

## DOD MANUAL 4140.01, VOLUME 3

## DOD SUPPLY CHAIN MATERIEL MANAGEMENT PROCEDURES: MATERIEL SOURCING

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Approved by: Change 1 Approved by:	Robert H. McMahon, Assistant Secretary of Defense for Sustainment Christopher Lowman, Assistant Secretary of Defense for Sustainment

**Purpose:** This manual is composed of several volumes, each containing its own purpose. In accordance with the authority in DoD Directive (DoDD) 5135.02, DoDD 5134.12, and DoD Instruction (DoDI) 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:

• Describes procedures for the DoD supply chain materiel management processes dealing with sourcing and acquiring materiel.

• Establishes the DoD Integrated Materiel Management Committee (IMMC).

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

**1.1. APPLICABILITY.** This issuance applies to OSD, the Military Departments (including the Coast Guard at all times, including when it is a Service in the Department of Homeland Security by agreement with that Department), 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. OVERARCHING CAVEAT.** Nothing in this issuance is intended to waive, deviate from, or provide an exception to any law or regulation governing the acquisition of materiel.

**1.3. SUMMARY OF CHANGE 1.** The changes to this issuance:

a. Add the DoDD 4715.21 requirements to consider climate change as part of supply chain risk management.

b. Update organizational titles, responsibilities, definitions, and references for accuracy.

## **SECTION 2: RESPONSIBILITIES**

**2.1. ASSISTANT SECRETARY OF DEFENSE FOR SUSTAINMENT (ASD(S)).** Under the authority, direction, and control of the Under Secretary of Defense for Acquisition and Sustainment, the ASD(S):

a. Oversees the DoD supply chain sourcing and acquisition process to optimize resources to meet support strategies that employ, to the furthest extent, collaboration between support providers and customers.

b. Reviews and approves exemptions to integrated materiel management for purposes of national security or war conditions.

**2.2. DOD COMPONENT HEADS.** The DoD Component heads implement the procedures prescribed in this volume and ensure that supplemental guidance and procedures are in accordance with DoDI 4140.01 and this volume.

2.3. SECRETARIES OF THE MILITARY DEPARTMENTS, DIRECTOR, MISSILE DEFENSE AGENCY (MDA), AND DIRECTOR, DEFENSE LOGISTICS AGENCY (DLA). In addition to the responsibilities in Paragraph 2.2., the Secretaries of the Military Departments, the Director, MDA (the Director, MDA, is under the authority, direction, and control of the Under Secretary of Defense for Research and Engineering), and the Director, DLA (the Director, DLA, is under the authority, direction, and control of the Under Secretary of Defense for Acquisition and Sustainment):

a. Develop and implement strategies for sourcing and acquiring materiel in accordance with Sections 3 and 5 of this volume.

b. Select the best value support alternatives (organic support, commercial, or a mix of both) in accordance with Section 4 of this volume.

c. Establish requirements for materiel managers to participate in sustainment planning for weapon system acquisition programs as soon as possible.

d. Conform to item management criteria approved by the ASD(S) in assigning materiel managers.

e. Establish and implement programs to:

- (1) Annually evaluate and improve the quality and reliability of secondary items.
- (2) Establish contract specifications.

f. Establish and implement, for their Military Department or agency, a standard strategy and program for diminishing manufacturing sources and material shortages (DMSMS) in accordance with DoDI 4245.15, that:

(1) Reduces or eliminates the cost and schedule impacts of all identified DMSMS problems.

(2) Helps ensure DMSMS problems do not adversely impact weapon system readiness.

## **SECTION 3: MATERIEL SOURCING STRATEGIES**

**3.1. REQUIREMENT FOR SOURCING**. When finding, evaluating, and engaging suppliers for acquiring materiel, the Military Departments, MDA, and DLA will:

a. Use mandatory U.S. Government sources as listed in Subparts 8.002 and 8.003 of the Federal Acquisition Regulation (FAR) as the first sources for supplies. If supplies are not available from those sources, the Military Departments, MDA, and DLA are encouraged to use the non-mandatory sources listed in Subpart 8.004 of the FAR.

b. Consider best value when evaluating manufacturers and distributors as possible sources if the mandatory sources listed in the FAR are not viable. Specifically, the Military Departments, MDA, and DLA will look at price plus these other factors to determine best value:

(1) Timeliness and Reliability of Delivery. Analyze past performance to assess the ability of the source to:

(a) Consistently deliver material to the government reliably and on time.

(b) Use an existing distribution network with metrics indicating timely and reliable deliveries.

(2) Product Quality. Determine if the source has quality controls in place that guard against counterfeit materiel or unauthorized product substitution.

(3) Existing Supplier Alliances. Determine if the source is the original equipment manufacturer for the item, provides items similar to those required, or has strategic acquisition agreements in place.

(4) Product Energy-efficiency and Environmental Impacts. Determine if the source offers cost-effective or energy-efficient products that:

(a) Are environmentally friendly items (i.e., sustainable products).

(b) Meet operational needs and improve operational outcomes by reducing logistics burdens to operating forces.

(c) Offer lower operations and sustainment costs.

c. Identify multiple qualified sources whenever possible. Establish primary and secondary suppliers to provide security against catastrophic events interrupting support from a single supplier and to ensure price competition. Exclude prohibited sources in accordance with Part 225.7 of the Defense Federal Acquisition Regulation Supplement (DFARS). Exclude prohibited sources for National Security Systems in accordance with Parts 213.1 and 239.7305 of the DFARS and as identified in the DoD's Supplier Performance Risk System, a web-enabled enterprise application available at https://www.sprs.csd.disa.mil/.

d. Maximize the use of existing government owned materiel before seeking new commercial support on all performance based logistics (PBL) arrangements and partnering agreements.

e. Utilize publicly available information and all-source intelligence analysis of critical component suppliers as part of supplier due diligence to inform risk management decisions, as established in DoDI 5200.44, to minimize the introduction of supply chain risk.

**3.2. IN-THEATER SOURCING.** When sourcing within theaters of operation, the Military Departments, MDA, and DLA will:

a. Use, or give preference to, local sources of supply or in-theater alternative sourcing such as lateral redistribution within the theater.

b. Select local sources of supply that do not support persons or entities actively opposing the United States or coalition forces. The Military Departments, MDA, and DLA will not use sources prohibited by Part 225.7 of the DFARS.

c. Select strategy that meets strategic and operational objectives in alignment with Joint Publication 4-0.

#### **3.3. SOURCING FOR MATERIEL REPAIR.**

a. For reparable items, the Military Departments', MDA's, and DLA's sourcing strategies will address both acquiring assets from commercial vendors and serviceable assets remanufactured by organic and commercial maintenance facilities, in accordance with the procedures in Volume 4 of this manual.

b. The Military Departments, MDA, and DLA will not use sources prohibited by Part 225.7 of the DFARS.

c. The Military Departments, MDA, and DLA will follow procedures involving remanufacturing at maintenance facilities in Volume 4 of this manual.

## **SECTION 4: MATERIEL SUPPORT ALTERNATIVES**

**4.1. SELECTING MATERIEL SUPPORT ALTERNATIVES.** The Military Departments, MDA, and DLA will evaluate and select materiel support alternatives based on a best value assessment that balances support goals, total supply chain costs, and performance factors.

a. The Military Departments, MDA, and DLA will consider materiel support alternatives such as:

(1) Organic sources of supply where the Military Services, MDA, and DLA maintain secondary item inventories at the wholesale and retail levels to meet customer requirements. Organic sources of supply are responsible for the materiel management of their inventories but must rely on the sourcing procedures in Section 3 of this volume for acquiring those inventories.

(2) Other U.S. Government sources:

(a) Federal supply schedules managed by General Services Administration (GSA) to provide supplies to organic sources or directly to customers, found at https://www.gsa.gov/acquisition/purchasing-programs/gsa-schedules.

(b) Host nation agreements.

(c) Reclamation in Lieu of Procurement or the Stricken Aircraft Reclamation and Disposal Program established in Secretary of the Navy Instruction 5442.2.

(d) Surplus with appropriate approval.

(e) Cannibalization when necessary with appropriate approval.

(3) Commercial sources of supply where customer requirements are satisfied through:

(a) Local purchase.

(b) Contracted logistics support where a contractor performs approved engineering, materiel management, maintenance, and procurement functions associated with materiel support.

(4) Commercial and organic partnerships:

(a) Prime vendor programs where a vendor provides wholesale support to DoD retail supply activities or directly to consuming customers.

(b) Depot maintenance public-private partnerships where a commercial vendor provides supply support to a DoD maintenance facility.

(c) Commercial sources of supply for reparable items partnering with a DoD maintenance facility for repair services.

b. The Military Departments, MDA, and DLA will assess materiel support alternatives to ensure timely, accurate, and complete customer satisfaction at minimum cost. Consider:

(1) Support goals.

(2) Weapon system performance goals. Employ effective PBL planning, development, implementation, and management, when appropriate, in developing a system's product support arrangements to deliver warfighter requirements and incentivize product support providers. Reflect required outcomes, rather than level of effort as the objective, using performance-based contracts, organic arrangements, or suitable alternatives such as Military Department-level agreements.

(3) Security and supply chain risk management requirements.

(4) Any considerations unique to the materiel, the end item, or application that the materiel will support.

(5) Strategic and operational objectives such as performance for host nations or partners outlined in Joint Publication 4-0.

(6) Total supply chain costs.

(a) All materiel management costs, including acquisition, transportation, receiving and storage, mitigation of supply chain risks, maintenance, and disposal costs.

(b) Cost performance and control.

(7) Performance factors.

- (a) Past performance of sources.
- (b) Interoperability.
- (c) Quality assurance.
- (d) Equipment reliability and criticality.
- (e) Surge capacity.

(f) Impact of surrendering or not developing an organic repair or sustainment capability.

(g) Impact of the availability of data and information relative to performance and lifecycle management.

c. The Military Departments, MDA, and DLA will develop best value assessments that:

(1) Extend the scope of the materiel support alternative assessment from the point of materiel design and production through all echelons of materiel management to delivering

materiel to the ultimate customer. Concurrently, consider all applicable enterprise and program performance objectives and cost trade-offs.

(2) Provide information for reviewing assessments of alternatives on a regular basis to ensure that the DoD is receiving fair and reasonable pricing from contractors. Performance and costs for sources may change significantly over time.

(3) Provide information to support the decisions on whether to use organic versus commercial source of supply before developing any acquisition strategy. Support this decision with a written management analysis that considers:

(a) Commercial and organic support alternatives, as well as commercial and organic partnerships.

(b) The requirements in Chapter 146 of Title 10, United States Code when making decisions regarding contracting for performance of civilian commercial or industrial type functions.

(c) Whether materiel procurement or repair is restricted to one commercial or organic source of supply (e.g., technical data rights, repair procedures, tools and test equipment).

(4) Provide information needed to evaluate and select support alternatives on an item-byitem basis or for logical groupings of items with common characteristics, items with a specific end item application, or items from a common source.

(5) Analyze existing DoD inventories' levels to avoid creating excess stock positions while purchasing the same items under an alternative support strategy.

d. The Military Departments, MDA, and DLA will:

(1) Annually validate the continued use of a PBL or similar arrangements through which a vendor is offered incentives to minimize environmental impact and total cost to the U.S. Government of hazardous materials used by multiple consumers. Include the administrative cost of furnishing government property to the vendor in the total cost for the PBL or similar arrangement.

(2) Limit the risks and costs of spills and leaks by relying on a strategy with a commercial source that directly delivers hazardous materials to consumers and provides services relative to the handling, transportation, storage, and disposal of hazardous materials.

(3) Prevent pollution related to hazardous materials, in accordance with DoDI 4715.23. Follow the procedures relative to the handling, transportation, storage, and disposal of hazardous materials in Volume 5 of this manual.

## **4.2. TRANSITIONING BETWEEN SUPPORT ALTERNATIVES.** The Military Departments, MDA, and DLA will:

a. When evaluating organic support alternatives for transition to commercial support, ensure that the best value assessments considers factors that:

(1) Satisfy demands by placing orders with suppliers for direct shipment to customers.

(2) Use commercial distribution systems.

(3) Purchase local, readily available materiel, primarily at retail supply activities.

(4) Rely more on other government activities for common support requirements.

(5) Use GSA Federal supply schedules found on website https://www.gsa.gov/acquisition/purchasing-programs/gsa-schedules.

(6) Have contractor logistics support contracts including, but not limited to, performance-based contracts stemming from PBL strategies.

(7) Have contractor support for assemblies and components with unstable designs.

(8) Use organic and contract manufacture-on-demand and other flexible manufacturing technology capabilities.

(9) Use host nation support and cross-Service support agreements.

(10) Measure the impact on:

(a) The total DoD distribution network and customers.

(b) The costs of providing other items.

(c) Additive costs with respect to both the items being considered and the rest of the DoD supply chain, if any (e.g., increased item price or higher administrative costs), before utilizing support alternatives.

(11) Use market research and surveys to determine market availability, presence of inplace commercial distribution systems, and vendor interest in providing support to validate the availability of commercial support.

(12) Address potential benefits of stocking commercial items such as:

(a) Consumable items that are commercial in nature, bulky, fast moving, hazardous, fragile.

(b) Consumable items with a short shelf life.

(c) Commercial products that may be substituted for military specification (MILSPEC) products.

(13) Consider cost effective commercial alternatives if they meet customer requirements, even when MILSPEC items are currently meeting customer requirements.

b. When transitioning from organic to commercial support:

(1) Maximize the use of existing DoD materiel before entering an alternative support arrangement for commercial support.

(2) Allow sufficient time to decrease DoD stockage requirements and existing materiel levels consistent with the new stockage requirements. Avoid unnecessary acquisition, repair, or storage costs by managing the timing of support alternative engagement.

(3) Use the results of readiness-based sparing tools during the process of negotiating PBL agreements with vendors.

(4) Reduce or eliminate government facilities or capabilities that duplicate resources available commercially or at other government activities, wherever possible and when consistent with mission requirements and best value considerations.

c. When reviewing commercial support alternatives for transition to organic support:

(1) Initiate reviews based on input of information from operational customers, industry surveys, or other sources.

(2) Continue customer support and cost-effective use of resources with validity reviews conducted on an individual item or item-grouping basis.

# **4.3. LOCAL PURCHASE OF MATERIEL SUPPORT.** The Military Departments, MDA, and DLA will:

a. Consider selecting local purchase of materiel and supplies as a support alternative at the retail level if it is cost effective for specific items or logical groupings of items.

b. Prohibit the local purchase of items that are critical to the safe operation of a weapon system, have special security characteristics, or are dangerous (e.g., explosives, munitions). Materiel management personnel will inspect visually or by other appropriate manner the items, packaging, and associated documentation to determine if the items appear to be authentic in accordance with DoDI 4140.67 and Volume 6 of this manual.

c. Consider contract negotiation and administrative costs associated with local purchases to determine if the use of local purchase authority is more cost effective than utilizing other established supply chain sources.

d. Establish processes for retail activities to notify the associated materiel manager when locally purchasing a centrally managed item.

(1) Explain the decision to purchase the item locally instead of through the integrated material manager.

(2) Notify the integrated material manager that recurring local purchases can acquire the item at lower costs.

e. Use purchasing tools such as government credit cards, GSA schedules, and in place or corporate contracts to help minimize local purchase administrative costs.

f. Establish access to a common repository of potential commercial sources for each retail supply activity to support materiel support requirements. Consider common repositories of potential commercial sources such as GSA Advantage, DoD Electronic Mall, and other online systems.

g. Address the local purchase of shelf-life items and the limitations on local purchase of hazardous shelf-life items using procedures in Volume 1 of DoD Manual (DoDM) 4140.27.

h. Authorize hazardous control and management centers to procure shelf-life items that are hazardous materials using the International Merchant Purchase Authorization Card when necessary.

4.4. ORGANIC STOCKAGE. The Military Departments, MDA, and DLA will:

a. In accordance with the procedures in Volume 2 of this manual, stock items at wholesale and retail levels of supply when other support alternatives do not meet mission requirements or are not cost effective.

b. Develop and use economic and military mission essentiality criteria to determine both appropriate stockage and requirements computation methodology.

c. Address a variety of factors in the stockage decision criteria, including identifying those items critical to safely operating weapon systems or equipment, items requiring special security controls, and items constituting environmental and personal hazards.

d. Periodically review the validity and currency of materiel stockage decisions. Conduct reviews on homogeneous groupings of items, based on clearly described criteria and analysis results applied to item groupings:

(1) Categorize items reviewed for potential DoD stockage as "stocked" or "non-stocked."

(2) Determine DoD stockage cost effectiveness by considering all costs attributable to storing and shipping items (e.g., breakage, shelf life expiration, counterfeit material or

unauthorized product substitution, hazardous materiel storage facilities, distribution, disposal, and total supply chain costs).

(3) Review the stockage classification of all demand-based and limited demand items at least annually.

(4) Reclassify non-forecastable items as demand-based forecastable items if they meet the criteria for using a demand forecasting model in accordance with the procedures in Volume 2 of this manual. Reclassify demand-based items failing to meet the criteria for demand-based stockage as either limited demand requirements based on military mission essentiality, nondemand-based insurance requirements, or non-stocked.

(5) Reclassify limited demand, numeric-requirements items that:

(a) Meet the economic criteria for demand-based stockage as demand-based items.

(b) Do not experience recurring demands, but continue to be essential, as nondemand-based insurance items.

(6) Review insurance item requirements before initiating stock replenishment.

(7) Review planned program requirements at least annually and at the scheduled completion of the supported program. At program completion, reduce planned program requirements to zero.

(8) Review life of type (LOT) purchase requirements and related stockage annually.

(9) Review non-stocked items with demands at least annually. Review non-stocked items without demands according to inactive item and item reduction procedures in Volume 9 of this manual.

e. Develop requirement levels for stocked items using readiness and demand-based, limited or non-demand-based computational methodologies in accordance with Volume 2 of this manual. Use requirements determination methodology that is consistent with the reason for stockage.

f. Use readiness-based computational methodology for stocked items that are essential to weapons systems support and have sufficient forecasted future requirements to warrant economic stockage.

g. Use demand-based computational methodology for items with sufficient forecasted recurring requirements to warrant economic stockage.

h. Consider stocking essential, non-weapon system items with low demand that do not economically justify being stocked as limited demand items and support such items through DoD stockage. Use the requirements computational methodologies to provide minimum stockage for essential, non-weapon system items with low demand. i. Use a non-demand-based requirements development methodology for items stocked to fill nonrecurring demands, including insurance requirements, planned program requirements, and LOT requirements in accordance with the procedures in Volume 2 of this manual.

j. Categorize items as non-essential when the Military Departments, MDA, and DLA do not have sufficient future requirements to warrant economic retention in accordance with Volume 6 of this manual.

k. Limit stockage of commercially available items to minimum stockage necessary for readiness (e.g., war reserve requirements), unless greater stockage is justified by cost effectiveness or security.

l. Consider the effect of stockage requirements on total supply chain costs when assessing alternatives.

### 4.5. RETAIL MATERIEL STOCKAGE.

a. Regardless of the funding source for the materiel, the Military Departments, MDA, and DLA will govern the items stocked at the retail level throughout the DoD based on:

(1) Providing stockage for each item or grouping of items that:

(a) Balances stock among specified performance goals and economy.

(b) Meets requirements for military essentiality or the essentiality of the secondary items necessary to achieve platform mission capabilities.

(2) Minimizing the items stocked at the retail level of supply on any basis other than demand. Operational considerations may require limited stockage of non-demand-based items at retail levels. Develop and maintain the justification for such stockage for review at the retail activity responsible for managing such materiel.

(3) Including non-demand-supported item requirements for initial provisioning requirement items only when an exception has been authorized.

(4) Limiting inventories in retail activities, self-service-type activities, or similar activities to an operating level that is based on demands at that subsidiary point. Backup stocks may be maintained at a central retail stock point in support of those inventories.

b. The Military Departments, MDA, and DLA will:

(1) Employ historical item demand in the development of operating levels for retail level activities. Minimize total variable cost for weapon system performance objectives or fill-time rates by considering demand variability and the order and shipping time in developing safety, order, and shipping time retail stock levels.

(2) Develop operating levels for retail level activities by analyzing:

(a) The total variable cost computed as the sum of the variable cost-to-order, variable cost-to-hold, and implied shortage cost.

(b) The order and shipping times, consistent with the delivery standards prescribed in Volume 8 of this manual.

(3) Determine requirements for a retail level of materiel, in accordance with Volume 2 of this manual, even though stockage decisions or computations may be accomplished by a program manager, an inventory control point (ICP), or an activity other than that at which the stocks will be held.

## **SECTION 5: MATERIEL ACQUISITION STRATEGIES**

#### 5.1. ACQUISITION STRATEGIES. The Military Departments, MDA, and DLA will:

a. Adhere to the policies on acquisition strategies found in Paragraph 1.2. of DoDD 5000.01 when acquiring materials needed to provision and sustain major end items.

b. Implement strategies that:

- (1) Leverage their acquisition expertise, experience, and resources. Base strategies on:
  - (a) An understanding of the technology involved in manufacturing items.
  - (b) The market place or supplier base.
  - (c) Potential contracting issues associated with items.
  - (d) Supply chain risks.

(2) Promote the health of organic and commercial sources, to include developing alternative sources, competitive practices, and spare parts breakout programs.

(3) Consider a strategic commodity approach by acquiring similar items of the same commodity or from the same source.

(a) Include original equipment manufacturers that have existing strategic supplier alliances with the procuring activity.

(b) Use a strategic commodity approach in order to influence the market place and align DoD processes with market forces where possible.

(c) Where applicable, establish joint acquisition groups to develop and implement a commodity sourcing strategy.

(4) Incorporate sufficient flexibility to be responsive to volatility in customer demand and supplier performance.

#### 5.2. PRICING STRATEGIES. The Military Departments, MDA, and DLA will:

a. Maximize the efficiency and effectiveness of price negotiations in reaching fair and reasonable prices.

b. Utilize collaborative strategies to provide customer demand information to suppliers to enable improved planning, thereby reducing costs.

#### **5.3. PROGRAMS PREVENTING THE ACQUISITION AND RETENTION OF UNAPPROVED PRODUCT SUBSTITUTIONS AND COUNTERFEIT MATERIEL.** The Military Departments, MDA, and DLA will:

a. Establish procedures to implement DoD anti-counterfeiting policies in item procurement, testing, and materiel management to mitigate the risk of counterfeit items entering the global supply chain, in accordance with DoDI 4140.67.

b. In accordance with Section 7 of this volume, establish quality programs that reduce the likelihood of unapproved product substitution or procuring counterfeit products.

c. In accordance with Volume 6 of this manual, establish programs to detect and investigate occurrences of defective materiel evolving from product substitution or acquisition of unapproved or counterfeit materiel. The Military Departments, MDA, and DLA will:

(1) Use government and industry best practices to develop processes to detect the occurrence and address the consequences of products containing counterfeit components or malicious functions.

(a) Develop and implement risk-based procedures to identify critical materiel that is susceptible to counterfeiting.

(b) Establish methods to certify that items not obtained from original manufacturers or franchised distributors are authentic.

(c) Evaluate, annually, risk-based procedures and methods used to identify critical materiel susceptible to counterfeiting, and apply corrective actions, procedures, or methods. Record and retain for record results of annual reviews and application of corrective actions, procedures, or methods.

(2) Investigate occurrences of suspect and confirmed cases of counterfeit items.

(a) Report all occurrences of suspect and confirmed counterfeit items to the appropriate authorities and reporting systems, including the Government Industry Data Exchange Program (GIDEP), in accordance with the procedures in DoDI 4140.67.

(b) Investigate and obtain remedies in all cases of confirmed counterfeit materiel under existing fraud, waste, and abuse authorities in accordance with DoDD 5106.01.

(c) Retain suspected counterfeit items without payment to the contractor or vendor until resolution of the investigation.

(3) Ensure personnel whose duties involve materiel acquisition, inspection, receiving, maintenance, repair, or storage are adequately trained to prevent, detect, report, handle, and protect suspected counterfeit products through existing product quality deficiency reporting processes and depot complaints.

# **5.4. INFORMATION AND MANAGEMENT SYSTEM CONSIDERATIONS.** The Military Departments, MDA, and DLA will:

a. Promote information exchange (including electronic information) among materiel managers and acquisition managers to:

(1) Provide timely, complete, and accurate data that promotes coordinated decision making.

(2) Provide visibility of procurement assets to help the materiel managers:

(a) Fill customer orders.

(b) Predict depot receipt workload.

(c) Assess future item support requirements.

(d) Manage excess stock on-order when the stock is no longer needed to fill a requisition for any DoD activity.

b. Promote information exchange between materiel managers and suppliers to:

(1) Encourage collaborative planning, forecasting, and replenishment in accordance with Volume 2 of this manual.

(2) Help suppliers plan internal operations to meet forecasted DoD requirements while minimizing costs.

c. Develop management systems to maintain visibility and control over acquisitions, from identifying the need through receiving the materiel. Management systems should include visibility of all assets a vendor delivers to satisfy a DoD contract, government-furnished property, and other assets the DoD gives to vendors.

d. For uniquely identified items addressed in DoDI 8320.04 and Volume 9 of this manual, include in their procurement programs all item unique identification requirements specified by Part 252.211-7003 of the DFARS.

## **5.5. RISK AND ANALYTICAL CONSIDERATIONS.** The Military Departments, MDA, and DLA will:

a. Develop, establish, and maintain contractor performance metrics to assess untimely delivery, non-performance risk, and counterfeit materiel.

b. Collect production information to help identify the risks of using commercial sources to meet war reserve requirements. Include contract specifications for contractors to provide production information. Include contract specifications on surge capacity or any other production limitations that might hinder the contractor's ability to support unexpected but critical requirements that arise.

c. Develop and use simulations and quantitative methodologies to improve sourcing and acquisition processes, in accordance with Volume 7 of this manual.

d. In coordination with the DoD Chief Information Officer and the DoD Component heads, integrate the identification and protection of mission critical functions and critical components as established in DoDI 5200.44.

e. Integrate the risks climate change poses to logistics infrastructure; materiel acquisition and supply (including critical suppliers and critical components); key transportation modes and routes; and storage and stockpile activities into supply chain risk management actions in accordance with DoDD 4715.21.

# **5.6. SPECIAL ENVIRONMENTAL CONSIDERATIONS.** The Military Departments, MDA, and DLA will:

a. Give acquisition preference to energy-efficient products that:

- (1) Meet operational needs.
- (2) Improve operational outcomes.
- (3) Reduce logistics burdens to operating forces.
- (4) Reduce operations and sustainment costs for combat or combat-related missions.

b. Consider environmental health and safety aspects during the acquisition process and for the duration of the life cycle for all materials acquired and services performed. When comparing competing products or services that serve the same purpose, acquire items that have a lesser or reduced effect on human health and the environment.

(1) Materiel managers, after coordination with the Military Departments, may add new, environmentally preferable sustainable items that are an equal alternative to the non-environmentally friendly items currently on-hand.

(2) As part of the approach to promote sustainable products and materials use, DoD Components will integrate actions targeted to reduce negative environmental impacts and preserve natural capital throughout the lifecycle of materials. DoD Components should take into account economic efficiency and social equity in accordance with Executive Order 13834 and Executive Order 13990.

(3) The DoD Components will implement DoD sustainable product purchasing for all products and services to the maximum extent practicable consistent with requirements of relevant Federal procurement preference programs in accordance with DoDI 4105.72. DoD sustainable product purchasing elements include:

(a) Recycled content, certified wood, and rapidly renewable materials.

(b) Energy efficient, non-toxic, durable, and locally manufactured, harvested, or extracted items.

## **SECTION 6: ACQUISITION INTERFACES**

#### 6.1. INTERFACES DURING WEAPON SYSTEM ACQUISITION.

a. DoD Components will ensure materiel managers actively interface with accountable property officers, weapon system program managers, and product support managers by participating in sustainment planning as early as feasible for each weapon system acquisition program. While participation should occur during all acquisition phases, materiel managers can make a significant contribution to the effectiveness of the weapon system acquisition from the technology development phase through the engineering and manufacturing development phase.

b. In accordance with DoDD 5000.01, weapon system program managers will consider performance based strategies for the acquisition and sustainment of products and services that are tailored to their individual programs.

c. Weapon system program managers and product support managers will collaborate with the Military Departments, MDA, and DLA materiel managers to develop life cycle sustainment plans.

d. With the Military Departments, MDA, and DLA participation, as appropriate, weapon system program managers and product support managers will:

(1) Develop and select performance based materiel support strategies that optimize total system and materiel availability while minimizing operations and support costs and the system's logistics footprint.

(a) Integrate weapon system oriented acquisition approaches with commodity oriented or force oriented approaches while taking into consideration existing strategic supplier alliances to derive the best value blend of existing and evolving, organic and commercial, weapon system-unique, and common support structures.

(b) Give consideration to existing organic supplies before acquiring new supplies.

(2) Develop performance contracts with commercial support providers that ensure weapon systems and equipment are fully supported to meet the established sustainment objectives before the system's initial operational capability.

e. Materiel managers will:

(1) Serve as a participating member of the acquisition logistics management team and sustainment related integrated process teams in acquisition programs, beginning in the materiel solution analysis phase and continuing throughout a weapon system's life cycle.

(2) Provide other supporting materiel managers with current information regarding acquisition and support decisions applicable to systems that are changing or being phased out.

(3) Fully participate in formulating supply chain management (SCM) concepts for acquisitions.

(4) Develop baseline comparison systems by providing applicable historical data on similar and predecessor systems.

(5) Provide materiel management information for:

(a) Weapon system solicitation documents (e.g., requests for proposals), including the statement of work and contract data requirements lists. Adequately reflect the requirement to minimize total ownership costs of materiel support, as defined by the materiel manager.

(b) Provisioning goals and objectives to be included in the product support strategy, beginning in the materiel solution analysis phase. Provisioning goals and objectives must be consistent with weapon system readiness goals and objectives and DoD SCM objectives.

(6) Participate in the Parts Standardization and Management Committee for an acquisition. Materiel managers place emphasis on reviewing the program parts selection list and the non-standard part approval request at or before preliminary design review to ensure parts control and standardization is adequately applied.

(7) Maintain weapon system application files, pipeline times, and associated logistics data containing predicted and historical weapon system data. Materiel managers:

(a) In coordination with product support managers, review predicted and actual data to evaluate reliability, maintainability performance, and the effectiveness of DoD supply chain support to system readiness objectives.

(b) Employ key DoD SCM metrics in Volume 10 and metrics used in commercial practices to evaluate customer wait time and weapon system readiness objectives.

(8) Provide comparative information to support logistics planning for supportability, starting during the early concept exploration phases. Materiel managers or their focal points use this information to evaluate DoD SCM support decisions' accuracy and effectiveness.

(9) Document and coordinate proposed changes to engineering data or logistics planning. Materiel managers:

(a) Provide necessary notice and documentation to the appropriate materiel manager and any other concerned logistics manager for coordination before implementation. Material managers provide this information to the accountable property office for physical inventory accountability and retention in the accountable property system of record, when applicable, in accordance with DoDI 5000.64 and DoDI 4140.73.

(b) Maintain an audit trail of any changes, to include a cost assessment and the rationale for change.

(c) Ensure the designated weapon system and system component maintenance facilities are notified in sufficient time to make needed adjustments to repair requirements and specifications.

**6.2. INTERFACES DURING WEAPON SYSTEM SUSTAINMENT.** The Military Departments, MDA, and DLA will:

a. Coordinate with product support managers or product support integrators to develop and maintain DoD supply chains that achieve the warfighter's sustainment objectives, help minimize total ownership costs, and provide best value support to weapon systems throughout their life cycles.

b. Designate a focal point, when appropriate, to:

(1) Represent the materiel management community on all associated DoD SCM activities, including integrated product teams and sustainment management teams.

(2) Provide supply management contract requirements; technical and quality data; and historical supply data as required.

c. Maintain analytical tools and historical data, particularly comparisons between projected quantitative factors developed during the acquisition processes and actual experience.

(1) Coordinate with product support managers to maintain a robust data model and data repository, or provide guaranteed access to one that includes all logistics support data acquired during the acquisition process.

(2) Establish a model and repository that will allow managers to assess the impact throughout the system life-cycle.

(3) Organize data in a manner that will be useful for performing DoD supply chain analysis, supportability analysis, and other analyses during the weapon system acquisition process.

d. Coordinate with product support managers to assess design stability during the acquisition development phase and determine financial risks that are applicable to life-cycle support.

e. Document extrapolations and deviations from engineering data and logistics requirements developed during the weapon system acquisition process, including the basis for any changes.

f. Coordinate engineering changes with the developers to avoid unnecessary future procurements of planned item phase-outs at the end of the item life-cycle.

## **SECTION 7: INTEGRATED MATERIEL MANAGEMENT**

#### 7.1. SINGLE MATERIEL MANAGER.

a. The DoD IMMC reviews management responsibility for items based on item management coding criteria and proposes recommendations for the single materiel manager to the ASD(S). ASD(S) approves the assignment of the single materiel manager to manage each item in the DoD supply system. The charter for the DoD IMMC is in Appendix 7A.

b. To achieve integrated management, it may be necessary for the materiel manager to recommend reassigning an items logistics management from one DoD Component to another, in accordance with the procedures in Volume 1 of DoDM 4140.26.

c. The materiel manager will accomplish materiel management at any level of supply:

(1) The wholesale level of supply organized DoD supply that procures, repairs, and maintains stocks to resupply the retail levels of supply.

(2) The retail level that directly provides materiel to users in an operating unit or to users in a geographical area.

(3) With an materiel management strategy that seeks to integrate wholesale and retail stock levels to reduce redundant inventories while providing timely supply support to customers.

#### 7.2. STOCKAGE AND ASSIGNMENT.

a. The materiel manager will use the supply support request (SSR) process to ensure sufficient stock is available to satisfy initial requisitions received from the customers. Funded SSRs will get first priority.

b. The materiel manager will:

(1) Establish integrated materiel management assignments by Federal supply classification (FSC) in accordance with Volume 1 of DoDM 4140.26.

(2) Use procedures in Volumes 1 and 2 of Defense Logistics Manual 4000.25, DoDM 4140.68, and Volumes 1 and 2 of DoDM 4140.26 for logistics reassignment of consumable and reparable items.

## **APPENDIX 7A: DOD IMMC CHARTER**

**7A.1. PURPOSE AND SCOPE.** The DoD IMMC supports the ASD(S). The DoD IMMC will:

a. Oversee policies, procedures, and criteria for improving materiel management of consumable and non-consumable items within the DoD.

b. Improve the overall efficiency and effectiveness of procedures and program controls for managing consumable items subject to item management codes, and non-consumable items subject to non-consumable item materiel support codes, assigned in accordance with the procedures in Volume 1 of DoDM 4140.26.

c. Evaluate proposed system change requests to both legacy and enterprise resource planning programs.

d. Identify supply chain problems, examine new SCM concepts, and make recommendations for improving materiel management policy.

**7A.2. AUTHORITY.** The DoD IMMC advises the ASD(S) on materiel management of consumable and non-consumable items and to ensure DoD integrated materiel management policies are consistent with this issuance, DoDI 4140.01, Volume 1 of DoDM 4140.26, and DoDM 4140.68.

**7A.3. MEMBERSHIP.** Representatives must be full-time government employees, permanent part-time government employees, or Service members.

**a.** Chair. The Deputy Assistant Secretary of Defense for Logistics, or their designee, will chair the DoD IMMC.

**b. Principal Members.** Participating organizations are responsible for ensuring knowledgeable and consistent DoD IMMC representation. DoD IMMC principal membership consists of one representative from each of the following organizations:

- (1) U.S. Army.
- (2) U.S. Navy.
- (3) U.S. Air Force.
- (4) U.S. Marine Corps.
- (5) U.S. Coast Guard.
- (6) United States Special Operations Command.

- (7) DLA.
- (8) GSA.

(9) Federal Aviation Administration.

**c.** Advisory Members. The advisory members support the DoD IMMC as required. The advisory members are representatives from:

- (1) DoD Component ICPs.
- (2) DLA Logistics Information Services.

**d.** Travel and Administrative Costs. The DoD IMMC members' respective organizations will fund necessary travel and administrative costs associated with personnel's participation in DoD IMMC functions.

### 7A.4. FUNCTIONS. The DoD IMMC:

a. Provides uniform DoD-wide criteria and procedures for integrated materiel management for all consumable and non-consumable items, through developing, coordinating, maintaining, and monitoring revisions to applicable guidance and procedures.

b. Provides guidance and procedures for registering users in the Federal Logistics Information System (FLIS) record.

c. Provides guidance and procedures for identifying users not registered in FLIS who submit demands for an item in the FLIS.

d. Provides guidance and procedures for SSRs.

e. Reviews and approves or disapproves proposed changes to primary inventory control activity (PICA) or secondary inventory control activity responsibilities and designations.

f. Implements approved changes to PICA or secondary inventory control activity responsibilities and designations.

g. Ensures DoD integrated materiel management policies and procedures are properly documented and supported with materiel management system interfaces to the FLIS, and other DoD standard systems.

h. Develops procedures for documentation of the data elements necessary to ensure effective information management control and financial management of consumable and non-consumable items, in accordance with the procedures in DoDM 4100.39, Volume 1 of DoDM 4140.26, and DoDM 4140.68.

i. Develops and coordinates time phased schedules for logistics reassignment actions when needed.

j. Responds to requests from the Federal Cataloging Committee for assistance in resolving cataloging issues.

### 7A.5. ROLES AND RESPONSIBILITIES.

- a. The DoD IMMC Chair:
  - (1) Approves the DoD IMMC meeting agendas.
  - (2) Calls and chairs the DoD IMMC meetings.

(3) Leads deliberations at DoD IMMC meetings. When principal members voice dissenting positions, the Chair will attempt to resolve the issue within the DoD IMMC. If an issue cannot be resolved within the DoD IMMC, the Chair will elevate the issue to the ASD(S) for a final decision.

(4) Approves DoD IMMC meeting minutes.

(5) Designates an individual to serve as the DoD IMMC Secretariat.

b. The DoD IMMC Secretariat:

(1) Prepares and distributes meeting agendas with a brief description of the discussion topics and indicates actions required before scheduled meetings.

(2) Coordinates and distributes presentation materials related to each meeting to DoD IMMC representatives before scheduled meetings.

(3) Records minutes from each meeting and distributes the minutes to DoD IMMC representatives.

(4) Tracks all action items until the DoD IMMC Chair determines the action has been completed.

c. DoD IMMC principal member representatives:

(1) Provide input to the agenda addressing and documenting item management codes, non-consumable item materiel support codes, SSRs, PICA, secondary inventory control activity, logistics reassignment, and other related materiel management issues within their respective organizations. As appropriate, DoD IMMC principal member representatives prepare materials, presentations, and briefings.

(2) Attend DoD IMMC meetings, represent their respective organizations, and participate in deliberations. As appropriate, DoD IMMC principal member representatives seek agreement among DoD IMMC members on issues affecting their organizations.

(3) As appropriate, designate subject matter experts to participate in DoD IMMC meetings, reviews, and studies. Subject matter experts are responsible for presenting findings from reviews or studies to the DoD IMMC.

(4) Convey the positions and decisions of the DoD IMMC to their organizations or offices.

(5) Execute actions and tasks, as requested by the DoD IMMC Chair.

**7A.6. MEETINGS.** DoD IMMC meetings will be held once every 2 months to address issues affecting materiel management of consumable and non-consumable items. Meetings are normally conducted via teleconference or video teleconference that are hosted in the National Capital Region. Face-to-face meetings may be scheduled as required.

**7A.7. CHARTER EFFECTIVE DATE.** This charter supersedes all previous charters. It remains in effect until superseded or until the DoD IMMC is disestablished.

## **SECTION 8: QUALITY PROGRAMS**

**8.1. QUALITY REQUIREMENT.** DoD Components will establish DoD supply systems that procure secondary items that fully conform to specifications for item identification, traceability, performance, and reliability.

**8.2. QUALITY PROGRAM REQUIREMENTS.** The Military Departments, MDA, and DLA will:

a. Apply quality programs to all applicable segments of the acquisition process to ensure secondary items meet quality requirements.

b. Include acquisition segments for pre-contract award, contract award, contract administration, supply management, and feedback.

c. Develop action plans to:

(1) Correct deficiencies identified in the acquisition process.

(2) Prevent counterfeit materiel or unauthorized product substitution items from entering the supply system.

(3) Prevent items that have been compromised (e.g., damaged from a fall, from excessive heat or cold, or from improper storage) from entering the supply system.

d. Include performance measures for secondary item quality requirements in the action plans and milestones in applicable acquisition phases.

e. Document actions and accomplishments that carry out quality program objectives.

f. Use applicable quality assurance methods to ensure that items conform to contract and technical requirements, methods include:

(1) Contractor selection and qualification programs.

(2) Properly selecting and applying quality requirements in contracts.

(3) Pre-award surveys.

(4) U.S. Government inspection at source or destination.

(5) Pre-acceptance and post-acceptance testing.

(6) Training to address counterfeit parts prevention, detection, segregation, reporting, and disposal.

g. Use quality assurance techniques and testing to stress that critical application items must conform to contract and technical requirements. Identify individual items or families of items that are critical to the safety of personnel and to the operation of weapon systems or sensitive information technology systems.

(1) If pre-qualified suppliers are not available, take appropriate counterfeit countermeasures (e.g., testing items, conducting visual inspection including inspecting item packaging and marking, and confirming documentation traceability).

(2) Particular attention should be given to past performance when allocating quality assurance and testing resources among contractors and items.

(3) Utilize trusted systems and networks processes, tools, and techniques to control quality, configuration, software patch management, and security of software, firmware, hardware, and systems throughout their lifecycles, including components or subcomponents from secondary sources as specified in DoDI 5200.44.

h. Identify items not conforming to contract specifications and take corrective actions under the provisions of the contract. The Military Departments, MDA, and DLA will:

(1) Report nonconforming items rejected by the government, items classified as having a major or critical nonconformance, or items suspected of or identified as being counterfeit to the GIDEP Failure Experience Data database using the appropriate submittal document consistent with the GIDEP Requirements Guide.

(2) Identify and report any critical nonconformance that involves counterfeit materiel or unauthorized product substitutions in accordance with DoDI 4140.67 and as described in Part 46 of the FAR and Part 246 of the DFARS for:

(a) Electronic parts;

(b) End items, components, parts, or assemblies containing electronic parts; or

(c) Services, if the contractor will supply electronic parts or components, parts, or assemblies containing electronic parts as part of the service.

i. Utilize criteria and methods (e.g., the System for Award Management; Federal Awardee Performance Integrity Information System) to identify contractors that consistently fail to meet contract requirements, and prevent future contract awards to such contractors. The Military Departments, MDA, and DLA will use information from the GIDEP Failure Experience Data database as part of this determination.

j Measure secondary item quality, document trends in item nonconformance, and ensure that items are authentic. The Military Departments, MDA, and DLA will place particular emphasis on measuring and documenting trends for critical nonconformance and major nonconformance (as defined in Section 46.101 of the FAR), as well as counterfeit materiel or unauthorized product substitution, in accordance with the procedures in the GIDEP Requirements Guide and DoDI 4140.67.

k. Establish quality methods in distribution depots and storage locations to verify that items accepted, stored, packaged, repackaged, marked, and issued conform to applicable quality and technical requirements. The Military Departments, MDA, and DLA will:

(1) Place emphasis on critical application items.

(2) Identify quality deficiencies during receipt processing.

(3) Use the procedures in Volume 5 of this manual to report and process quality deficiencies and to address quality control of materiel in storage.

(4) Respond promptly, in accordance with locally developed procedures, to any reports that a suspected or actual counterfeit item has entered the DoD supply chain.

1. Identify and remove nonconforming items from the supply system and wholesale and retail levels. The Military Departments, MDA, and DLA will dispose of counterfeit items in accordance with Volume 4 of DoDM 4160.21 and instructions provided through GIDEP in a manner that prevents the counterfeit items' re-entry into the DoD supply chain or private sector supply chain.

m. Review, once every year, the quality program's requirements, documentation, methodology, training, use, and reporting with respect to correcting deficiencies, preventing use of counterfeit material or unauthorized products, and preventing compromised products from entering the supply system. Record and retain for record the results of these annual reviews and quality procedures and methods used.

## **SECTION 9: DMSMS**

#### 9.1. DMSMS REQUIREMENTS.

a. In accordance with DoDI 4245.15, DoD Components will identify items as a DMSMS requirement when:

(1) There is a loss or impending loss of items' manufacturers or suppliers.

(2) There is a loss or impending loss of raw materials used to manufacture items of supply.

(3) Losses of an item may cause material shortages that endanger a weapon system's or equipment's development, production, or post-production support capability.

b. To minimize readiness, schedule, and cost impacts caused by DMSMS issues, the Military Departments, DLA, and MDA will:

(1) Develop and fund a standard strategy and program to address DMSMS issues by:

(a) Forming a DMSMS management team consisting of all appropriate stakeholders to develop and maintain a DMSMS management plan.

(b) Designating a focal point to coordinate management and implementation actions in the DMSMS management plan and to program and budget for those actions.

(c) Establishing internal procedures that implement the DMSMS program in the ICPs or any activity responsible for design control, acquisition, and management of any centrally managed item used within weapon systems or equipment.

(2) Proactively take timely and effective actions to identify and minimize known and anticipated DMSMS issues' impact on DoD acquisition and logistics support for weapon systems and equipment.

(3) For DMSMS items, implement cost effective solutions consistent with mission requirements for related weapon systems and equipment.

(4) Keep DMSMS records and report DMSMS metrics as required.

(5) Adopt, as appropriate, best practices for implementing a DMSMS program as outlined in DLA Standardization Document 22.

(6) Participate in the DoD DMSMS working group to facilitate consistent and comprehensive DMSMS management implementation throughout the DoD.

#### 9.2. ACTIONS FOR MINIMIZING THE IMPACT OF DMSMS.

a. The Military Departments, DLA, and MDA will minimize the impact of DMSMS issues by:

(1) Promoting technical efforts (such as using emulation and generic arrays), nontechnical efforts (such as sharing government and industry reports on DMSMS), and logistics research and development efforts to identify emerging technology that will neutralize or minimize DMSMS issues.

(2) Mitigating DMSMS impacts on new and emerging DoD weapon systems by:

(a) Inserting appropriate DMSMS language in contracts for development, production, and sustainment.

(b) Obtaining technical data from the DoD weapon systems manager needed for proactive DMSMS management, as appropriate.

(c) Screening parts for potential technology obsolescence to ensure, to the maximum extent practical, that items posing a DMSMS risk are not included in DoD systems during design, redesign, or production.

 $\underline{1}$ . This includes screening parts for current obsolescence and for near-future obsolescence (e.g., items that may be obsolete in up to 5 years) and assessing parts' vulnerability of becoming obsolete.

<u>2</u>. If an identified DMSMS item is not replaced during design, redesign, or production, the procuring activity should ensure there is continuous part availability and post-production support.

(d) Participating in post-production support planning activities conducted as part of the logistics support program, and recording these planning activities in product support planning documentation.

(3) Confronting the potential loss or impending loss of items' manufacturers or suppliers or the loss or impending loss of raw materials using to manufacture items of supply by:

(a) Ensuring that the affected system's program managers and materiel managers are notified within sufficient time to take action before the item is no longer available. Notification should include identification of the item, its technical specifications, the name of the manufacturer or supplier, when the item will be discontinued, where the item is used if known, and any existent government contracts for the item itself or for potential replacements.

(b) Conserving existing and on-order stocks until a cost effective resolution to the DMSMS issue is implemented.

(c) Sending, to the cognizant materiel managers, the information that was originally obtained from industrial sources about an actual or prospective announcement of a

manufacturer's intent to stop production. This information will also allow DMSMS broadcast alerts to be generated, if applicable.

(4) Communicating and exchanging DMSMS information within the DoD, with other government organizations, and with industry through alerts and the GIDEP.

(a) The cognizant materiel manager will notify the GIDEP to establish a DMSMS case. For the discontinuance of a manufacturer's item, at a minimum identify:

1. The item, its technical specifications, and the name of the manufacturer.

<u>2</u>. When the item will be discontinued.

3. Where the item is used, if known.

 $\underline{4}$ . Any existent government contracts for the item itself or for potential replacements.

(b) When DMSMS issues may affect a weapon system item, notify cognizant weapon systems program managers and item managers within sufficient time for them to take action before the item is no longer available.

(5) Continuing surveillance of a DMSMS item by the cognizant ICP throughout the life of the item.

b. When items are difficult to obtain because they are obsolete, out of production, or for other reasons, weapon system program managers and materiel managers will take measures to prevent potential counterfeit materiel or unauthorized product substitution items from entering the supply system in accordance with DoDI 4140.67.

## 9.3. RESOLUTION OF DMSMS ISSUES.

a. At DMSMS identification, the managing materiel manager (i.e., Military Service, DLA, or MDA) will develop cost-effective resolutions for DMSMS items, taking into account all research, design, engineering, test, and logistics costs throughout the item's or weapon system's life cycle.

b. For DMSMS cases involving multiple users, the managing materiel manager will participate in integrated production teams to determine resolution options. The integrated product teams will coordinate DoD assessment and response to ensure adequate logistics support is maintained for affected systems.

c. The managing materiel manager will consider potential courses of action to resolve the DMSMS such as:

(1) Conserving existing and on-order stocks, such as by challenging suspected excessive requisitions, limiting automatic issue to established users with known requirements, and issuing on a case-by-case basis to other users until a cost-effective solution to the DMSMS issue.

(2) Encouraging the existing source to continue production. This may include establishing a long-term relationship with the source using a multi-year contract.

(3) Using the current item specification to find another source to manufacture or supply the DMSMS item.

(4) Converting the existing DMSMS item's specification to a performance based specification, to provide more flexibility in acquisition approaches and facilitate identifying another source.

(5) Obtaining a substitute item that meets all item specifications without modification to the item or the next higher assembly and requires only minimal qualification (e.g., commercial or non-developmental item that meets form, fit, and function).

(6) Obtaining a substitute item with different specifications that does not require modifying the source product or the next higher assembly, and that may require requalification (e.g., new software to replace outdated software).

(7) Redefining requirements through applicable engineering support activities, to possibly include MILSPEC tailoring. This course of action might induce the emergence of additional sources.

(8) Using current manufacturing processes to produce a substitute item (form, fit, and function) for the DMSMS item.

(9) Making a bridge buy of a sufficient number of items to allow enough time to develop another solution.

(10) Making a LOT buy. Based on estimated life of system requirements, the managing materiel manager may make a one-time procurement of enough materiel to last until the end items being supported are no longer in use.

(a) When conducting LOT buys, justify the quantity based upon the total timeframe that the DMSMS item will be needed to minimize both life cycle cost and the likelihood of ending up with excess materiel even if the timeframe is greater than 2 years.

(b) Include sufficient materiel in LOT buys to provide government furnished materiel (GFM) for repair and for piecework applications in the procurement of additional systems, equipment, spare assemblies, and subassemblies.

(c) Consider the availability and cost of assets from all sources, including repair, reclamation, and de-installation in the decision to make a LOT buy and the quantity procured should.

(d) Unless otherwise specified, include a requirement for military packaging due to the anticipated long storage duration for items in a LOT buy.

(11) Reclaiming government furnished equipment from a source of supply and reissuing it to a new source to help establish production capabilities, in accordance with the procedures in Section 245.602 of the DFARS, if a contractor using government furnished equipment stops production.

(12) Reclaiming DMSMS items from marginal or out of service equipment or, when economical, from equipment that is in a long supply or potential excess position.

(13) Reverse engineering of a DMSMS item to develop an exact replica, through reviewing available technical data, testing, physical disassembly and inspection, and analysis of functions performed by the DMSMS item.

(14) Modifying or redesigning the end item to eliminate the DMSMS item or replace it with an alternative, non-DMSMS item. This option may be more cost effective if the end item contains several DMSMS items.

(15) Replacing the system in which the DMSMS item is used. This option may require extensive cost analysis.

(16) Requiring DMSMS item's manufacturers or suppliers, through contractual agreements, to maintain a physical inventory of DMSMS items on-hand for future DoD production demands in accordance with DoDI 4140.73. The managing materiel manager will weigh that option against the cost of the DoD maintaining DMSMS items on-hand and supplying the DMSMS items as GFM.

(17) Obtaining a production warranty, if possible, from the DMSMS item's manufacturers or suppliers to supply the DMSMS item or items for a specified time (life of equipment) irrespective of demands.

(18) Asking customers to respond to requests for requirements information needed to decide the best course of action for ensuring continued supply of DMSMS items, including requirements from security assistance customers.

d. DoD materiel managers should refer to Standardization Document 22 for further guidance or clarification on strategies to resolve DMSMS issues and other DMSMS matters of consideration.

## SECTION 10: MANAGEMENT OF EXCESS STOCK ON-ORDER

#### **10.1. MANAGEMENT PROCESS.**

a. The DoD Components will:

(1) Establish management processes that minimize excess assets and excess stock onorder where cost effective and in the best interests of the U.S. Government.

(2) Apply these management processes to secondary items with assets that are above an item's approved acquisition objective (AAO) that are on-order in a purchase request before contract award or in an awarded contract.

b. When changes in the requirements for an item cause excess stock on-order, materiel managers will follow their DoD Component's management process and take timely action to:

(1) Reduce or cancel orders or purchase requests before contract award.

(2) Consider terminating contracts for excess stock on-order.

c. Based on the dollar value of the excess stock on-order, DoD Components will:

(1) Establish the required levels of authority for deciding when to reduce, cancel, or retain excess stock on-order.

(2) Determine the management level for the review and approval of changes to the order.

(3) Establish a time frame for materiel managers to reach and implement termination and reduction of order decisions.

(4) Maintain records of retention, termination, or reduction of order decisions with the coordination of associated actions across functional areas involved with the order.

**10.2. PROCESS REQUIREMENTS.** When establishing the requirements for managing excess stock on-order, the DoD Components will:

a. Fully document requirements, including job roles, in accordance with this manual and DoD Component procedures.

b. Identify requirements that have been reduced during any phase of contract solicitation or award to the point that on-order assets are above the AAO.

c. Reduce or cancel purchase requests before contract award to avoid potential liability for contractor termination costs.

d. Consider, if possible, whether rescheduling deliveries without additional cost is viable to avoid both excess stock on-order and potential liability for contractor termination costs after contract award.

e. Document the methodology used to determine if termination of part or all of outstanding contract deliverables is cost effective when a cost free delivery date extension is not an option after contract award.

f. Utilize monitoring or decision review boards to ensure management emphasis on prompt reduction or cancellation of orders with excess assets.

g. Establish dollar value thresholds for applying graduated levels of authority and effort in making decisions regarding excess stock on-order and in verifying and approving those decisions.

#### **10.3. DECISIONS AND ACTIONS.**

a. When taking action with excess stock on-order before contract award, materiel managers will:

(1) Promptly request the contracting officer reduce or cancel the order if requirements for items on-order are significantly reduced or eliminated.

(2) Place particular emphasis on validating requirements data.

(3) Address security assistance and government furnished property requirements, if any.

(4) Conduct an audit according to the parameters in Section 49.107 of the FAR for contract actions involving a settlement of \$100,000 or more.

(5) Pursue follow up action on all requests for order reduction or cancellation within 20 calendar days to ensure that contract award quantities show reductions in requirements or cancellation, as appropriate.

b. When taking action with excess stock on-order that are on an awarded contract, materiel managers will:

(1) Not pursue a termination action if the undelivered balance of the contract is less than \$5,000, in accordance with Paragraph (c) of Section 49.101 of the FAR.

(2) If the undelivered balance of the contract is \$5,000 or more, promptly request a contract termination action if a termination action is cost-effective and in the best interest of the U.S. Government.

(3) Base cost effectiveness on an economic methodology (e.g., an economic termination model) that compares the cost to complete the contract and hold items on-hand against the cost to terminate the same items from contract plus potential re-procurement costs.

(a) Materiel managers will use an economic methodology that considers these specific factors:

<u>1</u>. Estimated Completion Costs, accounting for the cost to complete the contract, including undelivered materiel costs and holding costs (e.g., storage and interest).

<u>2</u>. Estimated Termination Costs, including termination costs, administrative costs, and contractor fees, plus re-procurement costs, if applicable. Materiel mangers should obtain estimated termination costs in a timely manner, within 21 calendar days of a request for termination action. If materiel mangers cannot obtain termination costs in a timely manner, use termination cost models to determine an estimate.

 $\underline{3}$ . Weapon System Life Cycle. Materiel managers will make appropriate proportion adjustments to the future requirements for items when weapon systems are in production and deployment, or disposal phases.

 $\underline{4}$ . Item Life Cycle. Materiel managers will make appropriate proportion adjustments based on the life cycle stage, e.g., if an item is introduced to the DoD supply chain or reaching end of life.

(b) Every 3 years, the DoD Components will validate their economic termination model using the checklist in Table 1. DoD Components should consider changes to their economic termination model if the response to the any of assessment criteria in Table 1 is "no."

Category	Assessment Criteria
	Does the estimated procurement cost include the cost of the undelivered materiel, the cost of receipt, and the cost of storing the received materiel until it is depleted by demand?
Cost Factors	Does the estimated cost to terminate the order include the administrative settlement costs and contractor termination fees, the cost to complete any remaining order, and the future cost of repurchasing the assets, if applicable?
	Is the estimate of the value of storage costs based on historical costs and cost growth?
	Are termination fees known or estimated with a high degree of confidence in advance of settlement?
	Are potential repurchase costs (i.e., the administrative costs of a procurement plus the future cost of the materiel) in the economic termination model up-to-date and estimated with a high degree of confidence?

 Table 1. Economic Termination Model Checklist

Category	Assessment Criteria
Modeling Considerations	Does the economic termination model consider minimum buy
	quantities?
	Does the economic termination model consider any applicable
	shelf life restrictions?
	Is the economic termination model sufficiently documented,
	including assumptions?

#### Table 1. Economic Termination Model Checklist, Continued

(4) Develop recommendations to modify, cancel, or continue the contract within 30 calendar days after the materiel manager has reviewed the requirements for the item.

c. Upon reaching a conclusion regarding excess stock on-order, materiel managers will:

(1) Maintain documentation that supports the d recommendations, such as the factors used to make the decision and, if applicable, the results of applying an economic termination model.

(2) Ensure the recommendations, including not to terminate a contract with excess stock on-order, is approved by the required level of approval authority.

(3) Coordinate t with the cognizant contracting officer to provide information that should be used in a review of contract actions.

d. Upon conclusion of all reviews and actions regarding excess stock on-order on contract, materiel managers will coordinate with contracting officers to update the decision documentation to include the final decision to modify, cancel, or continue the contract made by the contracting officer. Materiel managers will document their decision as:

(1) Modified or cancelled with a settlement agreement terminating the contract, in part or in whole, respectively.

(2) Continued due to a known future requirement.

(3) Continued as uneconomical to terminate.

(4) Received before final decision.

(5) Continued based on a management decision that termination is not in best interest of the government.

(6) Continued, but contract delivery dates modified.

## GLOSSARY

### G.1. ACRONYMS.

AAO	approved acquisition objective
ASD(S)	Assistant Secretary of Defense for Sustainment
DFARS DLA DLM DMSMS DoDD DoDI DoDI DoDM	Defense Federal Acquisition Regulation Supplement Defense Logistics Agency Defense Logistics manual diminishing manufacturing sources and material shortages DoD directive DoD instruction DoD manual
FAR	Federal Acquisition Regulation
FLIS	Federal Logistics Information System
FSC	Federal supply classification
GFM	government furnished materiel
GIDEP	Government Industry Data Exchange Program
GSA	General Services Administration
ICP	inventory control point
IMMC	Integrated Materiel Management Committee
LOT	life of type
MDA	Missile Defense Agency
MILSPEC	military specification
PBL	performance based logistics
PICA	primary inventory control activity
SCM	supply chain management
SSR	supply support request

**G.2. DEFINITIONS.** Unless otherwise noted, these terms and their definitions are for the purposes of this issuance.

**AAO.** The quantity of an item authorized for peace time and war time requirements to equip and sustain U.S. and allied forces, according to current DoD policies and plans. The quantity that is sufficient to support other U.S. Government civil agencies, as applicable.

**acquisition.** Obtaining logistics support, supplies, or services under an acquisition agreement or under a cross-servicing agreement. This includes purchasing (whether for payment in currency, replacement-in-kind, or by exchange for equal value), renting, leasing, or any method of temporarily obtaining logistics support, supplies, or services.

**assembly**. In logistics, an item forming a portion of equipment that can be provisioned and replaced as an entity and that normally incorporates replaceable parts or groups of parts.

**best value**. As determined through the use of a business case analysis methodology or a methodology approved by the applicable DoD Component, the term applies to the proposed alternative that ranks the highest when cost and non-cost factors are evaluated.

**bridge buy**. Purchase of a sufficient number of items to allow enough time to develop another solution to a DMSMS situation.

**cannibalization**. Removing serviceable parts from one item of equipment in order to install them on another item of equipment. The removed part may be replaced.

**case**. Either an exterior container within a palletized unit load or an individual shipping container.

**commercial sources**. Supply support provided for reparable items partnering with a DoD maintenance facility for repair services.

**consumable item.** An individual item (except explosive ordnance and major end items of equipment) that is normally expended or used up beyond recovery in the use for which it is designed or intended.

**cost-to-hold.** The sum of the annual charge for funds invested in materiel, storage costs, and losses due to obsolescence and materiel losses where:

The annual charge for funds invested in materiel is the current rate for long-term Federal government securities or an alternative discount rate if that rate results in lower overall cost to the U.S. Government. Synonymous with the cost of capital.

Storage costs are as defined separately.

Losses due to obsolescence are losses resulting from forecast error and obsolescence to include deterioration.

Materiel losses are losses due to misplacement, theft, or damage.

**cost-to-order.** The sum of the administrative expenses involved in procuring or requisitioning and issuing a single lot of one item regardless of the number of units ordered, their weight, cube, or dollar value. The major tasks contributing to the cost-to-order include requirements determination, order or requisition preparation and recording, receipt processing and stowage of materiel, accounting for the transfer of funds between the ordering activity and the source of supply, and, in the case of a requisition filled from a distribution depot, issue processing.

**counterfeit materiel.** An item that is an unauthorized copy or substitute that has been identified, marked, or altered by a source other than the item's legally authorized source and has been misrepresented to be an authorized item of the legally authorized source.

**cube.** When used in regard to storage requirements, the 3-dimensional space (i.e., cubic volume) available for storing materiel.

**demand.** An indication of a requirement, a requisition, or a similar request for an item. Demands are categorized as either recurring or non-recurring.

**demand-based requirements.** A requirements determination process that has a goal targeted at filling a percent of demand or at satisfying demand within a given period of time.

**DMSMS issue**. The loss or impending loss of manufacturers of items or suppliers of items or the loss or impending loss of raw materials used to manufacture items of supply. Such losses may cause material shortages that endanger a weapon system's or equipment's development, production, or post-production support capability.

**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 to implement the most cost-effective resolution.

**economic stockage.** An item with demand-based requirements stocked based on economics when the cost of being out of stock is equal to or exceeds the cost of holding stock and is stocked at the wholesale level.

end item. A final combination of end products, component parts, or materials that is ready for its intended use (e.g., ship, tank, mobile machine shop, aircraft).

**end-user.** An individual or organizational element authorized to use supply items. The end-user is normally the terminal point in the logistics system at which action is initiated to obtain materiel required to accomplish an assigned mission or task.

excess. Defined in Volume 1 of DoDM 4160.21.

excess stock on-order. An item that was placed on-order and has not been received, but is no longer required due to changes in mission, requirements or other similar changes.

**exterior container.** A container, bundle, or assembly that is sufficient by reason of material, design, and construction to protect unit packs and intermediate containers and their contents during shipment and storage as described in Military Standard 129. An exterior container can be a unit pack or a container with a combination of unit packs or intermediate containers. An exterior container may or may not be used as a shipping container.

**FLIS.** A management system designed to collect, store, process, and provide item-related logistics information. The comprehensive government-wide system used to catalog, assign stock numbers, and maintain and distribute logistics information for items of supply. Represents the

common data system that provides the item information in a database reflected in the Federal Catalog System.

**FSC.** A system by which all items of personal property used by all participating activities are classified. FSC contains groups and classes of commodities with emphasis on the items known to be in participating activities' supply systems.

This classification system is based on both current and anticipated management needs.

The FSC structure is modified as the needs of management change by the addition of newly developed groups and classes, the subdivision of existing classes, and the revision of definitions of classes.

The uniform FSC is governed by daily management requirements and provides uniform management categories throughout Service activities and participating agency and participating countries organizations, functions, operations, and supply pipelines.

The FSC permits greater uniformity within and between the participating activities in the operations of reporting, accounting, financial management, materiel management control, and budgeting.

Classification descriptions and codes, listed in Chapter 2 of Volume 13, Cataloging Data and Transaction Standards, are used to identify the organization with designated materiel management responsibilities for an item.

GFM. Defined in Chapter 4 of Volume 4, DoD 7000.14-R.

**government furnished equipment.** An item of special tooling, special test equipment, or equipment, in the possession of, or directly acquired by, the U.S. Government and subsequently furnished to a contractor for the performance of a contract.

**ICP.** An organizational unit or activity within the DoD supply system that is assigned the primary responsibility for the materiel management of a group of items either for a particular Military Department or for the DoD as a whole. In addition to materiel management functions, an ICP may perform other logistics functions in support of a particular Military Department or for a particular end item (e.g., centralized computation of retail requirements levels and engineering tasks associated with weapon system components).

**identity.** What an item is as defined by its national stock number and other identifiers such as original manufacturer, trademark, or other intellectual property, performance, part number, date code, lot number, testing methods and results, inspection, documentation, warranty, origin, ownership history, packaging, storage, handling, physical condition, or previous use.

**implied shortage cost.** The derived cost of a shortage of stock based upon a forecast of the number of days of delay in the availability of materiel.

**individual item.** A single instance of a stock-numbered item, a single assembly, or a single subassembly.

**insurance item.** A non-demand-based, stocked, essential item for which no failure is predicted through normal usage. However, if a failure were to be experienced, or a loss should occur through accident, abnormal equipment or system failure, or other unexpected occurrence, lack of replacement item will seriously hamper a weapon system's operational capability.

inventory. Defined in Chapter 4 of Volume 4, DoD 7000.14-R.

**item.** The individual items (i.e., units) included in a category of items identified by a national stock number with the same form, fit, and function. The individual items (i.e., units) categorized as an item can be manufactured by multiple sources.

**item identification**. A collection and compilation of data to establish the essential characteristics of an item that give the item its unique character and differentiate it from other supply items.

**item management coding.** The process of determining whether items of supply in FSCs for integrated materiel management qualify for management by the individual DoD Components other than the DLA or the GSA.

**logistics reassignment.** The transfer of integrated materiel management responsibilities from one manager to another.

**long supply**. Stocks that are calculated above the AAO quantity of an item authorized for peace time and war time requirements to equip and sustain U.S. and allied forces.

**LOT buy.** A one-time procurement, when all cost effective and prudent alternatives have been exhausted, for the total future requirement of an item that is no longer expected to be produced. The procurement quantity is based upon demand or engineering estimates of wear out rates or item malfunction or failure sufficient to support the applicable equipment until phased out.

**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 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).

**materiel management.** The phase of military logistics that includes managing, cataloging, demand and supply planning, requirements determinations, procurement, distribution, overhaul, and disposal of materiel.

**materiel manager.** An organization assigned materiel management responsibilities for the DoD and participating U.S. Government civil agencies. The term includes responsibilities performed by either wholesale materiel managers or retail materiel managers: managing, cataloging, demand and supply planning, requirements determination and definition, procurement,

distribution, overhaul and repair of reparable materiel, and disposal of materiel. Responsibility for physical inventory processes remain with the materiel managers who physically have the items in accordance with DoDI 4140.73.

**military mission essentiality.** An indicator reflecting the composite effect of an item on the overall military mission based on the most critical significant application of the item. Used in determining resource allocations, determining degree of management intensity, and communicating essentiality among the DoD Components.

**modification.** A U.S. Government-approved change in the configuration of a part or item that offers a benefit to the U.S. Government by correcting deficiencies, satisfying a change in operational or logistic support requirements, or effecting a life-cycle cost savings.

**national stock number.** The 13-digit stock number replacing the 11-digit Federal stock number. It consists of the 4-digit FSC code and the 9-digit national item identification number. The national item identification number consists of a 2-digit National Codification Bureau number designating the central cataloging office (whether North Atlantic Treaty Organization or other friendly country) that assigned the number and a 7-digit (xxx-xxxx) nonsignificant number. The number is arranged: 9999-00-999-9999.

**nonconformance**. Supplies not conforming in all respects to contract requirements as described in Part 46 of the FAR.

**non-demand-based.** A requirements determination process that is not based on forecasted demand, but qualifies for stockage based on other criteria. Types of non-demand-based stockage are insurance stockage, LOT buys, and program-based buys.

**non-stocked items**. Items received based on valid requisitions for items without an established stockage level, no previous demand, and no suitable substitutes.

**on-hand**. Assets physically located in a DoD facility, under DoD control, or in a DoD contractor managed physical inventory point or location, including consumed and unconsumed assets.

**order and shipping time level.** The quantities of materiel required to sustain operations during the interval between the time that an activity initiates a replenishment requisition and the time the activity receives the requisitioned materiel.

**organic support.** The capability of a Military Service or a Defense Agency to sustain logistics operations through U.S. Government organizational structures.

**PBL.** Outcome-oriented logistics approach that establishes outcome performance goals of weapon systems, ensures responsibilities are assigned, provides incentives for attaining these goals, and facilitates the overall life-cycle management of system reliability, supportability, and total ownership costs. The objective is to optimize the total system availability while minimizing cost and logistics footprint. The outcomes are the result of many products and processes acting towards a common purpose. Trade-off decisions are made between factors such as costs, useful service life, and effectiveness.

**physical inventory.** The process of physically counting DoD-owned assets to verify the onhand DoD-owned assets match the current record balances with documentation of events such as receipts, shipments, inventory adjustments, and changes to condition, ownership, or location. The emphasis is on inventory processes that produce an accurate accountability of DoD-owned assets with a full reconciliation to the financial statements in accordance with DoDI 4140.73.

**PICA.** The service or agency ICP designated as the single activity within the DoD responsible for providing materiel support.

**provisioning.** The management process of determining and acquiring the range and quantity of support items necessary to operate and maintain an end item of materiel for an initial period of service.

**public-private partnerships**. Partnership where a commercial vendor provides support to a DoD organization, (e.g., commercial vendor provides supply support for depot maintenance organizations in a DoD maintenance facility).

**readiness.** Measure(s) of a system's ability to undertake and sustain a specified set of missions at planned peacetime and wartime usage rates. Examples of system readiness measures are combat sortie rate, fully mission capable rate, and operational availability. Measures take account of:

The effects of system design, reliability, and maintainability.

The characteristics of the support system.

The quantity and location of support resources.

**readiness-based sparing tool.** An analytical capability primarily used to set sparing levels. Examples of other applications that a readiness-based sparing tool can support include:

Assessing the inventory investment required for the fielding of a new program (e.g., weapon system or subsystem).

Negotiating supplier PBL agreements.

Assessing the impact of reliability, maintainability, or supportability improvements on weapon system readiness.

Planning and developing budgets.

Conducting what-if exercises related to deployments.

**receiving.** All actions taken by a receiving activity from the physical turnover of materiel by a carrier until the on-hand balance of the accountable stock record file or in-process receipt file is updated to reflect the received materiel as an asset in storage, or the materiel is issued directly from receiving to the customer.

**reclamation.** The process of returning serviceable and economically reparable components and material from excess or surplus property to the proper supply activity, whereas the residue is processed as disposable property.

**reparable item.** An item subject to economical repair and for which the repair (at either depot or field level) is considered in satisfying computed requirements at any stockage point.

replenishment. Actions to resupply materiel when the stock level reaches the reorder point.

**requirements computation.** Any mathematical calculation performed to support requirements determination functions.

**requisition.** An order for materiel initiated by an established, authorized organization (i.e., a DoD or non-DoD organization that has been assigned a DoD activity address code) that is transmitted either electronically, by mail, or telephoned to a supply source within or external to the DoD (e.g., the GSA, the Federal Aviation Administration, or other organizations assigned management responsibility for categories of materiel), according to procedures specified in Volumes 1 and 2 of Defense Logistics Manual 4000.25.

**retail.** Supply organizations at the consumer level for the purpose of directly providing materiel to ultimate users or at the intermediate or region level for the purpose of supplying users in a geographical area.

**SCM.** Meeting customer-driven materiel requirements through the acquisition, maintenance, transportation, storage, and delivery of materiel to customers, and managing materiel returns, movement of reparable materiel to and from maintenance facilities, and the exchange of information among customers, maintainers, supply chain managers, and suppliers.

**secondary item.** An item that is either in use, stocked, or held in operating materials and supplies. Secondary items are included in principal items. Secondary items do not require centralized individual item management.

Secondary items include reparable components, subsystems, and assemblies, consumable repair parts, bulk items and materiel, subsistence, and expendable equipment and end items, including clothing and other personal gear.

Secondary items do not include principal items of such importance to operational readiness that management techniques require centralized individual item management, e.g., major weapon systems, munitions, equipment and other property in accordance with DoDI 5000.64, end items, or replacement assemblies.

**secondary inventory control activity.** The service or agency ICP receiving materiel support from the PICA for selected logistics functions.

**shelf-life item.** An item possessing deteriorative or unstable characteristics to the degree that a storage time period is assigned to ensure the item performs satisfactorily in service.

**shipping container.** An exterior container that meets carrier regulations and is of sufficient strength, by reason of material, design, and construction, to be shipped safely without further packing (e.g., wooden boxes or crates, fiber and metal drums, and corrugated and solid fiberboard boxes).

**shortage.** Insufficient quantity to meet a requirement for raw, in process, or manufactured commodity, equipment, component, accessory, part, assembly, or product of any kind.

**sparing**. When used in reference to stockage computations in this issuance, stocking of an individual item in case another individual item of the same type is worn out, broken, or lost, commonly referred to as a sparing of a reparable repair part but may be referred to as sparing

**sparing level**. Stocking levels established for spare reparable item or a consumable item used in connection with the maintenance of an end item or weapon system.

**SSR.** A transaction identifying requirements for supply support that is submitted to the integrated materiel manager by the organization introducing materiel or a weapon system.

**stock.** Materiel that materiel managers keep on hand or schedule to have on hand to meet customer requirements.

**stockage.** Stock requirement based on the type of item (reparable or consumable), the supply performance goal (weapon system readiness or time to fill a demand), and the demand forecastability for the item.

stock level. Item quantity that materiel managers keep on-hand to meet customer requirements.

**storage costs.** The variable costs of storing materiel. A storage cost factor is not variable (and therefore, not considered), if the cost would remain the same after eliminating 50 percent of the stored materiel. One percent of the annual average value of the relevant inventory for is used for storage costs unless actual variable storage costs are available.

supplier. Organic or commercial sources for items of supply.

**supply chain.** The linked activities associated with providing materiel to end users for consumption. Those activities include supply activities (e.g., organic and commercial ICPs and retail supply activities), maintenance activities (e.g., organic and commercial depot level maintenance facilities and intermediate repair activities), and distribution activities (e.g., distribution depots and other storage locations, container consolidation points, ports of embarkation and debarkation for ground, air, and ocean transportation).

**supply chain risk.** The risk of intentional or unintentional disruptions to the flow of product, materiel, information, and finances across the lifecycle of a weapon or support system which negatively impact the integrity of DoD logistics infrastructure; materiel acquisition and supply (including critical suppliers and critical components); key transportation modes and routes; and storage and stockpile activities. Disruptions could arise in any sub-set of the DoD supply chain, 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. The risk that an adversary may sabotage, maliciously introduce unwanted function, or otherwise subvert the design, integrity, manufacturing, production, distribution, installation, operation, or maintenance of a system so as to surveil, deny, disrupt, or otherwise degrade the function, use, or operation of such system.

**surplus property.** Excess personal property not required by any Federal agency as determined by the Administrator of the GSA.

**system acquisition process.** Process of providing new or improved materiel in response to a validated need.

**system acquisition program.** A directed, funded effort that is designed to provide a new or improved materiel capability in response to a validated need.

**total variable cost.** The sum of the variable cost-to-order, variable cost-to-hold materiel, and implied shortage cost. Procurement cycles and safety levels are determined through minimizing these costs for any given group of items in an inventory.

**traceability.** The process that connects the requirement to design implementation in parallel with life-cycle management events related to systems development, acquisition, property accountability, storage, operation, maintenance, safety, physical security, retirement, and disposal by commodity (e.g., a stock numbered product, a lot or batch of a product, a single instance of a stock numbered product, a single assembly or sub-assembly, an end item type, or a single instance of an item).

**unauthorized product substitution.** A situation arising when a supplier knowingly provides materiel other than that specified in the contract without obtaining prior approval from the contracting organization.

**unstable designs.** The design of a part is considered to be unstable if its engineering, manufacturing, or performance characteristics (or those of the component for which it is a part) indicate that the required design objectives have not been achieved; major changes are contemplated to input-output or form-fit-function characteristics; and these changes would render the part obsolete and unusable in the present configuration.

**weapon system availability.** As used in materiel management, the percent of time that a weapon system does not have a materiel failure that prevents it from performing its intended mission or missions.

wholesale. DoD supply organizations that procure, repair, and maintain stocks to resupply the retail levels of supply.

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

<sup>&</sup>lt;sup>2</sup> Available at https://www.dsp.dla.mil/Policy-Guidance/Key-Policy-Documents

<sup>&</sup>lt;sup>3</sup> Available at

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