THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION,
TECHNOLOGY
AND LOGISTICS

DEC 23 2004

MEMORANDUM FOR: SEE DISTRIBUTION

SUBJECT: Policy for Unique Identification (UID) of Tangible Personal Property Legacy Items in Inventory and Operational Use, Including Government Furnished Property (GFP)

Effective immediately, this policy update establishes the requirement to apply UID to existing personal property items in inventory and operational use, that is, legacy items. In addition, the policy is formally extended to specifically include items manufactured by organic DoD depots. This policy for legacy personal property items does not impact the mandatory UID DFARS clause to be included in all new solicitations and contracts issued after January 1, 2004, as stated in my UID Policy Memoranda.

UID will be a cornerstone of DoD Business Transformation. Therefore, I request that the Military Departments direct all program and item managers to plan for and implement UID for existing legacy personal property items in inventory and in operational use. UID plans should take an evolutionary approach, as I understand there are physical and resource concerns. ACAT 1D programs must submit UID program plans to the UID Program Office by June 2005. All other programs must submit plans to their respective Milestone Decision Authorities by January 2006. Periodic reviews of the UID program plans will be conducted by the respective Milestone Decision Authorities.

The plans should target Fiscal Year (FY) 2007 as the point by which: (a) all existing serialized assets that meet the criteria for UID have been entered in the UID registry, and (b) UID marking capabilities have been established for all existing items and embedded assets such that marking can commence as applicable equipment are returned for maintenance. I request that all program and item managers plan to complete UID marking of items and all applicable embedded assets within existing items by December 31, 2010, using the planning guidelines included in the attachment. It is recognized that programs will have different levels of completion by 2010 because fielded items will not be removed from service for the sole purpose of UID marking. In addition, programs or items that will be phased out of inventory by December 31, 2010, should be set apart in the plans for an exemption to the UID requirement.

In the case of DoD organic depot maintenance operations, the DUSD (Logistics and Materiel Readiness) shall develop a UID implementation plan specifically for legacy personal property items; the initial version of the plan will be published by May 31, 2005. The Military Departments should plan on establishing initial depot operating capabilities for these legacy items by July 2005, at those depot facilities currently involved with UID for depot-manufactured items. Full Operating Capability (FOC) at all organic depots will be put in place not later then FY 2007. Prior to December 2005, DUSD (Logistics and Materiel Readiness) will publish an FOC UID Concept of Operations for DoD maintenance.

Effective January 1, 2006, all Government Furnished Property (GFP) must meet the UID policy requirements. To achieve this goal, I have asked the Director, Defense Procurement and Acquisition Policy, to implement the UID policy requirements in regulations and guidance, as appropriate. I have also directed the DoD UID Program Management Office to accomplish the tasks specified in the attachment. Information on other specific UID implementation issues is detailed in the attachment.

The Director, Defense Contract Management Agency (DCMA) has the authority to grant short term extensions on UID implementation if such extensions are consistent with the implementation schedules of the negotiated corporate or facility strategies. I have also asked DCMA to issue a quality assurance plan for UID with the technical information and references for UID marking compliance. The quality assurance plan is expected to be released in January 2005.

I am pleased that since the forecast of the UID policy for legacy items was announced, the Military Departments have developed and submitted five model program plans: FA-18 Hornet/Super Hornet, CH-47 Chinook, C-17 Globemaster III, UH-60 Blackhawk, and AH-64 Apache. Industry experience with UID continues to demonstrate the savings that may be achieved once infrastructure and process investments occur. Use of this data key will continue to enhance potential knowledge enabled logistics. I will be conducting round table discussions with the Army, Navy, Air Force, and Defense Logistics Agency leadership on the overall progress and challenges in modernizing the infrastructure, reengineering business processes, and revising Automated Information Systems (AIS) to implement UID.

The Director of DCMA, together with our industry partners, is leading the development of strategies using Single Process Initiatives (SPI) and block changes to expedite UID implementation. I am especially pleased with the initial response we received from Rockwell Collins International. Development of SPIs and block changes will continue as a vital part of this overall transformation.

Current UID information and the latest version of the DoD Guide to Uniquely Identifying Items are available at: http://www.acq.osd.mil/dpap/UID/. Policy questions or comments may be addressed to Mr. Robert Leibrandt by telephone at (703) 695-1099 or by email at robert.leibrandt@osd.mil.

Michael W. Wynne
Acting

Attachment:
As stated

DISTRIBUTION:
SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
DEPUTY UNDER SECRETARY OF DEFENSE (LOGISTICS AND MATERIEL READINESS)
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARIES OF DEFENSE
GENERAL COUNSEL OF THE DEPARTMENT OF DEFENSE
INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE
DIRECTOR, ADMINISTRATION AND MANAGEMENT
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTOR, ACQUISITION RESOURCES AND ANALYSIS
DIRECTOR, DEFENSE PROCUREMENT AND ACQUISITION POLICY
DIRECTOR, DEFENSE SYSTEMS
DIRECTOR, SMALL AND DISADVANTAGED BUSINESS UTILIZATION
DIRECTOR, INTEROPERABILITY
DIRECTORS OF THE DOD FIELD ACTIVITIES

UID Policy for Tangible Personal Property Legacy Items in Inventory and Operational Use, including Government Furnished Property

This policy applies to tangible personal property; defined as property of any kind or any interest therein, except real property, i.e., land and facilities.

The expected outcomes for CY 2005 are as follows:

- Plans for ACAT 1D programs will be developed and required resources identified.
- OSD UID budget guidance to Components will be issued by April 2005.
- OSD AIS and depot roadmaps for key data, processes, and systems will be developed and necessary infrastructure identified.
- 2010 UID Exemption List will be published for sun-setting programs.
- Initial Operational Capability for paperless Government Furnished Property management will be established.

The following planning guidelines should be used:

- Unique Identification (UID) means a system of marking items delivered to the Department of Defense with unique item identifiers that have machine-readable data elements to distinguish an item from all other like and unlike items.
- Unique Item Identifier (UII) means a set of data elements marked on items that is globally unique and unambiguous.
- UID must be applied to items that are serialized within DoD today or already have data plates. These items may be assigned virtual Unique Item Identifiers (UIIs) in DoD information systems, deferring the physical item marking until a trigger event, such as maintenance or overhaul, occurs. Migration strategies will be used to resource and accomplish the technical analysis, as required, providing instructions for labeling or directly marking items that are not currently serialized or do not have data plates.
- All programs must complete UII marking of items and all applicable embedded assets within items by December 31, 2010. Budget planning should provide for the resources necessary to achieve this deadline. An embedded asset is any DoD serially managed subassembly, component, or part embedded within an item.
- Overall Service implementation planning must include modification of on-going production contracts for major programs in effect before January 1, 2004. These contracts should be modified as soon as possible, but no later than at phased events or exercise of options.

ATTACHMENT

- In-service items shall be assessed for retrofit for UII and plans prepared for implementation. Categories may be used by the program manager to distinguish implementation approaches for items based on specific criteria (e.g., items in use, items in stock, items under contract but not yet delivered, items containing embedded items). Chosen approaches and/or candidate approaches for each category shall address consistency with weapon system support and asset management objectives and processes. Relevant factors shall be identified and considered (e.g. weapon system/item life limitations, attrition rates, automated information systems updates, stock turnover, overhaul schedules, planned modifications, future production, and organic capabilities).
- Service UID Implementation plans must provide for data validation to eliminate duplicate and erroneous item data prior to establishment of UIIs or virtual UIIs.

Guidance for preparation of program plans

To be considered complete for unique identification purposes, a program plan should address cost, schedule, impacts on legacy assets in service, existing on-going contracts, drawing update strategy, business approach, and budget requirements, and should reflect coordination with program sustainment activity and industry.

- Planning should include the identification of Automatic Information Technology (AIT) infrastructure requirements for organic manufacturing, for maintenance and supply support, and for deployable assets.
- Planning should include the identification of process reengineering opportunities and Automated Information Systems (AIS) enhancements to exploit the capabilities of UID markings.

The UID PMO will conduct four PM Workshops in March, May, July and October CY05 to support preparation of the required plans. In preparation for these workshops the UID PMO will develop and promulgate within the department:

- UID Program Metrics
- Refined Milestone (MS) Decision Criteria for MDAPs
- Business rules for application of virtual Unique Item Identifiers (UII) on legacy items.

Templates for preparation of program plans along with MS decision criteria, business rules, marking strategies, and marking quality assurance and technical standards will be available on the UID website, http://www.acq.osd.mil/dpap/UID/.

Government Furnished Property (as defined by Federal Acquisition Regulation (FAR) Part 45)

All equipment provided to contractors must have a UII, or use a virtual UII, where appropriate. All applicable material provided must meet the existing UID criteria. All GFP on existing contracts must meet the UID criteria using virtual or physical UIIs by January 1, 2006. To achieve this conversion, special criteria is being developed for the FY 2005 submission of the DD 1662, DoD Property in the Custody of Contractors. The criteria for the submittal will be published by March 2005. The contractor will provide the unit acquisition cost of government property in the possession of contractors when the possessing contractor enters that cost into the UID Registry. The Government will convert that unit acquisition cost into a current cost (based on useful life and depreciation).

DoD Organic Depot Maintenance Operations

The Services should plan on establishing initial depot operating capabilities for legacy personal property items by July 2005 at those depot facilities currently involved with UID for depot-manufactured items (i.e., NADEP Cherry Point, Letterkenny Army Depot, and Ogden Air Logistics Center). Planning will ensure that appropriate design authority approval is obtained prior to actual parts marking (which will be done IAW the associated policy and standards). After such Initial Operating Capability (IOC) is established, and based on corresponding lessons learned/experience gained, Full Operating Capability (FOC) at all organic depots will be put in place NLT FY2007.

Update on UID Implementation Issues

UID International Standards

There is only one authorized standard to be used in DoD solicitations and requirements issued through other agencies to specify the encoding of UID syntax in high-density automatic identification technology media. The standard is defined in International Organization for Standardization /International Electrotechnical Commission (ISO/IEC) 15434 – Information Technology – Syntax for High Capacity Automatic Data Capture Media. Because ISO/IEC 15434 does not provide a format code for Text Element Identifiers (TEIs), which is one DoD approved semantic, DoD will accept a format code of "DD" for use until ISO Joint Technical Committee 1 (JTC1), Subcommittee 31 (SC31), approves a format code for TEIs. On December 2, 2004, a new item work proposal to assign this format code was approved by ISO JTC1/SC31 with 17 nations voting in support, which demonstrates broad international acceptance. International defense support for UID continues to grow as demonstrated by a NATO initiative to develop a UID standardization agreement (STANAG) and UID implementation policy for UID operational use.

In addition to accepting the use of ISO/IEC 15434 message headers, group separators and message trailers in Air Transport Association (ATA) Specification 2000, the Air Transport Association (ATA) has agreed to add additional TEIs to their Common Support Data Dictionary to enable use of TEIs in UID Construct #2, with serialization within the original part number.

UID Quality Assurance Requirements

Change 1 to MIL STD 130L has been published to change the quality parameters for machine-readable direct part markings as follows: (a) Dot peen, laser etch, and chemical etch will use AS 9132, and (b) Ink Jet and all other marking methods, including thermal transfer, will use ISO 15415.

UID Data on Embedded Items

Parent-child relationships between the end item UII and its embedded item UIIs will be reported upon the item's delivery. The parent-child relationship will always be hierarchical to one level. Each embedded item UII that is delivered will have its parent UII identified in the UID pedigree data that accompanies delivery. Parent item is defined as the item assembly, intermediate component or subassembly that has an embedded item with a unique item identifier or DoD recognized unique identification equivalent.

Virtual Unique Item Identifier (UII)

Virtual Unique Item Identifiers (UII) may be used for those DoD-owned items that can be accurately and uniquely identified until a trigger event for physical 2D marking occurs. The legacy item must have innate serialized identity data marked on it that is sufficiently unique to associate the individual item with its virtual UII (i.e., no existing redundant serialization). This means that serialized legacy equipment or reparable spares that meet the UID qualifying criteria may be assigned virtual UIIs. Business rules for Virtual UIIs can be found on the UID website. Trigger events may include the following:

- Change in location where the item is taken out of service at one place and moved to another place to begin service. The item may be marked during this movement process either at the origin or destination, depending on the availability of marking equipment.

- Change in status where the item is taken out of service and placed in maintenance or returned to inventory. Maintenance status may include phase maintenance, scheduled servicing, depot rebuild or overhaul processes, and work-order processes during modification. The item should be marked while in maintenance or upon receipt at the inventory point.

- Change in program where the item is transferred from accountability by one program to another program. The item may be marked by either the losing or gaining program upon the transfer of accountability.

- Change in organizational alignment where the item is moved from the custody of one organization to the custody of another organization, such as transfer of GFP from the custodian to the DoD. The item should be marked by the organization that is losing custody, unless there is a previous agreement with the receiving organization.

UII Registry Elements – Current and Forecast

The UID Program Manager has added the following data elements to the UII registry to support overseas procurements, identification of legacy items, use of virtual UIIs, and tracking of Government property in the possession of contractors:

- Action Code (e.g. Add, Update)
- Batch/Lot
- Current Part Number
- Current Part Number Effective Date

- Manufacturer Identifier
- Currency Code
- Government Property
    - CAGE
    - Contract Number
    - DoDAAC
    - DUNS
    - Received Date
    - Sent Date
    - Status Flag
- Mark
    - Contents
    - Effective Date
    - Added or Removed
    - Marker Code
    - Marker Identifier
    - Medium
    - Value

Future policy updates will address Custodian or Steward, Location UID, Program UID, Item Status, Current Value, Alias (system unique), and additional descriptive information as the Department's approach to uniquely identifying other entities, such as real property and organizations, continues to mature.

Data Capture for Legacy Items

Organizations assigning or marking UIIs for legacy items shall report the actions to the UID registry in accordance with procedures which will be published on the UID website. Data to be provided for legacy items includes descriptive data (e.g. UII, Description, Current Part Number), Parent UII (where applicable), and marking data. This data should be submitted at assignment of the UII, and at any point at which the mark or descriptive data change. For instance, an organization would submit the virtual UIIs, and then an update as each part is marked. Acquisition data is optional for legacy items.

UID Program Manager Tasks

The DoD UID Program Management Office will accomplish the following:

- Refine guidance for the use of "virtual" Unique Item Identifiers (UIIs) and define item lifecycle events that require update to the UID Registry for items in operational use and inventory.

- Continue to develop the Department's unique identification registry concept of operations working with the Office of the Under Secretary for Personnel and Readiness, Office of the Assistant Secretary of Defense (Networks & Information Integration), Office of the Joint Chiefs of Staff (J-4 Logistics), and Office of the Joint Chiefs of Staff (J-8 Force Structure, Resources and Assessment).
- Refine the approach to capturing legacy item UID data elements.
- Develop an implementation strategy for a paperless Government Furnished Property management approach working in partnership with the Defense Contract Management Agency and the Deputy Director, ARA (Property and Equipment Policy).
- Finalize milestone criteria for program reviews working with the Director, Defense Systems by March 2005.
- Continue to engage the Joint Aeronautical Commanders Group to develop UID implementation strategies.
- Work with the National Defense Industrial Association (NDIA) to establish an Industry UID/RFID Leadership group to ensure continued liaison with our industry partners.
- Continue to partner with other Federal Agencies, such as the Department of Homeland Security, to develop a UID roadmap for federal-wide application.
- Work with the Assistant Deputy Under Secretary of Defense (Maintenance Policy, Programs & Resources) to integrate and implement UID requirements in depot-level maintenance functions involving the major repair, overhaul, or complete rebuilding of weapon systems, end items, parts, assemblies, and subassemblies; and manufacture of parts.
- Integrate with the Office of the Deputy Under Secretary of Defense (Installations & Environment) to continue to refine a data policy that integrates the data structure for tangible personal property assets with the data structure for real property assets.
- Work with the Program Managers for Future Combat System and Global Combat Support System to ensure that UID is integrated into the system designs.
- Write a Management Initiative Directive to integrate Department-wide unique identification efforts.
- Establish an IOC for paperless Government Furnished Property management by Sept 2005 working in partnership with DCMA and the Deputy Director, ARA (Property and Equipment Policy).
- Working with the Deputy Director, ARA (Property and Equipment Policy) ensure that FY 2005 criteria for the DD 1662, DoD Property in the Custody of Contractors, is developed and publicized to industry no later than March 2005.
- Develop a strategy to ensure that applicable tangible personal property acquired with the Government Purchase Card is entered into the UID registry.

Coming UID Website Updates

The *Department of Defense Guide to Uniquely Identifying Items, Version 1.4, April 16, 2004*, will be updated soon and posted on the UID website at http://www.acq.osd.mil/dpap/UID/. Items of interest include modification of Construct 2 to allow for lot/batch serialization schemes and expansion of approved TEIs to support Construct 2.

An information paper on the concept of the Virtual UII and its applicability to legacy items and government property management is also available.