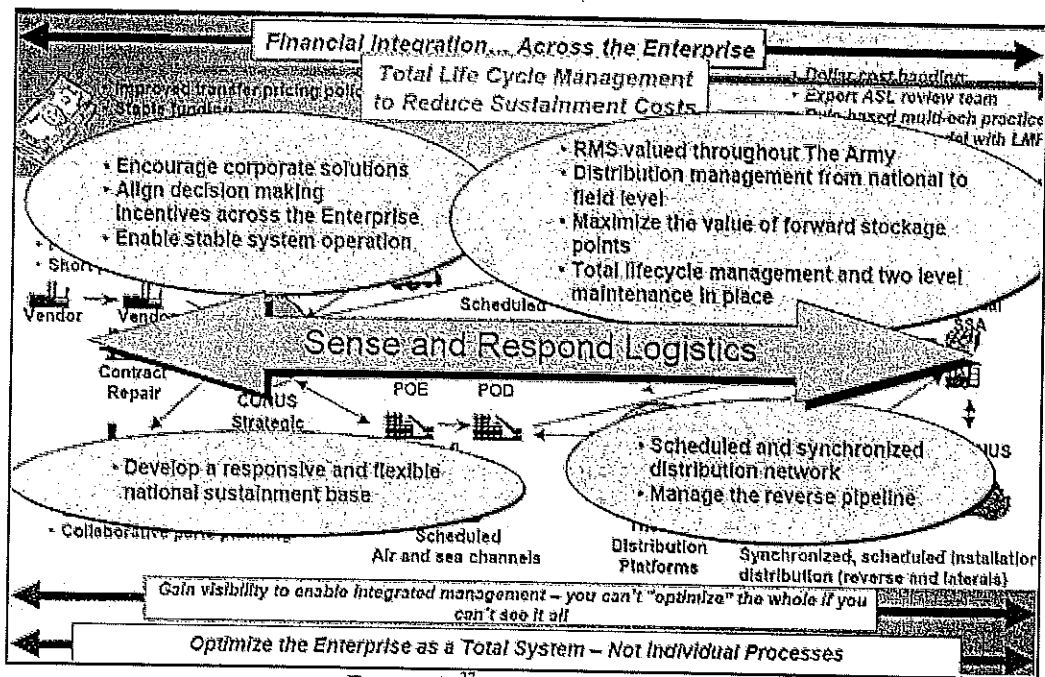


FIGURE 10²⁷. Sense and Respond

While overcoming product shortages sometimes requires stocking excess inventory, the primary reason why DoD maintains over 923,000 excess supplies is due to order duplication and lack of supply visibility throughout the system. Instead of redirecting supplies within the distribution network, often stock is ordered from third-party external suppliers. The 600 fractionated information systems supporting supply chain business processes are responsible for these inefficiencies. A comprehensive inventory management system would address many of these problems, and also resolve several impediments that hinder progress towards a world-class “sense and respond” distribution system²⁸. Figure 11 outlines the major logistics problems –

²⁶ Sense and Respond techniques enable an enterprise to dynamically adapt to market conditions for its logistics and supply chain infrastructure.

²⁷ <http://www.dtic.mil/ndia/2002apbi/thompson.pdf>

²⁸ “Army Participation in the Defense Logistics Agency Weapon System Support Program.” 8 November 2002. <http://www.army.mil/usapa/epubs/pdf/r711_6.pdf>.

including overcapacity, surplus employment, and long lead times – and the two major areas requiring change i.e. a transformed process and an integrated information system.

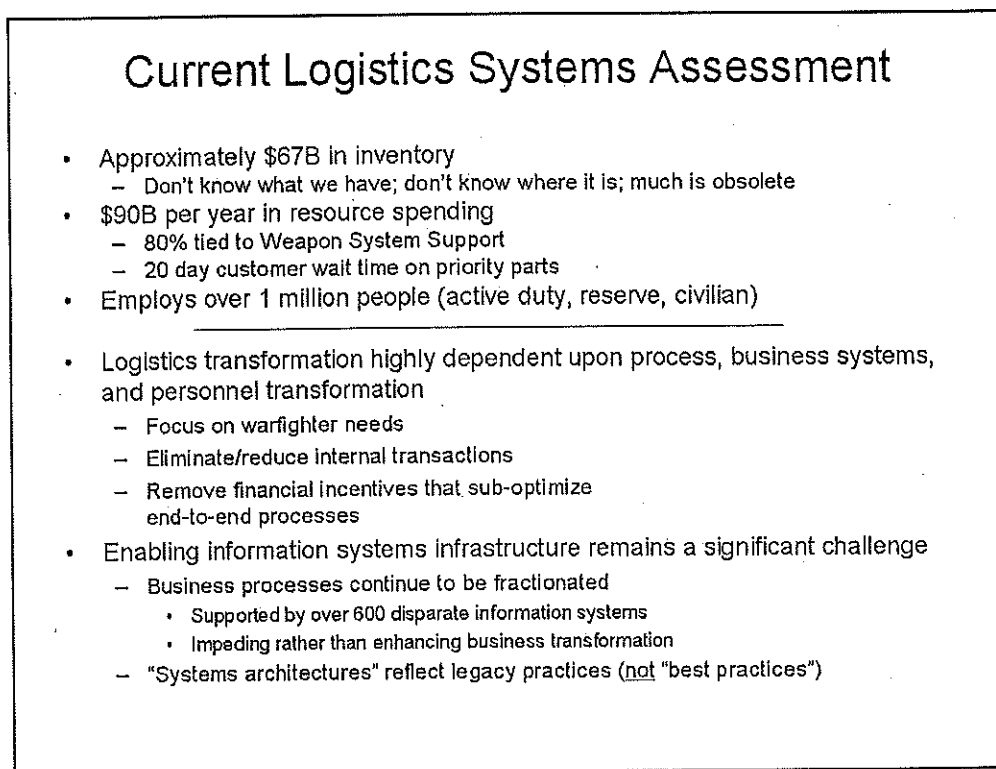


FIGURE 11²⁹. Logistics Assessment

During the Persian Gulf Conflict, for example, identical parts that Caterpillar supplies domestically or overseas in one to four days took the DoD logistics systems nearly 50 to 60 days to acquire. In addition, Caterpillar delivers equipment utilizing fewer people and far less inventory. Modern, secure, global networks provide Caterpillar and global transportation firms such as FEDEX and UPS, continuous and total asset visibility³⁰. In fact, FEDEX handles millions of packages each day, and some of them are delivered the same day³¹. Clearly, there is room to improve efficiency and reduce cost for DoD's logistics operations by implementing a unified system that applies "sense and respond" capabilities.

TRANSFORMATION BEST PRACTICES

During the late '90s many large corporations switched from using traditional logistics practices to "supply chain management" to improve process and profits. From these experiences, DoD can learn valuable lessons to improve its operations. For example, in 2001, IBM suffered from duplicate spending and redundant inventory that cost the company \$4 billion

²⁹ "Transformation Assessment". Defense Science Board 2005 Summer Study on Transformation: A Progress Assessment, 2005.

³⁰ <http://gbr.pepperdine.edu/032/supplychain.html>

³¹ <http://www.fedex.com>

annually. A series of expansion efforts across product lines and across geographies resulted in 30 supply chains, each attempting to optimize their own business, often at the expense of other business units. Numerous councils created to coordinate activities among the 30 supply chains yielded few results. Like DoD, the lack of end-to-end supply chain processes wreaked havoc, and the business struggled to respond effectively to end-market demands. For IBM, separation of supply chain operations, such as planning and demand forecasting, prevented the company from effectively responding to market conditions. As a result, when the firm reported component shortages for its AS/400 systems, the stock price declined 16% in a single day. Ineffective workforce management and fragmented physical and labor supply chains made it difficult to meet targets, losing \$250 million each day with inventory that was outstanding³². To create a 21st century world-class supply chain distribution network, IBM embraced the following principles:

1. **Outsource noncore functions;** to drive focus, flexibility, quality, and cost competitiveness.
2. **Implement core strategic processes across the globe;** to achieve unit synergies and offer a unified interface to customers.
3. **Extend supply chain principles;** to proactively balance supply chain demand with labor resources.
4. **Integrate development and delivery capabilities;** to support integrated technology products and services.

This was no simple task for IBM's 92-year-old supply chain operation; however, performance improvements achieved through this transformation demonstrate the value of such an undertaking. Ultimately, IBM became a responsive, flexible, focused, and resilient supply chain that could satisfy customer needs. Specifically, it now has the following – highly desirable – characteristics:

- **Responsive** – visibility into any point in the supply chain, with the ability to sense and respond to the environment, and make adjustments when, where, and how they are needed;
- **Variable** – the extended supply chain can vary capacity to meet new requirements simultaneously and instantaneously – working virtually as one team;
- **Focused** – concentration on core competencies, and using tightly integrated partners to handle select non-mission-critical activities;
- **Resilient** – services must be able to anticipate capacity or supply issues, assess impacts of decisions and flex the extended and global supply chain – in real time.

The improved quality of the supply chain operations was achieved through outsourcing, implementation of unified processes, management of labor demands, and support of development and distribution of integrated solutions. This strategy was led by a newly-appointed Chief Supply Chain Officer. According to Forrester Research, a single point of authority and accountability was a key factor in the transformation success.

³² Radjou, Navi. "IBM Transforms Its Supply Chain To Drive Growth." 24 March 2005. <<http://www-1.ibm.com/services/us/bcs/pdf/ibm-transforms-supply-chain-to-drive.pdf>>

SUMMARY AND RECOMMENDATIONS

To meet the demands of modern military operations (e.g. increased agility, reduced profiles, synchronized capabilities, etc.³³) the DoD must transform its supply chain and logistics operations to have “complete visibility” to track orders from factory to foxhole and reorient their metrics to focus on response to the warfighter’s needs. To achieve this, the Joint Force must develop, mobilize, leverage, and synchronize its organization with commercial best practices, utilizing modern information systems.

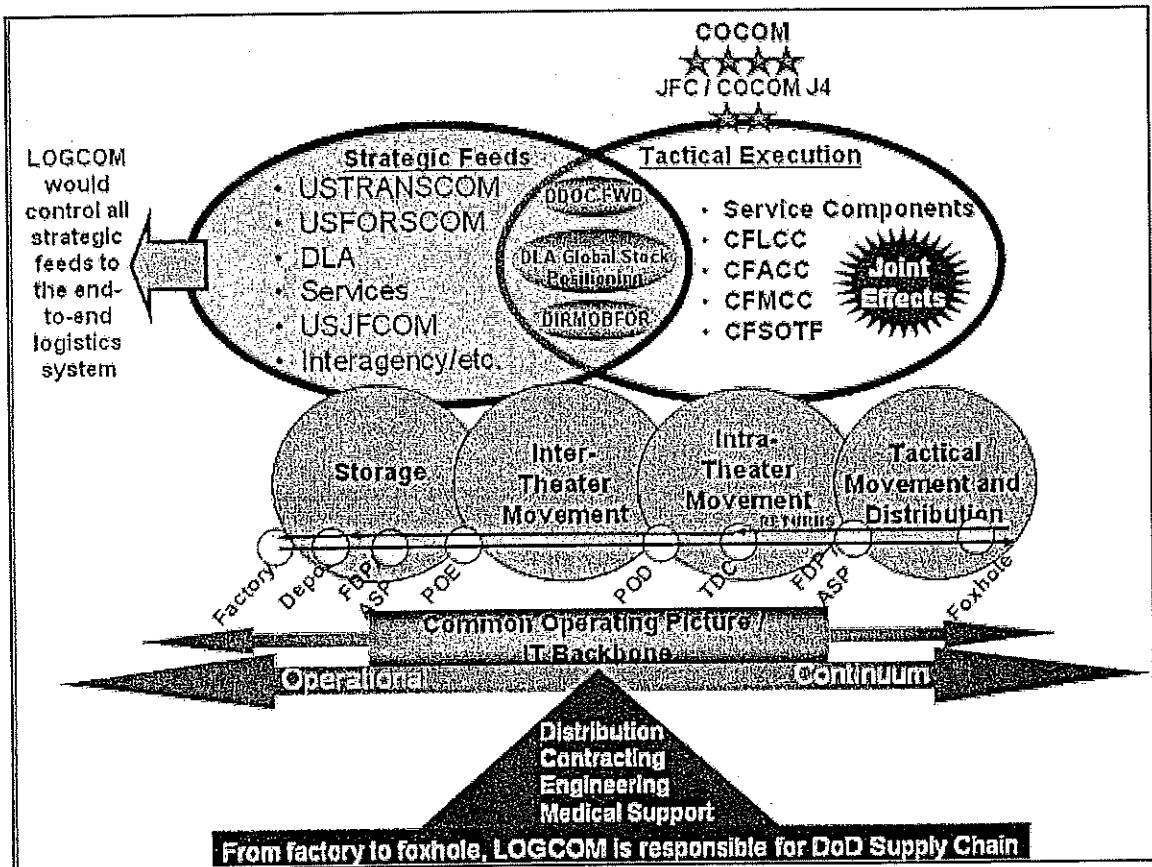


FIGURE 12. LOGCOM Roles

DoD military strategy demands simultaneous deployment of units (force deployment/projection), replacement personnel (redeployment), and supplies (sustainment) – across multiple theaters, day in and day out, with a constant reprioritization and/or shift in response to rapidly changing operational demands. By law, U.S. Transportation Command (TRANSCOM) is responsible for the transportation pipeline, and in September 2003 SecDef designated TRANSCOM as the Distribution Process Owner (DPO), controlling the simultaneous movement of forces and supplies to and from the theater. While this has proven to be a good first step, placing responsibility for the global DoD supply chain under a single Command structure would yield much greater benefit to the warfighter in terms of readiness and operational

³³ United States. Department of Defense. *Joint Operational Concepts*. Washington, DC: November 2003 pgs 13-14.

availability. To transform the deployment and distribution processes, and manage the seams between strategic and operational logistics, the Task Force recommends the establishment of a Logistics Command, responsible and accountable for end-to-end DoD Supply Chain.

In June 2003, the Defense Business Board (DBB) recommended the establishment of an Under Secretary of Defense for Global Supply Chain Integration (GSCI) to integrate logistics endeavors across the Department. Unfortunately, in execution, the Deputy Undersecretary of Defense (Logistics & Material Readiness) was given the GSCI role (established as the Assistant Undersecretary of Defense for Supply Chain Integration). The sub-panel would recommend elevating the leadership for DoD Global Supply Chain Integration to the 4-Star/Undersecretary of Defense level with accountability and responsibility for the Department's Logistics Command (LOGCOM). TRANSCOM and Defense Logistics Agency (DLA) would report directly to LOGCOM. LOGCOM's staff would be build from the existing staffs in OSD, TRANSCOM, and DLA. LOGCOM would be empowered with the authority required to effect DOD-wide logistics integration.

Leveraging the Joint Deployment Distribution Operations Center (JDDOC) construct under CoCOM operational control and LOGCOM administrative control, the Joint Force Commander retains operational control of the DDOC established forward for tactical logistics supporting the operational mission.

Air Force General John Handy (head of TransCom) has acknowledged the need to ease supply and demand imbalances by optimizing the distribution structure; standardize decision making; improve acquisition and distribution links; and reduce warehousing by coordinating storage and transportation activities. In addition, supply chain finance processes, including funding and billing, must be standardized.

The following long-term vision would dramatically improve DoD's supply and distribution infrastructure³⁴.

- **Consolidate all Logistics and Supply Chain Functions under a single commander.**
 - Consolidate all DoD logistics functions – including supply, transportation, maintenance, distribution, and procurement.
 - Integrate the different supply systems across the Services and DLA and drive joint material support solutions by consolidating all material management functions – policy, standards, training, etc.
 - Form a global public/private-partnership to achieve commercial-industry (“world-class”) performance.
 - Reduce cycle time, improve velocity and remove duplication of effort by deploying a Lean Enterprise model for the new integrated supply chain.

It is recognized that the creation of the Joint Logistics Command will be strongly resisted, so the Task Force recommends that the initial step in this process should be to establish the Joint Logistics Command by:

1. Coalesce the functions of TransCom and DLA – an immediate first step toward this end is the codification of the roles, responsibilities, and business rules of the Distribution Process Owner;

³⁴ United States. Department of Defense. Defense Science Board Task Force on Logistics Transformation Phase II. Washington, DC: January 2001. <<http://www.acq.osd.mil/dsb/reports/log2.pdf>>

2. Assign the Commander full responsibility for the end-to-end supply chain (performance and costs);
3. Designate the Commander responsible for all logistics policy, standards, training needs, etc. for the DoD;
4. Establish the Service Logistics Command organizations (to include distribution and maintenance organization) as “component commands” reporting to and under the direction of the Joint Logistics Command (similar to the component commands in the other COCOMs);
5. Specify that the Joint Theatre Commanders retain operational control of the flow of in-theatre logistics;
6. Specifying that the Joint Theatre Logistics Commander (who is “dual-hatted” to the JLC and the Theatre Commander) has control of the DDOC³⁵ and the “dual-hatted” Service Theatre Logistics Commands;
7. Assuring that the Program Managers retain responsibility for lifecycle logistics support planning, configuration control, logistics demands, etc.;
8. Maximize the use of Performance-Based Logistics (utilizing private and/or public sector via competitive sourcing, and/or direct contractor-support, as appropriate);
9. Shift to an “on demand” Business Model (“Sense and Respond”);
10. Deploy an integrated logistics information system as soon as possible – utilizing commercial software and revising DoD practices to fit – and beginning to work on the diverse databases in parallel. (Currently DoD is spending nearly \$2 Billion on 5 distinct modernization programs that are not interoperable);
11. Moving to “total asset visibility” as soon as possible (fully utilizing commercial RFID as it evolves);
12. Right-size the logistics manpower footprint. Careful analysis and planning may enable workforce reduction from 1.1M to 600,000 or lower. These reductions must be carefully planned, and (given the impending retirement of many DoD logistics personnel) programmatically eliminating or simply not hiring non-tactical logistics support and depot support would significantly curb costs and personnel impacts. In addition, combat capabilities can be increased by shifting military involvement that is inherently non-military activity to the private sector.
13. Appoint an external advisory board of industry supply chain experts to assist the Commander of the JLC in this transformation.

Finally, because the USD (AT&L) is ultimately responsible to the Secretary for the overall logistics operation of the DoD, it is necessary to establish a set of output metrics, and a process for measuring and reporting on them, that will clearly show the resultant military mission improvements and overall cost benefits that will come from this transformed DoD logistics operation.

The chart in Figure 13 summarizes the Task Force’s recommendations. Only with a transformed logistics system will the DOD be able to truly have a transformed warfighting capability. The time to begin this logistics transformation is now! The improved potential radical improvement in performance and a reduction in costs are surely worth the effort required.

³⁵ Army Science Board FY04 Task Force, Oct. 2004.

Recommendations: Logistics

SecDef create a Joint Logistics Command

- Responsible for global end-to-end supply chain (performance and costs)
- Include TransCom, DLA, Service Logistics Component Commands
- Joint Theater Commanders to retain operational control of the flow of in-theater logistics
- Program Managers retain responsibility for lifecycle logistics support plan and configuration control
- Maximize the use of performance-based logistics (partially through competitive sourcing)
- Development of integrated logistics information system is essential
- Appoint an external advisory board of industry experts

USD/AT&L

- Direct work to create a set of metrics for a world class logistics operation
- Provide a process and mechanism to measure logistics performance against the agreed metrics

FIGURE 13. Logistics Recommendations

IV. PERSONNEL

CIVILIAN AND MILITARY PERSONNEL

The most valuable, and scarce, resource for the Department of Defense is skilled manpower – military and civilian. Thus, it is critical that these people are used in the most effective and efficient fashion as possible (e.g. military for warfighting, and civilians for such inherently-governmental issues as policy and decision-making, management and oversight). However, as the data in Figure 14 shows, we have been doing a poor job of this.

Occupation	# Civ		# Mil		Total		%	
	1996	2005	1996	2005	1996	2005	1996	2005
Maintenance/Engineering	233	198	445	402	678	600	27%	29%
Administration	262	270	119	207	382	476	16%	23%
Combat	12	8	324	296	336	304	14%	15%
Service, Supply, and Procurement (Logistics)	132	92	152	127	283	218	12%	11%
Health/Medical	28	28	131	112	159	140	6%	7%
Technical	114	76	91	50	205	128	8%	6%
Comm/Intelligence	6	7	137	118	143	125	6%	6%
Other/Unknown	50	8	180	60	229	69	9%	3%
Total	874	687	1,599	1,370	2,472	2,057	100%	100%

FIGURE 14. What the People Are Doing (Thousands)

Here we see a comparison of the job authorization categories (military and government civilians) as officially provided by OSD's Program Analysis and Evaluation organization (PA&E). The baseline of 1996 was chosen to conform to the Defense Science Board Summer Study of that year, in which the same point—of the misallocation of this critical resource—was made. The data show (for example):

- That the total (military plus civilian) people in the “combat” category are only 15% of the over 2 million population.
- That from 1996 to 2005 the number of military people in the “combat” category went down (from 324 thousand to 296 thousand).

- That from 1996 to 2005 the number of military in “administration” increased from 119 thousand to 207 thousand.
- That, in 2005, there were 402 thousand military in “Maintenance/Engineering”.

Such statistics clearly indicate that this valuable resource is not being focused effectively, or efficiently, on the areas of critical DoD needs.

Of course, many of the functions now being performed by these people (both military and government civilian) will still have to be performed, but most of those non-combat military positions could be performed by civilians; and many of the non-inherently-governmental positions (now occupied by military or government civilians) could be open to competitive sourcing (i.e. competition between the public and private sector).

The DoD has run thousands of such competitions, (known as “A-76 studies,” based on the OMB circular defining the process to be used.) and has found that the average savings have been over 30%, and with significantly improved performance! For one set of examples, see Figure 15 from the DoD “Defense Reform Initiative Report” of November 1997. Or, on a more current set of data, for 286 competitions from 1995-1999 the DoD reported average savings of 39% (per GAO-01-20); and another set of data found that 314 competitions, from 1997-2000, had an average savings of 35%, on 36,987 positions (per DoD CAMIS data). Importantly, these results were found whether the public or the private sector won the competitions.³⁶

	Competitions Completed	Average Annual Savings (\$M)	Percent Savings
Army	510	\$470	27%
Air Force	733	\$560	36%
Marine Corps	39	\$23	34%
Navy	806	\$411	30%
Defense Agencies	50	\$13	28%
Total	2,138	\$1,478	31%

FIGURE 15. Results of DoD A-76 Cost Comparisons: 1978 – 1994

Based on such results, President George Bush, in issuing his “Management Agenda” for his first administration, listed competitive sourcing as one of his top 5 management initiatives.

RECOMMENDATIONS

In the 1996 DSB Summer Study an analysis was made to determine what the potential reduction in manpower—and thus people and dollars available to be shifted to combat and equipment modernization—would be if all DoD non-inherently-governmental positions were

³⁶ For detailed information on DoD competitive sourcing results (performance, costs, personnel impacts, percent wins by public and private sector bidders, etc.) see the references in Appendix H.

subjected to competition. It was found that the impact from introducing such competition would be over \$30 Billion annually. As Figure 16 shows (using the same categories studied in 1996), the total dollars (even after adjusting for inflation) in 2005 have grown by approximately 50%; so the impact of introducing competition in these areas today would be a potential resource shift of well over \$40 Billion a year.

Perhaps even more important, it would free up hundreds of thousands of military personnel for combat positions—a shift initiated by Sec. Rumsfeld in his Directive to move non-warfighting military positions to civilians.

Study Category	FY 1997	FY 2006	Comments
Equipment-Related			
CONUS Logistics	12.1	15.3	Includes entire "Central Logistics" Infrastructure Category except for Commissaries and Exchanges. Does not include the cost of installation-level supply operations called for by the study.
Test & Evaluation	1.9	2.8	Includes entire "Test & Evaluation" Infrastructure Category.
Science & Technology	7.4	11.1	Includes entire "Science & Technology" Infrastructure Category.
People-Related			
Education & Training	18.4	26.9	Includes entire "Training" Infrastructure Category.
Base Support	17.0	20.7	Includes all "Installation Support" Infrastructure Category except Family Housing.
Housing	9.5	16.2	Includes "Family Housing Activities" Infrastructure Category plus the Basic Allowance for Housing not visible in the FYDP.
Medical	15.2	26.2	Includes the "Central Medical" Infrastructure Category.
Commissaries	1.0	1.1	Includes the "Commissaries and Exchanges" Infrastructure Category.
Central Support			
ADP	0.7	2.8	Includes "Information Management/Services" Infrastructure Category.
C41 Central	4.4	8.2	Includes the "Central C3" Infrastructure Category except the "Information Management/Services" Infrastructure Category.
Finance & Admin			
Headquarters	10.4	15.2	Includes the Force Management" Infrastructure Category less DWCF DFAS.
Personnel	10.3	15.2	Includes entire "Personnel" Infrastructure Category.
Finance	1.7	1.7	Includes DWCF cost of DFAS operations
Acquisition Mgt	1.0	2.5	Includes entire "Acquisition" Infrastructure Category.
Total	111	165.9	

FIGURE 16. November 1996 DSB O&S Cost Categories (FY 1997 dollars in billions)

Based on the above data, a major initiative by the Secretary of Defense to change the personnel resource system could have a dramatic impact on both warfighting and the allocation of dollars within the DoD. Specifically, the policy to be adapted would be:

- **Use military people for military functions only**
- **Use civilian government personnel for inherently-governmental functions only** (unless “competitive sourcing” finds government civilians to be more effective and efficient)
- **Use civilian contractors based on competitive awards, for all other functions**

Certainly, such a significant personnel resource allocation change can be expected to receive considerable resistance; but it can be overcome. Numerous other successful “cultural changes” have shown what is required for their achievement; namely:

- Strong, and consistent leadership
- Widespread recognition of the need
- A clear, and simple vision of the change
- A time-phased plan with metrics and accountability
- Continuous communication of the message

The responsibility for the implementation of the personnel resource allocation change should be assigned to the Under Secretary Of Defense of Personnel and Readiness (USD (P&R)), and the first step in implementation should be a full baseline audit of military, civilian and contractor personnel – in terms of their current positions and their full costs. (Making sure that each truly military job is clearly identified, along with each civilian, inherently-governmental position – and that contractors are not doing work that is, in fact, inherently-governmental.) Priority will need to be given to warfighting needs; and where government civilians or contractors are involved in working in dangerous areas, further policy changes may be required (to clarify the chain-of-command, etc.). Most important, is for the USD (P&R) to develop and monitor a time-phased plan, with measurable milestones, to achieve the needed realignment of personnel resources.

The payoff, from this shift in personnel resources, is clearly worth the required effort, in terms of enhanced warfighting effectiveness and efficiency. And the time to begin is now!

V. MANAGEMENT INFORMATION SYSTEMS

BUSINESS MANAGEMENT INFORMATION SYSTEMS

Business management software systems are central to transformation of business practices in the DoD. The current situation in the Department is that there are hundreds of such diverse systems which have evolved over a period of decades. Many of these systems are service-unique, are non-interoperable, have been based upon customized software, are expensive to maintain, and are incompatible with a net-centric philosophy. Moreover, standard definitions, interfaces, and protocols are not universally used. Data bases for the same types of information use different definitions and formats, and there is little flow-through of data from one program to another. These stove-pipe programs enforce historic processes and mentalities that retard transformation, compartmentalize information, and inhibit enterprise-wide access. Since this flawed infrastructure underlies all of the business practices in the DoD, there is a desperate need for a modern, integrated set of business management information systems to provide horizontal visibility across all business sectors (e.g. personnel, programs, finance, logistics, etc.).

A 2002 report of the DSB on e-Business comments on the current state of DoD business management software as follows: "The Department finds itself having implemented several major DoD-unique e-Business software applications that support the DoD's *past* business practices and procedures. Although these applications started with commercial off-the-shelf systems (COTS) as their foundation, they have since deviated substantially. Thus, the DoD faces large costs of ownership for these systems and it cannot make effective use of the concept, product, and technology enhancements that are continually being developed in the private sector."

The 2002 report concluded that not only can mission performance be dramatically improved but that billions of dollars of savings can be achieved by the adoption of commercial software and best practices. This savings might be only the tip of the iceberg, compared to the indirect savings in the potential for management efficiencies.

Certainly, the DoD is aware of the shortcomings of its current systems, and there is a current program to develop a set of common interoperable systems based upon COTS software and standard definitions (see below). Also, there is a great deal of industry experience in similar developments, and the DoD would be well advised to pay attention to the lessons learned in these developments.

LESSONS LEARNED ON IMPLEMENTATION OF NEW ENTERPRISE IT SYSTEMS

In spite of the many seemingly-unique complexities and constraints in the DoD, there are many comparable examples, within large industries, of the successful application of management information systems across heterogeneous organizational structures. Specifically, there are a number of important lessons that have been learned from these industry examples:

- First, it is necessary to do a complete inventory of existing systems, their cost, their functionality, and their data structures. Often there are many niche and customized systems that have evolved over time to satisfy specialized needs. The business rules that

underlie these systems also need to be understood and formalized. Legacy systems often have embedded business rules that are not documented and are poorly understood. New rules cannot be adopted without understanding their impact.

- In order to displace and integrate the existing infrastructure it is especially important that there be a single individual or entity responsible for architecture of the management information systems and that this individual or entity be given both budgetary and decision authority in the implementation and adoption of the system. Inevitably, there will be organizations that resist change, and often for seemingly-good reasons. There must be a way to impose decisions that accomplish a greater good at the expense of occasional transitional difficulties at the local levels.
- There is no real substitute for expertise and experience in the architecture and implementation of IT systems. The DoD system architect must be able to hire key people from industry, and then to outsource whatever skills and services that are required. This is not an area that can be staffed by amateurs.
- The system architect should monitor adoption of systems and “score” organizations periodically on their progress. The Task Force heard from the Chief Strategic Information Officer of General Motors that peer pressure from such public scoring was one of the most effective ways to assure rapid and widespread adoption of interoperable software.
- Perhaps the most difficult task in the development of management information systems is that of converting existing data bases. The DoD is currently undergoing the frustrations of this conversion in the DIMHRS (Defense Integrated Military Human Resources System) for personnel and pay. DIMHRS was first recommended in a 1996 Defense Science Board report, which called for Initial Operational Capability no later than 2001. Now in 2005 the COTS software is operational, but much data conversion from services and agencies remains to be accomplished. The lesson is certainly that conversion and cleansing of legacy data bases is an enormous task that must be planned from the start and accomplished in parallel with the system software development.
- The systems software must be COTS, and customization of this software should be resisted forcefully. Wherever possible, business processes should be modified to take advantage of commercial software, rather than customizing the software to meet existing business practices. The motto is “adopt, not adapt”. Not only will this COTS adoption be less costly in the long run, but the business processes that it enforces – which are based on best practices in industry – will often themselves give improvements in efficiency once the transition is accomplished. Moreover, the modification of COTS software can lead to performance and maintenance problems.
- As with any large and complex program, “requirements creep” in the acquisition of COTS software must also be resisted. The Task Force recommends a spiral development process as a way of controlled evolution in the acquisition of software systems.

- User training is also an area requiring attention. There are obviously a number of levels of required expertise, from the manager who occasionally accesses the system to the financial person who inputs data to the systems administrator. For people in the latter two categories the Task Force feels that a significant amount of training needs to be planned and administered. As a guideline, perhaps 120 hours of IT “bootcamp” would not be unreasonable.

Finally, continuous and strong support from top management is absolutely essential. Without such support, most disruptive IT systems will be rejected by the embedded culture.

RECOMMENDATIONS – MANAGEMENT INFORMATION SYSTEMS

The Task Force recommends that the Secretary of Defense address the need for an integrated DoD business management information system by designating the USD (AT&L) as the lead organization to manage acquisition of all new business process support systems.

The Task Force supports the recent organization under AT&L of the Business Transformation Office with dotted line relationship with the Financial Business Transformation Office under the USD Comptroller. This can be an effective organizational structure providing that the AT&L office has budgetary and ultimate decision authority on the acquisition of new and major modifications of software systems.

The Task Force also approves of the ongoing plans of the AT&L office to integrate management software into seven areas of common use and definition, providing enterprise financial visibility, material visibility (including in-transit), common supplier engagement, acquisition visibility, personnel visibility, real property accountability, and common asset valuation. This program appears to be well conceived, but the Task Force has concerns that 1) it must continue to assure the interoperability of the data in these seven systems, and 2) since this project is extremely ambitious it will need to be staffed with experts, have the necessary leadership support, and have sufficient funding and authority. Even with all these empowerments, this will be an extraordinarily challenging undertaking.

An earlier section of this report listed key lessons from industry in the acquisition of management information systems. Among those cited were the needs for the hiring of experienced experts and the critical role of centralized authority over resources, architecture, and decisions. For the software itself, the most important lesson is the adoption of COTS programs with the absolute minimum of customization to provide interfaces between systems; changing business processes where necessary to conform to the software interfaces and expectations. Moreover, it is obviously essential at this period of technological development that all systems be net-centric to provide shared information and the capability for collaborative planning.

SOME INITIAL THOUGHT ON IMPLEMENTATION

Implementing this “horizontally-integrated,” enterprise-wide system will be difficult, but there are clear paths to follow, and a number of themes were recurrent during the briefings and discussions of the Task Force on business practices. Specifically:

- There was unanimous agreement on the use of commercial IT, rather than service-specific or customized software. Furthermore, the Task Force felt strongly that DoD

business practices should be modified to fit commercial suites (which embed best practices), rather than customizing the software to fit DoD practices.

- There should be common data standards, common interfaces and protocols, and common multi-layer security standards.
- The criticality of control over the IT resources was believed essential for program success.
- During discussions the Task Force often returned to the fundamental power of competition to empower the performance and to reduce the cost of services and products. The Task Force fully endorses the recommendation of the 1996 DSB report that shifting all non-inherently governmental support to utilize competitive forces would result in better performance at lower costs.
- Another general business precept that the Task Force agreed upon from the start of discussions was that decision-makers at an action level need to be empowered, albeit with appropriate oversight and visibility. Too often decisions are cumbersome, authority is diffuse, and large inefficiencies and time delays ensue. In logistics cycle times, for example, the contributory factors are processes, information, and decision, and in many instances – both commercial and governmental – the dominant factor in delay is the decision time.
- A topic that generated much discussion during Task Force meetings was the use of activity-based costing. However, unlike in the previous cases, there was no general agreement among the Task Force members on how this tool should be used in the DoD. The benefits are obvious, in that activity-based costing (ABC) would give visibility into the relative costs and values of the various activities comprising a given organization. ABC assigns costs to activities based on the use of resources, and assigns costs to products based on their use of activities. Having such data would be an invaluable tool for management of an organization.

One of the difficulties in applying ABC within the DoD is the lack of a quantitative worth of output “products” which would in any way be the equivalent of the simple metric of profit that is applicable in industry. The process of collecting and analyzing data for ABC can also tend to generate arguments and defensiveness within an organization, and to turn into a potentially wasteful and bureaucratic exercise. Nevertheless, given the commitment of top level management and intelligent allocation of costs, application of ABC can effectively identify places where there are significant disparities between cost and value. The Task Force recommends more use of this tool in the DoD.

VI. AGENCY SUPPORT

The dozen³⁷ Defense Agencies currently operating within the Department of Defense vary widely in their missions and focus from “inherently governmental” (e.g.: MDA and DIA) to heavily “commercial-like” (e.g.: DeCA and DISA). They range in budgetary size from \$34.5 billion to \$33.8 million and each of these Agencies has its own set of strategic, operational governance and financial issues. In the aggregate, these organizations account for approximately \$67 billion of the 2005 DoD budget and involve approximately 90,000 civilian and military Full-Time Equivalent (FTE) personnel.

Agency		Mission
DLA	Defense Logistics Agency	Provides worldwide logistics support for the missions of the Military Departments and the Unified Combatant Commands under conditions of peace and war; provides logistics support to other DoD Components and certain Federal agencies, foreign governments, international organizations, and others as authorized.
DFAS	Defense Finance and Accounting Service	Provides responsive, professional finance and accounting services for the people who defend America.
DeCA	Defense Commissary Agency	Provides groceries to military personnel, retirees and their families in a safe and secure shopping environment.
DISA	Defense Information Systems Agency	Combat support agency responsible for planning, engineering, acquiring, fielding, and supporting global net-centric solutions to serve the needs of the President, Vice President, the Secretary of Defense, and other DoD Components, under all conditions of peace and war.
DIA	Defense Intelligence Agency	Provides timely, objective, and cogent military intelligence to warfighters, defense planners, and defense and national security policymakers.
DCAA	Defense Contract Audit Agency	Responsible for performing all contract audits for the Department of Defense, and providing accounting and financial advisory services regarding contracts and subcontracts to all DoD Components responsible for procurement and contract administration.
MDA	Missile Defense Agency	Develop and field an integrated BMDS capable of providing a layered defense for the homeland, deployed forces, friends, and allies against ballistic missiles of all ranges in all phases of flight.
DARPA	Defense Advanced Research Projects Agency	Maintains the technological superiority of the U.S. military and prevents technological surprise from harming national security by sponsoring revolutionary, high-payoff research that bridges the gap between fundamental discoveries and their military use.
DLSA	Defense Legal Services Agency	Provides legal advice and services for the Defense Agencies, DoD Field Activities, and other assigned organizations.
DCMA	Defense Contract Management Agency	Helps ensure that DoD, Federal, and allied government supplies and services are delivered on time, at projected cost, and meet all performance requirements.
DTRA	Defense Threat Reduction Agency	Safeguards America and its interests from weapons of mass destruction (chemical, biological, radiological, nuclear, and high explosives) by reducing the threat and providing quality tools and services
DSCA	Defense Security Cooperation Agency	Builds relationships that promote specified U.S. interests; Builds allied and friendly nation capabilities for self-defense and coalition operations; Provides U.S. forces with peacetime and contingency access

FIGURE 17. Defense Agency Missions

³⁷ For purposes of this study, two Agencies (NSA and NGA) have been excluded for security reasons.

Defense Agencies (Personnel and Funding)

Agency	# Civ		# Mil		# Guard/Reserve		Budget (\$K)	
	1996	2005	1996	2005	1996	2005	1996	2005
DLA*	49,991	23,397	1,338	631	-	312	14,953,917	27,445,689
DFAS*	22,241	13,848	1,634	474	-	-	2,066,624	1,379,799
DeCA*	17,416	15,015	42	13	-	-	7,351,332	6,020,654
DISA*	7,657	5,066	2,343	1,906	-	17	3,710,308	4,597,070
DEA	4,439	5,806	2,422	2,459	-	18	890,292	1,727,531
DCAA	4,885	3,804	-	-	-	-	332,244	300,221
MDA	248	741	128	147	-	-	3,404,521	7,743,602
DARPA	187	182	19	18	-	-	2,299,221	2,615,368
DLSA	74	159	7	39	-	-	7,335	26,684
DCMA	-	11,028	-	599	-	-	-	862,350
DTRA	-	1,082	-	787	-	1	-	1,046,993
DSCA	-	341	-	52	-	-	-	814,727

* Personnel and Funding figures for these agencies include DWCF
 All Budgets are listed in constant 1997 dollars
 All Guard/Reserve personnel are in full time equivalents (FTEs)
 Some Intelligence Agencies removed for security reasons



FIGURE 18. Defense Agencies (Personnel and Funding)

From a DoD perspective, management oversight of the Agencies is fragmented. While seven different DoD senior executives have responsibility for at least one Agency, USD (AT&L) oversees five of the Agencies (DLA; MDA, DARPA; DCMA, and DTRA) aggregating \$48.7 billion in 2005 budgetary authority. To put this responsibility within a commercial context, this is equivalent to having USD (AT&L) have responsibility for overseeing a highly diverse set of operations only slightly smaller than Boeing (2004 revenue: \$52.5 billion; Fortune 500 rank: #25), as part of his/her total AT&L responsibilities.

While the Agencies have each taken actions to improve their operations; utilize their staff more efficiently, and, in some cases, react to reduced budgets, these efforts have varied greatly in both extent and results. In addition, because of the diverse nature of the Agencies; the differing nature of the managerial expertise necessary to provide effective senior civilian DoD oversight to them; and the extremely limited managerial bandwidth (both individually and collectively) available to oversee the Agencies, the quality and extent of the progress the Agencies are each making to transform themselves and their business practices is often obscure.

REASONS TO APPOINT AND UTILIZE BOARD OF ADVISORS

Both the DSB (September 1999 Task Force Report on Warfighting Transformation) and the GAO (Reports of November 2002 and July 2003), as well as numerous private sector studies have identified key practices necessary to accomplish transformation of both public and private sector organizations. Key among these practices is to:

- Ensure that top management's commitment is clear, consistent and pervasive.
- Sustain the commitment over a multi-year period.
- Establish metrics for best-in-class performance and communicate the results in a highly visible and understandable way.
- Utilize leading expertise from outside the organization.
- Empower a team to guide the transformation efforts that embodies the preceding characteristics.

The Department of Defense is no stranger to the use of Advisory Boards. Indeed, the Defense Science Board, the Defense Business Board, and the Defense Policy Board, along with numerous ad hoc Advisory groups formed by the current, and former, Secretaries of Defense, speak eloquently to the continuing benefits the Department believes it receives from those Advisors.

Extending and formalizing DoD experience with Advisory Boards to the Agencies would give the Secretary of Defense, the Deputy Secretary of Defense (and all other relevant senior DoD civilian managers) another tool to help leverage the time they spend overseeing the Agencies. Specifically, their Advisory Boards, should be able to provide senior DoD managers with:

- Independent insight into key management related issues at each Agency (insight that would be deeper than that obtained without an independent viewpoint and broader than the reports provided solely by the Agency head and his/her direct reports);
- Greater visibility to an agency's performance and costs;
- A fuller debate on an Agency's priorities;
- Assistance in establishing and communicating metrics to be used in assessing how well an Agency is accomplishing its mission;
- Access to best-in-class knowledge from outside the Agency; and;
- A respected group of Advisors who could help ensure that senior DoD management's objectives are being pursued over a multi-year period.

In addition, these Advisory Boards and the individual members should prove to be an equally valuable assurance to the specific Agency head — providing him or her with constructive relevant insights from other parts of the public, or private sector.

There should be no question that Agency heads must have the flexibility and responsibility to manage their resources to accomplish their missions in the most effective and efficient manner. Experience shows that the effectiveness and efficiency of any organization can be improved by making its performance and costs more visible and transparent. Advisory Boards, because of their independence and, usually, longer term perspective, tend to develop significant "institutional knowledge" that contributes to providing incentives for driving continuing improvements.

RECOMMENDATIONS

- The Deputy Secretary of Defense (acting as the Chief Operating Officer of the Department of Defense) shall appoint, or approve the appointment, of members to a Board of Senior Advisors for each Defense Agency.
- The Deputy Secretary of Defense shall act in consultation with, and receive advice and input from, the specific senior DoD civilians (e.g.: USD (AT&L); USD (C); etc.) to whom the Agency reports, as to the specific members and the number of specific members that will comprise each Board.
- The Deputy Secretary of Defense shall determine for each Advisory Board whether it will report to him, or to the responsible senior DoD official, or jointly to both.
- The membership of each Advisory Board should be constituted of outstanding individuals with relevant expertise in the mission, operations and business issues relevant to each Agencies. Members could include public and private sector experts, former government employees and customer representatives.
- The Deputy Secretary of Defense shall utilize the Advisory Boards as vehicles for continuous transformation and request that the Boards help provide guidance and oversight to help infuse best-of-class practices into each Agency and to assist in ensuring the improvement of each Agency's performance and costs.
- The Deputy Secretary of Defense should determine for certain of the "inherently governmental" Agencies whether he wishes to have the Advisory Board focus on the full range of the Agency's mission, or just on its business practices.
- The terms of membership on each Advisory Board shall be at least two years, with the intention of renewals to ensure consistency and pervasiveness of the Board's advice.

VII. RECOMMENDATIONS

In summary the Task Force makes five key recommendations:

1. Create an Output-Driven, Multi-year, Resource-Constrained, Business Plan

The Secretary of Defense (SecDef) should create a multi-year plan that broadly specifies what is to be done, in what time period, with what resources, and with what capability output. Such a plan will:

- Provide discipline for allocating major resources to mission purposes
- Provide discipline for constraining Service and agencies plans to intended resources
- Provide discipline for COCOMs, Force and Service Providers, CJCS and Joint Staff, and OSD to maintain coherent execution
- Provide a disciplined basis for measuring progress against plan objectives

2. Create a Joint Logistics Command

The SecDef shall create a Joint Logistics Command responsible for global, end-to-end supply chain (performances and costs). This command shall:

- Include TransCom's mission, DLA, Service Logistics and transportation commands to the JLC Component Commands
- Assure Joint Theatre Commanders retain operational control of the flow of in-theater logistics
- Assure Program Managers retain responsibility for lifecycle logistics support planning and configuration control
- Maximize the use of performance-based logistics (wherever possible, through competitive sourcing)
- Appoint an external advisory board of industry logistics experts

USD (AT&L) shall:

- Direct work to create a set of output metrics for a world-class logistics operation
- Provide a process and mechanism to measure logistics performance against the agreed metrics

3. Align Personnel with the Department's Missions (and their Training)

The SecDef should direct (consistent with the President's Management Plan #5):

- Use of military people for military functions only
- Use of civilian government personnel for inherently-governmental functions only (unless competitive sourcing indicates greater effectiveness and efficiency by government workforce)
- Use of civilian contractors for all other functions

USD (P&R) will:

- Conduct an audit of all personnel positions and their costs (including the full cost of military personnel)
- Give priority to warfighting needs
- Develop incentives (e.g. savings and military personnel to be retained for other needs)
- Develop a time-phased plan with milestones to realign human resources
- Monitor performance against plan

Implementation of this recommendation will significantly improve performance and dramatically lower costs (30-40% avg.) while freeing up military personnel to perform military-specific functions.

4. Use Modern Practices to Manage Business Systems

SecDef should address the need for an integrated DoD business management information system by:

- Designating USD (AT&L) as the lead organization to manage acquisition of all new business process support systems
 - Assure that these systems are net-centric to provide the shared information and collaborative planning essential to a complex, adaptable enterprise
 - Maintain the integrity of the COTS systems; change the business processes accordingly, and adapt appropriate interfaces
 - Assure adequate authority over architecture, applications, resources, and personnel to achieve implementation
 - Hire experienced key people to lead the Department effort and outsource the balance

5. Enhance the Management of DoD Agencies

DepSecDef (as the COO) shall appoint a Board of Senior Advisors for each Defense Agency Director (comprised of customers and area experts, including knowledgeable outsiders) to provide guidance and oversight to:

- Help guide the performance and direction of the agency
- Help provide commercial best practices and institutional knowledge

The Task Force recommends that advisor's terms be at least 2 years.

COMPELLING REASONS FOR MOVING FORWARD

As mentioned before, these recommendations are not entirely new, yet the Task Force believes that the time is right to move forward with them now, because the Task Force believes:

1. They support the values of the current SecDef, DepSecDef and the USD (AT&L);
2. The future is likely to be a much tougher political environment for defense spending as O&M and medical costs are continuing to take a much larger share of the budget, and the nation's economy will not likely support the continued increase in the DoD top line;

3. The significant shift in resources and personnel enabled by these recommendations will result in potential for more resources to be allocated to improving warfighting capability and national security.

GENERAL OBSERVATIONS

In closing, the Task Force makes some important general observations. The current DoD leadership team, the SecDef, DepSecDef, and USD (AT&L), have shown a strong interest in achieving the objectives highlighted in this report. The management of the proposed transformation in this report will take strong and persistent leadership from this leadership team. While they can expect continuing resistance, (from the internal organization and many external DoD stakeholders) for these changes, they should look for early "successes"; clearly communicate the vision for the organization going forward; and continue to push a single, clear message of the objectives.

It can, and must, be done!