

Guidance for Performing Inventory Counts

**Office of the Under Secretary of Defense (Comptroller)
Financial Improvement and Audit Readiness
8/26/15**

DRAFT

INTRODUCTION

In the private sector as well as the Federal government, maintaining accurate and reliable inventory data is necessary for managers to make effective budgeting, operating, and financial decisions. Proper inventory accountability requires that detailed inventory records be maintained and the inventory be properly reported in the entity's financial management records and reports. Over the years, audit reports issued by the Government Accountability Office (GAO) and other auditors have repeatedly found that the Federal government lacks complete and reliable information for reported inventory, cannot determine that all assets are reported, is unable to verify the existence of inventory, or cannot substantiate the amount of reported inventory and related property, and property, plant and equipment (PP&E).

As of the end of fiscal year 2014, the Federal government reported approximately \$1.2 trillion in net Inventory and Related Property and PP&E combined. Per the 2014 Financial Report of the United States Government issued by the Department of Treasury, 73.6% of this amount was reported by the Department of Defense (Department or DoD). In addition, these assets comprise approximately 39.4% of the Department's total assets¹. Thus, the Department's ability to perform consistent, accurate physical inventory counts has a considerable impact on the reliability of both the Department's and Federal government's financial reporting.

Assets, as mentioned in this document, include both inventory and operating materials and supplies (OM&S) as defined per Statement of Federal Financial Accounting Standards² (SFFAS) No 3, *Accounting for Inventory and Related Property*, and real property and general PP&E (including military equipment) as defined per SFFAS 6, *Accounting for Property, Plant and Equipment* (as amended). Further, the Department defines those asset categories in the DoD Financial Management Regulation (DoD FMR), Volume 4, Chapter 4, *Inventory and Related Property* and Chapter 6, *Property, Plant, and Equipment*.

Purpose

One of the priority areas in the Department's Financial Improvement and Audit Readiness (FIAR) strategy is verifying the existence and completeness of its mission critical assets. The ability to perform accurate physical inventory counts is an essential element of improving the reliability of inventory records and demonstrating the existence and completeness of assets. The purpose of this paper is to:

- Evaluate the Department's current physical inventory counting procedures against industry best practices, including processes and controls used by private sector companies identified by the GAO as excelling in their ability to

¹ Fiscal Year 2014 Department of Defense Agency Financial Report

² The Federal Accounting Standards Advisory Board, or FASAB, promulgates accounting standards for federal entities.

manage inventory and achieve consistent, accurate physical counts of inventories.

- Recommend improvements to existing guidance for efficient and effective inventory counting procedures that will contribute to the accuracy and reliability of inventory data.

Challenge

Due to the complexity and uniqueness of its assets, the DoD's existing guidance related to physical inventory processes may not comprehensively address the Department's longstanding challenges related to achieving consistent, accurate physical counts of its assets.

Authoritative Guidance

The following sources were used as authoritative guidance in the development of this paper:

- *GAO Executive Guide: Best Practices in Achieving Consistent, Accurate, Physical Counts of Inventory and Related Property (GAO-02-447G).*

A report prepared by the GAO intended to assist federal agencies and other governmental entities in establishing and implementing inventory counting procedures that will contribute to the accuracy and reliability of inventory data, and demonstrate the existence and completeness of assets.

- *DoD FMR, Volume 4, Chapters 4 & 6*

These chapters prescribe the Department's accounting policy and requirements related to Department-owned inventory and OM&S (Chapter 4) and PP&E, including real property and general PP&E (Chapter 6).

- DoD policies, procedures, directives and guidance, including:
 - *DoD Instruction (DoDI) 4140.01, DoD Supply Chain Materiel Management Policy* – establishes policy and assigns responsibilities for management of materiel across the DoD supply chain.
 - *Defense Logistics Manual (DLM) 4000.25, Defense Logistics Management Standards* – prescribes responsibilities, procedures, rules, and electronic data communications standards for conducting logistics operations within DoD.
 - *DLM 4000.25-2, Military Standard Transaction Reporting and Accounting Procedures (MILSTRAP) Manual* – prescribes uniform procedures, data elements, forms and other standards for the exchange of logistics information related to inventory control.

- *DoDI 5100.76, Safeguarding Sensitive Conventional Arms, Ammunitions, and Explosives* – establishes policy and procedures for the physical security of sensitive conventional arms, ammunitions and explosives in the possession or custody of the DoD Components, DoD contractors, and under foreign military sales or security cooperation programs.³
- *DoDI 4165.14, Real Property Inventory and Forecasting* – assigns responsibilities and prescribes procedures for collecting, submitting, and forecasting Department real property inventory.
- *DoDI 5000.64, Accountability and Management of DoD Equipment and Other Accountable Property* – establishes accountability and management policy for tangible DoD-owned equipment and other accountable property.

Factors to Consider

The inventory count process is a fundamental element of an agency's internal control environment and the commitment of management is critical to establishing effective and reliable internal controls. The GAO Executive Guide identifies common characteristics and practices used by identified leading-edge companies to ensure the physical count of their inventories provides management with useful, reliable, and timely information for decision making and reporting. Specifically, 12 key factors were identified, which collectively ensure consistent and accurate count results. The following table lists each key factor, main characteristics of each factor, and whether the characteristics are contained in current Department guidance related to the physical inventory of assets.

³ Inventory of nuclear weapons for which DoD has custodial responsibility is not included in the scope of this document. Guidance can be found in these Department of Energy and Military Service publications: DOE-DNA TP 100-1, Navy SWOP 100-1, Army TM 39-100-1, Air Force TO 11N-100-1, *Supply Management of Nuclear Weapons Materiel*.

	GAO Guidance		Department Guidance		
	Key Factor	Characteristics	Inventory/OM&S	Real Property	General Equipment
			DoDI 4140.1; DLM 4000.25; DLM 4000.25-1; DoDI 5100.76	DoDI 4165.14	DoDI 5000.64
1	Accountability	a) Set inventory record accuracy goals at 95% or better.	a) Met. Goal range from 95% - 99% depending on type.	a) Not met Noted no mention of accuracy goals.	a) Met. Min goal of 98% (100% for sensitive and classified items).
		b) Set other performance expectations, such as adjustments and number of accurate counts based on impact to operations.	b) Met. Prescribes specific performance standards for all materiel for which Component maintains accountability record.	b) Not met. Noted no mention of performance expectations.	b) Partially met. Requires USD(AT&L) to establish Department-wide performance measures and Heads of DoD Components to develop additional performance measures. However, those additional performance expectations are not mentioned.
		c) Establish accountability for achieving performance goals in employee job descriptions. Enforce through periodic performance evaluations and a reward system that measures the achievement of performance goals.	c) Not met. Noted no published Department-wide guidance or requirement to include performance goals in employee job descriptions.	c) Not met. Noted no published Department-wide guidance or requirement to include performance goals in employee job descriptions.	c) Not met. Noted no published Department-wide guidance or requirement to include performance goals in employee job descriptions.
		d) Establish accountability from the top of the organization to the lowest level, including direct accountability at the level	d) Met. Integrated Materiel Managers (IMMs) within DLA and Military Services	d) Partially met. Establishes requirement for Real Property	d) Met. Requires Heads of DoD Components to be accountable,

	GAO Guidance		Department Guidance		
	Key Factor	Characteristics	Inventory/OM&S	Real Property	General Equipment
			DoDI 4140.1; DLM 4000.25; DLM 4000.25-1; DoDI 5100.76	DoDI 4165.14	DoDI 5000.64
		responsible for managing the physical count process.	are responsible for initiating and directing the physical inventory process. Storage activities, which have custody of assets, are responsible for executing the count. Performance goals and feedback mechanisms required for physical inventory counters and supervisors.	Accountable Officer (RPAO), at WHS and the Military Departments.	develop effective performance measures, and appoint Accountable Property Officers (APO), who have direct responsibility for, among other things, physical inventory counts.
2	Written policies	<p>a) Document policies and procedures for the entire physical count process, including objective of the count, timing and types of counts, instructions for counting and recording, and researching and adjusting variances.</p> <p>b) Regularly review and update established policies and procedures.</p>	<p>a) Met. Provides uniform procedures over the complete physical count process for materiel within the DoD supply system.</p> <p>b) Partially met. Provides for a change management process. Noted no provision for regular, periodic reviews.</p>	<p>a) Not met. Noted no specific instructions for counting, recording, researching, and adjusting variances, although timing requirement is specified (every 5 years, or 3 years for historic real property).</p> <p>b) Not met. Noted no guidance regarding policy and procedure updates.</p>	<p>a) Not met. Requires development of count procedures, but provides no specific instructions for counting, recording, researching, and adjusting variances. Also, no mention of timing, type, or objective of count.</p> <p>b) Not met. Noted no guidance regarding policy and procedure updates.</p>

	GAO Guidance		Department Guidance		
	Key Factor	Characteristics	Inventory/OM&S	Real Property	General Equipment
			DoDI 4140.1; DLM 4000.25; DLM 4000.25-1; DoDI 5100.76	DoDI 4165.14	DoDI 5000.64
3	Approach	<p>a) The two predominant physical inventory counting approaches are:</p> <ul style="list-style-type: none"> • Cycle counting – when portions of the inventory are counted periodically until the entire inventory has been counted – supports operational and financial needs of the entity, and • Wall to wall counting – when the entire inventory is counted at a point in time – supports financial reporting needs of the entity. 	<p>a) Met. Mentions statistical sampling (including sample stratification guidance), wall-to-wall counts as acceptable approaches and cycle counting (acceptable if perpetual balances are supported).</p>	<p>a) Not met. Noted no guidance regarding physical inventory count approach.</p>	<p>a) Partially met. While statistical sampling, cyclic and wall-to-wall methods are mentioned, no criteria or detailed guidance is provided.</p>
		<p>b) When selecting the best approach management should consider the following:</p> <ol style="list-style-type: none"> 1. the objective or purpose of the count and the timing issues involved, 2. the capabilities of inventory system, 3. the existing control environment over the inventory system and processes, and 4. the characteristics of the inventory. 	<p>b) Met. Emphasizes a selective approach, rather than “100% wall-to-wall” concept, based on directing available inventory resources towards critical areas where maximum return can be derived; considers control environment, type of materiel, purpose, and capability of system.</p>	<p>b) Not met. No guidance regarding criteria for selecting physical inventory count approach.</p>	<p>b) Not met. Delegates the responsibility to Components to determine timing, method, type and scope of the physical inventory process. Expectations include ensuring readiness and internal controls, but no mention of capability of system.</p>
4	Frequency of counts	<p>a) Determine which items to count and how frequently by segmenting the inventory into</p>	<p>a) Met. Provides minimum frequency of count by inventory</p>	<p>a) Partially met. Frequency of counts – at least once every</p>	<p>a) Partially met. Minimum frequency of counts is provided</p>

	GAO Guidance		Department Guidance		
	Key Factor	Characteristics	Inventory/OM&S	Real Property	General Equipment
			DoDI 4140.1; DLM 4000.25; DLM 4000.25-1; DoDI 5100.76	DoDI 4165.14	DoDI 5000.64
		identifiable classes, assess the risk for each and assign frequency of counts based on results of each.	class, which includes consideration for specific risk categories including arms, missiles, ammunition, explosives, etc.	5 years or 3 years (heritage assets).and inventory segmentation guidance are separately mentioned. No mention of risk assessment.	– every 3 years or annually (sensitive and classified items) but no guidance regarding segmenting into identifiable classes and risk assessment.
		b) Choose a method for selecting individual items or locations to count based on types of physical inventory being performed to ensure all inventory is counted.	b) Met. Provides inventory selection guidance based on prescribed prioritization of items. Also, refer to 3a) regarding statistical sampling.	b) Not met. Noted no guidance regarding method of selecting items to count.	b) Met. See 3a) regarding above.
5	Segregation of Duties	a) To ensure adequate segregation of duties over the physical count process, personnel should not have overlapping responsibilities in (1) custody or access to the inventory items, (2) processing and recording inventory transactions, and (3) approval of inventory transactions and adjustments.	a) Met. Responsibilities related to recording, processing, and adjusting inventory records are documented. Specifies duties shall not overlap so that no individual can adversely affect the integrity/accuracy of the inventory.	a) Not met. No guidance regarding segregation of duties surrounding the inventory count process.	a) Not met. No specific guidance related to segregation of duties, except incorporating the Managers' Internal Program by reference (DoDI 5010.40). However, APOs are responsible for both posting inventory adjustments, and assisting in the

	GAO Guidance		Department Guidance		
	Key Factor	Characteristics	Inventory/OM&S	Real Property	General Equipment
			DoDI 4140.1; DLM 4000.25; DLM 4000.25-1; DoDI 5100.76	DoDI 4165.14	DoDI 5000.64
					completion of the physical inventory and research/ investigations per the guidance.
		b) When adequate segregation of duties is not practical or cost-effective, other risk mitigating controls such as (1) blind counts, (2) increased supervision, and (3) using two-member count teams should be implemented.	b) Met. Requires blind counts and provides guidance related to risk mitigation techniques/controls when adequate segregation of duties is not present.	b) Not met. Noted no guidance related to risk mitigation techniques/controls when adequate segregation of duties is not present.	b) Not met. Noted no guidance related to risk mitigation techniques/controls when adequate segregation of duties is not present.
6	Knowledge of Staff	a) Counters are knowledgeable about the inventory items as they are better able to correctly identify items that may look similar. Thus likely reducing the need for second or third count.	a) Met. Requires of DoD Component heads to ensure that sufficient emphasis is placed on materiel accountability, inventory accuracy, and familiarity with inventory items to facilitate counts.	a) Not met. Mentions RPAO requirement, but noted no guidance regarding counters' requisite knowledge of inventory items or specific qualifications of RPAO.	a) Partially met. Except APO requirement, noted no guidance regarding counters' requisite knowledge of inventory items.
		b) Counters are knowledgeable about the count process to help facilitate efficient and accurate physical counts.	b) Met. See above.	b) Not met. See above.	b) Not met. See above.
		c) Count personnel are typically trained on types of inventory, unit of measure, recording of counts, systems, and research methods (if applicable).	c) Met. See above.	c) Not met. See above.	c) Partially met. Requires Heads to ensure that all personnel are properly trained to

	GAO Guidance		Department Guidance		
	Key Factor	Characteristics	Inventory/OM&S	Real Property	General Equipment
			DoDI 4140.1; DLM 4000.25; DLM 4000.25-1; DoDI 5100.76	DoDI 4165.14	DoDI 5000.64
					their level of responsibility, but no mention of specific areas.
		d) Establish a separate inventory group of dedicated counters.	d) Met. Provides for separate group of dedicated counters.	Not met. Noted no guidance regarding group of separate group of dedicated counters.	Not met. Noted no guidance regarding group of separate group of dedicated counters.
		e) In instances where less experienced personnel perform the count, then increased supervision, training and instructions are required.	e) Met. Requires increased supervision when using less experienced count personnel.	e) Not met. Noted no guidance regarding level of count supervision based on count personnel experience.	e) Not met. Noted no guidance regarding level of count supervision based on count personnel experience.
7	Supervision	a) Elements of supervision include providing instructions and training, solving problems, and reviewing the work performed.	a) Met. DoD Component managers must ensure proper instructions, training, tools and resources are provided to ensure timely and accurate counts.	a) Not met. Noted no specific guidance related to elements of supervision.	a) Not met. Noted no specific guidance related to elements of supervision.
		b) Supervisor responsibilities include ensuring counters are available to count, selecting count team members, assigning responsibilities, and ensuring timely completion of the count.	b) Met. See above.	b) Not met. Noted no specific guidance provided on inventory count supervisor responsibilities.	b) Not met. Noted no specific guidance provided on inventory count supervisor responsibilities.
		c) The use of direct or indirect supervision is dependent on management's determination of	c) Not met. Noted no specific guidance provided on direct or	c) Not met. Noted no specific guidance provided on direct or	c) Not met. Noted no specific guidance provided on direct or

	GAO Guidance		Department Guidance		
	Key Factor	Characteristics	Inventory/OM&S	Real Property	General Equipment
			DoDI 4140.1; DLM 4000.25; DLM 4000.25-1; DoDI 5100.76	DoDI 4165.14	DoDI 5000.64
		the adequacy of segregation of duties.	indirect supervision.	indirect supervision.	indirect supervision.
8	Blind Count ⁴	a) Counters performing the blind count have no prior knowledge or access to the on-hand quantity balance in the inventory records.	a) Met. Blind counts are required except in rare circumstances.	a) Not met. Noted no guidance regarding blind counts.	a) Not met. Noted no guidance regarding blind counts.
		b) Counters are provided other tools to perform the count including the part number, description, location, etc.	b) Met. Requires providing this information to the counters.	b) Not met. See above.	b) Not met. See above.
		c) The strength of segregation of duty controls should be considered when deciding to perform blind counts.	c) Met. This is the determining factor in deciding whether to employ blind counts.	c) Not met. See above.	c) Not met. See above.
9	Completeness of Count	To facilitate a complete count, the following considerations need to be made prior to the start of the count:	a) Met. Guidance includes considerations for cutoff procedures.	a) Not met. Noted no specific guidance regarding pre-inventory procedures to ensure completeness of the physical count.	a) Not met. Noted no specific guidance regarding pre-inventory procedures to ensure completeness of the physical count.
		a) Cutoff procedures - conduct the count when operations are shut down or during a slow movement period.	b) Met. Guidance includes considerations for pre-inventory physical location preparation.	b) Not met. See above.	b) Not met. See above.
		b) Pre-inventory activities, primarily physical location preparation.			

⁴ A blind count, which offers the highest degree of assurance of an accurate and reliable count, refers to the performance of a physical inventory count in which those executing the count have no knowledge of, or access to, the on-hand quantity balance in the inventory records.

	GAO Guidance		Department Guidance		
	Key Factor	Characteristics	Inventory/OM&S	Real Property	General Equipment
			DoDI 4140.1; DLM 4000.25; DLM 4000.25-1; DoDI 5100.76	DoDI 4165.14	DoDI 5000.64
		c) Control methods to ensure all inventory items are considered for count, regardless of location.	c) Met. Guidance includes consideration for control methods to ensure all inventory items are considered for count.	c) Not met. See above.	c) Not met. See above.
10	Execution of Physical Count	Five key areas of consideration when executing the physical count include:	Partially met. Details below:	Not met. Noted no specific guidance related to the execution of the physical count.	Not met. Noted no specific guidance related to the execution of the physical count.
		a) communication of proper information to the counters;	a) Met. Guidance is provided on communicating information to counters.		
		b) verification of correct item information;	b) Not met. Noted no guidance re: verification.	Not met. See above.	Not met. See above.
		c) the appropriate method to capture and compare the physical count to the inventory records;	c) Met. Guidance on comparing data included.	Not met. See above.	Not met. See above.
		d) determination of the number of requisite counts; and	d) Met. Guidance on the number of requisite counts is included.	Not met. See above.	Not met. See above.
		e) timely completion of the count.	e) Met. Guidance on timeliness of count included.	Not met. See above.	Not met. See above.
11	Research	a) Management must establish criteria for which variances to research based on impact.	a) Met. Criteria and guidance prescribed based on inventory class and dollar amount.	a) Not met. Noted no guidance related to the criteria used to determine which variances to	a) Not met. Noted no guidance provided – delegates research process to Components.

	GAO Guidance		Department Guidance		
	Key Factor	Characteristics	Inventory/OM&S	Real Property	General Equipment
			DoDI 4140.1; DLM 4000.25; DLM 4000.25-1; DoDI 5100.76	DoDI 4165.14	DoDI 5000.64
				research.	
		b) Required research must be performed.	b) Met. Required as part of physical inventory process.	b) Met. Must be done at least annually.	b) Met. Required as part of physical inventory count process.
		c) The research process includes performing required analysis, promptly completing research, and, and referring variances to management for approval and/or security for investigation.	c) Met. Prescribes research process and responsibilities for inventory classes, including when and how to refer variances for investigation.	c) Not met. Noted no guidance related to the research process.	c) Met. Included in definition of inventory adjustment and APO responsibilities. Also incorporates entire DoD FMR by reference, which includes guidance on investigations (Volume 12, Chapter 7).
12	Evaluation of Count Results	a) The results of the physical count should be evaluated against established performance measures.	a) Met. Includes mechanism for reporting results against standardized performance measures.	a) Not met. Noted no guidance related to the evaluation of the results of the physical count.	a) Met. USD (AT&L) evaluates Department-wide performance against measures. Results measured by annual loss and overage rates in accordance with ASTM (E 2132-11). ⁵
		b) Results of the physical count can be measured in several ways	b) Met. Performance measures include	b) Not met. See above.	b) Partially met. See above.

⁵ Standard Practice for Inventory Verification: Electronic and Physical Inventory of Assets, ASTM International [E 2132-11]

Key Factor	GAO Guidance	Department Guidance		
	Characteristics	Inventory/OM&S DoDI 4140.1; DLM 4000.25; DLM 4000.25-1; DoDI 5100.76	Real Property DoDI 4165.14	General Equipment DoDI 5000.64
	including accuracy rate, number of adjustments, and tracking and analyzing the frequency of error codes.	accuracy rate, adjustments, and error code tracking.		
c)	What constitutes an "error" should be clearly defined.	Met. Types of errors defined per standardized error classification system.	Not met. See above.	c) Not met. Noted no specific definition of "error".
d)	Communication of the results of physical counts should include counters, management, and warehouse personnel.	Met. Prescribed feedback mechanism includes communication of results to all personnel involved in the physical counts.	d) Not met. See above.	d) Partially met. DoD Property Council communicates Department-wide goals, but no mention of communication of physical count results.
e)	Policies and procedures should be modified as appropriate to address changes to processes.	e) Met. Provides a framework for policy and procedure updates.	e) Not met. See above.	e) Not met. Noted no specific guidance related to policy and procedure maintenance.

Recommendations

Based on the comparison, we recommend the Department take the following steps to improve its existing guidance and procedures related to physical inventories which will contribute to increased accuracy and reliability of inventory data, and demonstrate the existence and completeness of its assets:

- Revise existing Department guidance to include all key factors cited in the GAO Executive Guide, starting with improving Department level accountability and performance measures and then cascading them downward throughout the Department to individual performance metrics.
- Consider using Appendix I of the GAO Executive Guide as an aid in developing more prescriptive guidance in for each phase of the inventory count process - planning, conducting, researching, and evaluating results.
- Compare Department policies procedures against applicable accounting and auditing standards to ensure they are properly aligned.
- Improve the knowledge base of responsible personnel by mandatory training related to inventory requirements - from both an operational accountability and financial reporting perspective – for employees with asset accountability responsibilities. Also establish an ongoing continuing education requirement.
- Establish minimum frequency requirements for the routine review of the adequacy/accuracy of key policies and procedures related to the physical count process and update as appropriate.
- To facilitate the process of navigating the various sources of Department guidance related to asset accountability, consider inserting a matrix in the DoD FMR listing the specific sources of guidance covering the key factors cited in the GAO Executive Guide.