



DoD INSTRUCTION 4245.15

DIMINISHING MANUFACTURING SOURCES AND MATERIAL SHORTAGES MANAGEMENT

Originating Component: Office of the Under Secretary of Defense for Acquisition and Sustainment

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Purpose: In accordance with the authority in DoD Directive 5135.02, this issuance:

- Establishes policy, assigns responsibilities, and prescribes procedures for diminishing manufacturing sources and material shortages (DMSMS) management.
- Implements risk-based, proactive DMSMS management for all DoD materiel, parts, equipment, assemblies, components, material, and software, referred to in this issuance as “DoD items,” throughout the life cycle in accordance with:
 - The authority in DoD Instructions (DoDIs) 4140.01, 5000.02T, 5000.02, 5000.75, 5000.80, 5000.81, 5000.85, and 5000.87.

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SECTION 1: GENERAL ISSUANCE INFORMATION

1.1. APPLICABILITY.

This issuance applies to 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”).

1.2. POLICY.

It is DoD policy to:

- a. Establish and implement risk-based, proactive DMSMS management throughout the life cycle of all DoD items.
- b. Evaluate all DoD system designs and redesigns for potential DMSMS issues that could arise during the life cycle of DoD items.
- c. Implement resolutions, if necessary, to minimize or eliminate risks and negative impacts (e.g., cost, schedule delays, readiness) resulting from DMSMS issues throughout the life cycle of DoD items.
- d. Implement improvements to DMSMS management processes throughout the life cycle of all DoD items across the DoD enterprise.

SECTION 2: RESPONSIBILITIES

2.1. UNDER SECRETARY OF DEFENSE FOR ACQUISITION AND SUSTAINMENT USD(A&S).

The USD(A&S):

- a. Establishes and implements acquisition and sustainment policies, procedures, regulations, guidance, and training to minimize the impact of DMSMS on supply chain risk.
- b. Mitigates DMSMS risk throughout the life cycle of DoD items.

2.2. ASSISTANT SECRETARY OF DEFENSE FOR ACQUISITION.

Under the authority, direction, and control of the USD(A&S), the Assistant Secretary of Defense for Acquisition:

- a. Integrates DMSMS risk management processes in acquisition and contracting policy, procedures, guidance, regulations, and training.
- b. Addresses the impacts of DMSMS on DoD items with a focus on minimizing the potential impacts to weapon system production, the supply chain, and sustainment.
- c. Standardizes DMSMS management contract language and promotes its use in contracts in accordance with Standardization-Related Document (SD) 26.
- d. Designates a primary point of contact to serve as the organization's lead representative for the DoD DMSMS Working Group.
- e. Supports the Assistant Secretary of Defense for Sustainment (ASD(S)) in overseeing and monitoring the overall effectiveness and efficiency of DMSMS management processes throughout DoD and continually develops improvements.

2.3. ASD(S).

Under the authority, direction, and control of the USD(A&S), the ASD(S):

- a. Serves as the principal for DMSMS management within the DoD.
- b. Establishes the DoD DMSMS Working Group and designates an individual to serve as its co-chair.
- c. Integrates supply chain and DMSMS risk management processes in sustainment policy, procedures, guidance, regulations, and training.

d. Provides oversight and monitors the overall effectiveness and efficiency of DMSMS management processes throughout DoD and continually develops improvements.

2.4. DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR INDUSTRIAL POLICY.

Under the authority, direction, and control of the USD(A&S), the Deputy Assistant Secretary of Defense for Industrial Policy:

a. Integrates DMSMS risk management processes in industrial base policy, procedures, guidance, regulation, and training.

b. Communicates DMSMS issues in the industrial base with the DoD Components and assists with their resolution.

c. Supports the ASD(S) in overseeing and monitoring the overall effectiveness and efficiency of DMSMS management processes throughout DoD and in continually developing improvements.

d. Establishes the Priority Allocation of Industrial Resources (PAIR) Task Force to address critical material shortages, as required, in accordance with DoD 4400.1-M.

e. Designates a principal point of contact to serve as the organization's lead representative for the DoD DMSMS Working Group.

2.5. DIRECTOR, DEFENSE CONTRACT MANAGEMENT AGENCY.

Under the authority, direction, and control of the USD(A&S), in addition to the responsibilities in Paragraph 2.7., the Director, Defense Contract Management Agency:

a. Integrates DMSMS risk management processes in contract management policy, procedures, guidance, regulations, and training.

b. Develops and implements a surveillance process to report the performance of contractors' DMSMS management activities and identify risks to DoD customers as authorized by contract.

c. Coordinates communication with the affected DoD Component(s) and the DoD DMSMS Working Group as authorized by contract when DMSMS risks and issues are identified during surveillance of contractors' DMSMS processes.

d. Designates a primary point of contact to serve as the organization's lead representative for the DoD DMSMS Working Group.

2.6. UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING.

The Under Secretary of Defense for Research and Engineering:

- a. Includes integrated risk-based, proactive DMSMS management in policy, procedures, guidance, and training for systems engineering, manufacturing, technology protection, and test and evaluation to reduce the occurrence and impact of DMSMS (e.g., cost, schedule delays, readiness) on programs and systems.
- b. Supports the ASD(S) in overseeing and monitoring the overall effectiveness and efficiency of DMSMS management processes throughout DoD and in continually developing improvements.
- c. Provides technical advice and assistance on DMSMS management to the DoD Components as needed.
- d. Designates an individual to serve as the co-chair of the DoD DMSMS Working Group.
- e. Defines DMSMS-related requirements for the Government Industry Data Exchange Program.

2.7. DOD COMPONENT HEADS.

The DoD Component heads:

- a. Establish, develop, and implement integrated risk-based, proactive policy, procedures, regulations, guidance, and training:
 - (1) To minimize the impact of DMSMS issues.
 - (2) For program offices and supply chain organizations.
 - (3) For engineering, logistics, maintenance, and industrial base offices.
 - (4) In accordance with:
 - (a) DoDIs 4140.01, 5000.02, 5000.02T, 5000.75, 5000.80, 5000.81, 5000.85, and 5000.87.
 - (b) SD 22 and SD 26.
 - (c) The current version of the systems engineering plan outline from the Office of the Deputy Assistant Secretary of Defense for Systems Engineering.
 - (d) The current version of the life cycle sustainment plan outline from the office of the ASD(S).
- b. Designate a DoD Component lead office within each DoD Component to provide DMSMS management oversight.
- c. Designate a primary point of contact to serve as the DoD Component's lead representative for the DoD DMSMS Working Group.

d. Confirms the adequacy of DMSMS risk evaluation, mitigation, and resolution during systems engineering technical reviews and independent technical risk assessments as they relate to system design and redesign, parts selection, mission and system assurance, sustainment, and manufacturing.

e. Establish DMSMS management metrics and internal reporting requirements to reduce cost and improve efficiency.

f. Share information on DMSMS issues and resolutions within 10 business days of occurrence among all DoD Components using the Government Industry Data Exchange Program and collaborate on resolutions where feasible.

g. Direct supply organizations develop and implement processes to identify and assess DMSMS issues and risks using supply system data and communicate that information to the responsible DMSMS management organizations and affected program offices.

h. Direct acquisition programs and other organizations responsible for DMSMS management in support of those programs to implement and conduct the actions in Section 3 of this issuance throughout the life cycle of all DoD items regardless of whether those actions are performed by contractors or the government.

i. Where appropriate, coordinate with other DoD program offices, such as the Defense-wide Manufacturing Science and Technology Office, the Industrial Base Analysis and Sustainment Office, and the Defense Production Act Title III Office, to support risk mitigation or resolution of DMSMS issues.

2.8. SECRETARIES OF THE MILITARY DEPARTMENTS; DIRECTOR, DEFENSE LOGISTICS AGENCY; DIRECTOR, MISSILE DEFENSE AGENCY; AND DIRECTOR, DEFENSE HEALTH AGENCY.

The Secretaries of the Military Departments; the Director, Defense Logistics Agency; the Director, Missile Defense Agency; and the Director, Defense Health Agency, in addition to the responsibilities in Paragraph 2.7., provide DMSMS management direction and oversight of the program offices and other DMSMS management performing organizations under each official's purview.

SECTION 3: DMSMS MANAGEMENT PROCEDURES

The acquisition and item management program offices and other DMSMS management performing organizations:

- a. Develop (as soon as feasible after acquisition pathway authorization) and maintain a DMSMS management plan to document proactive, risk-based DMSMS management processes and team structures necessary to:
 - (1) Identify DMSMS risks (e.g., monitor bills of materials, review DMSMS notifications, and examine technology trends) in all life cycle phases.
 - (2) Assess the potential for negative impacts on schedule or readiness.
 - (3) Analyze potential mitigations.
 - (4) Implement the optimal resolution.
- b. Collect and maintain DMSMS case and management operations data and use the data to:
 - (1) Estimate and justify requests for resources in the programming and budgeting process to resolve DMSMS issues and conduct DMSMS management (e.g., resolution type, resolution cost, and number of items monitored).
 - (2) Assess the effectiveness of DMSMS management processes.
 - (3) Continuously improve DMSMS management processes.
- c. Direct consideration of DMSMS when designing new items and redesigning existing items and in the production and reproduction of those items. Evaluate, document, and manage all DMSMS risks (e.g., technology selection, item selection, use of commercial-off-the-shelf items, proprietary or closed architectures) associated with these designs.
- d. Identify, document, and mitigate DMSMS risks and issues throughout the life cycle of DoD items to minimize or eliminate their negative impacts.
- e. Program and budget for both DMSMS management operations and DMSMS resolutions.
- f. Include provisions in contracts and requests for proposals requiring the execution of the DMSMS management plan to:
 - (1) Perform proactive, risk-based DMSMS management and resolve DMSMS issues.
 - (2) Specify requirements for contractors and their suppliers to report information needed for government oversight (e.g., identification of DMSMS issues, system health, and research and analysis of resolutions).

(3) Provide access, delivery, and technical data rights (e.g., indentured bills of material, drawings, models, and supportability information) necessary to:

(a) Perform proactive, risk-based DMSMS management.

(b) Implement resolutions to DMSMS issues.

(c) Continue DMSMS management in support of a DMSMS exit strategy to enable the transfer of DMSMS management activities at the end of the contracting period.

(4) Establish a DMSMS exit strategy for life cycle phase changes, contract transitions, or similar situations.

g. Resolve DMSMS issues in a timely manner to minimize their impact on schedule, readiness, and cost.

h. Communicate with supply organizations internal and external to the DoD Component on mitigation of issues and risks identified in Paragraph 2.7.g of this issuance.

i. Train the DMSMS workforce and other stakeholders on DMSMS management.

j. Evaluate DMSMS management activities in logistics and engineering processes and practices. These evaluations will be performed during logistics assessments and systems engineering technical reviews as described in DoDI 5000.02, starting at preliminary design review or its equivalent.

k. Establish a scheduled frequency for updating the DMSMS management plan.

GLOSSARY

G.1. ACRONYMS.

ACRONYM	MEANING
ASD(S)	Assistant Secretary of Defense for Sustainment
DMSMS DoDI	diminishing manufacturing sources and material shortages DoD instruction
PAIR	priority allocation of industrial resources
SD	standardization-related document
USD(A&S)	Under Secretary of Defense for Acquisition and Sustainment

G.2. DEFINITIONS.

These terms and their definitions are for the purpose of this issuance.

TERM	DEFINITION
DMSMS case	Documents that enable the tracking and management of a DMSMS issue from its initial identification to the implementation of the selected resolution.
DMSMS exit strategy	Strategy for the transfer of data necessary to continue DMSMS management processes and highlight the existence of any known or anticipated DMSMS issues with a near-term impact on the system, as well as a recommended resolution. Such a strategy describes the transfer of DMSMS management responsibilities and activities required when transitioning to a new DMSMS management provider or a new contract.
DMSMS issue	The loss, or impending loss, of manufacturers or suppliers of items, raw materials, or software.
DMSMS management	A multidisciplinary process to identify risks resulting from obsolescence, loss of manufacturing sources, or material shortages; to assess the potential for negative impacts on schedule or readiness; to analyze potential mitigations; and then to implement the most cost-effective resolution.

TERM	DEFINITION
DoD item	DoD materiel, parts, equipment, assemblies, components, material, and software.
life cycle	All phases of life for a DoD item including research, development, test, and evaluation, production, deployment (inventory), operations and support, and disposal.
material	Property that may be consumed or expended during the performance of a contract, component parts of a higher assembly, or items that lose their individual identity through incorporation into an end-item. Material does not include equipment, special tooling, special test equipment, or real property.
materiel	All items necessary to equip, operate, maintain, and support military activities without distinction as to their application for administrative or combat purposes, excluding real property, installations, and utilities. Materiel is either serviceable (i.e., in an issuable condition) or unserviceable (i.e., in need of repair to make it serviceable).
PAIR	Allocation of all items necessary to equip, operate, maintain, and support military activities without distinction as to their application for administrative or combat purposes, excluding real property, installations, and utilities. If purchase orders cannot be fulfilled in a timely manner, the Deputy Assistant Secretary of Defense for Industrial Policy establishes a PAIR, assets are frozen, and purchase orders are prioritized from a DoD enterprise level.
supply chain risk management	The process for managing risk by identifying, assessing, and mitigating threats, vulnerabilities, and disruptions to the DoD supply chain from beginning to end to ensure mission effectiveness. Successful supply chain risk management maintains the integrity of products, services, people, and technologies, and ensures the uninterrupted flow of product, materiel, information, and finances across the lifecycle of a weapon or support system. DoD supply chain risk management encompasses all sub-sets of supply chain risk management, such as cybersecurity, software assurance, obsolescence, counterfeit parts, foreign ownership of sub-tier vendors, climate change-related risks, and other categories of risk that affect the supply chain.
supply organizations	DoD's and the Military Services' centralized supply chain management agencies (e.g., Defense Logistics Agency, Naval Supply Systems Command).

TERM

DEFINITION

technical data rights

Rights to recorded information that is acquired and retained in accordance with the program manager's data management strategy. The recorded information is used to define a design and to produce, support, maintain, or operate the system or subsystem. Examples of technical data include research and engineering data, engineering drawings, and associated lists, specifications, standards, process sheets, manuals, technical reports, technical orders, catalog-item identifications, data sets, studies and analyses and related information, and computer software.

REFERENCES

- Assistant Secretary of Defense for Logistics and Materiel Readiness Memorandum, “Life-Cycle Sustainment Plan Outline,” current version¹
- Defense Standardization Program Office Standardization-Related Document 22, “Diminishing Manufacturing Sources and Material Shortages (DMSMS): A Guidebook of Best Practices for Implementing a Robust DMSMS Management Program,” January 2016²
- Defense Standardization Program Office Standardization-Related Document 26, “DMSMS Contract Language Guide Book,” October 2019²
- DoD 4400.1-M, “Department of Defense Priorities and Allocations Manual,” February 21, 2002, as amended
- 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 5000.02, “Operation of the Adaptive Acquisition Framework,” January 23, 2020
- DoD Instruction 5000.02T, “Operation of Defense Acquisition System,” January 7, 2015, as amended
- DoD Instruction 5000.75, “Defense Business Systems,” February 2, 2017, as amended
- DoD Instruction 5000.80, “Operation of the Middle Tier of Acquisition,” December 30, 2019
- DoD Instruction 5000.81, “Urgent Capability Acquisition,” December 31, 2019
- DoD Instruction 5000.85, “Major Capability Acquisition,” August 6, 2020
- DoD Instruction 5000.87, “Operation of the Software Acquisition Pathway,” October 2, 2020
- Office of the Deputy Assistant Secretary of Defense for Systems Engineering, “Systems Engineering Plan (SEP) Outline,” current version³

¹ Available on <https://www.dau.edu/tools/Lists/DAUTools/>

² Available on <https://www.dsp.dla.mil/Policy-Guidance/Key-Policy-Documents/>

³ Available on <http://acqnotes.com/acqnote/acquisitions/systems-engineering-plan>