



Modernizing Defense Logistics

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Modernizing Defense Logistics

The initiative to modernize Defense logistics has high payoff potential for the new Administration. They can produce significant savings though accelerating more efficient government practices and processes.

During the 1991 Gulf War, the United States executed the largest logistical move since WWII. This historic effort highlighted the shift from forward deployed war fighting to power projection, persistent presence warfare. While highly successful, the Gulf logistical campaign has been described as “brute force” logistics. Following the Desert war experience, the DoD set in motion initiatives to transform the way this country deploys, sustains and redeploys its combat forces. Those initiatives have included Performance Based Logistics on selected weapon systems, commercial supply chains for consumables, better distribution process integration and improved asset visibility. Many of the lessons learned apply equally to government and industry as inseparable partners in achieving the logistics mission. It is appropriate to accelerate the work on the initiatives at this time in history.

Currently, the new Administration is faced with a wide array of daunting domestic and international challenges. Within the Department of Defense (DoD) the tasks involve maintaining defense readiness, resetting the force from overseas contingency operations and modernizing aging weapon systems. These significant challenges are further magnified by the need to address domestic economic issues and other Federal priorities which will limit resources for DoD. Some analysts have argued there must be a trade-off between readiness and modernization. This “trade-off” ignores the significant savings which could be achieved by increasing the emphasis on current logistics initiatives being led by DoD personnel to more quickly migrate DoD logistics to best-in-class performance through partnerships with industry. The U.S. will spend approximately \$270B on defense logistics and sustainment activity in FY09¹. Cumulative savings by advancing government/industry partnerships will enable simultaneous reset and modernization with additional resources available to work other Administration high priority issues while continuing to add jobs at maintenance depot locations.

These performance improvements and efficiency outcomes are possible if the DoD accelerates five proven logistics modernization initiatives:

¹ PRTM DoD FY09 Budget and GWOT Analysis

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- 1 - Life Cycle Product Support / Outcome Based Partnerships
- 2 - Management of Commodities
- 3 - Mobility Assets and the Supporting Infrastructure
- 4 - Theater Services
- 5 - Logistics Information Systems

If fully implemented, these five initiatives will save an estimated \$25B to \$30B annually – enough to fund weapon system’s recapitalization annual requirements for high priority combat systems. To simultaneously achieve recapitalization and readiness, the new administration should make logistics modernization a core tenet of its defense agenda. The five elements of such an agenda are:

1. Life Cycle Product Support / Outcome Based Partnerships

Weapon system support is the largest opportunity to accelerate performance increase and simultaneous cost savings. While consuming \$105B of the DoD's budget, weapon system readiness remains unacceptably low as we continue to use the personnel intensive, massed logistics support policies of the past². This situation contributes to increasing backorders, slow supply chain responsiveness, poor asset visibility, and slow customer response times. The end result is reduced long term military readiness at higher cost. As a result military readiness is degraded and warfighter effectiveness is reduced.

These circumstances so alarmed Congress over a decade ago, that Congress directed DoD to transform its product support practices through the 1997 National Defense Authorization Act. As a result, DoD began to migrate from its historic pattern of buying and warehousing parts to buying outcomes or military readiness from industry to enhance accountability for Life Cycle costs and readiness outcomes across the life of a platform. DoD refers to this initiative as Performance Based Life Cycle Product Support (PBL).

² PRTM DoD FY09 Budget and GWOT Analysis

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DoD has over 200 PBL efforts ongoing today at the systems, subsystem and component level. These efforts have shown improvements in material availability (above 95 percent), world class response times (2-4 days), significant reductions in inventory, and average savings of 16 percent over the historic, Cold War support methods³. Many of these programs have demonstrated this performance for 5 years or more, responding to surge, high operational tempo, and wartime needs without interruption. These approaches should be rapidly expanded across all DoD systems to improve readiness and reduce costs by an estimated \$16B to \$21B per year.

2. Management of Commodities

The Defense Logistics Agency (DLA) pioneered DoD's migration from managing (and warehousing) supplies to managing *suppliers* – to fix the problem of no single responsible owner for the end to end supply chain system. DLA adopted commercial supply chains for pharmaceuticals, food, clothing, fuel, bottled gas, shop materials, and tires. These efforts reduced inventory and improved customer delivery times to 2-4 days. As an example, for naval aviation tires, the commercial supply chain currently provides 100 percent availability, delivery to Iraq in 55 hours, a 75 percent reduction in inventory, and \$46 million in savings³.

Despite these proven results, DoD inventory increased by \$30B over the past five years while spending \$24B annually⁴. This has resulted in degrading overall weapon system performance and hindered the ability to get required resources to the right place at the right time – some \$93B worth of parts and materials is sitting in warehouses⁴. DoD needs to rapidly expand its reliance on commercial supply chains for key commodities such as weapon system consumable parts, batteries, construction material, and depot shop materials. These efforts should include a clear emphasis on full asset visibility from source, through testing and acceptance, to delivery to the ultimate customer. The most effective approach would be for DoD to partner with commercial industry to rapidly infuse best-in-class supply chain practices across all DLA items, saving \$2.8B to \$3.7B per year

³ Performance Based Logistics (PBL): Implications for Availability, Public-Private Partnerships, and Cost Savings, Dr. William Bajusz, December 2006

⁴ DoD Supply System Inventory Report 30 Sep 2007

3. Mobility Assets and the Supporting Infrastructure

From the Cold War through the Desert Wars, the United States has migrated to a persistent, concurrent multi-theater engagement concept that requires a rapid, global mobility and distribution capability and infrastructure, consuming \$14B per year⁵. Despite years of study and investment, significant challenges still remain in the areas of tactical distribution, multi-modal synchronization, asset visibility and fuel distribution. These challenges will be exacerbated by the emerging DoD emphasis on global force re-alignment and distributed operations as well as DoD's envisioned retrograde and reset of equipment from Iraq.

In this area, DoD should rely more heavily on the private sector and dual use infrastructure. For example, in support of Operation Iraqi Freedom, DoD built three distribution centers in Kuwait, despite an abundance of private sector infrastructure in the region. In addition, DoD's retrograde process is so fractured that DoD cannot document the cost or time of its retrograde process, while billions of dollars worth of assets sit in queue at ports and depots. Finally, DoD still relies heavily on military ground distribution within an area of operation. This reliance creates vulnerabilities to supply interruptions and places US forces in harm's way unnecessarily. DoD needs to assess end-to-end capabilities and specifically modernize its global distribution capabilities by increasing its reliance on commercial providers for carrier on board delivery, unmanned rotary wing distribution, global warehousing, and integrated end-to-end retrograde, while ensuring appropriate DoD capabilities are retained for wartime applications. These efforts could achieve savings of \$1.1B to \$1.5B per year.

4. Competitively Source Private Sector Theater Services

DoD currently employs approximately 1.1 million personnel in logistics positions⁵. Over 600,000 of those are in deployable positions to provide port/theater opening and theater services⁶. Many of these personnel are in Reserve Units. Despite this force structure (and associated cost), recent experience indicates that DoD relies heavily on the private sector for approximately \$18B worth of theater support services each year⁵. Currently, there are more contractor personnel in Iraq than uniformed personnel. Recent experience also clearly demonstrates that the nation cannot afford to continue the ad hoc approach to industry, and its attendant "urgent" contracting process.

⁵ PRTM DoD FY09 Budget and GWOT Analysis

⁶ Performance Based Logistics (PBL): Implications for Availability, Public-Private Partnerships, and Cost Savings, Dr. William Bajusz, December 2006

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As the nation debates the need for increased force structure, the DoD should conduct a bottom up review of its ongoing actions to provide combat services support, recognizing an increasing role of the private sector. Those functions that can be performed by the private sector or in partnership with the private sector (to include port opening, port operations, distribution, base operations, food service, and non-trauma health care) should be competitively solicited from the private sector as an integrated package, with multiple awards to enable follow-on competition, saving \$2.4B to \$3.2B per year. This would also free up force structure (for re-assignment to maneuver units) while avoiding the multiple contracting challenges with which DoD is struggling.

5. Logistics Information Systems

DoD continues to rely upon over 2,000 logistics information systems, some of which were developed in the 1960's and 1970's⁷. These systems "hardcode" Cold War business rules and processes. Despite spending over \$2B per year over the last decade to modernize these systems, DoD is still at least 10 years away from fully fielding "modern" supply chain systems which turn data into information supporting effective decision-making as well as integrated collaborative tools to enable planning in an adaptive environment⁷. At the current rate of innovation, these "modern" systems will be obsolete before they are fielded. In the meantime, DoD continues to incur \$14B/year in development and operations and maintenance costs to sustain its Cold War logistics information infrastructure⁸.

To address similar problems, the rest of the Federal government has moved to "shared language" information services provided by the private sector on a fee for service or "managed service" basis. Such an approach involves the private sector assuming responsibility of the legacy systems and modernizing over time, similar to commercial information networks. DoD should move forward rapidly with a similar approach, building off current efforts to integrate DLA and USTRANSCOM. This will provide savings of \$1.9B to \$2.5B per year while providing DoD with a state of the art logistics information capability within five years.

Impact on Recapitalization/Reset

The performance improvements and efficiency initiatives described above represent responsible governance while making an estimated \$25B to \$30B per year available by reducing logistics costs,

⁷ University of Maryland Center for Public Policy and Private Enterprise

⁸ PRTM DoD FY09 Budget and GWOT Analysis

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while improving logistics performance for the warfighter and increasing jobs at depot locations. These studies are on-going, and will be refined as better information becomes available. Nonetheless, the analysis shows that the initiatives described will make funding available to simultaneously increase recapitalization and reset, while reducing logistics costs and improving logistics performance with the likelihood of producing substantial resources for other Administration priorities. To put \$30B per year into defense context, if these funds were re-allocated to recapitalization, they would be sufficient to fund the annual production requirements for many critical weapon systems such as KC-X, F-35, C-130J Super Hercules, Littoral Combat Ship, DDG-51 Arleigh Burke, Virginia Class SSN, and Army system upgrades. Additionally, while DoD recapitalizes our defense systems, our warfighters will gain immediate readiness improvements.

Recommendations: The Way Ahead

The following policy changes will enable performance outcomes of improved military capability, enhanced logistics performance, and dramatically reduced costs. The changes can be implemented without any statutory or regulatory modifications. The resultant savings can be applied to rebuild the military assets used during ongoing overseas contingency operations:

- Incorporate into DoD's guidance the preference for the use of Outcome Based Partnerships at all levels, component, subsystem and system, to improve availability and reduce support costs.
- Capitalize on Commercial Supply Chains For All DoD Commodity /Repairable Forecasting, Ordering, Storage And Distribution
- Achieve Commercial Best Practice Distribution Performance Through Partnering With Industry (Commercial Infrastructure)
- Competitively Source Commercially Provided Theater Opening And In-theater Logistics Support
- Convert Existing Logistics Information Systems To Commercial Managed Services Model

These opportunities come at an inflection point in our history when unprecedented budget pressures, global defense challenges, and commercial logistics opportunities are coming together. We cannot afford to ignore this opportunity, since our warfighters deserve the best the country has to offer. Industry is ready to work with the new administration and Congress to accelerate these changes.