



## DoD MANUAL 4140.01, VOLUME 12

# DoD SUPPLY CHAIN MATERIEL MANAGEMENT PROCEDURES: ENTERPRISE LOGISTICS DECISIONS

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**Purpose:** This manual is composed of several volumes, each containing its own purpose. In accordance with the authority in DoD Directive 5135.02 and DoD Instruction 4140.01:

- This manual:
  - Implements policy, assigns responsibilities, and provides procedures for DoD materiel managers and others who work within or with the DoD supply system.
  - Establishes standard terminology for use in DoD supply chain materiel management.
- This volume establishes the enterprise logistics decision making framework across the DoD Components for:
  - Sales and operations planning (S&OP).
  - The integrated materiel manager or single manager for item management of each interchangeable and substitutable (I&S) item, I&S master item, and I&S family.
  - The I&S families of national stock number (NSN) items.
  - The master item for each I&S family and the assignment of NSN items to an I&S family.

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## **SECTION 1: GENERAL ISSUANCE INFORMATION**

### **1.1. APPLICABILITY.**

This issuance applies to:

a. OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this issuance as the “DoD Components”).

b. Supply chain management processes for DoD supply classes for subsistence, clothing, individual equipment, tools, administrative supplies, petroleum, oils, lubricants, construction materials, medical materials, munitions and ammunition, and repair parts with an NSN registered in the Federal Logistics Information System (FLIS) as outlined in DoD Instruction 4140.01 and Volume 10 of this issuance.

## SECTION 2: RESPONSIBILITIES

### 2.1. ASSISTANT SECRETARY OF DEFENSE FOR SUSTAINMENT.

Under the authority, direction, and control of the Under Secretary of Defense for Acquisition and Sustainment, the Assistant Secretary of Defense for Sustainment:

- a. Reviews recommendations from the DoD Integrated Materiel Management Committee on the logistics assignment of the item manager (either an integrated materiel manager or the single manager for item management) for I&S items in the DoD supply chain in accordance with Volume 1 of DoD Manual (DoDM) 4140.26, DoDM 4140.68, and Volume 3 of this manual.
- b. Resolves differences on enterprise-level integrated materiel management of items that cannot be resolved by the DoD Integrated Materiel Management Committee.
- c. Monitors progress towards attaining strategic supply chain objectives based on DoD Component S&OP self-assessments concerning key performance indicators of demand and supply imbalances at the product family level for all items.

### 2.2. DIRECTOR, DEFENSE LOGISTICS AGENCY.

Under the authority, direction, and control of the Under Secretary of Defense for Acquisition and Sustainment, and in addition to the responsibilities in Paragraph 2.3., the Director, Defense Logistics Agency:

- a. Provides oversight of I&S items and coordinates with the DoD Components to eliminate unnecessary duplication in the management of I&S items.
- b. Designates an I&S program manager to:
  - (1) Serve as the DoD focal point for I&S item management.
  - (2) Coordinate with the designated DoD Component I&S points of contact on I&S item management.
  - (3) Assign a definitive order of use code to each item in each I&S family to facilitate I&S determinations.
  - (4) Provide a standard method for I&S item identification through the FLIS.

### **2.3. DOD COMPONENT HEADS.**

The DoD Component heads:

a. Designate I&S focal points to represent their organization's requirements for items during the coordination of actions to identify and manage I&S items, I&S master items, and I&S families.

b. Identify, catalog, and manage I&S items:

(1) Using Chapter 5 of Volume 6 in the FLIS Technical Procedures and the Cataloging Data and Transaction Standards (CDTS).

(2) In accordance with DoDMs 4140.26, 4100.39, and 4140.68; Volumes 2, 8, 9, and 10 of this manual; and Defense Logistics Manual 4000.25.

c. Promote consistent enterprise level management assignments:

(1) Within an I&S family.

(2) For I&S items and I&S master items.

d. Establish key performance indicators, such as the supply chain enterprise metrics identified in Volume 10 of this manual, to measure progress toward the achievement of strategic supply chain objectives.

e. Implement and use an S&OP framework to produce a balanced and actionable demand and supply plan that aligns with strategic supply chain objectives.

f. Internally review the outcome of S&OP self-assessments conducted in accordance with Paragraph 3.4.c.

## SECTION 3: PROCEDURES

### 3.1. MANAGEMENT OF I&S ITEMS.

a. DoD Components:

- (1) Provide consistent management of I&S items, I&S master items, and I&S families.
- (2) Establish I&S relationships when two or more items are identified as interchangeable or substitutable with or for each other.
- (3) Manage I&S items in an I&S family that:
  - (a) Are interchangeable and:
    1. Possess physical and functional characteristics that are equivalent in performance, reliability, and maintainability to another item of similar or identical purposes.
    2. Exchangeable for other items in the I&S family without alteration of the items themselves or of adjoining items, except for adjustments that provide comparable performance to satisfy given requirements under given conditions.
  - (b) Are substitutable and possess functional and physical characteristics that are capable of being exchanged for another item only under specified conditions or for particular applications and without alteration of the items themselves or of adjacent or adjoining items within the end item.
  - (c) Contain the full range of items identified as interchangeable or substitutable with or for each other in accordance with item identification procedures in DoD Instruction 8320.03 and DoDM 4100.39.
  - (d) Have one I&S master item in an I&S family. The I&S master item is a generic item that is suitable for use as a substitute for any item in the I&S family.
- (4) Agree on the use of an I&S master item as suitable for use as a substitute for any item in the I&S family.

b. In accordance with Volume 3 this manual, DoD Components participate in the DoD Integrated Materiel Management Committee to:

- (1) Assign I&S items to an item manager (either an integrated materiel manager or a single manager for item management) that has a requirement for the item in accordance with Volume 1 of DoDM 4140.26 and DoDM 4140.68.
- (2) Designate the I&S family and the I&S master item.

(3) Identify a range of items within an I&S family that are interchangeable with each other using the procedures in Volumes 2, 6, 10, and 11 of CDTS and Table 162 of Volume 10, CDTS.

c. The organization assigned as the item manager for an I&S master item:

(1) Has a requirement for the I&S master item and is thereby assigned as the integrated materiel manager or the single manager for item management for all I&S items in the I&S family of the I&S master item.

(2) Initiates action to establish an I&S family when two or more items are determined to have an I&S relationship in accordance with Volume 3 of this manual, Volume 1 of DoDM 4140.26, and DoDM 4140.68.

(3) Initiates a logistics assignment to align an I&S item in the I&S family of the I&S master item in accordance with Volumes 1, 2, and 4 of DoDM 4140.26 and DoDM 4140.68.

(4) Limits the I&S family to 50 NSNs, including one master item NSN which is the generic NSN for the I&S family.

(5) Include I&S items in the I&S family that are assigned to the item manager.

(6) Maintains current I&S item information and I&S families in the FLIS and notifies organizations that use the I&S items in the I&S family of revisions to the I&S items in accordance with DoDM 4100.39, Chapter 6 of Volume 6 in the FLIS Technical Procedures, and CDTS.

(7) Maintains visibility of I&S assignments and requirements for all users of the items in the I&S family.

d. Organizations that use I&S items process their item requirements in accordance with Volume 1 of DoDM 4140.26, DoDM 4140.68, and Volumes 2 and 3 of this manual.

e. DoD Components use procedures in DoDM 4140.26; DoDM 4140.68; DoDM 4100.39; Volumes 2, 3, 8, 9, 10, and 11 of this manual; Volume 1 of DoDM 4140.27; FLIS Technical Procedures; and CDTS for item management actions:

(1) Such as item adoption, cataloging, pricing, logistics assignment and reassignment, standardization, configuration management, requirement computation, war reserve materiel requirements, budgeting and funding, requisition processing, critical item management, repairs, reclamation, returns, inactive item reviews, and shelf-life management.

(2) While maintaining alignment of serial numbers and unique item identifiers within appropriate I&S families for I&S master items and I&S item management to establish and maintain the total item property records in accordance with Volume 11 of this manual.

(3) In coordination with all users of the I&S items in an I&S family.

### **3.2. CHANGES IN I&S ITEM REQUIREMENTS.**

a. Using the procedures in DoDM 4100.39, Chapter 6 of Volume 6 in the FLIS Technical Procedures, and CDTS, the item manager for an I&S master item coordinates with all users of the I&S items in an I&S family:

- (1) When considering changes to an I&S family such as:
  - (a) Increasing or decreasing item demand quantities or other changes in requirements.
  - (b) Adding or deleting items.
  - (c) New or revised family structures.
  - (d) Proposed I&S master items or related items, which are items with functional or physical characteristics that do not include all characteristics of the master item in an I&S family.
- (2) To maintain consistent management assignments within an I&S family.
- (3) To assess materiel management requirements, meet customer requirements, and identify changes to meet customer requirements.
- (4) To negotiate agreement with all primary inventory control activities and secondary inventory control activities that use the I&S items in an I&S family to make proposed changes to the management of I&S items. The item manager for an I&S master item will make changes to the management of an I&S item only when concurrence is reached with all users in accordance with DoDM 4140.68 and Volume 4 of DoDM 4140.26.

b. A DoD Component may propose a change to delete or add an item to an I&S family after coordinating with all DoD Components that use the item. The item manager for an I&S master item will:

- (1) Collaborate with all users of items in an I&S family until all conflicts are resolved and an agreement is reached with all users of items in an I&S family.
- (2) Once agreement is reached to delete an I&S item from an I&S family or to add a new item to an I&S family, submit the proposed actions in accordance with DoDM 4140.68 and Volume 4 of DoDM 4140.26.

### **3.3. PROVISIONING FOR I&S ITEMS.**

DoD Components will:

- a. Screen provisioning requirements for potential and existing I&S items.
- b. Consider use of related items in an I&S family before adding new items.



c. Determine if the I&S master item and the related I&S items in a family will meet requirements on a technical and engineering basis established in a completed standardization study, an approved engineering change proposal, or technical directive, order, or instruction.

d. Coordinate with the provisioning organization on preliminary determinations of an I&S relationship and code assignments relevant to item adoption for provisioning in accordance with Volume 2 of this manual.

e. Coordinate with the users of the I&S items to establish appropriate I&S families, code assignments, and requirements.

### **3.4. S&OP.**

a. The DoD Components use an S&OP framework to:

(1) Balance demand and supply within product families.

(2) Align materiel management strategic objectives with overarching DoD Component and DoD strategic supply chain objectives, such as those documented annually in the National Security Strategy, military strategy, and defense planning guidance.

(3) Measure progress towards achieving strategic supply chain objectives with the applicable and appropriate supply chain enterprise metrics identified in Volume 10 of this manual.

b. DoD Components develop and implement S&OP by:

(1) Developing, validating, and reviewing the demand and supply plans established in accordance with Volumes 2 and 3 of this manual and Volumes 1 and 2 of the Defense Logistics Manual 4000.25.

(2) Aligning the demand and supply plans with strategic supply chain objectives.

(3) Focusing supply planning to meet forecasted DoD requirements for operations.

c. DoD Components review the outcome of S&OP internally to:

(1) Address imbalances between demand and supply based on the results of supply chain enterprise metrics in accordance with Volume 10 of this manual.

(2) Identify changes for future S&OP.

(3) Request assistance from supply chain organizations that have requirements for similar items when needed.

(4) Conduct self-assessments of S&OP maturity in fully realizing objectives to establish, integrate, and continuously improve the balance of demand and supply planning.

## GLOSSARY

### G.1. ACRONYMS.

ACRONYM	MEANING
CDTS	Cataloging Data and Transaction Standards
DoDM	DoD manual
FLIS	Federal Logistics Information System
I&S	interchangeable and substitutable
NSN	national stock number
S&OP	sales and operations planning

### G.2. DEFINITIONS.

A complete glossary of DoD supply chain terms and definitions is maintained on the Deputy Assistant Secretary of Defense for Logistics website at [https://www.acq.osd.mil/log/LOG\\_SD/policy\\_vault.html](https://www.acq.osd.mil/log/LOG_SD/policy_vault.html).

## REFERENCES

- Cataloging Data and Transaction Standards, dates vary by volume<sup>1</sup>
- Defense Logistics Manual 4000.25, “Defense Logistics Management Standards,” dates vary by volume<sup>1</sup>
- DoD Directive 5135.02, “Under Secretary of Defense for Acquisition and Sustainment,” (USD(A&S)),” July 15, 2020
- DoD Instruction 4140.01, “DoD Supply Chain Materiel Management Policy,” March 6, 2019
- DoD Instruction 8320.03, “Unique Identification (UID) Standards for Supporting the DoD Enterprise,” November 4, 2015, as amended
- DoD Manual 4100.39, “Federal Logistics Information System (FLIS) Procedures,” March 8, 2017, as amended
- DoD Manual 4140.01, Volume 2, “DoD Supply Chain Materiel Management Procedures: Demand and Supply Planning,” November 9, 2018
- DoD Manual 4140.01, Volume 3, “DoD Supply Chain Materiel Management Procedures: Materiel Sourcing,” October 9, 2019, as amended
- DoD Manual 4140.01, Volume 8, “DoD Supply Chain Materiel Management Procedures: Materiel Data Management and Exchange,” February 10, 2014, as amended
- DoD Manual 4140.01, Volume 9, “DoD Supply Chain Materiel Management Procedures: Materiel Programs,” February 16, 2018, as amended
- DoD Manual 4140.01, Volume 10, “Supply Chain Materiel Management Procedures: Supply Chain Inventory Reporting and Metrics,” March 9, 2017, as amended
- DoD Manual 4140.01, Volume 11, “Supply Chain Materiel Management Procedures: Inventory Accountability And Special Management And Handling,” March 8, 2017, as amended
- DoD Manual 4140.26, “DoD Integrated Materiel Management for Consumable Items,” June 10, 2021
- DoD Manual 4140.27, Volume 1, “DoD Shelf-Life Management Program: Program Administration,” July 6, 2016, as amended
- DoD Manual 4140.68, “Integrated Materiel Management of Nonconsumable Items,” March 5, 2020
- Federal Logistics Information System (FLIS) Technical Procedures, dates vary by volume<sup>1</sup>

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<sup>1</sup> Available at <https://www.dla.mil/>