Joint Deployment and Distribution Capability Gaps

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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.

Total Asset Visibility (TAV) is not adequately supported and often requires manual workarounds due to disparate systems, lack of awareness, access, and training.

- The DOD Radio Frequency Identification (RFID) Policy dated 30 Jul 04 has no provisions for bulk petroleum.
- 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.
- In-Transit Visibility (ITV) systems do not provide event management. Issues are revealed only after problems are experienced, investigated, and reported. Supply chain managers handle exceptions in a manual and reactive manner.
- Duplicate and disparate TAV system capabilities exist
- Lack of ITV systems/services awareness, access, and training exists

Sub-gaps:

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

• Shipment-unit detailed information is lost due to manual data entry, because there is insufficient system interface between Transportation Coordinators-Automated Information for Movement System II (TC-AIMS II), Integrated Computerized Deployment System (ICODES), and World-wide Port System (WPS) Manifesting systems for vessels.

• Source systems use different data standards making aggregation in ITV systems difficult, and often inaccurate.

• Cargo Movement Operational System-Theater Distribution Center (CMOS-TDC) cannot read Global Air Transportation Execution System (GATES)-produced Radio Frequency Identification (RFID) tags.

• Item detail shipping information from Standard Asset Tracking System (SATS) is not transferred to CMOS for transportation booking.

• Automated Airload Planning System (AALPS) not used for USAF load planning due to software conflicts with Microsoft Windows.

Sub-gaps:

Common Data Governance	1
Common Architecture/Single Aggregate View	2
Shipment Detailed Information	3
Parent-Child Shipment Information	4
Joint Retail Inventory Interoperability	5
AALPS Software Conflicts	6
CMOS and GATES Communication	7
GATES RF Tags	8
Distribution Network Analysis	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.

• Poor synchronization, lack of ITV, and stove-piped Command and Control (C2) exists at the Aerial Port of Debarkation (APOD) and Sea Port of Debarkation (SPOD) where transition occurs from strategic movement to theater movement.

• Transportation forecasts are inaccurate and do not include near-term and future customer requirements; instead, forecasts rely too heavily on historical transportation demand. Forecast accuracy is not validated or measured.

• Intermediate distribution nodes do not have the trained people, capabilities (refrigeration), and capacities needed to support the distribution of medical materiel. The Distribution and Transportation Management organizations and units (including the Deployment Distribution Operation Center (DDOC) and the Joint Deployment Distribution Operation Center (JDDOC) do not collaboratively plan with Class VIII subject matter experts for E2E routing, transportation, handling, and delivery of medical materiel. This collaboration specifically includes the consideration of intermediate distribution and transshipment 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.

• Individual transshipment nodes in the supply chain, including intermediate 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 requirements.

• Medical Transportation Managers are not able to synchronize load movement with available air capacity when scheduling loads, though they are able to review pipeline capabilities. The process to influence and optimize movements, which is used on a recurring basis, requires multiple layers of approval authority. This causes the Medical Transportation Manager to miss opportunities to utilize the available capacity.

Sub-gaps:

Movement Requirement Identification	1
Movement Planning/Optimization	2
Transportation Node Optimization	3
Class VIII Planning and Coordination	4
APOD and SPOD C2	5
Retrograde Scheduling and Preparation	6
Predictive Equipment Failures Forecasting	7
Synchronized Medical Load movements	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.

Sub-gaps

RDD Constraints	1
Priority System Service Level of Differentiation	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.

Sub-gaps:

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

6. Distribution Performance Metrics Strategy

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	1
D2 Performance Assessment	2
Collaborative Capability	3
Carrier Performance and Availability	4
Customer Service	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.

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

Certain contract mechanisms and acquisition methods are inappropriate and unreliable.

Sub-gaps:

Heavy Weight Commercial Tender	1
CL III Transportation Responsibility	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.

Sub-gaps:

Coalition/Multi-National/Interagency movement requirements	1

10. Professional Joint Logistics Workforce Development

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	1
COCOM E2E Competency Models and Bullets	2
Knowledge Management	3
Core and Specialty Training Curricula	4
Operators' Motivation and Rewards	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.

Sub-gaps:

Organizational Constructs	1
Supply Chain Tool Simulation Capability-Solutions	2
Process and System Training	3