



Joint Deployment and Distribution Enterprise Capability Gaps

21 Nov 2013

1. Visibility

There is insufficient timely and accurate information on the location and status of materiel and transportation assets. Stakeholders throughout the distribution process require the ability to determine shipment status through system/service access, automatic information technology (AIT) or event management. There is a lack of end-to-end materiel asset visibility and transportation process inefficiencies exist between nodes in the DOD supply chain. Stakeholders need the capability to view the status and availability of all materiel and transportation assets in-storage, in-transit, or in-repair, detect pipeline bottlenecks and provide recommended alternatives to overcome the bottleneck.

- The JDDE lacks enhanced end-to-end visibility of all aspects of the projection and sustainment of forces and equipment.
- The issuing and ordering activities have little or no visibility of the movement of Class IV materiel once it has left the Port of Debarkation (POD). There is no over-arching system to provide all stakeholders with visibility of Class IV movement within theater. This lack of visibility limits the issuing activity's ability to respond to routine customer requests for updated shipment information in a timely manner.
- There is no common global architecture which portrays system software, hardware, Information Exchange Requirements (IERs) and protocols among all the elements of cargo booking to ensure shipment unit consolidation, deconsolidation, financial and customs requirements are met.
- Existing information technology (IT) systems and support tools do not allow collaboration between deployment systems and theater distribution planning. As a result, multiple theater-level organizations are ill-equipped to conduct coordinated planning and scheduling and are forced to "hobby shop" their own tools making the sharing of information and ability to see schedules for specific materiel difficult, if not impossible.
- Originating, intermediate and final destination nodes are unable to optimize outbound distribution due to insufficient advanced inbound notification.
- No enforced policy for ensuring / maximizing compliance, quality and integrity of information disseminated by all supply chain partners or systems.
- Poor quality of data creates frequent re-work and delays in planning and execution.

Sub-Gaps:

Common Architecture	1
Bandwidth / Connectivity - CLOSED 11/14/2013	2
Movement Status Information	3
Business Event Capture - CLOSED 11/14/2013	4
Tracking of Consolidated Orders - CLOSED 11/14/2013	5
Data Quality	6
Single Aggregate View - CLOSED 11/14/2013	7
Exception Handling / Event Management - CLOSED 11/14/2013	8
User Access and Training - CLOSED 11/14/2013	9

2. Distribution Systems Interoperability

Transportation information exchange across the DOD is inhibited by the disparity of systems, differing data standards and insufficient interfaces. Queries and retrieval of

movement status and shipment information cannot be executed due to lack of connectivity between the various components of the supply chain.

- There is no single, shared, enterprise view(s) of transportation due to disparate, yet similar systems to serve individual Services, agencies, and other commands.
- There is no enforced common data governance. Nor does a map exist that provides detailed shipment information (including needs of both peace time and contingency operations).
- Source systems use different data standards making aggregation in ITV systems difficult, and often inaccurate.
- The Department of Defense (DoD) cannot optimize its fulfillment of customer requirements since it does not provide inventory interoperability across all Services, theaters and locations. Information and materiel exchange across the DoD is inhibited by the disparity of systems and insufficient interfaces. Inventory status and shipment information cannot be affected due to lack of connectivity between the various components in supply chain.
- The issuing activity is unable to optimize order fulfillment in-theater due to a lack of inventory visibility at the Services' stocking locations. Visibility into all available in-theater stock would allow for cross-leveling and lateral support.
- Distribution efficiency and effectiveness are hindered by a lack of process and systems interfaces needed to execute intra-Service and inter-Service supply referrals (lateral support).
- Intra-Service and inter-Service supply referrals (lateral support) and financial reconciliation lack necessary processes and systems interfaces for seamless automatic execution.
- The Department of Defense (DoD) lacks processes for defense-wide (joint, inter-agency, including links to coalition partners) inventory planning and management.

Sub-Gaps:

Common Data Governance	1
Common Architecture / Single Aggregate View – CLOSED 11/14/2013	2
Shipment Detailed Information – CLOSED 04/19/2013	3
Parent-Child Shipment Information – CLOSED 11/14/2013	4
Joint Retail Inventory Interoperability	5
AALPS Software Conflicts – CLOSED 04/19/2013	6
CMOS and GATES Communication – CLOSED 04/19/2013	7
GATES RF Tags – CLOSED 02/23/2010	8
Distribution Network Analysis – CLOSED 11/14/2013	9

3. Distribution Planning and Forecasting

There is a lack of collaborative distribution planning, based on an understanding of aggregate customer requirements, for optimizing the End-to-End (E2E) distribution process. E2E distribution planning and forecasting efforts are not synchronized. There is a lack of properly trained personnel, established procedures, and transportation/materiel assets to execute the distribution plan. There is limited ability to conduct synchronized strategic and theater deployment and distribution planning/optimization employing demand forecasts. There is a limited E2E requirements process for the movement of sustainment cargo. There is a limited ability to discern and act on theater capacity-based movement demands.

- Warfighters have no single, integrated view(s) of force movement and sustainment planning requirements.
 - Originating, intermediate, and final destination transportation nodes are unable to optimize outbound distribution due to insufficient advanced inbound notification.
 - Intermediate distribution nodes do not have the trained people, capabilities nor capacities needed to support the distribution of medical material. The Distribution and Transportation Management organizations and units including the Joint Movement Center (JMC) and deployment and Distribution Operations Center (DDOC) do not collaboratively plan with Class VIII subject matter experts (SMEs) the complete end-to-end (E2E) routing, transportation, handling and delivery of medical material. This collaborative specifically includes the consideration of intermediate distribution and trans-shipment node capabilities and limitations when planning the routing of forward, return and retrograde movements.
 - Planning and coordination of the Class VIII distribution and transportation activities is not performed under a synchronized concept of operations with the input of Class VIII subject matter experts (SMEs).
 - Individual trans-shipment nodes in the supply chain, including intermediate Aerial Ports Of Debarkation (APODs) and transportation transfer points, are accountable to separate organizational commands and/or Service Components. Each of these Commands / Components maintains individual performance objectives and incentives that are not synchronized with the unique needs of the commodity's distribution.
 - Technologies need to be continually leveraged / developed that can transform force projection, sustainment velocity, and synchronize (through information exchange) strategic & theater delivery capabilities to meet customer needs.
 - Intra-theater movements (both forces and sustainment) are negatively impacted by a lack of tools and a common process to facilitate visibility, planning and integration of strategic inbound traffic with available theater multimodal assets.
 - A standardized process for requesting and prioritizing movements within the Area of Responsibility (AOR) is required. It must be applicable to all Service requirements and recurring training must be available to accommodate the turnover of users. The process needs to be flexible enough to include requirements from host nation or coalition forces.
 - A single unit of identification (Ex: Unit Line Number (ULN), Transportation Control Number (TCN), Joint Movement Request (JMR)) must be established to attach to requirements and carried throughout the distribution pipeline to facilitate accurate tracking of each item. The Defense Transportation Regulation (DoD 4500.9-R) may need to be modified to provide specific direction so that all the Services use the same process.
 - Integrated theater distribution planning tools are lacking. They are necessary to provide the flexibility to make rapid and accurate changes to the force list. Without this key information it is difficult to forecast sustainment requirements. Integration of Automated Information Systems (AIS) across functional users would help aggregate / manage requirements.
- Warfighters do not have a single integrated view of force movement and sustainment planning requirements from Point of Entry (POE) in theater to end destination. Also lacking is visibility of Direct Vendor Delivery (DVD) shipments and little to no advance data on incoming materiel.
 - Sustainment planning is not translated into execution tasks. There is a lack of full integration between processes used to deploy and sustain the joint force. Additionally, the Joint Deployment and Distribution Enterprise (JDDE) needs to be able to perform predictive sustainment analysis in order to apply Sense and Respond Logistics (SRL).

- Insufficient truck capacity was a shortfall against the estimated requirement developed during operational planning. Logisticians and supply chain leaders are unable to document the total theater requirement for the dry cargo distribution system over time.
- Strategic lift planning was not synchronized with theater lift planning. Strategic lift was planned without considering tactical lift constraints.
- There is a lack of collaborative distribution planning based on an understanding of aggregate customer requirements for optimizing the end-to-end (E2E) distribution process. The Time-Phased Force Deployment Data (TPFDD) process does not adequately support rapid and task order-driven needs.
- Unexpected / unplanned events create delays in terminal operations.
- The DoD lacks a continuous / optimal balancing of total demand and capacity from plan inception to mission completion.
- Inefficient full-spectrum transportation adaptive planning and analysis in a collaborative, web-accessible, service-oriented environment sub-optimizes execution.
- Capability to fine-tune the pairing of air movement requirements / resources to maximize aircraft utilization efficiency does not exist.
- The Joint Deployment and Distribution Enterprise (JDDE) has yet to leverage social networking / crowd sourcing / gaming / other technologies to provide a continuous / optimal balancing of total demand and capacity from plan inception to mission completion.
- The Joint Deployment and Distribution Enterprise (JDDE) is lacking the ability to build deployment, sustainment and redeployment plans; as well as rapidly / systematically create and revise existing plans as emerging events dictate through informed global situational awareness.
- Current Transportation Protective Service (TPS) requirements (as delineated in the Defense Transportation Regulation (DTR) and associated publications) for the transport of controlled medical material (special Class VIII sub-commodities of Controlled Drugs and Precious Metals) severely constrain / restrain some Military Class VIII Supply Support Activities' ability to support 'remote' locations as these TPS requirements presently prevent / prohibit the use of commercial / contract air cargo movement / transportation services (aka white-tail services).
- Scheduling, collection, preparation and movement processes for repairable retrograde(s) are poorly defined.
- Return scheduling processes are not synchronized with maintenance, rebuild and reclamation processes and financial activities.
- Business rules for retrograde mode, packaging, special handling and receipt are poorly defined, trained and monitored.
- Return credit business rules are not coupled with retrograde credit penalties to recover excess handling costs for non-compliance with disposition instructions.
- Where predictive maintenance forecasting capabilities exist they are not linked (machine to machine) to distribution and logistics support responses.
- Predictive maintenance forecasting capabilities are not resident in many major end-items / systems.
- Systems maintenance today is either conducted reactively (after a costly failure occurs) or routinely (whether maintenance is needed or not). Potential corrective action: Sense and Respond Logistics (S&RL).
- No capability currently exists to link distribution and logistics responses to maintenance failure sensing capabilities.
- No predictive maintenance strategy exists to achieve increased equipment availability.
- The Joint Deployment and Distribution Enterprise (JDDE) lacks the capability to predict maintenance and logistics issues / demand forecasting to optimize supply chain.

- There is no automated link from Service tactical maintenance status / reports to strategic systems.
- The ability does not exist to determine parts failure / usage patterns and mission type / environment impact to initiate sustainment support actions.

Sub-Gaps:

Movement Requirement Identification	1
Movement Planning / Optimization	2
Transportation Node Optimization	3
Class VIII Planning and Coordination	4
APOD and SPOD C2 - CLOSED 11/14/2013	5
Retrograde Scheduling and Preparation	6
Predictive Forecasting for Equipment Failures	7
Synchronized Medical Load Movements - CLOSED 11/14/2013	8

4. Requisition Priorities

Current processes and systems permit nearly unconstrained use of high movement priorities, which in turn gives the requestor (customer) unrealistic expectations and an invalid Required Delivery Date (RDD). There is limited ability to identify priority of movements across movement categories, modes and levels/echelons. The JDDE needs a more accurate and realistic process for the assignment of customer priorities.

- Current processes and systems permit nearly unconstrained use of high priorities, unrealistic and invalid Required Delivery Dates (RDDs).
- Customer is not informed on changing conditions or expected delivery dates (EDDs).

Sub-Gaps

RDD Constraints – CLOSED 11/14/2013	1
Priority System Service Level Differentiation – CLOSED 04/19/2013	2
Customer Feedback on Changes	3

5. Process Management and Business Rules

Joint process descriptions and business rules either do not exist or are unclear for many key deployment and distribution processes. A lack of well-defined, integrated process descriptions cause shipment delays, waste resources and undermine efforts to streamline the supply chain. Unclear or non-existent business rules lead to breakdowns in organizational lines of communication.

- To facilitate consistent Joint Deployment and Distribution Enterprise (JDDE) operations, from training through combat execution, standardized coherent Joint Distribution Policy and Guidance must be established and enforced. Without an endorsed Standard Operating Procedure (SOP) it is not possible to examine the distribution system as a single holistic entity and identify what and where problems arise, assess the impact on the entire JDDE, and then take steps to optimize the system to produce the most effective service.

- There are no existing processes for working Direct Vendor Delivery (DVD) shipments, government donations and other non-DOD goods. These items present numerous challenges in receiving, expeditiously processing, requesting and scheduling onward movement.

- Lack of, or limited use of, force modules restrict ability to accommodate requests, accurately schedule and effectively track unit movements through execution.

- Supply, transportation and force closures rules/processes are not followed to allow reports to be closed out in automated logistics systems in a timely manner.

- Manual and automated multi-modal (air, rail, truck, ocean and pipeline) booking Information Exchange Requirements (IERs) poorly defined. There is a lack of sufficient information for In-Transit Visibility (ITV), shipping instructions and customs clearance.

- Multiple surface booking systems have different rates and no clear purpose for each (Ex: Integrated Booking System (IBS), Direct Carrier Booking, etc.).

- Rail and One-Time-Only (OTO) Ocean Booking requests and confirmation processes lack standards for timeliness.

- There is no common global architecture which portrays system software, hardware, Information Exchange Requirements (IERs) and protocols among all the elements of cargo booking to ensure shipment unit consolidation, deconsolidation, financial and customs requirements are met.

- There is no enforced common data model, map and data definitions which include a common interface with carriers, document management support, event tracking and diversions or merges during transit.

- Multiple multi-modal booking processes / systems with different rates exist. Re-booking for next available opportunity is a manual process.

- Performance metrics and compliance standards enforced for booking and confirmation processes (i.e. Rail and One-Time-Only (OTO) Ocean Booking) are not enforced.

- There is no knowledge management portal for processes and procedures. Such as how to ship unknown substances, documentation requirements and identifying legal / regulatory issues.

- The current procedure for ocean cargo booking modifications (increases, decreases, cancellations, etc.) within the Integrated Booking System (IBS) needs to be improved. Changes in requirements after the initiation of movement are extremely difficult to achieve. The process is currently fractured with multiple operational and financial considerations involved in each request for a change in cargo destination. Current system

is not applicable globally (this has since been fixed by deployment of IBS OCONUS in May 05).

- Direct Vendor Delivery (DVD) shipments lack visibility, unclear routing procedures, nodal processing procedures, and customs impact on delivery time. There are no Reception, Staging, Onward-movement & Integration (RSOI) processes to accommodate theater inbound commercial freight. There is no reliable means of receiving and rapidly processing DVD shipments.

- Shipping and routing policies and processes for Direct Vendor Delivery (DVD) shipments are unclear and insufficient without consideration of transportation priorities, operations and other situational constraints.

- Nodal policies and processes for receiving and processing of Direct Vendor Delivery (DVD) shipments arriving in theater do not adequately provide onward movement.

- Additional customs requirements are not always considered as part of the overall delivery time for commercial / Direct Vendor Delivery (DVD) shipments.

- Projected port throughput requirements insufficiently account for the peaks in shipments and the resulting lower productivity.

- There is poor visibility and movement responsiveness for non-DoD goods. Specifically, there is a lack of knowledge for accepting donations on behalf of the government and knowledge on how to request and sponsor Defense Transportation System (DTS) support.

- There is a lack of a clear / quick processes in accordance with the Defense Transportation Regulation (DTR) to address the knowledge and authority of movement of non-DoD cargo.

- There is a lack of understanding of doctrine, policy and processes for accepting privately donated and non-DoD cargo (i.e. Denton Amendment) on behalf of the government

- The escalation / authority paths to request and sponsor Defense Transportation System (DTS) support are unclear.

- The Joint and Combined Forces have a requirement to improve the manual and automated multi-modal (air, rail, truck, ocean and pipeline) booking Information Exchange Requirements (IERs). The current processes and procedures are poorly defined and not standardized.

- There is a lack of sufficient information for In-Transit Visibility (ITV) shipping instructions and customs clearance.

- Multiple surface booking systems have different rates and no clear purpose for each (Ex: Integrated Booking System (IBS), Direct Carrier Booking, etc.). Rail and One-Time-Only (OTO) ocean booking requests and confirmation processes lack standards for timeliness.

- Pallet build business rules (weight and cube utilization, pure vs. mixed pallets, etc.) are at odds with metrics such as pallet hold time. This causes unclear priorities: efficiency (cost) vs. effectiveness (speed).

- There is a lack of clear understanding between "cost-to-serve" and related "trade-offs" necessary to make optimal distribution decisions.

- Current capabilities do not allow discrete activities and costs (pallet break down, holding, frustration clearance, etc.) to be tied to shipments.

- Confused priorities for stakeholders at aerial ports and other key nodes feel driven by metrics to reduce hold time and are at odds with current guidance to maximize the use of pure pallets.

- No consistent communication of pallet build business rules exist that maximizes support to the warfighter at best value to the government.

- The DoD cannot optimize its fulfillment of customer requirements since it does not execute the receipt processes necessary to ensure inventory accuracy and accountability. Retail and final consignee receipts are typically not posted in a timely manner.
- Shipment lifecycle conclusion is not standardized with a consistent and timely receiving process.
- Generally, there is no pre-receiving process at nodes to allow reconciliation with stock record accounts for Supply Demand Reviews.
- The receipting and accountability processes are manpower intensive and not fully automated.
- The DoD lacks comprehensive procedures, checklists, decisions matrices, standard operating procedures (SOPs) and training for familiarity with specific actions regarding the Defense Transportation System (DTS) expansion / augmentation (e.g. forces and lift).
- Lack of understanding of the prepositioned vessel process delayed / hindered utilization of assets.
- Key transportation-related units, forces and capabilities to execute crisis response are delayed due to the lack of developed procedures with specific actions regarding their access.
- The Defense Transportation System (DTS) expansion / augmentation of lift assets is suboptimal without comprehensive procedures and communication of the identified decision windows for the Voluntary Intermodal Sealift Agreement (VISA), Civil Reserve Air Fleet (CRAF), etc. that drive our ability to meet Time-Phased Force Deployment Data (TPFDD) requirements.
- There is a lack of training regarding obtaining authority and control over Pre-Positioned (PREPO) vessels to properly utilize pre-positioned assets
- The training and knowledge transfer for the Defense Transportation System (DTS) expansion during Joint Chiefs of Staff (JCS) exercises is inadequate for distribution operators.

Sub-Gaps:

Process Description and Business Rules for Movement	1
Cargo Booking	2
Commercial Cargo Integration	3
Movement of Non-DOD Goods	4
Legal and Regulatory Updates – CLOSED 11/14/2013	5
DOD Activity Address Codes Management – CLOSED 11/14/2013	6
Cargo Screening	7
Pallet Build Business Rules	8
GL VIII Material Handling – CLOSED 12/22/2009	9
JDDOC Authorities – CLOSED 11/14/2013	10
Determine and Coordinate Convey Security – CLOSED 11/14/2013	11
Mail Delivery – CLOSED 11/14/2013	12
Receipts and Accountability	13
Defense Transportation System (DTS) Expansion	14
Customer Returns – CLOSED 11/14/2013	15

6. Distribution Performance Metrics – **CLOSED 04/19/2013**

Distribution performance metrics are inconsistent, unclear, and insufficient. There are insufficient shared data sets, collaborative capability, or common metric scorecards.

Different stakeholders require various levels of precision. No standard metrics or methods exist across supply chain organizations to evaluate performance.

Sub-Gaps

Performance Measurement – CLOSED 03/24/2011	1
D2 Performance Assessment – CLOSED 03/19/2010	2
Collaborative Capability – CLOSED 03/19/2010	3
Carrier Performance and Availability – CLOSED 03/19/2010	4
Customer Service – CLOSED 01/05/2010	5

7. Container Management

The JDDE has a requirement to control and track containers and minimize detention fees globally. Current processes, systems, tools and/or performance metrics are not sufficient.

- Processes and systems to control and track containers and minimize detention fees are not sufficient.
- Current policies do not adequately address global container management.
- Carrier and container leasing contracts do not maximize compliance, quality or cost control.
- Currently, there is no common (i.e. not Regional Combatant Command (RCC) specific) information management for the container acquisition, transportation, disposition and other container management processes.
- There is no global organizational plan that portrays relationships among all the elements of the container management process including organizations, functions, timing, etc.
- Container marking, labeling and tagging processes are insufficient and inconsistently applied.

Sub-Gaps:

Global Container Management Policies	1
Common Information Management	2
Global Organizational Plan	3
Marking, Labeling and Tagging Processes	4

8. Contracts / Acquisitions Methodology – **CLOSED 11/10/2010**

Certain contract mechanisms and acquisition methods are inappropriate and unreliable.

Sub-Gaps:

Heavy Weight Commercial Tender – CLOSED 01/04/2010	1
GL III Transportation Responsibility – CLOSED 11/10/2010	2

9. Coalition / Multi-National / Interagency Capabilities

The JDDE community limits participation of other US government agencies and the transportation industry when conducting Joint and Combined exercises and simulation planning. Interaction with key national partners is seldom practiced during exercises. Key partners such as Department of State, MARAD, DLA, DESC, and the transportation industry are often excluded from exercise and simulation planning resulting in missed opportunities for valuable interaction and insight. The JDDE lacks the capability to generate, manage, share and distribute coalition/multi-national/inter-agency movement requirements.

- Interaction with key national partners is seldom practiced during exercises.
- Exercises seldom adequately stress all tasks / processes and do not include all stakeholders required to accomplish end-to-end (E2E) distribution.
- The C-days evaluated in current exercises are insufficient to test sustainment support and other follow on stakeholder requirements and relationships.
- All stakeholders are not included early enough in the exercise planning process.

Sub-Gaps:

Coalition / Multi-National / Interagency Movements – CLOSED 11/14/2013	1
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10. Professional Joint Logistics Workforce Development – CLOSED 11/14/2013

The DOD does not have the requisite cadre of joint logisticians who understand the E2E deployment and distribution process necessary to execute desired joint effects. There are no specific requirements for joint logisticians including competency models, career paths, and training requirements. The JDDE must expand the definition of joint logistics training to one that includes interagency, intergovernmental and multinational partners and more effectively uses innovative technologies.

Sub-Gaps:

Career Paths and Skill Specialty Designators – CLOSED 11/14/2013	1
COCOM E2E Competency Models and Bullets – CLOSED 12/07/2010	2
Knowledge Management – CLOSED 11/14/2013	3
Gore and Specialty Training Curricula – CLOSED 04/02/2010	4
Operators' Motivation and Rewards – CLOSED 11/14/2013	5

11. Supply Chain Simulation Tools

Joint simulation tools are rarely used and poorly equipped or integrated into sustainment flow modeling at the strategic and operational levels (wholesale and Service-level retail). The Joint and Combined Forces have a requirement for simulation tools for sustainment flow modeling at the strategic and operational levels (wholesale and Service-level retail). Current tools are rarely used and poorly equipped or integrated. There is little capability to do unconstrained "what-if" supply scenarios without manual effort. Operational Planners at Regional Combatant Commands (RCCs) have Force Flow modeling / simulation capabilities, but lack this capability for sustainment planning.

- Joint simulation tools are rarely used and poorly equipped or integrated into

sustainment flow modeling at the strategic and operational levels (wholesale and Service-level retail).

- There is little capability to do unconstrained "what-if" supply scenarios without manual effort.
- Supply chain tools are inadequate for simulation of supply chain solutions / alternatives.
- There is no process or systems training for users to effectively build, reuse and develop robust / realistic supply chain models.

Sub-Gaps:

Organizational Constructs – CLOSED 11/14/2013	1
Supply Chain Tool Simulation Capability-Solutions	2
Process and System Training	3

