



## INSPECTOR GENERAL

U.S. Department of Defense

APRIL 28, 2022



(U) Evaluation of the DoD's Actions to Develop Interoperable Systems and Tools for Forecasting **Logistics Demand Across the Joint Logistics Enterprise** Controlled by: DoD OIG/Evaluations Category: PRIVILEGE LDC: FEDCON

INTEGRITY ★ INDEPENDENCE★ EXCELLENCE





(U) Evaluation of the DoD's Actions to Develop Interoperable Systems and Tools for Forecasting Logistics Demand Across the Joint Logistics Enterprise

#### April 28, 2022

### (U) Objective

(U) The objective of this evaluation was to determine the extent to which the DoD took actions to develop interoperable systems and tools to forecast logistics demand for campaign planning across the Joint Logistics Enterprise (JLEnt).

### (U) Background

(U) According to Joint Publication 4-0, "Joint Logistics," logistics involves the "planning and executing the movement and support of forces," and joint logistics involves the use of two or more combatant commands or Military Departments' logistics resources to support the joint force. The DoD's JLEnt consists of logistics directorates across DoD Components and is structured to achieve a unity of effort without jeopardizing individual mission and goals. ILEnt logisticians use a variety of automated systems and tools, including information systems, decision support tools, and communications capabilities to perform functions such as forecasting logistic demands required to execute specific missions. For the purposes of our report, we defined "forecasting demand for campaign planning" as a process to identify overall sustainment support that the joint force needs to accomplish its mission in the future.

(U) The DoD has strategies focused on logistics, digital modernization, and data. In 2010, the Office of the Assistant Secretary of Defense (Logistics and Materiel Readiness)

#### (U) Background (cont'd)

(U) issued the DoD Logistics Strategic Plan (DoD Logistics Strategy), which stated that the DoD's logistics community must take steps to better integrate logistics with strategic planning and decision-making processes. In 2019, the DoD issued the "DoD Digital Modernization Strategy," which states that data owners and their communities of interest, such as logistics and cybersecurity, are responsible for much of the necessary work to treat data as a strategic asset. In 2020, the DoD released the "DoD Data Strategy," which supports the Digital Modernization Strategy and requires data interoperability across DoD's systems.

(U) DoD policies also identify a number of requirements related to logistics and the interoperability of DoD systems. DoD Directive 5135.02, "Under Secretary of Defense for Acquisition and Sustainment" requires the Under Secretary of Defense for Acquisition and Sustainment, through the Assistant Secretary of Defense for Sustainment, to establish policies on and supervise all elements of the DoD relating to sustainment, which includes logistics. DoD Instruction (DoDI) 8330.01, "Interoperability of Information Technology, Including National Security Systems" states that information technology interoperability includes the technical exchange of information and the operational effectiveness of that exchange of information as required for mission accomplishment. The Instruction also states that interoperability includes systems, processes, procedures, organizations, as well as missions over the life cycle and must be balanced with cybersecurity.

(U) DoDI 5158.06, "Joint Deployment and Distribution Enterprise (JDDE) Planning and Operations" issued by the Office of the Under Secretary of Defense for Acquisition and Sustainment establishes policy, assigns responsibilities, and provides procedures for the Joint Deployment and Distribution Enterprise planning and operations. DoDI 5158.06 states that the DoD will maintain the Joint Deployment and Distribution Enterprise in alignment with related DoD requirements, initiatives, and activities. According to DoDI 5158.06, it is



(U) Evaluation of the DoD's Actions to Develop Interoperable Systems and Tools for Forecasting Logistics Demand Across the Joint Logistics Enterprise

#### (U) Background (cont'd)

(U) the DoD's policy to maintain a Joint Deployment and Distribution Enterprise that is "robust, agile, effective, efficient, resilient, and flexible" and capable of projecting and sustaining U.S. military power across the world. DoDI 5158.06 also establishes policy for the Office of Secretary of Defense and DoD Component participation in the development of campaign plans to assist with alignment between operational plans and theater distribution plans.

### (U) Finding

(U) The DoD's systems and tools used to forecast logistics demand for campaign planning across the JLEnt were not interoperable. The Defense Logistics Management Standards are not sufficient to achieve overall interoperability of the DoD's systems and tools used for forecasting logistics demand because DoD policies do not assign roles and responsibilities for the development of interoperable ILEnt systems. Our analysis of an Office of the Under Secretary of Defense for Acquisition and Sustainment-provided data set identified over 1,100 DoD systems and tools with the potential to forecast logistics demand for campaign planning. However, not one Military Service, combatant command, or Defense Logistics Agency official we spoke with identified any systems across the JLEnt that met the criteria for interoperability identified in DoDI 8330.01. To forecast logistics demand, joint logistics planners at the Military Services, combatant commands, and the Defense Logistics Agency either:

- (U) manually converted, manipulated, or validated data sets from these noninteroperable systems and tools, or;
- (U) bypassed the systems and tools by manually forecasting logistics demand for campaign plans to provide feasible estimates for future demands.

- (U) These conditions occurred because the Office of the Under Secretary of Defense for Acquisition and Sustainment did not:
  - (U) assign roles and responsibilities in DoD policies to develop interoperable JLEnt systems and tools to forecast demand for campaign planning, and;
  - (U) update the DoD Logistics Strategy to address data interoperability (as defined in DoDI 8330.01) for forecasting demand for campaign planning to align the DoD Logistics Strategy with the DoD Digital Modernization Strategy and the DoD Data Strategy, which identified specific goals to achieving interoperability of DoD information technology systems and tools.
- (U) Not having interoperable systems and tools for forecasting logistics demand increased the DoD's risk to execute global operations in support of the National Defense Strategy. The lack of interoperability led to potentially inaccurate or untimely forecasts for logistics demands. Specifically, the lack of interoperability prevented logistics officials at combatant commands from accessing and analyzing accurate data, and providing effective, relevant recommendations to combatant commanders. Furthermore, forecasting logistics demand for campaign planning using noninteroperable DoD systems and tools placed a significant time burden on logistics officials, reducing their effectiveness and capability to support other priorities, such as managing global supplier networks. The inability to produce accurate and timely forecasts of joint logistics needs created an unmitigated risk to the DoD's ability to plan and logistically support operations and contingencies.



(U) Evaluation of the DoD's Actions to Develop Interoperable Systems and Tools for Forecasting Logistics Demand Across the Joint Logistics Enterprise

#### (U) Finding (cont'd)

(U) Additionally, the duplication of future efforts to develop interoperable JLEnt systems and tools risks financial waste. Without clearly defined roles and responsibilities, the Military Services and combatant commands may continue to develop separate systems and tools, which may produce redundant or overlapping capabilities. For example, in April 2019, the Joint Requirements Oversight Council terminated the Global Combat Support System-Joint logistics system after investing over \$200 million. Specifically, according to logistics officials we interviewed, the system was terminated because the system did not meet its objective, and combatant commands continued developing their own separate logistics information technology solutions.

### (U) Recommendations

- (U) We recommend that the Under Secretary of Defense for Acquisition and Sustainment:
- (U) Review and identify DoD issuances related to forecasting logistics demand for campaign planning.
- (U) No later than the next periodic review process, identify and recommend updates to the DoD issuances identified in the prior recommendation or the creation of new issuances to assign roles and responsibilities across the JLEnt. At a minimum, the recommended updates should propose the following actions:
  - (U) establish a DoD-wide executive agent or management action group to track and monitor ongoing development and implementation of interoperable systems and tools (as defined in DoDI 8330.01) for forecasting logistics demand across the ILEnt;

- (U) task existing logistics executive agents and offices of primary responsibility with coordinating and standardizing JLEnt data, planning factors, tools, and logistics support area processes within their areas of responsibility, and;
- (U) assign new executive agents and offices of primary responsibility to coordinate and standardize data, planning factors, tools, and logistics support area processes for JLEnt areas that do not currently have an executive agent or office of primary responsibility.
- (U) Update the DoD Logistics Strategy to align with the DoD Digital Modernization Strategy and the DoD Data Strategy, which identified specific goals to achieving the interoperability of DoD systems and tools, by addressing data interoperability as identified in DoDI 8330.01 for forecasting logistics demand for campaign planning.

### (U) Management Comments and Our Response

- (U) The Deputy Assistant Secretary of Defense for Logistics (DASD[L]), responding for the Under Secretary of Defense for Acquisition and Sustainment, agreed with the recommendation to review and identify DoD issuances related to forecasting logistics demand for campaign planning. The DASD(L) stated that her office would conduct a review and identify DoD issuances related to forecasting logistics demand for campaign planning.
- (U) The DASD(L) also agreed with the recommendation to update the DoD Logistics Strategy to align with the DoD Digital Modernization Strategy and the DoD Data Strategy. The DASD(L) stated that, in October 2021,



(U) Evaluation of the DoD's Actions to Develop Interoperable Systems and Tools for Forecasting Logistics Demand Across the Joint Logistics Enterprise

#### (U) Comments (cont'd)

- (U) the Assistant Secretary of Defense for Sustainment updated the DoD Logistics Strategy and reissued it as the Logistics & Materiel Readiness Strategic Plan. The DASD(L) also stated that the updated strategic plan aligns with the DoD Digital Modernization Strategy and the DoD Data Strategy.
- (U) The DASD(L) partially agreed with the recommendation to update DoD issuances, as appropriate, to ensure roles and responsibilities are properly documented. However, the DASD(L) stated that the Assistant Secretary of Defense for Sustainment does not have the authority or resources to provide direct oversight of DoD Components' development of logistics systems and tools.
- (U) Additionally, the DASD(L) stated that the assignment of an executive agent for certain logistics functions already accomplishes the intent of the recommendation. However, we disagree with the DASD(L)'s statement.
- (U) To address the DASD(L)'s comments, we revised the recommendation to clarify actions needed to improve forecasting logistics demand for contingency planning across the JLEnt. We also aligned the recommendation with the objectives of the 2021 Logistics & Materiel Readiness Strategic Plan. We request that the Under Secretary of Defense for Acquisition and Sustainment provide additional comments on the final report.
- (U) Please see the Recommendations Table on the next page for the status of recommendations.

### (U) Recommendations Table

Management	Recommendations	Recommendations	Recommendations
	Unresolved	Resolved	Closed
Under Secretary of Defense (Acquisition and Sustainment)	1.b.i, 1.b.ii, 1.b.iii	1.a	1.c

Please provide Management Comments by May 27, 2022.

Note: The following categories are used to describe agency management's comments to individual recommendations.

- Unresolved Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
- Resolved Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
- **Closed** DoD OIG verified that the agreed upon corrective actions were implemented.





### INSPECTOR GENERAL DEPARTMENT OF DEFENSE

4800 MARK CENTER DRIVE ALEXANDRIA, VIRGINIA 22350-1500

April 28, 2022

### (U) MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION AND SUSTAINMENT

(U) SUBJECT: (U) Evaluation of the DoD's Actions to Develop Interoperable Systems and Tools for Forecasting Logistics Demand Across the Joint Logistics Enterprise (Report No. DODIG-2022-088)

This final report provides the results of the DoD Office of Inspector General's evaluation. We previously provided copies of the draft report and requested written comments on the recommendations. We considered management's comments on the draft report when preparing the final report. These comments are included in the report.

This report contains recommendations that are considered unresolved. Therefore, as discussed in the Recommendations, Management Comments, and Our Response section of this report, the recommendations remain open. We will track these recommendations until an agreement is reached on the actions that you will take to address the recommendations, and you have submitted adequate documentation showing that all agreed-upon actions are completed.

DoD Instruction 7650.03 requires that recommendations be resolved promptly. Therefore, please provide us within 30 days your response concerning specific actions in process or alternative corrective actions proposed on the recommendations. Send your response to if classified SECRET.

If you have any questions, please contact

lefferson L. DuBinok

Acting Assistant Inspector General for Evaluations Program, Combatant Commands, and Overseas Contingency Operations

## (U) Contents

(U) Introduction	
(U) Objective	1
(U) Background	1
(U) Finding. The DoD's Systems and Tools Used to Forecast Logistics Demand Across the JLEnt Were	
Not Interoperable	9
(U) The DoD's Systems and Tools Used to Forecast Logistics Demand Were Not Interoperable, Creating Additional Work for Logistics Planners	10
(U) The OUSD(A&S) Did Not Assign Roles and Responsibilities for Developing Interoperable JLEnt Systems and Tools or Update the DoD Logistics Strategy to Align with Current Interoperability Efforts	22
(U) Inaccurate, Time Consuming, and Wasteful Methods for Forecasting Logistics Demand Across the JLEnt Increased the Risk to Global Operations	24
(U) Recommendations, Management Comments, and Our Responses	30
(U) Appendixes	
(U) Appendix A. Scope and Methodology	35
(U) Use of Computer-Processed Data	37
(U) Prior Coverage	38
(U) Appendix B. Other Matters of Interest	39
(U) Management Comments	42
(U) Deputy Assistant Secretary of Defense for Logistics	43
(U) Acronyms and Abbreviations	46

### (U) Introduction

### (U) Objective

(U) The objective of this evaluation was to determine the extent to which the DoD took actions to develop interoperable systems and tools to forecast logistics demand for campaign planning across the Joint Logistics Enterprise (JLEnt).

### (U) Background

# (U) Joint Logistics is Critical to the DoD's Ability to Plan for Campaigns and Accomplish Mission Objectives

(U) Joint Publication (JP) 4-0 defines logistics as "planning and executing the movement and support of forces," and joint logistics as the "coordinated use, synchronization, and sharing of two or more combatant commands (CCMDs) or Military Departments' logistics resources to support the joint force." JP 4-0 also identifies the DoD's seven core logistics functions and states that "[c]ore logistics functions provide a framework to assist integrated decision making, enable effective synchronization and allocation of resources, and optimize joint logistics processes."

(U) To assist in planning and execution, logisticians use a variety of automated systems and tools. Information systems, decision support tools, and communications capabilities can improve visibility of logistics processes, resources, and requirements and provide the information for decision-making. To meet the wide variety of global challenges, CCMD officials must develop a clear understanding of joint logistics. This understanding includes the relationship between logistics organizations, personnel, core functions, principles, imperatives, and the operational environment. Globally integrated logistics is the capability to allocate and provide joint logistics support on a global scale to maximize effectiveness and responsiveness, and to resolve competing demands for limited logistics resources based on strategic priorities. To achieve full integration, commanders and their logisticians coordinate, synchronize, plan, execute, and assess logistics support to joint forces during all phases of the operation.

<sup>(</sup>U) Joint Publication 4-0, "Joint Logistics," February 4, 2019, incorporating Change 1, May 8, 2019. According to the JP 4-0, the DoD's seven core logistics functions are: deployment and distribution, supply, maintenance, logistics services, operational contract support, engineering, and joint health services.

CUI Introduction

### (U) The DoD Forecasts Logistics Demand for Campaign Planning

(U) According to JP 5-0, a campaign plan is a plan to organize the daily operations of the joint force to shape the operational environment and achieve national objectives.<sup>2</sup> Campaign plans also establish objectives, conditions, and tasks under which the CCMDs and Service components build operations, activities, and investments to achieve objectives (set conditions) in support of national policy. Identifying the underlying problems enables CCMD commanders to develop campaign plans to prepare for or minimize contingencies.

(U) DoD Manual (DoDM) 4140.01, Volume 2, defines forecasting demand as the prediction of demand for an item or group of items for a future period.<sup>3</sup> However, Joint Staff and DoD publications do not define "forecasting demand" for the purposes of campaign planning. As a result, we defined "forecasting demand for campaign planning" as a process to identify overall sustainment support that the joint force needs to accomplish its mission in the future. Further details on the absence of a definition and process for forecasting logistics demand in DoD policy and doctrine can be found in Appendix B, Other Matters of Interest.

### (U) The JLEnt Is a Multi-Tiered Cooperative

- (U) According to JP 4-0, the DoD's JLEnt is a "multi-tiered matrix of key global logistics providers cooperating and structured to achieve a unity of effort without jeopardizing the integrity of their own organizational missions and goals." JP 4-0 describes the responsibilities of key DoD JLEnt organizations.
- (U) The Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD[A&S]) establishes logistics policies and oversees all elements of DoD logistics. The Under Secretary of Defense for Acquisition and Sustainment (USD[A&S]) exercises authority and direction over the Assistant Secretary of Defense (Sustainment) (ASD[S]), who has the primary executive authority to prescribe and compel compliance with policies and procedures for DoD logistics across the JLEnt.
- (U) The Military Services are responsible for the logistics support of their respective forces assigned, or attached, to joint commands. The Military Services are the primary force providers and executors of joint logistics.

<sup>&</sup>lt;sup>2</sup> (U) Joint Publication 5-0, "Joint Planning," December 1, 2020.

<sup>&</sup>lt;sup>3</sup> (U) DoD Manual 4140.01, Volume 2, "DoD Supply Chain Materiel Management Procedures: Demand And Supply Planning," November 9, 2018.

- (U) The U.S. Transportation Command is responsible for providing air, land, and sea transportation to support the global deployment, employment, and sustainment of U.S. forces. It synchronizes distribution planning of global operations in coordination with other CCMDs, Military Services, and agencies as directed.
- (U) The Defense Logistics Agency (DLA) serves as the DoD Executive Agent for subsistence, construction and barrier material, bulk petroleum, and medical material.
- (U) The CCMD Logistics Directorates conduct logistics planning and execution in support of joint operations. The directorates integrate, coordinate, and synchronize each Military Service component's and combat support agency's logistics capabilities to support the joint force in multinational environments.
- (U) The Chairman of the Joint Chiefs of Staff (CJCS) is the principal military advisor to the President and advises the Secretary of Defense on critical deficiencies in force capabilities, including logistics. The CJCS prepares joint logistics plans to support strategic and contingency plans and recommends the assignment of logistics responsibilities to the Armed Forces. The CJCS exercises authority, direction, and control over the Joint Staff.
- (U) The Joint Staff Logistics Directorate leads the DoD's efforts in the JLEnt, coordinating policy and making recommendations to improve the preparedness of the DoD's global logistics forces. Additionally, the Joint Staff Logistics Directorate advises the CICS on readiness assessments of the CCMDs and the Military Services.

### (U) The DoD Has Recognized the Need to Integrate the Systems and Tools to Manage Joint Logistics for Over 10 Years

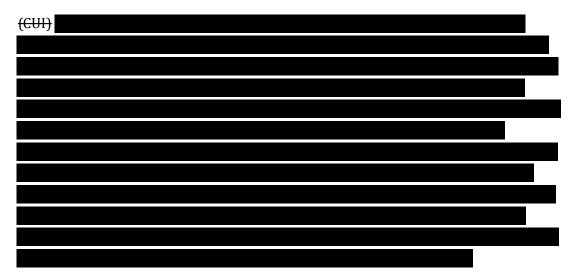
- (U) For over 10 years the DoD has recognized the need to integrate the DoD logistics suite of systems and tools to effectively manage joint logistics. For example, one of the objectives of the 2008 DoD Logistics Roadmap was to establish "visibility into customer materiel requirements and available resources to meet those needs."4 Additionally, the 2008 DoD Logistics Roadmap stated that integrated logistics data across the CCMDs, Military Services, and agencies improves the logistician's ability to forecast and respond to mission requirements.
- (U) In 2010, the Office of the Assistant Secretary of Defense (Logistics and Materiel Readiness) issued the DoD Logistics Strategic Plan (DoD Logistics Strategy).<sup>5</sup> The first goal of the DoD Logistic Strategy was to "provide logistics support in

 $<sup>^4</sup>$  (U) The Office of the Secretary of Defense, "DoD Logistics Roadmap," Volume 1, July 2008.

<sup>&</sup>lt;sup>5</sup> (U) Department Of Defense, "Logistics Strategic Plan," July 2010. During a DoD reorganization in 2018, the Secretary of Defense eliminated the Assistant Secretary of Defense (Logistics and Materiel Readiness) position and established the Assistant Secretary of Defense (Sustainment) position.

Introduction CUI

(U) accordance with warfighters' requirements." The strategy stated that to do so and to manage logistics performance, all elements of the DoD's logistics community needed to take steps to better integrate logistics with strategic planning and decision-making processes. The DoD Logistics Strategy also identified goals, performance measures, and key initiatives to drive the DoD logistics enterprise toward that end. For example, one of the strategic initiatives was to implement effective demand planning to increase forecast accuracy. Additionally, the DoD Logistics Strategy identified key initiatives to "provide Joint Force Commanders with the processes, tools, and rules to provide effective operational level logistics support to joint operations."



# (U) The DoD Issued a Digital Modernization Strategy and a Data Strategy to Achieve Data Interoperability

(U) In 2019, the DoD issued a Digital Modernization Strategy, which states that data owners and their communities of interest, such as logistics and cybersecurity, are responsible for much of the necessary work to treat data as a strategic asset. "Innovate for Competitive Advantage" is one of the DoD Digital Modernization Strategy's goals. To accomplish this goal, the strategy states that the DoD will improve the efficiency and effectiveness of warfighting support functions, such as logistics. Furthermore, the Digital Modernization Strategy explains that to obtain the full benefits of decision-making and information sharing, the strategy is dependent on the DoD's data, including logistics data, being visible, accessible, understandable, trusted, and interoperable. According to the DoD Digital Modernization Strategy, the DoD Chief Information Officer (CIO) is responsible

<sup>&</sup>lt;sup>6</sup> (<del>CUI)</del>

- (U) for ensuring interoperability of information technology (IT) across the DoD, and for eliminating duplicate IT within and between the Military Services and Defense Agencies.<sup>7</sup>
- (U) The DoD released the DoD Data Strategy in 2020, which supports the DoD Digital Modernization Strategy by providing the vision, guiding principles, and goals to transform the DoD into a data-centric enterprise. The initial focus areas of the DoD Data Strategy include Joint All-Domain Operations, business analytics, and senior leader decision support. The strategy provides eight guiding principles for all DoD data efforts. The first guiding principle identifies data as a strategic asset, stating that it should be visible, accessible, understandable, linked, trustworthy, interoperable, and secure. Additionally, the strategy describes data interoperability as:
  - (U) Properly exchanging data between systems and maintaining semantic understanding are critical for successful decision-making and joint military operations. Achieving semantic as well as syntactic interoperability using common data formats and machine-to-machine communications accelerates advanced algorithm development and provides a strategic advantage to the Department.
- (U) Specifically, the DoD Data Strategy requires data interoperability to be designed, procured, tested, operated, and sustained within the DoD's software and hardware systems. The strategy assigns the Under Secretary of Defense (Comptroller) to lead an effort to analyze and display a wide range of business data, including logistics data. While the DoD Data Strategy requires DoD Components to develop measurable implementation plans, it does not establish specific milestones. Finally, the strategy states that the Office of the DoD Chief Data Officer is responsible for governing the DoD's data management efforts and overseeing the implementation of the DoD Data Strategy.
- (U) In May 2021, the Deputy Secretary of Defense also issued a memorandum titled "Creating Data Advantage" that supports the data goals of the DoD Digital Modernization Strategy and directs specific actions supporting the DoD Data Strategy. According to the May 2021 memorandum, the DoD's Chief Data Officer is responsible for issuing policy and guidance for the DoD's data sharing and data architecture. The memorandum also requires that DoD senior leaders use the

<sup>(</sup>U) Department of Defense, "DoD Digital Modernization Strategy. DoD Information Resource Management Strategic Plan FY 19 – 23," July 12, 2019.

<sup>8 (</sup>U) Department of Defense, "DoD Data Strategy," September 30, 2020. According to the DoD's Data Strategy, "data centric" means an environment where data is the primary asset separated from systems and applications, making it available to various tools and analytics within and across security domains.

<sup>&</sup>lt;sup>9</sup> (U) Deputy Secretary of Defense Memorandum, "Creating Data Advantage," May 5, 2021.

Introduction <del>CUI</del>

- (U) Advancing Analytics (known as ADVANA) platform, which will contain inputs from DoD Components, as the single enterprise authoritative data management and analytics platform.
- (U) In June 2021, the Deputy Secretary of Defense issued another memorandum, "Accelerating Data and Artificial Intelligence for the Warfighter." This memorandum states that the DoD will launch an Artificial Intelligence and Data Acceleration Initiative. The initiative will support the CCMDs in integrating existing capabilities used in real-world operations. The initiative will also introduce forward deployed operational data teams to assist combatant commands with strategic data goals.<sup>10</sup>
- (U) In response to these Deputy Secretary of Defense memorandums, the Joint Staff Logistics Directorate is leading an effort to leverage the ADVANA platform with a data analytics tool to support operational logistics visibility and decision-making. A Joint Staff logistics official stated that this initiative to leverage the ADVANA platform would support current and future logistics planning and execution requirements. Specifically, the Joint Staff platform, in ADVANA, will provide an operational logistics solution to assist senior level decision support across the JLEnt. The Joint Staff Logistics Directorate official further stated that as of February 2022, the ADVANA team has developed minimum viable products that provide visibility of munitions, fuel, and prepackaged food products.

# (U) The Defense Logistics Management Standards (DLMS) Are the DoD Standard for Logistics Transactional Data Exchanges

(U) DoD Directive (DoDD) 8190.01E establishes the DLMS as the DoD standard for transactional information exchanges among the automated information systems that comprise assigned business processes of the DoD's logistics and global supply chain management information systems.<sup>11</sup> Furthermore, DoDD 8190.01E states that the DLMS should standardize electronic transactional information exchanges among automated information systems that comprise assigned business processes of the global supply chain management system. As a result, the goal of the DLMS is to enable transactions for logistics operations to occur accurately and promote interoperability between DoD and external logistics activities at any level of the DoD organizational structure.<sup>12</sup> According to DoDD 8190.01E,

<sup>10 (</sup>U) Deputy Secretary of Defense memorandum, "Accelerating Data and Artificial Intelligence for the Warfighter," June 21, 2021.

<sup>(</sup>U) DoDD 8190.01E, "Defense Logistics Management Standards (DLMS)," January 9, 2015, Incorporating Change 3, December 30, 2019.

<sup>12 (</sup>U) The DLMS encompasses standardization of logistics processes including, but not limited to: Military Standard Billing System, Military Standard Transaction Reporting and Accountability Procedures, Military Standard Requisitioning and Issue Procedures, and Supply Discrepancy Reporting.

(U) the DLA Director oversees the implementation of the DLMS throughout the DoD under the direction and oversight of the USD(A&S), through the ASD(S). Additionally, the Defense Logistics Manual (DLM) 4000.25 series prescribes logistics management responsibilities, procedures, rules, and electronic data communications standards to conduct logistics operations.<sup>13</sup>

### (U) United States Code and DoD Policies Require Integrated and Comprehensive Defense Business Enterprise Architecture

- (U) According to section 2222, title 10, United States Code (10 U.S.C. § 2222), "Defense business systems: business process reengineering; enterprise architecture; management," the Secretary of Defense must ensure that each covered defense business system developed, deployed, and operated by the DoD is integrated into a comprehensive defense business enterprise architecture. Furthermore, 10 U.S.C. § 2222 states that the Secretary of Defense must direct the USD(A&S) to issue and maintain supporting guidance, as appropriate, within the office's area of responsibility.14
- (U) Section 133b, title 10, United States Code, (10 U.S.C. § 133b) and DoD issuances identify the USD(A&S)'s responsibilities for establishing policies and supervising all elements of the Department relating to sustainment, including logistics, maintenance, and materiel readiness.<sup>15</sup> In accordance with 10 U.S.C. § 133b, DoDD 5135.02, states that the USD(A&S) serves as the Defense Logistics Executive and is responsible for improving defense logistics. This directive also requires the USD(A&S) to coordinate on related functions with other Office of the Secretary of Defense officials, such as the DoD CIO, to develop and implement a secure and integrated DoD IT architecture and ensure interoperability of IT throughout the DoD.<sup>16</sup>
- (U) Specifically, DoDD 5135.02 requires the USD(A&S) to establish policies on, and supervise all elements of the DoD relating to sustainment, including logistics, to improve the visibility, accountability, and control of all critical assets. The USD(A&S) exercises authority and direction over the ASD(S) and the DLA Director through the ASD(S). In addition, DoDD 5134.12 states that the ASD(S) is responsible for prescribing policies and procedures for conducting logistics,

<sup>&</sup>lt;sup>13</sup> (U) Defense Logistics Manual 4000.25, "Defense Logistics Management Standards (DLMS)," Volume 1, May 19, 2014 latest change November 26, 2019, Change 9.

<sup>&</sup>lt;sup>14</sup> (U) Section 2222, title 10, United States Code states that a "covered defense business system" means a defense business system that is expected to have a total amount of budget authority in excess of \$50,000,000. Section 2222 also states that the Secretary of Defense must direct the DoD Chief Management Officer, the CIO, and the Chief Management Officer of each of the military departments to issue and maintain supporting guidance, within their areas of responsibility.

<sup>&</sup>lt;sup>15</sup> (U) Section 133b, title 10, United States Code, 2020.

<sup>&</sup>lt;sup>16</sup> (U) DoDD 5135.02, "Under Secretary of Defense for Acquisition and Sustainment (USD[A&S])," July 15, 2020.

Introduction

- (U) maintenance, materiel readiness, strategic mobility, and sustainment support in the DoD.<sup>17</sup> The policies and procedures include supply, maintenance, and transportation.
- (U) DoD Instruction (DoDI) 5158.06, issued by the OUSD(A&S) establishes policy. assigns responsibilities, and provides procedures for the Joint Deployment and Distribution Enterprise ([DDE) planning and operations.<sup>18</sup> DoDI 5158.06 states that the DoD will maintain JDDE in alignment with related DoD requirements, initiatives, and activities. According to the DoDI 5158.06, it is the DoD's policy to maintain a JDDE that is "robust, agile, effective, efficient, resilient, and flexible" and capable of projecting and sustaining U.S. military power across the world. DoDI 5158.06 also establishes policy for the Office of Secretary of Defense and DoD Component participation in the development of campaign plans to facilitate alignment between operational plans and theater distribution plans.
- (U) Furthermore, DoDI 5158.06 reiterates the USD(A&S) responsibilities as the Defense Logistics Executive who is responsible for establishing policies on, and oversees all elements of, the DoD relating to sustainment, including logistics, maintenance, and materiel readiness. Finally, DoDI 5158.06 establishes the Joint Deployment and Distribution Coordinator within the JDDE to coordinate authority for operations and planning across all domains and collaborate with other CCMDs, the Military Services.

### (U) Interoperability of IT Systems and Tools

(U) DoDI 8330.01 states that IT interoperability includes both the technical exchange of information and the operational effectiveness of that exchange of information as required for mission accomplishment.<sup>19</sup> Additionally, DoDI 8330.01 states that interoperability is more than just information exchange, but that interoperability also includes systems, processes, procedures, organizations, and missions over the life cycle, and that interoperability must be balanced with cybersecurity.

<sup>17 (</sup>U) DoD Directive 5134.12, ""Assistant Secretary Of Defense for Logistics And Materiel Readiness," May 25, 2000 (Certified Current As Of November 21, 2003; Incorporating Change 1, October 27, 2010).

<sup>18 (</sup>U) DoD Instruction (DoDI) 5158.06, "Joint Deployment and Distribution Enterprise (JDDE) Planning and Operations," effective April 7, 2020. The JDDE is defined as DoD equipment, procedures, doctrine, leaders, technical connectivity, information, shared knowledge, organizations, facilities, training, and materiel necessary to conduct joint deployment and distribution operations with mobility, transportation (including the DTS), force projection, sustainment, redeployment, and retrograde operations. The JDDE is comprised of representatives from entities such as the Office of the Secretary of Defense, Services, Joint Staff, CCMDs, DLA, Defense Health Agency, U.S. Transportation Command and its commands. The JDDE may also include non-DoD U.S. Government organizations.

<sup>&</sup>lt;sup>19</sup> (U) DoDI 8330.01, "Interoperability of Information Technology (IT), Including National Security Systems (NSS)," May 21, 2014, Incorporating Change 2, December 11, 2019, defines IT interoperability as the ability of systems, units. or forces to provide data, information, materiel, and services to, and accept the same from, other systems, units, or forces, and to use the data, information, materiel, and services exchanged to enable them to operate effectively together. For the purposes of this evaluation, we determined that IT interoperability definition includes interoperability of systems and tools.

### (U) Finding

### (U) The DoD's Systems and Tools Used to Forecast Logistics Demand Across the JLEnt Were Not Interoperable

- (U) The DoD's systems and tools used to forecast logistics demand for campaign planning across the JLEnt were not interoperable. The DLMS are not sufficient to achieve overall interoperability of the DoD's systems and tools used for forecasting logistics demand because DoD policies do not assign roles and responsibilities for the development of interoperable JLEnt systems. Our analysis of an OUSD(A&S)-provided data set identified over 1,100 DoD systems and tools with the potential to forecast logistics demand for campaign planning. However, not one Military Service, CCMD, or DLA official we spoke with identified any systems across the JLEnt that met the criteria for interoperability identified in DoDI 8330.01. To forecast logistics demand, joint logistics planners at the Military Services, CCMDs, and the DLA either:
  - (U) manually converted, manipulated, or validated data sets from these noninteroperable systems and tools; or
  - (U) bypassed the systems and tools by manually forecasting logistics demand for campaign plans to provide feasible estimates for future demands.
- (U) These conditions occurred because the OUSD(A&S) did not:
  - (U) assign roles and responsibilities in DoD policies to develop interoperable JLEnt systems and tools to forecast demand for campaign planning; and
  - (U) update the DoD Logistics Strategy to address data interoperability
    (as defined in DoDI 8330.01) for forecasting demand for campaign
    planning, to align the DoD Logistics Strategy with the DoD
    Digital Modernization Strategy and the DoD Data Strategy, which
    identified specific goals to achieving the interoperability of DoD IT
    systems and tools.
- (U) Not having interoperable systems and tools for forecasting logistics demand increased the DoD's risk to execute global operations in support of the National Defense Strategy. The lack of interoperability led to potentially inaccurate or untimely forecasts for logistics demands. Specifically, the lack of interoperability

Finding CUI

- (U) prevented logistics officials at CCMDs from accessing and analyzing accurate data and providing effective, relevant recommendations to combatant commanders. Further, forecasting logistics demand for campaign planning using noninteroperable DoD systems and tools placed a significant time burden on logistics officials, reducing their effectiveness and capability to support other priorities, such as managing global supplier networks. The inability to produce accurate and timely forecasts of joint logistics needs created an unmitigated risk to the DoD's ability to plan and logistically support operations and contingencies.
- (U) Additionally, the duplication of future efforts to develop interoperable JLEnt systems and tools risks financial waste. Without clearly defined roles and responsibilities, the Military Services and CCMDs may continue to develop separate systems and tools, which may produce redundant or overlapping capabilities. For example, in April 2019 the Joint Requirements Oversight Council (JROC) terminated the Global Combat Support System-Joint (GCSS-J) logistics system after investing over \$200 million.<sup>20</sup> Specifically, according to logistics officials we interviewed, the system was terminated because it did not meet its objective, and CCMDs continued developing their own separate logistics IT solutions.

# (U) The DoD's Systems and Tools Used to Forecast Logistics Demand Were Not Interoperable, Creating Additional Work for Logistics Planners

- (U) The DoD's systems and tools used to forecast logistics demand for campaign planning across the JLEnt were not interoperable. While taking steps toward achieving interoperability of logistics processes, the DLMS did not achieve the interoperability of the DoD's systems and tools used for forecasting logistics demand because the DLMS did not specify a data format to allow for information exchange.
- (U) Our review of a data set of current DoD systems and tools provided by the OUSD(A&S) identified over 1,100 systems and tools with the potential to forecast logistics demand for campaign planning. However, officials from the Military Services, geographic CCMDs, and the DLA did not identify any systems across the JLEnt that met the criteria for interoperability identified in DoDI 8330.01. Overall, a lack of interoperable systems and tools for forecasting logistics demand

<sup>(</sup>U) According to Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 5123.01H, "Charter of the Joint Requirements Oversight Council (JROC) and Implementation of the Joint Capabilities Integration and Development System," August 31, 2018, the JROC is required to assist the CJCS in assessing joint military capabilities, and identifying, approving, and prioritizing gaps in such capabilities, to meet applicable requirements in the National Defense Strategy.

(U) creates additional work for joint logistics planners at CCMDs, the DLA, and Military Services who must either manually convert, manipulate, or validate data sets or bypass the systems and tools entirely.

### (U) The DLMS Do Not Achieve Interoperability of Systems and **Tools for Forecasting Logistics Demand**

- (U) The implementation of DoD DLMS by the DLA did not achieve interoperability of JLEnt systems and tools used for forecasting logistics demand. According to OUSD(A&S) officials and DoDD 8190.01E, the DLMS are a DoD effort toward achieving interoperability of logistics processes. DLM 4000.25, Volume 1 further explains that the DLMS provide for interoperability between the DoD and external logistics activities and that the DoD Components are required to implement the DLMS.<sup>21</sup>
- (U) While DoDD 8190.01E and DLM 4000.25 provide requirements and guidance for the DoD Components to implement the DLMS, the standards do not contain specific data format requirements to support development of interoperable JLEnt systems and tools used for forecasting demand. During our evaluation, OUSD(A&S) officials explained that the Military Services were in the process of transitioning from old data formatting methods to the DLMS, which would help ensure logistics data interoperability, but these officials did not provide an estimated completion date for the transition. The OUSD(A&S) officials also stated that the DLMS do not include a demand planning capability or specific data exchange format.

### (U) Our Review of an OUSD(A&S)-Provided Data Set Identified Over 1,100 Systems and Tools That Could Be Used for **Forecasting Logistics Demand**

(U) OUSD(A&S) officials could not quantify the number of systems and tools used to forecast logistics demand for campaign planning. In response to our request for a list of systems and tools for forecasting logistics demand, an OUSD(A&S) official provided a data set downloaded from the DoD Information Technology Portfolio Repository (DITPR) system.<sup>22</sup> The OUSD(A&S) official conducted a cursory review of this data set and highlighted a list of 26 of 1,797 currently active DoD systems and tools within the business management activity category that he believed had the capabilities to forecast logistics demand. However, another OUSD(A&S) official stated that this list of 26 systems and tools was incomplete because it did not

<sup>&</sup>lt;sup>21</sup> (U) Defense Logistics Manual 4000.25, "Defense Logistics Management System," Volume 1, April 2, 2019, Change 8.

<sup>&</sup>lt;sup>22</sup> (U) According to "Department of Defense Information Technology Portfolio Repository (DITPR)," June 2011 user's guide, DITPR is a web-based IT system that contains basic overview information regarding all DoD information technology systems, which includes information such as system names and descriptions.

CUI Finding

- (U) include all of the systems and tools the JLEnt used for forecasting logistics demand. Additionally, that same OUSD(A&S) official stated that quantifying and determining whether systems are interoperable would be a comprehensive and lengthy task.
- (U) Although the OUSD(A&S) list of 26 systems and tools from the DITPR data set was incomplete, we further analyzed the data set to identify and quantify potentially interoperable systems and identify instances of duplication. An OUSD(A&S) official subsequently identified an additional 382 logistics systems and tools, which increased the total number of systems and tools from 1,797 to 2,179.23 Of the 2,179 currently active DoD logistics systems and tools, we identified over 1,100 systems and tools with the potential for forecasting logistics demand, compared to the 26 identified by the first OUSD(A&S) official. In our analysis of the OUSD(A&S)-provided DITPR data set, we reviewed the systems and tools and used information such as the category of the software system (for instance business management area) and key word searches (such as demand, forecast, campaign, and planning) to identify the systems and tools that might have forecasting potential. Based on the categories of systems and key words used, we manually reviewed the descriptions of those systems and tools. If the description revealed a system or tool that met the criteria, we identified that system or tool as having potential to forecast logistics demand. When we discussed our analysis with an OUSD(A&S) logistics official, the official concurred with the approach we used. However, we could not fully quantify the number of systems that forecast logistics demand or determine whether these systems and tools were interoperable. Therefore, our analysis confirmed OUSD(A&S) officials' statements about the difficulty in determining the number of systems capable of being used to forecast logistics demand, as well as whether the systems and tools were interoperable.

### (U) The Military Services and Geographic CCMDs Did Not Fully Identify Interoperable Systems and Tools for Forecasting **Logistics Demand Across the JLEnt**

(U) During our evaluation, we asked the Military Services and geographic CCMD logistics directorate officials to identify and name which logistics systems and tools were interoperable with other Joint/Military Service systems and tools used for forecasting logistics demand. Based on the information provided by U.S. Army, Navy, Air Force, and Marine Corps (USMC) logistics officials, we could not quantify the systems and tools used to forecast logistics demand across the Military Services. Furthermore, we were not able to identify whether systems and tools

<sup>(</sup>U) The 2,179 currently active DoD systems and tools includes the 1,797 currently active DoD business management activity systems and tools as well as 311 currently active DoD warfighter management activity command and control systems and tools and 71 warfighter management activity logistics systems and tools.

(U) were interoperable across the JLEnt as reported by Navy, Air Force, USMC, U.S. Central Command (USCENTCOM), U.S. European Command (USEUCOM), and U.S. Indo-Pacific Command (USINDOPACOM) logistics officials.

#### (U) Military Services Did Not Fully Identify Systems and Tools

(U) To complete our analysis of the interoperability of DoD logistics systems, we requested Military Services' logistics officials identify all campaign planning logistics systems and tools used to forecast logistics demand within their respective Services. The purpose of this request was to quantify and compare the Military Services' systems and tools against the data set of systems and tools provided by the OUSD(A&S). In response to our request, the Military Services reported that they used 33 systems and tools to forecast logistics demand for campaign planning. Among the 33 systems and tools reported by the Military Services, we identified completeness or accuracy issues with the Department of the Army and Department of the Navy data, which limited our ability to determine the total number of systems and tools used for forecasting logistics demand. Specifically, we found the following completeness or accuracy challenges with data provided by the Department of the Army and Department of the Navy.

(U) The Department of the Army identified 22 systems and tools that had forecasting demand capabilities. In response to our request for information, an official from the Headquarters, Department of the Army, Office of the Deputy Chief of Staff for Logistics, reported 20 systems and tools and the Army's Training and Doctrine Command reported two additional systems and tools. The Headquarters, Department of the Army official reported its 20 systems and tools by the supply class each system supported but did not explain how these systems supported forecasting logistics demand for campaign planning. The Headquarters, Department of the Army official's response included the Defense Property Accountability System, a DoD property management system, as one of the 20 systems used to forecast logistics demand for campaign plans. However, the response did not explain how this system forecasts logistics demand for campaign planning. A DoD website stated that the Defense Property Accountability System provided the DoD with three distinct functions: property accountability, maintenance and utilization tracking, and warehouse management.<sup>24</sup> We reviewed the description of these functions but did not identify a capability to forecast logistics demands among the functions for this system. Therefore, we could not verify how this system was used to forecast logistics demand for campaign plans.

<sup>(</sup>U) Office of the Under Secretary of Defense for Acquisition, Technology & Logistics, Property & Equipment Policy Office, "Defense Property Accountability System Program Office."

Finding

(U) The Department of Navy staff did not provide us a list of systems and tools that have forecasting demand capabilities. In response to our request for information, a logistics official in the office of the Deputy Assistant Secretary of the Navy (Sustainment) identified the Logistics Information Technology portfolio as a system and tool used for campaign planning activities. Furthermore, the Navy official also reported that the Logistics Information Technology portfolio consists of over 200 Navy and USMC logistics systems and that some of those systems could be used to forecast logistics demand.<sup>25</sup> However, since the Navy official did not identify which of these Navy or USMC systems and tools had the capability to forecast logistics demand, we could not determine whether the Navy's logistics systems and tools were interoperable or duplicative with other systems and tools. Additionally, we could not verify the completeness of the Navy's response without more information about the specific functions of the systems and tools.

(U) In addition to challenges with the completeness and accuracy in the Army and Navy data, we also identified disparities between the OUSD(A&S) and Military Service reported systems and tools. Our comparison revealed that out of the 33 systems and tools reported by the Military Services, only 19 of 33 were included within the data set of systems and tools provided by the OUSD(A&S).26 Additionally, an official from the Headquarters, U.S. Army Training and Doctrine Command reported the Logistics Estimation Workbook tool as part of the 22 Army systems and tools used to forecast logistics demand. However, the Logistics Estimation Workbook tool was not included in the data set of systems and tools provided by the OUSD(A&S).27 Further, an OUSD(A&S) official highlighted the U.S. Air Force Enterprise Supply Chain Analysis, Planning and Execution system among the 26 of 1,797 systems and tools that had the capability to forecast logistics demand. However, the Air Force Logistics Readiness Division did not identify the Enterprise Supply Chain Analysis, Planning and Execution system among the systems and tools used to forecast logistics demand that they reported.

 $<sup>^{25}</sup>$  (U) The USMC responded to our request for information separately from the Department of the Navy. The USMC reported two of its logistics systems as having a forecasting logistics demand function. We did not identify issues with the completeness of the USMC response.

<sup>&</sup>lt;sup>26</sup> (U) Although we identified that 19 of 33 systems and tools were included in the list provided by OUSD(A&S), we also observed disparities within component ownership for some of the systems. For example, the Army reported the Theater Enterprise Wide Medical Logistics System; however, the DITPR data set identified the Theater Enterprise Wide Medical Logistics System under the Defense Health Agency, which is a joint support agency.

<sup>&</sup>lt;sup>27</sup> (U) The Army's Logistics Estimation Workbook is an automated sustainment planning tool designed to improve the logistics estimates process during planning and orders development, and it can be tailored for all phases of an operation.

Finding

### (U) Military Services and Geographic CCMDs Did Not Identify Interoperable Systems and Tools Across the JLEnt

- (U) The Military Services and geographic CCMD logistics officials identified logistics systems and tools but did not provide information on whether they were interoperable with other Joint Force or Military Service systems and tools for forecasting logistics demand. Therefore, the Military Services and the CCMDs did not provide evidence of interoperable logistics systems within the JLEnt that met the criteria for interoperability identified in DoDI 8330.01. Specifically, DoDI 8330.01 states that IT interoperability includes the technical exchange of information as well as systems, processes, procedures, organizations, and missions.
- (U) Logistics officials from the Army, Navy, Air Force, and USMC either stated that their Services did not use planning systems and tools that were interoperable with those of other Services, or could not provide information on systems and tools that met the definition of interoperability in DoDI 8330.01. For example, a logistics official from the Army's Training and Doctrine Command stated that the Army's Joint Logistics Factor File (LFF) data was submitted to the Joint Staff Logistics Directorate for use by the joint community, but the official did not provide any information to support if or how the LFF data was communicated to other DoD entities within the JLEnt.<sup>28</sup> Additionally, a logistics official from the Office of the Deputy Assistant Secretary of the Navy (Sustainment) stated that the Navy does not use planning systems and tools that are interoperable with other Joint or Military Service systems and tools for forecasting logistics demand. Separately, an Air Force Logistics Readiness Division logistics official identified the Theater Integrated Combat Munitions System as an interoperable system that, through the Defense Automated Addressing System, communicates transactional data between the Army's Logistics Modernization Program and the Navy's Ordnance Information System for stocks held and managed for the other Military Services.<sup>29</sup>
- (U) However, the Air Force logistics official did not describe any other Military Service or DoD entity within the JLEnt that was able to communicate munitions data from the Theater Integrated Combat Munitions System. Lastly, a USMC logistics

<sup>&</sup>lt;sup>28</sup> (U) The LFF supports the creation of sustainment requirements that are used in Time-Phased Force And Deployment Data files (commonly known as TPFDD), and the data must be in a Joint Operation Plan and Execution System compatible format for use in TPFDD supporting transportation planning, Logistics Supportability Analysis, and plan assessments. TPFDD is time-phased force, non-unit cargo, and personnel data that is combined with movement data for an operation plan, operation order, or ongoing rotation of forces.

<sup>(</sup>U) According to the data set provided by officials from the OUSD(A&S), "The Theater Integrated Combat Munitions System is the Air Force's single... application for worldwide conventional munitions configuration management, capability analysis, and combat support." The Defense Automated Addressing System designs, develops, and implements logistics solutions that improve customers requisition processing and logistics management processes worldwide. The Army's Logistics Modernization Program is a system that builds, sustains, and generates warfighting capabilities using one of the largest, fully-integrated supply chain and maintenance, repair, and overhaul solutions in the world. The Navy's Ordinance Information System provides the development and deployment of an integrated conventional ordnance logistics management and inventory control system.

Finding CUI

- (U) official stated that the USMC's current interoperability for forecasting logistics demand for campaign and contingency planning with Joint Forces or other Military Services is limited to email communication with the DLA. The USMC response did not provide any further detail that described communication of logistics demand inputs between the USMC and any other Military Service or entity within the JLEnt.
- (U) Similar to the logistics officials from the Military Services, the logistics directorate officials from three geographic CCMDs could not provide examples of logistics systems capable of forecasting demand that were interoperable with other CCMDs or across the Military Services. We requested logistic systems information from USCENTCOM, USEUCOM, and USINDOPACOM logistics directorate officials to determine whether systems and tools used for forecasting logistics demand are interoperable across the JLEnt.<sup>30</sup>
- (U) A logistics official from USCENTCOM stated that forecasting demand at USCENTCOM is a routine process and identified the USCENTCOM LOGCOP as a central decision-making tool at the joint-strategic-operational level that was intended to merge logistics information from USCENTCOM's Service Components, Joint Task Forces, and strategic partners. According to the USCENTCOM logistics official, the GCSS-J program was formerly used, but terminated in April 2019 due to its inability to meet expectations. GCSS-I was a logistics system of record that was supposed to provide a Joint LOGCOP to ensure the right personnel, equipment, supplies, and support were in the right place, time, and in quantities to mobilize, move, and sustain all elements of operating forces within a theater or operational area. The USCENTCOM logistics official stated that the USCENTCOM LOGCOP established data feeds directly with logistics data sources and developed a USCENTCOM repository for logistics data to include additional data points not available in GCSS-J. According to USCENTCOM officials, key missing data feeds from the Joint Operation Planning and Execution System, readiness data for Services, and U.S. Army Corps of Engineers data sources were not in GCSS-J. Additionally, the USCENTCOM logistics official stated that USCENTCOM is looking for joint solutions from the Office of the Under Secretary of Defense (Research and Engineering) to transform the USCENTCOM LOGCOP into a Joint Capability Technology Demonstration.<sup>31</sup> As of February 2022, USCENTCOM officials stated that USCENTCOM continued to search for joint solutions for its LOGCOP, but is no longer perusing the Joint Capability Technology Demonstration.

<sup>(</sup>U) We requested information from U.S. Southern Command as well but did not receive a response to our request. We did not request information from U.S. Africa Command due to the command's limited size and logistics responsibilities.

<sup>&</sup>lt;sup>31</sup> (U) A Joint Capability Technology Demonstration is a capability solution with operational concepts and tactics, techniques and procedures to address CCMD needs, resulting in a significant increase to joint, coalition, and interagency capabilities.

- (U) A logistics official from USINDOPACOM stated the CCMD does not have an interoperable logistics system that allows staff to perform forecasting demand for any class of supply or logistics function, with no joint solution, program of record, or system of record that the CCMDs can use to forecast logistics demand. For example, according to the USINDOPACOM logistics official, the CCMD uses real time data to track supplies on vessels. This capability should allow the USINDOPACOM logistics staff to maintain visibility of afloat ships and supplies to incorporate the supplies in their LOGCOP. However, not all Military Services used transponders on their vessels, nor did Military Services share data, such as location of afloat vessels and supplies. The lack of interoperability between the Military Services and USINDOPACOM presents a gap in coverage that prevents USINDOPACOM from being able to synchronize their data. As a result, USINDOPACOM spends man hours tracking supplies and querying the Military Services to identify information needed to forecast demand. The USINDOPACOM logistics official also stated that USINDOPACOM does not have the capabilities to perform demand forecasts for logistics planning due to noninteroperable systems and tools at the Military Service level.
- (U) A logistics official from USEUCOM stated that no joint-level version of the former GCSS-I program existed that could aggregate logistics data from the DoD-wide systems. Another logistics official from USEUCOM provided an example of a system used to monitor and track various classes of supply across the DoD, the Global Air Transportation Execution System.<sup>32</sup> However, the logistics official from USEUCOM also stated that the Global Air Transportation Execution System did not have the ability to forecast demand or visibility of the data within the system, which impaired USEUCOM's ability to forecast demand.
- (U) As a result, we could neither quantify the total number of systems and tools used to forecast logistic demand, nor could we determine whether those systems and tools were interoperable throughout the JLEnt. We could not make these determinations because the staffs of the Military Services, the CCMDs, and the OUSD(A&S) could not provide us with complete and accurate data.

<sup>32 (</sup>U) The Global Air Transportation Execution System is an automated information system designed to track, document, manage and process payment for the global air and surface movement of personnel and cargo across the DoD.

# (U) Joint Logistics Planners Transformed Logistics Data Sets Between Noninteroperable Systems or Manually Forecasted Demand

- (U) Joint logistics planners manually converted, manipulated, or validated logistics data sets from multiple noninteroperable systems or bypassed them entirely. To forecast logistics demand, joint logistics planners at the Military Services, CCMDs, and the DLA either:
  - (U) manually converted, manipulated, or validated data sets from these multiple noninteroperable systems; or
  - (U) bypassed the systems and tools by manually forecasting logistics demand for campaign plans to provide feasible estimates for future demands.

## (U) Joint Logistics Planners Manually Converted Data from Unclassified to Classified Networks

- (U) DLA and USCENTCOM logistics officials described challenges with forecasting demand, such as converting basic logistics data from unclassified to classified networks. According to both DLA and USCENTCOM logistics officials, workarounds were necessary to convert logistics data from unclassified networks to classified networks to aggregate logistics data into a tool for decision-making and forecasting. Specifically, logistics officials from the DLA and USCENTCOM stated that the movement of logistics planning data between the unclassified and classified networks was a challenge. A DLA logistics official also stated that most of the DLA's logistics data were unclassified. However, to use it for decision-making, DLA logistics officials moved the unclassified logistics data to a classified environment, which posed a challenge. Specifically, a DLA logistics official stated that the DLA used its systems to purchase materiel at an unclassified level, but challenges existed whenever requirements involved decision making on a classified network.
- (U) Additionally, a USCENTCOM logistics official stated that most of USCENTCOM's logistics data was stored on classified systems. Additionally, to execute contracting actions that support planning for contingencies, USCENTCOM logistics officials moved logistics data from classified systems to unclassified environments. Besides moving logistics data from the unclassified environment, USCENTCOM logistics officials also moved the logistics data to the classified environment and systems to coordinate at the headquarters or senior leader levels, which involved a daily classified video-teleconference to make decisions. Specifically, a USCENTCOM logistics official stated that to provide a real-time update on logistics to the senior leadership, USCENTCOM logistics officials had to move logistics data from the unclassified systems to the classified systems in support of the daily decision making video-teleconference.

### (U) Joint Logistics Planners Manipulated Data Before Transferring it Between Noninteroperable Campaign Planning Systems and Tools

(U) We identified instances where Service logisticians manipulated logistics data to transfer it from one noninteroperable planning system or tool to another. For example, an Air Force Logistics Readiness Division official stated that the Air Force had to manipulate data within the Air Force's Deliberate and Crisis Action Planning and Execution Segments tool.<sup>33</sup> This included manually interfacing logistics data between the Logistics Module system to the Deliberate and Crisis Action Planning and Execution Segments tool, for use in the Joint Operational Planning and Execution System.<sup>34</sup> According to the Air Force logistics official, this process was labor intensive, time consuming, and often at the expense of accuracy. An Air Force logistics official stated that an initiative to modernize Deliberate and Crisis Action Planning and Execution Segments tool would enable logistics detail development and management capability. However, without the modernization capability for the Deliberate and Crisis Action Planning and Execution Segments tool, system operators would continue to need to manually enter, manipulate, and transfer complex data between systems. Additionally, an Air Force Medical Service logistics official stated that the Air Force Medical Service used workarounds, such as applying Structure Query Language programs to manipulate and mine data from the Defense Medical Logistics Standard Support System.35

(U) Lastly, an Army Logistics Directorate official stated that the Army's 21st Theater Sustainment Command in the USEUCOM area of responsibility created a LOGCOP to support the North Atlantic Treaty Organization's Logistics Functional Area Services program.<sup>36</sup> According to the logistics official, as of June 2021, the 21st Theater Sustainment Command was working with a vendor to create application software to manipulate logistics data within the Logistics Functional Area Services program.

<sup>(</sup>U) Deliberate and Crisis Action Planning and Execution Segments tool is the United States Air Force's system of record for managing operational plan requirements. The system integrates automated decision support applications and information exchange capabilities to provide the Air Force the means to plan, present, source, mobilize, deploy, account for, sustain, redeploy, and reconstitute forces. According to an Air Force logistics official, the Air Force system should provides a real-time, two-way interchange of personnel, manpower, logistics, and operational data between the Air Force and CCMDs in response to CCMD requirements.

<sup>(</sup>U) Logistics Module is a computer software program that runs on computers at both the Major Command and base level or through networked servers. Logistics Module manages a database containing the logistics equipment and supplies for Air Force Unit Type Codes. Additionally, the Joint Operations Planning and Execution System is an integrated joint command and control system used to support military operation monitoring planning, and execution activities.

<sup>35 (</sup>U) Structured query language is a standardized computer programming language for defining and manipulating data in a relational database. The Defense Medical Logistics Standard Support System provides automation support of reengineered medical logistics business practices and delivers comprehensive range of materiel, equipment, and facilities management information systems. Additionally, the Defense Medical Logistics Standard Support System is the Air Force Medical Service's class VIIIA system of record.

<sup>(</sup>U) The Logistics Functional Area Services System is a system in the military command and control domain that enables multinational movement, transportation planning and execution management, sustainment planning, and logistics reporting.

Finding CUI

# (U) Joint Logistics Planners Manually Corrected Errors and Updated Outdated Data From Multiple Noninteroperable Systems

- (U) Logistics officials from the CCMDs described challenges with accessing logistics data from multiple noninteroperable systems and identified the need to validate, remove errors in, and prepare data they received from those systems. According to a USINDOPACOM logistics official, the current USINDOPACOM LOGCOP only provided joint logistics planners a picture of current operations, and did not allow them to accurately forecast demand. The USINDOPACOM logistics official also stated that the USINDOPACOM LOGCOP was not an interoperable system, and added that USINDOPACOM did not have the capabilities to perform demand forecasts for logistics planning because of noninteroperable systems and tools at the Service level. In addition, a USCENTCOM official reported that its LOGCOP fed from over 20 disparate and noninteroperable systems and tools.
- (U) Joint logistics officials at USCENTCOM, USEUCOM, and USINDOPACOM also described the challenging processes they had to go through to use logistics data from disparate and noninteroperable authoritative systems and tools that belonged to the Military Services. A USEUCOM logistics official stated that USEUCOM logistics planners had to go through a time-consuming process to manually enter information.
- (U) USEUCOM logistics officials reported that data accuracy remains the primary challenge concerning interoperability of systems and tools. To manually validate data, USEUCOM logistics officials reported that they relied on phone calls with their Military Service Components to check the accuracy of the system data, and updated data to remove errors. Additionally USEUCOM logistics officials stated that they devoted approximately 2 weeks of their joint logistics staff time solely to validating the data supporting one Logistics Supportability Analysis for a specific operation plan.<sup>37</sup>
- (U) Related to data accuracy, we also identified that the Joint Operations Planning and Execution System contained Service-level data that in some cases was more than 10 years old and had to be manually updated to avoid inaccurate planning estimates. Logistics officials at USCENTCOM, USEUCOM, the Joint Staff, and the DLA stated that some Military Service data contained in the LFF used to produce planning estimates within the Joint Operations Planning and Execution System was outdated and had to be updated manually. For example, an official from the Joint Staff Logistics Directorate confirmed that updates to the LFF were infrequent

<sup>37 (</sup>U) Logistics Supportability Analysis is a combatant command internal assessment for the Joint Strategic Campaign Plan on capabilities and shortfalls of key logistic capabilities required to execute and sustain the concept of support conducted on all level three and four plans with the time phased force deployment data.

- (U) and some Military Services have had not updated the LFF in more than a decade. Specifically, the Air Force, Navy, USMC, and Army last updated the LFF in the following years:
  - (U) the Air Force and the Navy updated LFF data before 2006,
  - (U) the USMC updated their LFF data in 2020 for the first time in 10 years, and
  - (U) the Army updated their LFF data in 2020.
- (U) USEUCOM officials explained that when the Military Services did not update their LFF data, the joint planners could not run an accurate analysis to forecast the logistics demand needed for campaign plans without having to manually update or manipulate the data. For example, a USCENTCOM official stated that if the LFF provided outdated data, such as the per-person per-day needs for water, it could harm the ability to sustain operations. Joint Staff Logistics Directorate officials and USCENTCOM officials also reported that they had no authority over Military Services to require any updates to the Joint LFF, or no ability to hold the Services accountable when the files were outdated. The LFF database supports the Joint Operations Planning and Execution System, and the submitted data is used to compute sustainment requirements in the following core logistics functions: Supply, Logistics Services, Health Services, Operational Contract Support, and Engineering.

### (U) USMC Logistics Planners Bypassed Systems and Tools to Circumvent Noninteroperable, Inaccurate, and Outdated Data

(U) Finally, we identified that the USMC bypassed logistics systems and tools by manually forecasting logistics demand. Specifically, a USMC logistics official stated that since 2017 the USMC had not used the War Reserve System for an annual DLA data call because it made inaccurate calculations. The USMC logistics official further stated that the USMC's current ability to forecast demand with its legacy War Reserve System was severely hampered as the data produced was largely outdated, requiring significant manual updates and data validation efforts. According to the USMC logistics official, the USMC instead provided a demand input to the DLA through e-mail communication because the USMC's current interoperability for forecasting logistics demand with Joint Forces or Military Services for campaign and contingency planning through the War Reserve System was limited.

Finding CUI

### (U) The OUSD(A&S) Did Not Assign Roles and Responsibilities for Developing Interoperable JLEnt Systems and Tools or Update the DoD Logistics Strategy to Align with Current Interoperability Efforts

- (U) The DoD's JLEnt systems and tools used to forecast logistics demand for campaign planning were not interoperable because the OUSD(A&S) did not:
  - 1. (U) assign roles and responsibilities in DoD policies to develop interoperable JLEnt systems and tools to forecast demand for campaign planning; and
  - 2. (U) update the DoD Logistics Strategy to address data interoperability (as defined in DoDI 8330.01), for forecasting demand for campaign planning to align the DoD Logistics Strategy with the DoD Digital Modernization Strategy and the DoD Data Strategy, which identified specific goals to achieving the interoperability of DoD IT systems and tools.

# (U) Current DoD Policies Do Not Contain Roles and Responsibilities for Developing Interoperable JLEnt Systems and Tools

(U) No DoD policy, including DoDD 5135.02, DoDD 5134.12, DoDD 8190.01E, and DoDI 5158.06, assigns roles and responsibilities across the JLEnt to develop interoperable systems and tools for forecasting logistics demand.<sup>38</sup> According to the Government Accountability Office's "Standards for Internal Control in the Federal Government," for an organization to operate effectively, management must assign responsibility and delegate authority to key roles throughout the organization.<sup>39</sup> Within the DoD, the responsibility and authority to improve and maintain DoD logistics rests with the USD(A&S) as the Defense Logistics Executive, according to DoDD 5135.02. Additionally, DoDD 5135.02 states that the USD(A&S) is responsible for establishing policies and procedures for logistics, to improve the visibility, accountability, and control of all critical assets of the logistics enterprise. DoDD 5135.02 also requires the USD(A&S), in collaboration with the DoD CIO, to lead sustainment data management and to provide capabilities that would result in timely and reliable data. In coordination with the USD(A&S), the DoD CIO is responsible for ensuring the interoperability of the DoD's IT, including the implementation of a sound, secure, and integrated IT architecture.

<sup>&</sup>lt;sup>38</sup> (U) DoDD 5135.02, "Under Secretary of Defense for Acquisition and Sustainment," July 15, 2020.

<sup>&</sup>lt;sup>39</sup> (U) GAO-14-704G, "Standards for Internal Control in the Federal Government," September 10, 2014.

- (U) The Government Accountability Offices standards for internal control additionally state that those in key roles can further assign responsibility for internal control to roles below them. DoDD 5135.02 clarifies that the USD(A&S) oversees the ASD(S) in the exercise of his or her assigned functions. Furthermore, the DoDD 5134.12 states the ASD(S) is responsible for prescribing policies and procedures for logistics in the DoD.<sup>40</sup>
- (U) According to the Office of Assistant Secretary of Defense For Sustainment (OASD[S]) website, DoDD 5134.12 is the primary guiding policy for logistics. Although DoDD 5134.12 still references the Assistant Secretary of Defense (Logistics and Materiel Readiness), an OASD(S) official stated that the directive now applies to the ASD(S).41 DoDD 5134.12 requires the heads of DoD Components to coordinate with OASD(S) officials "on all matters related to the authorities, responsibilities, and functions assigned in this Directive." While the ASD(S) is responsible for providing logistics guidance to the Secretaries of the Military Departments, and for monitoring all logistics programs within the DoD, DoDD 5134.12 does not address DoD's logistics IT, and does not assign roles and responsibilities to develop interoperable JLEnt systems and tools to forecast demand for campaign planning.42
- (U) We also found that the policy documents supporting the DLMS do not assign roles and responsibilities for developing interoperable JLEnt systems and tools to forecast demand for campaign planning. Specifically, while the DoDD 8190.01E and DLM 4000.25 series provide requirements and guidance for DoD components to implement the DLMS, these documents do not assign roles and responsibilities to support development of interoperable JLEnt systems.
- (U) Lastly, we found that DoDI 5158.06 does not assign roles and responsibilities for ILEnt components to develop interoperable systems and tools to forecast demand for campaign planning even though the specific purpose of DoDI 5158.06 is to establish policy, assign responsibilities, and provide procedures for the JDDE in support of the development, improvement, and sustainment of deployment and distribution capabilities. Specifically, DoDI 5158.06 states that the USD(A&S) serves as the Defense Logistics Executive and establishes policies on, and oversees all elements

<sup>&</sup>lt;sup>40</sup> (U) DoDD 5134.12, "Assistant Secretary Of Defense for Logistics And Materiel Readiness," May 25, 2000 (Certified Current As Of November 21, 2003; Incorporating Change 1, October 27, 2010)

<sup>41 (</sup>U) Public Law 114-328, "The National Defense Authorization Act for Fiscal Year 2017," section 901, December 23, 2016, removed the position of the Under Secretary of Defense (Acquisition, Technology, and Logistics), and created new positions for the USD (A&S) and Under Secretary of Defense for Research and Engineering. In conjunction with this DoD reorganization, the Secretary of Defense eliminated the ASD (Logistics and Materiel Readiness) position and instead established the ASD(S) position under the USD(A&S).

<sup>&</sup>lt;sup>42</sup> (U) According to OASD(S) officials interviewed, while DoDD 5134.12 has not been updated to reflect the restructuring within the Office of the Secretary of Defense, it is still valid and applies to OASD(S).

(U) of the DoD relating to sustainment, including logistics, maintenance, and materiel readiness. Furthermore, DoDI 5158.06 states that DoD Components should develop joint cybersecurity and mission assurance, data, and information technology strategies and initiatives, but does not assign specific roles and responsibilities to JLEnt components to support the development of interoperable systems and tools to forecast demand for the purposes of campaign planning. Overall, we did not identify any DoD policy that assigned roles and responsibilities for developing such systems and tools.

# (U) The DoD Logistics Strategy Was Outdated and Did Not Align with Other DoD Strategies

- (U) The 2010 DoD Logistics Strategy did not address interoperability of logistics IT systems, nor did it align with other DoD strategies such as the DoD Digital Modernization Strategy and the DoD Data Strategy. Although the OASD(S) website listed the DoD Logistics Strategy as part of active guidance for the DoD's logistics enterprise, the strategy had not been updated since 2010. Therefore, the DoD Logistics Strategy did not align with current national strategic guidance or with DoD-wide efforts for interoperability of systems, such as the DoD Digital Modernization Strategy and the DoD Data Strategy, issued in 2019 and 2020, respectively. For example, the DoD Logistics Strategy did not address data interoperability, as defined in DoDI 8330.01, for forecasting demand for campaign planning. Although the DoD Logistics Strategy identified goals, performance measures, and key initiatives for DoD logistics, it did not assign roles and responsibilities for fulfilling them.
- (U) During an interview, an OASD(S) official stated that he was not aware of any current implementation activities related to the DoD Logistics Strategy. Further, the OASD(S) official stated that the DoD Logistics Strategy was no longer used, and that their office was developing new strategic goals for DoD logistics. However, the OASD(S) official did not state whether these goals would be part of an updated DoD Logistics Strategy.

# (U) Inaccurate, Time Consuming, and Wasteful Methods for Forecasting Logistics Demand Across the JLEnt Increased the Risk to Global Operations

(U) As a result of the DoD not having interoperable systems and tools for forecasting logistics demand, risk increased when executing global operations in support of the National Defense Strategy. The lack of interoperability required logisticians across the JLEnt to manually convert, manipulate, validate, or bypass

(U) data in existing systems, potentially leading to inaccurate or untimely forecasts for logistics demands. Additionally, any duplication of future efforts to develop interoperable JLEnt systems and tools risks financial waste.

### (U) The Joint Logistics Directorates Could Not Access and Analyze Accurate Data to Forecast Logistics Demands, Risking the Integrity of Campaign Plans

- (U) Due to the lack of interoperable systems and tools, the potentially inaccurate or time-consuming methods for forecasting logistics demands across the JLEnt hindered the joint logistics directorates' ability to bring effective and relevant recommendations to combatant commanders. Specifically, some logistics systems and tools did not have accurate or reliable information. To correct the data, joint logistics planners at CCMDs manually converted, manipulated, validated, or bypassed data in existing systems. This method also placed a significant time burden on logistics officials, reducing their effectiveness and capability to support other priorities, such as managing global supplier networks.
- (U) The current state of systems and tools did not allow logistics directorates at CCMDs to access and analyze accurate data to forecast logistics demands for campaign plans. As previously discussed, joint logistics planners had to access disparate systems, gather relevant logistics data that they could then manually analyze and forecast, or bypass systems entirely. In addition, we also discussed previously that LFFs contained outdated and unreliable logistics data and the USMC's War Reserve System provided inaccurate calculations. Further, the need to manually convert, manipulate, validate, or bypass data in existing systems introduced additional potential for human error into the process, increasing the risk that data was inaccurate or unreliable.
- (U) When logistics data was inaccurate or unreliable, joint logistics planners had to validate the accuracy of data that they obtained from authoritative systems, or risk a failure of internal controls. USEUCOM logistics directorate officials reported that data accuracy remained a primary challenge concerning the interoperability of systems and tools and that their logistics staff relied on accurate data to build a complete common operating picture for their leadership.
- (U) Furthermore, USEUCOM logistics directorate officials reported that they relied on the Military Services to provide updates, via phone calls or spreadsheets, to verify the accuracy of data in systems. Inaccurate data could have resulted in inaccurate logistics demand analyses, which could have increased logistics risk if a campaign, operation, or contingency plan transitioned to execution. 43

<sup>&</sup>lt;sup>43</sup> (U) According to Joint Publication 5-0, campaign plans help combatant commanders identify resources required to achieve objectives and tasks for input into budget and force allocation requests.

CUI Finding

> (U) Forecasting logistics demand for campaign planning using noninteroperable DoD systems and tools also reduced logistics officials' effectiveness and capability to support other priorities, such as managing global supplier networks. The method of accessing disparate, noninteroperable systems and manually converting, manipulating, validating, or bypassing data found within them was a time consuming process. An interoperable logistics enterprise would eliminate the need for joint logistics planners to establish access to noninteroperable systems from the Military Services, manually download logistics data from various systems, manually cleanse or correct inaccurate data, and manually enter the data to forecast logistics demands. Instead, the JLEnt systems would automatically feed accurate logistics data to the CCMD's LOGCOP (or equivalent system) and the joint logistics planner would then use the data to forecast demand in a timely manner.

> (U) Based on the evidence we collected and analyzed and the policies we reviewed, we concluded that the lack of interoperable systems and tools, policy, and assignment of roles and responsibilities on interoperability, hindered the JLEnt's ability to forecast logistics demand for campaign plans. Without increased interoperability, joint logistics planners will continue to dedicate additional time and resources to cleanse logistics data and perform accuracy checks from different authoritative systems and tools that contain outdated information, slowing down the ability to forecast logistics demand. Specifically, if logistics officials underestimate needs or do not produce forecast demands in a timely manner, the CCMDs may risk not achieving their campaign plan objectives that are in support of and aligned with national policy and strategic objectives in an operation or contingency.<sup>44</sup> Accurate and timely forecasting of logistics demand capabilities is essential to projecting and sustaining combat power worldwide. 45

<sup>&</sup>lt;sup>44</sup> (U) According to JP 5-0, campaign plans establish objectives, conditions, and tasks under which the CCMD and Service Components build operations, activities, and investments to achieve objectives in support of and aligned to national policy and strategic objectives.

<sup>45 (</sup>U) JP 4-0 states that logistics integrates strategic, operational, and tactical support to project and sustain military power across the globe at a chosen time and place. It also states the relative combat power that military forces can generate against a threat is constrained by their capability to plan for, gain access to, and deliver forces and materiel to points of application.

### (U) Independent Efforts to Improve Interoperability Risk **Duplication and Waste**

(U) JLEnt organizations were pursuing independent IT solutions to achieve interoperability of systems and tools for forecasting logistics demand, which created a risk of financial waste. Without the USD(A&S) developing policy assigning roles and responsibilities for forecasting logistics demand, the JLEnt organizations may continue to develop and fund their own IT interoperability solutions, which could lead to potential waste. For example, in April 2019 the JROC terminated the GCSS-I logistics system as a program of record, effective at the end of FY 2020, after investing over \$200 million. According to the Defense Information Systems Agency's budget justification document for FY 2021, the intent of GCSS-J was to develop a common logistics operational picture for CCMDs to inform them about available capabilities and resources for planning purposes.<sup>46</sup> However, an official from the Joint Staff Logistics Directorate stated that while a lot of time and money was spent to improve the GCSS-I, many CCMDs were developing their own logistics IT solutions. The Joint Staff official also stated that it was difficult to get quality authoritative data from the Military Services and other authoritative sources in a timely manner. Moreover, USEUCOM and USINDOPACOM officials stated that the GCSS-I was terminated because the system did not meet its objective. Roles and responsibilities to ensure that the Military Services provided authoritative logistics data in a timely manner, the authority to hold Military Services accountable when they do not provide timely data, and efforts to require CCMDs to use the GCSS-I may have prevented the need to terminate the GCSS-I program, and could reduce the risk of future systems being cancelled.

(U) During our evaluation, we also reviewed efforts by CCMDs to invest resources to develop and maintain similar or overlapping capabilities within logistics systems and tools. After the GCSS-J was terminated, a USCENTCOM official stated that USCENTCOM absorbed the GCSS-I database to inform its LOGCOP and added key missing data feeds. The USCENTCOM official reported that the CCMD allocated approximately \$2.5 million for the maintenance of its LOGCOP annually. The official stated that in FY 2021 USCENTCOM submitted an additional \$4 to \$6 million contract request over the following 5 years, to bring in more data scientists to further improve the data that feeds the USCENTCOM's LOGCOP.<sup>47</sup> Moreover, we found

<sup>(</sup>U) The DoD FY 2021 Budget Estimates, "Defense Information Systems Agency. Defense-Wide Justification Book Volume 5 of 5. Research, Development, Test & Evaluation, Defense-Wide," February 2020, further stated that by using the GCSS-J, the joint logistics warfighter would no longer need to log into multiple legacy systems and manually gather data to compile reports, and that the GCSS-J would provide real time actionable information. After the GCSS-J program was terminated, remaining funds were realigned to other programs.

<sup>&</sup>lt;sup>47</sup> (U) At the time we completed our interviews, USCENTCOM officials were discussing integrating their data feeds into the ADVANA platform.

Finding CUI

- (U) that USINDOPACOM also allocated significant resources for a LOGCOP. According to a USINDOPACOM contracting action in FY 2021, USINDOPACOM allocated approximately \$1.5 million annually for its LOGCOP to maintain the system.
- (U) USCENTCOM maintained a LOGCOP that joint logistics planners could use to forecast logistics demand. However, USCENTCOM's logistics directorate official stated all CCMDs faced challenges with noninteroperable systems and tools, because no DoD-wide mandate exists for a joint system or tool; therefore, JLEnt planners do not have a rapid decision making tool. Furthermore, USCENTCOM officials explained that the LOGCOP stores logistics data in the repository and makes it available to any organization across the JLEnt that has appropriate credentials. For example, a USCENTCOM official identified challenges in funding future initiatives to improve the LOGCOP and that a potential solution would be to merge the LOGCOP with a program of record. However, the USCENTCOM official noted it would be challenging to get a Military Service to make the LOGCOP a program of record because the Military Services have other focuses, different from USCENTCOM's focus.
- (U) We also spoke with CCMD logistics officials outside of USCENTCOM who noted that USCENTCOM's LOGCOP was the best model right now, but was not easily replicated at other CCMDs. The CCMD officials explained that USCENTCOM was able to afford to fund its LOGCOP system due to extra funding resulting from decades of contingency operations. According to the officials, this extra funding allowed USCENTCOM to pay for contractors and systems required to maintain its LOGCOP. However, with drawdowns of operations in the USCENTCOM area or responsibility, the officials stated that USCENTCOM's future budgets may not support funding for its LOGCOP. The CCMD officials stated that USCENTCOM was trying to get another organization to continue funding its LOGCOP. Therefore, we determined that if USCENTCOM could not continue funding its LOGCOP or find a Military Service to absorb the LOGCOP as a program of record, the USCENTCOM LOGCOP may end up terminated, similar to the GCSS-I program.
- (U) Additionally, according to a USINDOPACOM logistics official, the current USINDOPACOM LOGCOP only provided joint logistics planners at the Joint Staff a picture of current operations, and did not allow them to forecast demand accurately. The logistics official also stated that the main logistics challenges for USINDOPACOM were visibility of intra-theater distribution information that was maintained by the Military Services and lack of a system that is interoperable with the Services to forecast logistics demand.

Finding

(U) We also identified that USCENTCOM and U.S. Northern Command staff were working on similar capabilities that would use machine learning and artificial intelligence to automate logistics data. Automating logistics data between JLEnt systems and tools could make these systems and tools interoperable, the mitigating current joint logistics planners' process of manually handling and cleansing logistics data from disparate systems. USCENTCOM officials provided documents describing how they were developing this capability for their LOGCOP. For example, USCENTCOM issued a contract request to bring in more data scientists to further improve the data feeding its LOGCOP. Meanwhile, the U.S. Northern Command staff was developing this capability under its Global Information Dominance Experiments.48

(U) Lastly, our analysis of documents, and statements from ILEnt organizations revealed additional potentially duplicative initiatives that could compete for resources across multiple organizations. For example, Army Training and Doctrine Command officials identified five initiatives that, if developed, could possibly contribute to forecasting demand capabilities. The Army Training and Doctrine Command officials stated that these five initiatives will compete for resources as efforts mature. Additionally, the U.S. Transportation Command's Research, Development, Test and Evaluation office solicited a proposal to develop a predictive maintenance capability.

<sup>(</sup>U) The Global Information Dominance Experiments will enable cross-combatant command collaboration to generate globally-integrated effects using artificial intelligence information and machine-learning techniques that identify the important trends within data and help enable decision making in a crisis or conflict.

Finding

# (U) Recommendations, Management Comments, and Our Responses

#### (U) Revised and Added Recommendations

(U) As a result of management comments, we revised draft Recommendation 1.b, to clarify to the nature of the action needed to improve forecasting logistics demand for contingency planning across the JLEnt. Additionally, we aligned Recommendation 1.b with the objectives of the 2021 Logistics & Materiel Readiness Strategic Plan (L&MR Strategic Plan) identified by the Deputy Assistant Secretary of Defense for Logistics (DASD[L]) in the management comments.<sup>49</sup>

#### (U) Recommendation 1

- (U) We recommend that the Under Secretary of Defense (Acquisition and Sustainment):
  - a. (U) Review and identify DoD issuances related to forecasting logistics demand for campaign planning.

## (U) Under Secretary of Defense (Acquisition and Sustainment) Response

(U) The DASD(L), responding for the USD(A&S), agreed and stated that the Office of the Deputy Assistant Secretary of Defense for Logistics would conduct a review and identify DoD issuances related to forecasting logistics demand for campaign planning, with an estimated completion date of May 31, 2022.

### (U) Our Response

(U) Comments from the DASD(L) addressed all specifics of the recommendation; therefore the recommendation is resolved but will remain open. We will close the recommendation once the Office of the Deputy Assistant Secretary of Defense for Logistics provides the results of its review and we are able to verify its completion.

**CUI** 

<sup>&</sup>lt;sup>49</sup> The ASD(S) "Logistics & Materiel Readiness Strategic Plan," October 2021.

- b. (U) No later than the next periodic review process, identify and recommend updates to the DoD issuances identified in Recommendation 1.a. or the creation of new issuances to assign roles and responsibilities across the Joint Logistics Enterprise. At a minimum, the recommended updates should propose the following actions:
  - i. (U) establish a DoD wide executive agent or management action group to track and monitor ongoing development and implementation of interoperable systems and tools (as defined in DoD Instruction 8330.01) for forecasting logistics demand across the Joint Logistics Enterprise, with the objective of expanding and optimizing sustainment data integration without duplicating efforts;
  - ii. (U) task existing logistics executive agents and offices of primary responsibility with coordinating and standardizing Joint Logistics Enterprise data, planning factors, tools, and logistics support area processes within their areas of responsibility; and
  - iii. (U) assign new executive agents and offices of primary responsibility to coordinate and standardize data, planning factors, tools, and logistics support area processes for areas within the Joint Logistics Enterprise that do not currently have an executive agent or office of primary responsibility.

### (U) Under Secretary of Defense (Acquisition and Sustainment) Response

- (U) The DASD(L), responding for the USD(A&S), agreed to update DoD issuances to ensure roles and responsibilities are properly documented. The DASD(L) stated that for Recommendations 1.b.i and 1.b.ii, the ASD(S) does not have the authority to provide direct oversight of the DoD Components' development of logistics systems and tools, and does not approve the development of DoD Component logistics systems and tools.
- (U) The DASD(L) also stated that assigning ASD(S) the responsibility to "track and monitor the development and implementation of interoperable systems and tools," and to "coordinate and de-conflict efforts across DoD Components" would require the addition of extensive ASD(S) resources, due to a lack of current subject matter expertise. The DASD(L) also stated that the DoD continues to be challenged by the inability to quickly integrate and operationalize new IT systems and tools. The DASD(L) stated that pursuing Recommendation 1.b would add to this challenge by creating an additional oversight burden that could potentially extend already lengthy timelines.

CUI Finding

- (U) The DASD(L) stated that the assignment of an executive agent for certain logistics functions already accomplishes the intent of Recommendation 1.b.ii. According to the DASD(L), the DoD assigns executive agents the responsibilities that are intended to ensure the development and implementation of interoperable systems and tools to forecast logistics demand for campaign planning. The DASD(L) stated that the DoD has not specified the exact tools or capabilities required by each executive agent, and that DoDD 5101.1, "DoD Executive Agent," directs executive agents to:
  - (U) Ensure proper coordination with the DoD Components for the responsibilities and activities assigned to provide continuous, sustainable, and global support as required by end users. Ensure effective planning throughout operations by developing a coordinated process and support plans for transition from peacetime to wartime or contingency operations, and
  - (U) Identify requirements and resources, including force structure to the extent permitted by law, necessary to execute assigned responsibilities and functions. Submit these requirements to the cognizant heads of the DoD Components to be included in their respective budget documentation.50

#### (U) Our Response

- (U) Comments from the DASD(L) partially addressed the recommendation; therefore, the recommendation is unresolved and remains open. We recognize that the USD(A&S) and ASD(S) have certain authorities; however, we disagree that OUSD(A&S) cannot establish policy or recommend a policy change to the Secretary of Defense or the Deputy Secretary of Defense to supervise the development and implementation of interoperable systems and tools for forecasting logistics demand for contingency planning. According to 10 U.S.C. § 133b, the USD(A&S), under the authority, direction, and control of the Secretary of Defense, shall perform duties such as establishing policies on and supervising all elements of the DoD related to sustainment, including logistics. Additionally, DoDD 5135.02 requires the USD(A&S) to establish policies for, and supervise all, elements of the DoD relating to sustainment, including logistics, to improve the visibility, accountability, and control of all critical assets. Furthermore, the L&MR Strategic Plan states:
  - (U) The Principal Deputy Assistant Secretary of Defense for Logistics will provide oversight responsibility for the management and implementation of this ASD(S) Strategic Plan and will assess progress, set priorities, and develop updates to the plan.

**CUI** 

 $<sup>^{50}\,\,</sup>$  The DoDD 5101.1, "DoD Executive Agent," November 21, 2003.

- (U) The L&MR Strategic Plan also announces efforts that align with the intent of Recommendation 1.b. For example, the L&MR Strategic Plan efforts include: (1) "Standardize JLEnt data, planning factors, tools, and logistics sustainability analysis processes for integrated contingency plans," and (2) "Improve asset visibility policy, procedures, and standards. To address the DASD(L)'s comments, we have revised Recommendation 1.b to align the recommendation with the objectives of the 2021 L&M Strategic Plan identified by the DASD(L) in the management comments.
- (U) We agree with the DASD(L) that executive agents exist for certain logistics functions. However, we disagree that the current executive agent assignments meet the intent of Recommendation 1.b.ii. We also disagree that the DoDDs identified by the DASD(L) in the management comments include responsibilities for executive agents to develop and implement interoperable systems and tools to forecast logistics demand for campaign planning. For example, DoDD 4705.01E, "Management of Land-Based Water Resources in Support of Contingency Operations," does not assign responsibilities to the Army, as the executive agent, for developing and implementing interoperable land-based water systems and tools.<sup>51</sup> Additionally, DoDD 5101.1 does not specifically task DoD executive agents with the responsibilities related to IT systems development.
- (U) Therefore, we revised Recommendation 1.b to clarify USD(A&S) actions needed and added Recommendation 1.b.iii to identify actions needed to improve forecasting logistics demand for contingency planning across the JLEnt. We request that the USD(A&S) provide additional comments on the revised Recommendation 1.b to describe planned actions to address the lack of assigned roles and responsibilities across the ILEnt for the development and implementation of interoperable systems and tools for forecasting logistics demand for campaign planning.

<sup>&</sup>lt;sup>51</sup> (U) The DoDD 4705.01E, "Management of Land-Based Water Resources in Support of Contingency Operations," June 3, 2015 incorporating Change 3, January 2, 2020.

c. (U) Update the DoD Logistics Strategy to align with the DoD Digital Modernization Strategy and the DoD Data Strategy, which identified specific goals to achieving the interoperability of DoD systems and tools, by addressing data interoperability as identified in DoD Instruction 8330.01 for forecasting logistics demand for campaign planning.

## (U) Under Secretary of Defense (Acquisition and Sustainment) Response

- (U) The DASD(L), responding for the USD(A&S), agreed and stated that in October 2021, the ASD(S) updated the DoD Logistics Strategy and reissued it as the L&MR Strategic Plan. The DASD(L) also stated that the new strategic plan aligns with the DoD Digital Modernization Strategy and the DoD Data Strategy in three specific lines of effort. Those lines of effort are:
  - **(U) Line of Effort 1.3.3** Guide modernization of Component logistics information systems and improve data analytics.
  - **(U)** Line of Effort 4.1.1 Standardize JLEnt data, planning factors, tools, and logistics sustainability analysis processes for integrated contingency plans.
  - **(U)** Line of Effort 4.1.2 Develop logistics options that address organic shortfalls in contested operational environments.
- (U) Lastly, the DASD(L) stated that the OASD(S) would further consider the intent of the recommendation in future updates to the L&MR Strategic Plan.

#### (U) Our Response

(U) Comments from the DASD(L) addressed all the specifics of the recommendation. The ASD(S) issued the L&MR Strategic Plan during our evaluation, in October 2021, and the plan was responsive to our recommendation. Therefore, the recommendation is closed.

### (U) Appendix A

### (U) Scope and Methodology

- (U) We conducted this evaluation from March 2021 through February 2022 in accordance with the "Quality Standards for Inspection and Evaluation," published in January 2012, by the Council of Inspectors General on Integrity and Efficiency. Those standards require that we adequately plan the evaluation to ensure that objectives are met and that we perform the evaluation to obtain sufficient, competent, and relevant evidence to support the findings, conclusions, and recommendations. We believe that the evidence obtained was sufficient, competent, and relevant to lead a reasonable person to sustain the findings, conclusions, and recommendations.
- (U) The scope of this project focused on the DoD's actions since March 2019 to develop interoperable systems and tools to forecast logistics demand for campaign planning across the JLEnt. We reviewed applicable laws and regulations; DoD directives and instructions; DoD strategies; and Joint Staff issuances to develop interoperable systems and tools for forecasting logistics demand for campaign planning. Specifically, we determined whether the OUSD(A&S) established policies and assigned roles and responsibilities to the JLEnt to develop interoperable systems and tools to forecast logistics demand for campaign planning. Furthermore, we assessed whether the DoD Logistics Strategy aligned with current DoD-wide efforts for interoperability of systems, such as the DoD Digital Modernization Strategy and the DoD Data Strategy. We interviewed key stakeholders and reviewed documentation to understand ongoing efforts to develop interoperable systems, current policies, roles, and responsibilities.
- (U) This report was reviewed by the DoD Components associated with this oversight project to identify whether any of their reported information, including legacy FOUO information, should be safeguarded and marked in accordance with the DoD CUI Program. In preparing and marking this report, we considered any comments submitted by the DoD Components about the CUI treatment of their information. If the DoD Components failed to provide any or sufficient comments about the CUI treatment of their information, we marked the report based on our assessment of the available information.

### (U) Criteria

(U) To address the objective for this report, we reviewed public laws and regulations, DoD policies, plans, and strategies related to DoD's actions to develop interoperable systems and tools to forecast logistics demand for campaign planning across the JLEnt.

- (U) Public Law 114-328, "The National Defense Authorization Act for Fiscal Year 2017," section 901
- (U) Section 2222, title 10, United States Code (10 U.S.C. § 2222), "Defense business systems: business process reengineering; enterprise architecture; management"
- (U) Section 133b, title 10, United States Code, (10 U.S.C. § 133b),
   "Under Secretary of Defense for Acquisition and Sustainment"
- (U) DoD Directive 5135.02, "Under Secretary of Defense for Acquisition and Sustainment (USD[A&S])," July 15, 2020
- (U) DoD Directive 5134.12, "Assistant Secretary of Defense for Logistics and Materiel Readiness (ASD[L&MR])," May 25, 2000 (certified current as of November 21, 2003; incorporating Change 1, October 27, 2010)
- (U) DoD Directive 8115.01, "Information Technology Portfolio Management," October 10, 2005
- (U) DoD Directive 8190.01E, "Defense Logistics Management Standards (DLMS)," January 9, 2015, Incorporating Change 3, December 30, 2019
- (U) DoD Instruction 8330.01, "Interoperability of Information Technology (IT), Including National Security Systems (NSS)," May 21, 2014 (incorporating Change 2, December 11, 2019)
- (U) DoD Instruction (DoDI) 5158.06, "Joint Deployment and Distribution Enterprise (JDDE) Planning and Operations," effective April 7, 2020
- (U) DoD Manual 4140.01, Volume 2, "DoD Supply Chain Materiel Management Procedures: Demand and Supply Planning," November 9, 2018
- (U) DoD Digital Modernization Strategy. DoD Information Resource Management Strategic Plan FY 19 – 23, July 12, 2019
- (U) DoD Data Strategy, September 30, 2020
- (U) DoD Logistics Strategic Plan, July 2010
- (U) Defense Logistics Manual 4000.25, "Defense Logistics Management System," Volume 1, Concepts and Procedures, latest change November 26, 2019, Change 9

- (U) Joint Publication 1, "Doctrine for the Armed Forces of the United States," March 25, 2013 (incorporating Change 1, July 12, 2017)
- (U) Joint Publication 4-0, "Joint Logistics," February 4, 2019 (incorporating Change 1, May 8, 2019)
- (U) Joint Publication 5-0, "Joint Planning," December 1, 2020

#### (U) Interviews and Documentation

- (U) We interviewed personnel from the OUSD(A&S), Joint Staff, CCMDs, and the Military Services. We conducted interviews with stakeholders and key personnel responsible for the DoD's actions to develop interoperable systems and tools to forecast logistics demand for campaign planning across the ILEnt. Specifically, we interviewed and obtained information from personnel at the following organizations:
  - (U) Office of the Under Secretary of Defense for Research and Engineering
  - (U) Office of the USD(A&S)
  - (U) Joint Staff Logistics and Joint Force Development Directorates
  - (U) The DLA's Center of Planning Excellence, Logistics Operations, Information Operations, Energy, and Troop Support
  - (U) CCMD Logistics Directorates U.S. Transportation Command, USEUCOM, USINDOPACOM, U.S. Northern Command, and USCENTCOM
  - (U) Military Services -Headquarters, Department of the Army, Office of the Deputy Chief of Staff for Logistics (G4); Headquarters, U.S. Army Training and Doctrine Command; Office of the Deputy Assistant Secretary of the Navy for Sustainment; U.S. Air Force Logistics Directorate (A4); and Headquarters Marine Corps, Installations and Logistics

### (U) Use of Computer-Processed Data

(U) We used computer-processed data to perform this evaluation. Specifically, we obtained a data set of DoD logistics IT systems that an OASD(S) official downloaded from DITPR and provided to us. The official stated that the DITPR data set included systems and tools used by the JLEnt to forecast logistics demand for campaign planning. During an interview, the OASD(S) official explained that the partial list of systems and tools they had identified as capable of forecasting logistics demand within the larger DITPR data set was not all-inclusive. Although the OUSD(A&S) list was not all-inclusive, we further analyzed the DITPR data set of systems and tools provided by OUSD(A&S) by using information such as the category of the software system (for example, business management area), key word searches, and manual screening to identify systems and tools that could

Appendixes **CUI** 

> (U) be used to forecast logistics demand. We used the results of our analysis to provide context to our evaluation results. Therefore, we believe that the computer processed data used is sufficiently reliable for the purposes of the evaluation.

### (U) Prior Coverage

(U) No prior coverage has been conducted on DoD actions to develop interoperable systems and tools to forecast logistics demand for campaign planning across the JLEnt during the last 5 years.

### (U) Appendix B

### (U) Other Matters of Interest

### (U) DoD and Joint Policy and Issuances Do Not Establish a Clear Process to Forecast Logistics Demand for Campaign Planning

(U) Joint Publication 1 (JP-1) presents principles that guide the employment of U.S. military forces. Specifically, JP-1 states that "... most often policy drives doctrine."52 However, DoD and Joint policy and issuances do not clearly define processes for forecasting logistics demand for campaign planning. During our review of policy and issuances over the course of our evaluation, we did not identify clear definitions and processes for forecasting logistics demand. Specifically, we reviewed and analyzed the following policies and issuances for definitions and processes to forecast logistics demand: DoDM 4140.01, Volume 2; Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3110.03F; Chairman of the Joint Chiefs of Staff Manual (CJCSM) 3150.23C; JP 4-0; and JP 5-0.53 Additionally, during our interviews with Joint Staff, USEUCOM, and USINDOPACOM logistics directorate officials, the officials stated that current DoD policies and doctrines did not establish a clear process for conducting forecasting logistics demand for campaign planning.

#### (U) DoDM 4140.01, Volume 2, Does Not Define Forecasting Logistics Demand for Campaign Planning

- (U) DoDM 4140.01, Volume 2, defines demand forecasting as the "prediction of demand for an item or group of items for a future period of time;" however, the manual does not define or establish further parameters around campaign planning. According to DoDM 4140.01, Volume 2, the purpose of the manual is to:
  - (U) implement policy, assign responsibilities, and provide procedures for DoD officials who work within or with the DoD supply system, and;
  - (U) establish standard terminology for use in DoD supply chain materiel management.

<sup>(</sup>U) Joint Publication 1, "Doctrine for the Armed Forces of the United States," March 25, 2013 (incorporating Change 1, July 12, 2017).

<sup>&</sup>lt;sup>53</sup> (U) DoD Manual 4140.01, Volume 2, "DoD Supply Chain Materiel Management Procedures: Demand And Supply Planning," November 9, 2018, CJCSI 3110.03F, "Logistics Supplement (LOGSUP) for the Joint Strategic Campaign Plan," April 9, 2021; CJCSM 3150.23c, "Joint Reporting Structure (JRS) Logistic Factors Report," August 30, 2007, Change 1 September 19, 2014, JP 4-0, "Joint Logistics," and JP 5-0, "Joint Planning."

Appendixes CUI

(U) An official from the OASD(S) stated that the definition of demand forecasting in DoDM 4140.01, Volume 2, is extremely general on purpose, to enable DoD Components and Military Services flexibility to establish policy based on their organization's specific needs. An official from the DLA's Center of Planning Excellence stated that the definition of forecasting logistics demand depends on whom you ask, and could refer to an item that is needed in 6 months or 10 years in the future. Without a clear definition, an official from the DLA's Information Operations stated that he differentiates forecasting demand for campaign plans, and forecasting demand for current and steady state operations, because that distinction is not defined in policy.

### (U) Joint Staff Policy and Issuances Do Not Establish a Clear, Defined Process To Forecast Demand for Campaign Planning

- (U) We also reviewed CJCSM 3150.23C, CJCSI 3110.03F, JP 4-0, and JP 5-0 and determined these documents did not provide a clear definition of demand forecasting for campaign planning. The purpose of CJCSM 3150.23C is to identify the reporting mechanism and process to enter and update Logistics Factor Files (LFF) data. It also prescribes data reporting to support the LFF, including uniform reporting requirements, and requires annual updates and uses the data to support the development, evaluation, and implementation of joint military operations plans and operations orders. The manual also states that data compiled in the LFF is a representation of five core logistics functions; however, the manual does not reference or contain additional data for the remaining two logistics functions, specifically "deployment and distribution" and "maintenance." Furthermore, the manual only states that it supports specific logistics processes, such as Adaptive Planning and Execution (APEX) war-gaming, and analytical products, such as analysis of future air and sealift acquisition.<sup>54</sup> As a result, we concluded that CJCSM3150.23C only defines data reporting requirements for specific processes and does not establish a clear, defined process to forecast demand for campaign planning.
- (U) The purpose of CJCSI 3110.03F is to provide guidance for logistics planning for global campaigns, regional, functional, or other directed planning from the Joint Strategic Campaign Plan. CJCSI 3110.03F requires the Joint Staff Logistics Directorate to conduct a sustainment planning conference using deployment data, service planning factors, and associated risks to calculate sustainment requirements, to include identifying National Stock Number requirements and service computation of

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<sup>(</sup>U) War gaming is a disciplined process, with rules and steps that attempt to visualize the flow of the operation. APEX is a compilation of joint policies, processes, procedures, tools, training, education, and stakeholders associated with developing and implementing plans and orders to further strategic objectives.

- (U) war reserve requirements required to support and maintain operations. However, while the policy document identifies these requirements, it does not include a clear, defined process to forecast logistics demand for campaign planning.
- (U) IP 4-0 provides fundamental principles and guidance for logistics planning execution and assessment in support of joint operations. The publication states that joint logistics planning provides the process and means to integrate, synchronize, and prioritize joint logistics, and further details that logisticians must identify requirements, and critical logistics assets and services needed, and need to address all core logistics functions. Furthermore, JP 4-0 defines a logistics estimate as an analysis of how combat service support factors can affect comparison of requirements and capabilities and states that the logistics estimate supports operation order development and execution. We concluded that JP 4-0 requires that joint logisticians to develop a logistics estimate consistent with the concept of logistics support, operation order development, and execution. However, we did not find the publication contained a detailed process on how to forecast logistics demand, and does not explicitly define a term to forecast logistics demand for campaign planning.
- (U) JP 5-0 identifies planning considerations for the Armed Forces of the United States. JP 5-0 states that campaign plans organize the day-to-day operations of the Joint Force to shape the Operating Environment and achieve national objectives. The IP 5-0 states that campaign plans establish objectives, conditions, and tasks under which the Unified Combatant Command and Military Service components build operations, activities, and investments to achieve objectives. Furthermore, JP 5-0 states the commander's logistics staff and Service Component logisticians develop a logistics overview, a concept of logistics of support, and states that a supporting organizations should conduct a logistics supportability analysis to determine the logistics support they must provide to adequately support mission execution. Furthermore, each supporting organization must also conduct a logistics supportability analysis to the lowest level of detail needed to quantify the logistics requirements to the National Stock Number level. We concluded that JP 5-0 provides guidance to determine whether capabilities exist to support logistics needs for mission execution by each organization, but that the document does not contain a detailed process on how to forecast logistics demand, and does not define a term for forecasting logistics demand for campaign planning.

Appendixes CUI

(U) Logistics officials at the Joint Staff Logistics Directorate, USEUCOM, and USINDOPACOM identified a lack of doctrine to forecast logistics demand for campaign planning. Specifically, officials from USEUCOM and USINDOPACOM logistics directorates stated that the processes on how to forecast logistics demand are absent in doctrine, as a result, joint organizations processes to forecast logistics demand differ across joint commands. Furthermore, a Joint Staff logistics official stated that a sustainment architecture did not exist, and they were looking to build a sustainment architecture "one level" below JP 5-0.

### (U) Management Comments

### (U) Deputy Assistant Secretary of Defense for Logistics



OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE 3500 DEFENSE PENTAGON WASHINGTON, DC 20301-3500

**Final Report Reference** 

#### MEMORANDUM FOR DEPARTMENT OF DEFENSE OFFICE OF INSPECTOR GENERAL

SUBJECT: Response to Department of Defense Inspector General Draft Report on Evaluation of the Department of Defense's Actions to Develop Interoperable Systems and Tools for Forecasting Logistics Demand Across the Joint Logistics Enterprise (Project No. D2021-DEV0PC-108.000)

As requested, responses to the general content and the recommendations contained in the subject report are provided below.

Draft Report Recommendation 1: We recommend that the Under Secretary of Defense (Acquisition and Sustainment):

- a. Review and identify DoD Issuances related to forecasting logistics demand for campaign planning.
- b. As appropriate, update the DoD Issuances identified in Recommendation 1.a. no later than the next periodic review process to assign roles and responsibilities across the Joint Logistics Enterprise to develop and implement interoperable systems and tools to forecast logistics demand for campaign planning. At a minimum, the roles and responsibilities should include the requirement for the Office of the Assistant Secretary of Defense (Sustainment) (ASD(S)) to:
  - i. track and monitor the development and implementation of interoperable systems and tools (as defined in DoD Instruction 8330.01) for forecasting logistics demand across the Joint Logistics Enterprise and avoid duplicating already existing efforts;
  - ii. coordinate and de-conflict efforts across DoD Components and assign offices of primary responsibility for developing and implementing interoperable systems and tools for forecasting logistics demand across the Joint Logistics Enterprise to DoD Components by core logistics function.
- c. Update the DoD Logistics Strategy to align with the DoD Digital Modernization Strategy and the DoD Data Strategy, which identified specific goals to achieving the interoperability of DoD systems and tools, by addressing data interoperability as identified in DoD Instruction 8330.01 for forecasting logistics demand for campaign planning.

Response to 1a.: Concur. The Office of the Deputy Assistant Secretary of Defense (Logistics) will conduct a review and identify DoD Issuances related to forecasting logistics demand for campaign planning. We anticipate completing this review by May 31, 2022.

Response to 1b: Partially concur. The Department concurs with updating DoD Issuances, as appropriate, to ensure roles and responsibilities are properly documented. With regard to the recommendations contained in 1.b.i and 1.b.ii, ASD(S) does not have the authority to provide direct oversight of the Components' development of logistics systems and tools. ASD(S) does not

Revised Recommendation 1.B

### (U) Deputy Assistant Secretary of Defense for Logistics (cont'd)

approve development of Component logistics systems and tools. The DoD Components receive direct funding for logistics systems and tools, and are required to certify their Information Technology (IT) systems and tools during the budget submission process through the DoD Chief Information Officer.

In its findings, the DoD Inspector General (IG) report states that: "Our analysis of an Office of the Under Secretary of Defense (Acquisition and Sustainment)-provided dataset identified over 1,100 DoD systems and tools with the potential to forecast logistics demand for campaign planning." Assigning ASD(S) the responsibility to "track and monitor the development and implementation of interoperable systems and tools", and to "coordinate and de-conflict efforts across DoD Components" would require the addition of extensive ASD(S) resources as this subject matter expertise is not inherent to the Office of the ASD(S). Additionally, the Department continues to be challenged by the inability to quickly integrate and operationalize new IT systems and tools. Pursuing this recommendation would add to this challenge by creating an additional oversight burden that could potentially extend already lengthy timelines.

Finally, the assignment of Executive Agency for certain logistics functions already accomplishes the intent of 1.b.ii, "assign offices of primary responsibility for developing and implementing interoperable systems and tools for forecasting logistics demand across the Joint Logistics Enterprise to DoD Components by core logistics function". The DoD assigns, to the Executive Agent, responsibilities that are intended to ensure the development and implementation of interoperable systems and tools to forecast logistics demand for campaign planning. The Department has not specified the exact tools or capabilities required by each Executive Agent however, DoD Directive (DoDD) 5101.1 (DOD Executive Agent) directs Executive Agents to:

- Ensure proper coordination with the DoD Components for the responsibilities and activities assigned to provide continuous, sustainable, and global support as required by end users. Ensure effective planning throughout operations by developing a coordinated process and support plans for transition from peacetime to wartime and/or contingency operations. (Section 5.2.2 of DoDD 5101.1), and to
- Identify requirements and resources, including force structure to the extent permitted by law, necessary to execute assigned responsibilities and functions. Submit these requirements to the cognizant Head of the DoD Component to be included in their respective budget documentation. (Section 5.2.3 of DoDD 5101.1)

Examples of the directed Executive Agents for logistics are provided in the below table. The complete list is located at https://dod-executiveagent.osd.mil/Default.aspx.

Title	DoD Executive Agent	DoDD
Bulk Petroleum	Defense Logistics Agency (DLA)	5101.08E
Construction and Barrier Materiel (Class IV Supply)	DLA	5101.12E
Defense Logistics Management Standards	DLA	8190.01E
Management of Land-Based Water Resources in Support of	Army	4705.01E
Contingency Operations		
Medical Materiel (Class VIII Supply)	DLA	5101.09E
Subsistence	DLA	5101.10E

2

### (U) Deputy Assistant Secretary of Defense for Logistics (cont'd)

Response to 1c.: Concur. The subject report stated, "In 2010, the Office of the Assistant Secretary of Defense (Logistics and Materiel Readiness) issued the DoD Logistics Strategic Plan (DoD Logistics Strategy)." However, during the course of this audit, ASD(S) updated this plan and reissued it as the, "Logistics & Materiel Readiness Strategic Plan" dated October 2021. This updated plan aligns with the DoD Digital Modernization Strategy and the DoD Data Strategy. Specific goals in the revised October 2021 Strategic Plan, located at  $https://www.acq.osd.mil/log/LMR/.strategic\_plan.html/OSD\_L\&MR\_Strategic\_Plan\_20211004\_log/LMR/.strategic\_plan.html/OSD\_L\&MR\_Strategic\_plan\_20211004\_log/LMR/.strategic\_plan.html/OSD\_L\&MR\_Strategic\_plan\_20211004\_log/LMR/.strategic\_plan.html/OSD\_L\&MR\_Strategic\_plan\_20211004\_log/LMR/.strategic\_plan.html/OSD\_L\&MR\_Strategic\_plan\_20211004\_log/LMR/.strategic\_plan.html/OSD\_L\&MR\_Strategic\_plan\_20211004\_log/LMR/.strategic\_plan\_2021100$ Final.pdf, include the following lines of effort (LOE):

LOE 1.3.3: Guide modernization of Component logistics information systems and improve data analytics.

**LOE 4.1.1:** Standardize Joint logistics Enterprise (JLEnt) data, planning factors, tools, and LSA logistics sustainability analysis processes for integrated contingency plans.

LOE 4.1.2: Develop logistics options that address organic shortfalls in contested operational environments.

In addition, OASD(S) will further consider the recommendation 1c. during revisions of the L&MR Strategic Plan.

For questions or to request additional information, my point of contact for this effort is

Leigh E. Method, SES Deputy Assistant Secretary of Defense for Logistics

### (U) Acronyms and Abbreviations

APEX	Adaptive	<b>Planning</b>	and	Execution
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**ASD(S)** Assistant Secretary of Defense for Sustainment

**CCMD** Combatant Command

**CIO** Chief Information Officer

CJCS Chairman of the Joint Chiefs of Staff

CJCSI Chairman of the Joint Chiefs of Staff Instruction

CJCSM Chairman of the Joint Chiefs of Staff Manual

DASD(L) Deputy Assistant Secretary of Defense for Logistics

**DITPR** DoD Information Technology Portfolio Repository

**DLA** Defense Logistics Agency

**DLM** Defense Logistics Manual

**DLMS** Defense Logistics Management Standards

**DoDD** DoD Directive

**DoDI** DoD Instruction

**DoDM** DoD Manual

GCSS-J Global Combat Support System – Joint

**IT** Information Technology

JDDE Joint Deployment and Distribution Enterprise

JLEnt Joint Logistics Enterprise

JP Joint Publication

**LOGCOP** Logistics Common Operating Picture

LFF Logistic Factors File

OUSD(A&S) Office of the Under Secretary of Defense for Acquisition and Sustainment

OASD(S) Office of the Assistant Secretary of Defense for Sustainment

U.S.C. United States Code

**USCENTCOM** U.S. Central Command

**USEUCOM** U.S. European Command

USINDOPACOM U.S. Indo-Pacific Command

**USMC** United States Marine Corps

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