



Report to the Secretary of Defense

Global Logistics Management

Report FY11-07

- **Recommendations to help optimize the Department's global logistics management**
-

Global Logistics Management

TASK

The Defense Business Board (hereafter referred to as “the Board”) provides recommendations to the Department of Defense’s (DoD) senior management on improving DoD’s management policies and practices to maximize operational effectiveness and efficiency.

In May 2010, the Chairman of the Board created a task group to recommend ways to improve the management and governance of the Department’s FY10 \$210 billion global logistics enterprise. The Task Group was asked to identify and analyze best business practices for enterprise-wide logistics management. The group specifically focused on leadership and organizational constructs that could streamline the end-to-end logistics system enhancing its effectiveness, as well as reducing its costs. A copy of the Terms of Reference outlining the scope and deliverables for the Task Group may be found at **Tab A**.

Mr. Philip Odeen served as the Task Group Chair. The other Task Group members were Pierre Chao, William Phillips, Richard Spencer, and Leigh Warner. Catherine Whittington served as the Board’s Staff Analyst.

PROCESS

The Task Group conducted more than 30 interviews with current and former DoD senior leaders, officials from other government agencies, and executives from the private sector. The Task Group reviewed previous reports on the Department’s global supply chain management by the Board (Reports FY03-03 and FY07-02), the Defense Science Board (DSB), and the Government Accountability Office (GAO). Furthermore, the Members analyzed the logistics plans of the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSD(AT&L)); U.S. Transportation Command (USTRANSCOM); the Defense Logistics Agency (DLA); and the Joint Staff. The Task Group also reviewed relevant DoD Directives and Instructions as well as reports from within the DoD and the private sector (see page 18 in **Tab B** for the complete list of these reports).

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The Task Group's draft findings and recommendations were presented to the Board for deliberation at the July 21, 2011 quarterly Board meeting where the Board voted to approve the recommendations. See **Tab B** for a copy of the brief presented to the Board.

FINDINGS

The Task Group assessed the Department's current logistics operations. The Department's logisticians manage an extremely large and complex supply chain to support military operations around the world. The Department spent \$210 billion in FY10 on its logistics enterprise, which is divided into maintenance (\$112 billion), supply (\$74 billion), and transportation (\$24 billion).

Magnitude of DoD Logistics Operations (FY10)

Total Logistics Costs: \$210B <ul style="list-style-type: none">\$ 112 billion in maintenance\$ 74 billion in supply\$ 24 billion in transportation	Operational Resources <ul style="list-style-type: none">100,000 suppliers1,000+ legacy logistics systems103,000+ requisitions per day\$95.6B inventory/4.6M items (SKUs)
Assets: \$595B <ul style="list-style-type: none">• 500 ships• 15,800 aircraft• 30,000 combat vehicles• 330,000 ground vehicles	Operating Locations <ul style="list-style-type: none">• 17 Maintenance depots• 25 distribution depots (global)• 49,000 customer sites• Worldwide air and seaports

Source: Defense Logistics Cost Baseline, FY2010

DoD logisticians have also faced a number of challenges, including a lack of end-to-end asset visibility, a lack of common platforms and limited interoperability among information systems, a lack of common metrics and definitions, numerous "hand-offs" between organizations, and weak governance across the logistics enterprise. The challenges have contributed to longer lead times, excess inventory and stockpiling,

Defense Business Board

duplicative activities and systems, inadequate performance measurements, and increased costs.

In light of these problems, the DoD logistics leadership has developed a thoughtful vision for future defense logistics operations. This vision has been captured in several key documents such as the Strategic Plan of the Office of the Principal Deputy Assistant Secretary for Logistics and Materiel Readiness (within OUSD(AT&L)) as well as the Joint Staff's Joint Concept for Logistics, the USTRANSCOM Strategic Plan for 2011, and the DLA Strategic Plan for 2010-2017. These plans envision a DoD logistics enterprise that delivers, positions, and sustains forces from any point of origin to any point of employment, including retrograde, redeployment, and return of materiel. To achieve this vision, the enterprise needs integrated processes and synchronized activities across numerous defense organizations; meaningful performance metrics; and a real-time global information system that provides accurate data and total visibility of requirements and assets. However, there is no consensus on the appropriate governance structure to achieve the vision.

The Task Group found that given its operational and budgetary pressures, it is imperative DoD fully implement the Department's logistics vision and do so expeditiously. While the operational tempo remains high and contingencies remain unpredictable, the President has directed an additional \$400 billion in cuts from national security over the next 12 years. Given the cost of logistics (\$210B in FY10), it will be affected by these cuts.

Many large commercial organizations have faced similar challenges and, in response, have integrated their supply chains to create competitive advantages and cost savings. Companies have experienced 10 to 30 percent in cost savings and enhanced performance. To achieve this, companies have streamlined their governance and organizational structures.

OPTIONS CONSIDERED

Based on these findings, the Task Group developed three options to improve the management of the Department's logistics.

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1. Option 1: Implement a virtual integration of the current structure (continuing the current approach to improve logistics performance).
 - a. This may enable the Department to achieve improvements through incremental changes to the existing management processes.
 - b. However, the pace of change will be slow (an estimated 20 years) and the magnitude of savings will be limited.
2. Option 2: Combine USTRANSCOM and DLA into a single organization.
 - a. The governance of these organizations could be enhanced through consolidation, but the modest savings are unlikely to justify the disruptions and loss of focus during the transition.
 - b. Moreover, in recent years the cooperation and interconnections between the two organizations have improved markedly and performance would be unlikely to improve significantly.
3. Option 3: Create a single Defense Logistics Organization (DLO) that would be responsible for the end-to-end integration of supply, maintenance, and transportation.
 - a. A Four Star General/Flag Officer would lead the DLO and would report to the SECDEF via OUSD(AT&L) and to the Chairman of the Joint Chiefs of Staff (CJCS) as appropriate for military operations.
 - b. The DLO's governance and reporting relationships would need to take into account the Organization's combat support roles as well as the imperative to reduce costs.

The Task Group concluded that the first two options are neither efficient nor effective. Option 1 would be unlikely to remedy the current system's problems at the pace and magnitude that is required to address both operational and financial challenges. Option 2 does not address the majority of the DoD logistics spend. For example, transportation and DLA

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supply operations only account for about \$50 billion of the \$210 billion in total logistics spend. The bulk of the activities, people, and costs are in the Military Departments. Option 3 would empower a DLO to undertake the actions that are necessary to rapidly integrate the activities, which would increase logistics efficiency and effectiveness in an acceptable timeframe.

RECOMMENDATIONS

In light of the operational and budgetary issues that confront the Department, the Board recommends that DoD create a single DLO to increase supply chain efficiency and effectiveness at a much lower cost. This organization, equipped with strong leadership would be able to rapidly accomplish the integration and make the difficult tradeoffs between functions, capabilities, and costs.

Within the proposed framework, the Board offers several specific recommendations to expedite and improve the creation of the DLO.

1. Address legislative authorities in order to ensure the appropriate levels of cooperation.
2. Develop an integration plan, including a roadmap, sequencing, milestones, and metrics in order to ensure that goals are achieved.
3. Prepare a detailed transition plan, including necessary changes in leadership, personnel, processes, and technology.
4. Implement this plan on a phased, but expeditious basis (e.g. five years or less). More detailed descriptions of these recommended elements and implementation steps are found in **Tab B**.

CONCLUSION

The Board recognizes the critical need to fundamentally reform the Department's global logistics management. The Board believes that the above recommendations will significantly improve the efficiency and effectiveness of the Department's logistics enterprise. Moreover, these recommendations could achieve significant budget savings, allowing the

Defense Business Board

Department to preserve funds for force structure and the modernization of military capabilities.

Respectfully submitted,

A handwritten signature in black ink that reads "Philip A. Odeen". The signature is written in a cursive style with a large initial "P" and "O".

Mr. Philip Odeen
Task Group Chair

TAB A

CHAIRMAN, DEFENSE BUSINESS BOARD
TERMS OF REFERENCE –
“GLOBAL LOGISTICS MANAGEMENT”

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DEFENSE
BUSINESS
BOARD

DEFENSE BUSINESS BOARD
1155 DEFENSE PENTAGON
WASHINGTON, DC 20301-1155

May 14, 2010

MEMORANDUM FOR PIERRE CHAO

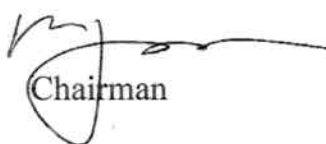
SUBJECT: Terms of Reference – “Global Logistics Management”

The Secretary of Defense is committed to reshaping the Department of Defense by reforming its priorities, procedures, and institutional culture to align defense dollars with real-world military needs. As the Secretary continues to make tough decisions in this constrained budget environment, the Department’s management procedures, particularly in supply chain – a \$170 billion per year enterprise – should be reviewed for similar reforms and overhead reduction.

Request you lead a DBB Task Group to develop recommendations that would help optimize the Department’s global logistics management. Consider best business practices for enterprise-wide logistics management, including leadership and organizational constructs that could streamline the end-to-end logistics system, as well as reduce overhead for the Department.

Barbara Barrett, Bill Phillips, Richard Spencer, and Leigh Warner will assist you. Please provide me with your findings and any recommendations to improve our processes by October 2010. Kelly Van Niman will serve as the DBB Secretariat Representative.

As a subcommittee of the Board, and pursuant to the Federal Advisory Committee Act of 1972, the Government in the Sunshine Act of 1976, and other appropriate federal regulations, this Task Group shall not work independently of the Board’s charter and shall report its recommendations to the full Board’s public deliberation. The Task Group does not have the authority to make decisions on behalf of the Board, nor can it report directly to any federal officer who is not also a Board member. The Task Group will avoid discussing “particular matters” according to Section 208 of Title 18, U.S. Code.


Chairman



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TAB B

FINDINGS AND RECOMMENDATIONS
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DEFENSE BUSINESS BOARD



Global Logistics Management

Task Group

July 21, 2011

Task Group Overview

Terms of Reference

In this constrained budget environment, request that the DBB review the management framework of the DoD global logistics operations.

Deliverables

Provide recommendations to help optimize the Department's global logistics management. Consider best business practices for enterprise-wide logistics management, including leadership and organizational constructs that could streamline the end-to-end logistics system, as well as reduce overhead for the Department.

Task Group

Mr. Philip Odeen (Chair)

Mr. Pierre Chao

Mr. William Phillips

Mr. Richard Spencer

Ms. Leigh Warner

DBB Staff Analyst

Ms. Catherine Whittington



Methodology

- Reviewed DoD Directives and Instructions on logistics roles, responsibilities, and authorities
- Reviewed logistics plans, strategies, and reports from:
 - Office of the Secretary Defense (OSD)
 - Joint Staff (JS)
 - Military Services
 - US Transportation Command (USTRANSCOM)
 - Defense Logistics Agency (DLA)
- Reviewed prior GAO/DSB/DBB Reports
- Reviewed articles and reports on industry best practices
- Conducted 30+ interviews with DoD leaders (current and former) and commercial executives



Magnitude of DoD Logistics Operations (FY10)

DoD logisticians manage a large and complex supply chain to support operations around the world

Total Logistics Costs: \$210B

- \$ 112 billion in maintenance
- \$ 74 billion in supply
- \$ 24 billion in transportation

Operational Resources

- 100,000 suppliers
- 1,000+ legacy logistics systems
- 103,000+ requisitions per day
- \$95.6B inventory/4.6M items (SKUs)

Assets: \$595B

- 500 ships
- 15,800 aircraft
- 30,000 combat vehicles
- 330,000 ground vehicles

Operating Locations

- 17 Maintenance depots
- 25 distribution depots (global)
- 49,000 customer sites
- Worldwide air and seaports

Challenges in Logistics Management

Defense logisticians have had to overcome numerous obstacles to meet the needs of warfighters

Obstacles

- Lack of end-to-end asset visibility
- Lack of common platforms, or even interoperability, among information systems
- Lack of common metrics and definitions
- Numerous “hand-offs” between organizations
- Weak governance across the logistics enterprise

Consequences

- Increased risk to warfighting effectiveness
- Longer lead times
- Excess inventory and stockpiling
- Duplicative activities and systems
- Insufficient performance measurement
- Increased costs



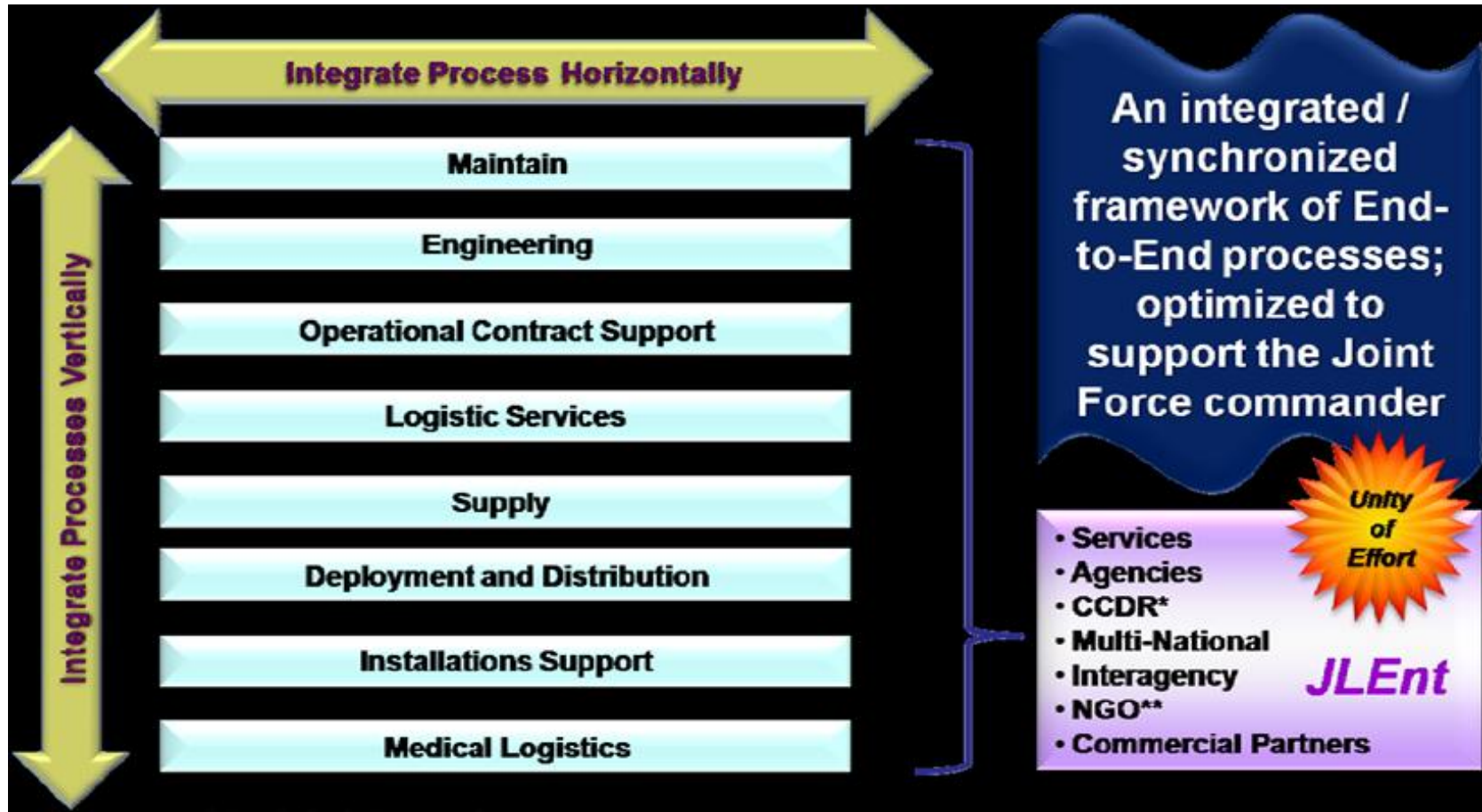
Logistics Vision

DoD logistics leadership has developed a thoughtful vision for future defense logistics operations

- Key Documents
 - OSD/LM&R – Logistics Strategic Plan (July 2010)
 - Joint Staff – Joint Concept for Logistics (August 2010)
 - USTRANSCOM – Strategic Plan 2011
 - DLA – Strategic Plan 2010-2017 (July 2010)
- Common Features
 - Integrated and synchronized processes and capabilities across logistics components
 - Effective performance metrics
 - Real-time global information system providing accurate data, total requirement, and asset visibility
- Outcome
 - Defense logistics delivers, positions, and sustains forces from any point of origin to any point of employment, including, retrograde, redeployment, and return of materiel

Logistics Process Framework

The vision addresses the integration of logistics processes on an end-to-end basis to deliver support to warfighter

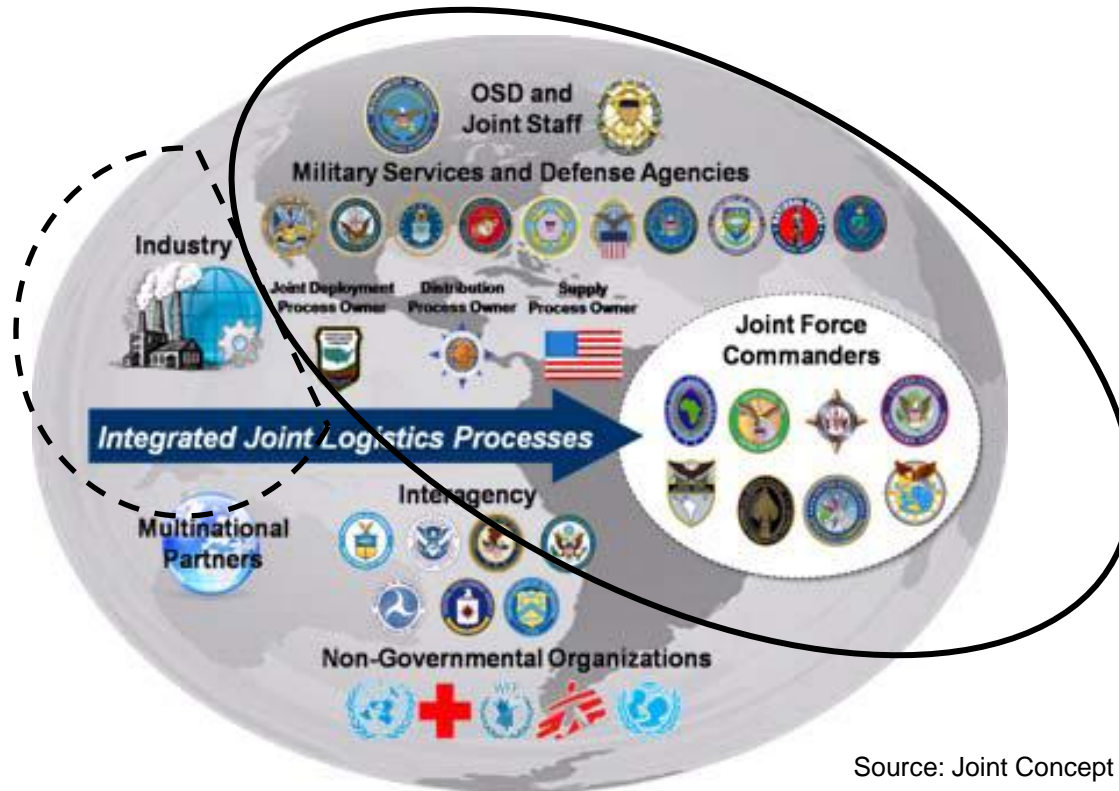


Source: Joint Concept for Logistics (August 2010)



DoD Logistics Governance

Delivering that vision currently involves integrating processes and synchronizing activities across numerous defense organizations . . .



Source: Joint Concept for Logistics (August 2010)

. . . but, there is not yet consensus on the appropriate governance structure to achieve that vision

A Burning Platform

Pressure to achieve the Department's logistics vision is accelerating

- Operational pressures
 - Operational tempo remains high
 - Contingencies remain unpredictable, requiring the Department to be agile and prepared for what those changes mean to the operational forces and doctrine
 - Effectiveness of operational forces is directly related to effectiveness and agility of logistics
- Budget pressures
 - SECDEF initiated \$178B cuts in 2010 (\$100B to be reinvested in modernization)
 - President directed additional \$400B cuts from national security over 12 years
 - Efficiency initiatives have begun to focus on logistics
 - Pilot to transfer additional Depot Level Repairable/Consumable Inventory Management and Product Development/Engineering Services to DLA
 - Implementing remaining elements of Military Services' IT initiatives
 - Defense Logistics – at \$210B for Supply, Maintenance and Transportation – represents roughly a third of current DoD spend and will likely be a major component of any significant budget reduction

Commercial Best Practices

Commercial organizations rely on Integrated Supply Chain solutions to create both competitive advantage and cost savings

- Major corporations often launch their efforts to restructure their global supply chain operations at times of competitive and financial challenge
- Integrated supply chains are being used to create a competitive advantage, to be more responsive to market changes, and to recover from disruptions faster
- Financial results yielding 10-30% real cost savings are typical
 - IBM: Global costs decreased 21% even as logistics volume grew 30%
 - Wal-Mart: Immediate 10% cost reduction and additional 5% out of the supply chain every year
 - Best Buy: Reduced inventory costs by \$600M
 - Tyco: Eliminated \$1B (14%) out of its supply chain costs
- Governance and organization is centralized and led from the top
 - Ford, IBM, and Wal-Mart rely on centralized management of full supply chain/logistics processes to drive continuous cost improvement with designated leader reporting to the CEO/COO

Management Options

This is an opportune time to consider alternative approaches to governance and management of the defense supply chain

- 1. Virtual integration of current structure**
- 2. Combination of USTRANSCOM and DLA**
- 3. Integrated Defense Logistics Organization**



Option 1: Virtual Integration of Current Structure

- **Represents continuation of current approach to improving logistics performance**
 - Joint Logistics Board serves coordination function
 - USTRANSCOM is Distribution Process Owner
 - Joint Deployment Process Owner – TBD
 - Potential for Supply Process Owner – TBD
- **Achieve improvements via incremental change to existing management processes**
 - Establish framework of common processes, taxonomy, data, and metrics
 - Enable interoperability across systems
 - Deliver change over next 20 years (Joint Concept for Logistics, August 2010)
- **However, pace of change will be slow and magnitude of savings will be limited by:**
 - Absence of single point of day-to-day leadership will inhibit rapid decision-making
 - Challenge of achieving consensus will either repeatedly push decisions to SD or will encourage less aggressive change
 - Tendency of organizations to protect turf (in processes, systems, and structures)

This approach is unlikely to deliver change at the pace and magnitude required to address both operational and financial challenges

Option 2: Combine USTRANSCOM and DLA

- DoD has reviewed DLA-USTRANSCOM combination on several occasions (including review by DBB in 2003)
- DLA and USTRANSCOM both perform critical functions in the logistics enterprise
- Effective communication and coordination are required to enable effective transportation planning
- Opportunities for consolidation of savings is limited (primarily to command staff)
- Governance across organizations could be enhanced through consolidation, but savings alone unlikely to justify
- However, combination of USTRANSCOM and DLA does not address majority of DoD logistics spend
 - Maintenance and supply account for \$186B of \$210B total logistics spend
 - Supply chain activities involve not just DLA and USTRANSCOM, but also Military Services

The combination of USTRANSCOM and DLA alone will not deliver the full range of achievable operational benefits or cost efficiencies



Option 3: Create a Single Defense Logistics Organization

- The Defense Logistics Organization (DLO) would have responsibility for end-to-end integration of supply, maintenance, and transportation.

<u>Included Components</u>	<u>Excluded Activities</u>
<ul style="list-style-type: none">• DLA• AMC/AFMC/NSSC (ICPs, Maintenance Depots)• USTRANSCOM	<ul style="list-style-type: none">• Logistics policy (OSD, J4, Service 4s)• Design and acquisition of future weapon systems

- Governance and reporting relationships of the DLO would need to consider the Organization's support and combat roles
- Led by 4 Star General/Flag Officer – reporting to Secretary of Defense via OUSD(AT&L) – and to CJCS as appropriate for command relationships

A single DLO would have the authority to undertake the actions necessary to rapidly increase logistics efficiency and effectiveness

Option 3: Benefits and Challenges

- Creating a single defense organization would have the authority to make trade offs between functions/capabilities and to most rapidly deliver:
 - Improved asset visibility (through implementation of DoD-wide approach)
 - Improved forecasting (through joint governance of supply systems)
 - Reduced inventory (through use of national inventory vice multi-echelon)
 - Reduced warehousing costs (through consolidation and inventory reduction)
 - Better utilization of maintenance capacity (through workload balancing)
 - Lower procurement costs (through aggregation of repair spend)
 - Reduced IT costs (through consolidation across organizations)
- However, DoD would need to address a number of critical issues to implement a change of this magnitude:
 - Legislative authorities
 - Integration Plan (roadmap, sequencing, milestones, and metrics)
 - Transition planning (leadership, people, process, and technology)
 - Change management and stakeholder management
 - Maintenance of ongoing operations



Comparison of Options

Strengths

Weaknesses

Option 1: Virtual Integration

- Delivers incremental process improvement
- Lowest risk of disruption to ongoing operations

- Slow achievement of integrated logistics vision
- Unlikely to deliver results rapidly enough to meet current financial challenges

Option 2: USTRANSCOM- DLA

- Creates organization that will reinforce and institutionalize existing USTRANSCOM-DLA collaboration

- Fails to address majority of DoD logistics spend
- Will deliver few potential operational benefits and/or cost efficiencies

Option 3: Defense Logistics Organization

- Provides single point of responsibility, authority, and accountability
- Maximizes operational benefits and cost efficiencies in shortest time once structure is established/funded

- Requires legislative action to start up
- Creates disruption to existing activities and processes
- Large span of control

In light of operational and budgetary pressures, the Task Group recommends the creation of a single Defense Logistics Organization to rapidly increase supply chain efficiency and effectiveness



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Appendix

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Business Excellence In Defense of the Nation



Methodology: Documents and Studies

- Reviewed prior DBB/DSB/GAO reports on DoD global supply chain management
 - DBB FY03-3 – DLA-USTRANSCOM Review
 - DBB FY07-2 – Review of Implementation of Prior DBB Reports (Supply Chain)
 - GAO Report 07-807 – Defense Logistics: Efforts to Improve Distribution and Supply Support for Joint Military Operations Could Benefit from a Coordinated Management Approach (June 2007)
 - GAO Report 09-150 – Defense Logistics: Lack of Key Information May Impede DOD’s Ability to Improve Supply (January 2009)
- Reviewed governing documents on roles/responsibilities/authorities
 - DoD Directive 5105.22 on DLA (May 2006)
 - DoD Directive 5158.04 on USTRANSCOM (July 2007)
 - DoD Instruction 5158.06 on Distribution Process Owner (July 2007)
 - DoD Directive 5134.01 on USD(AT&L) as the “Defense Logistics Executive” (April 2008)
 - DoD Instruction 5158.05 on Joint Deployment Process Owner (May 2008)
 - Joint Publication 4-0, Joint Logistics (July 2008)

Methodology: Documents and Studies (Continued)

- Reviewed Component-specific documents
 - AT&L
 - DoD Logistics Strategic Plan (July 2010)
 - USD(AT&L) Better Buying Memos (2010)
 - CJCS
 - Unified Command Plan (April 2011)
 - CJCS Guidance for 2011
 - Joint Publication 4-0, *Joint Logistics* (18 July 2008)
 - J-4
 - Joint Concept for Logistics (JCL)(August 2010)
 - Joint Logistics Strategic Plan 2010-2014 (July 2010)
 - White Paper on Joint Logistics (June 2010)
 - Joint Logistics (Distribution) Joint Integrating Concept 1.0 (February 2006)
 - Joint Logistics (Supply) Joint Integrating Concept 1.0 (March 2010)
 - USTRANSCOM 2011 Strategic Plan
 - Gen Duncan McNabb Testimony before the SASC on the State of the Command (April 2011)
 - 2010 Annual Report
 - 2009 Annual Report
 - DLA
 - Strategic Plan 2010-2017 (July 2010)
 - 2011 Director's Guidance

Methodology: Interviews

■ Department of Defense

- RADM David F. Baucom, Deputy Assistant Secretary of the Navy for Acquisition and Logistics Management
- VADM William R. Burke, Deputy Chief of Naval Operations for Fleet Readiness and Logistics, N-4
- Col Rick Cornelio, Chief, Force Development and Organization, A-4 Logistics
- Alan Estevez, Principal Deputy Assistant Secretary of Defense for Logistics and Materiel Readiness (OUSD(AT&L))
- David Fisher, Director, Business Transformation Agency (BTA)
- LTG Kathleen M. Gainey, Director for Logistics, J4
- VADM Mark D. Harnitchek, Deputy Director, USTRANSCOM
- Stuart Hazlett, Deputy Director, DPAP, Strategic Sourcing (OUSD(AT&L))
- Gen Donald J. Hoffman, Commander, Air Force Materiel Command (AFMC)
- Frank Kendall, Principal Deputy Under Secretary of Defense for Acquisition, Technology and Logistics (PDUSD(AT&L))
- RADM Kurt L. Kunkel, Commander, Supply Corps, USN, Commander, DLA Energy
- Jeff Parsons, Executive Director, Army Contracting Command (ACC), Army Materiel Command (AMC)
- Paul D. Peters, DASD for Supply Chain Integration (OUSD(AT&L))
- Gen Norton A. Schwartz, Chief of Staff, Air Force; former Commander of USTRANSCOM
- LTG Mitchell H. Stevenson, Office of the Deputy Chief of Staff of the Army, G-4 Logistics
- CAPT Harry Thetford, OpNav N-41, N-4 Logistics
- VADM Alan Thompson, Director, Defense Logistics Agency (DLA)

Methodology: Interviews (Continued)

■ Former Department of Defense

- Jack Bell, former DUSD for Logistics and Materiel Readiness
- Members of DBB 2003 Task Group on Supply Chain
- Paul Kern (GEN USA, Retired), former Commanding General of Army Materiel Command
- William Gus Pagonis (LTG USA, Retired), Commanding General, 21st Theater Army Area Command, US Army Europe and Seventh Army, Germany
- Larry Welch (Gen USAF, Retired), former Chief of Staff of the Air Force)

■ Corporate Supply Chain Executives

- Mike Boos, Vice President, UPS
- Timothy E. Carroll, Vice President, Global Operations – Integrated Supply Chain, IBM
- Robert Dail (LTG USA, Retired), President of Supreme Group USA, (former Director, DLA)
- Robert E. Luby, Jr., Vice President, IBM Global Business Services
- Joel D. Marpe, Vice President, Logistics Administration, Wal-Mart Stores, US
- Robert J. Quinn, Corporate Vice President, Operations and Service Support, FedEx Corporation