

Item Unique Identification (IUID) Standards & Guidance Updates

IUID Center Representative
NSWC Corona, IUID Center
31 Jan 2013

Housekeeping

- Please mute your telephone
- Please use the chat box for questions which are critical to the understanding of the presentation
- Please submit any question not requiring immediate attention to CRNA-IUID_gateway@navy.mil
- Questions will be answered as time permits

What documents changed?

- **MIL-STD 130N Change 1 (Nov 2012)**

http://www.assistdocs.com/search/document_details.cfm?ident_number=35521&StartRow=1&PaginatorPageNumber=1&doc_number=130&status_all=ON&search_method=BASIC

- **DoD Guide to Uniquely Identifying Items v2.5 (Sep 2012)**

http://www.acq.osd.mil/dpap/UID/attachments/DoDUIDGuideVer2_5.pdf

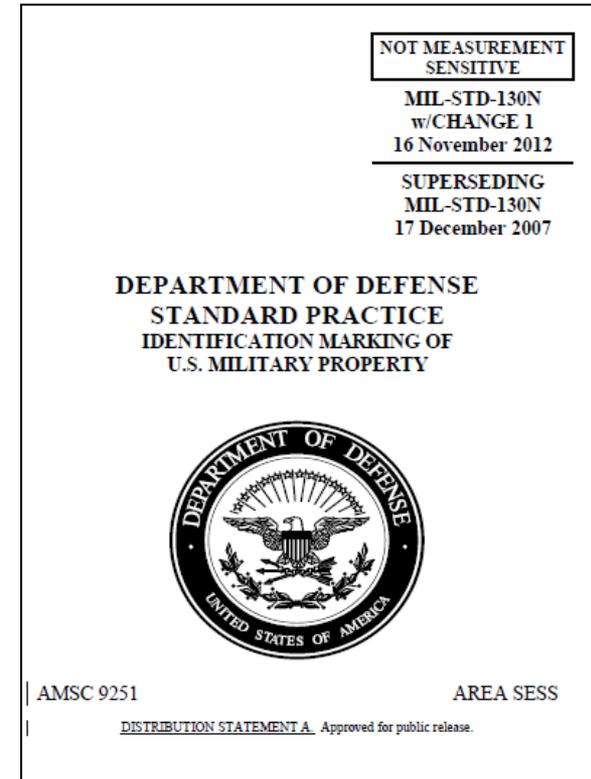
- **DFARS 252.211-7007 (Aug 2012)**

<http://www.acq.osd.mil/dpap/dars/dfars/pdf/r20121231/252211.pdf>

If performing IUID as a contract requirement,
use the version required in the contract

MIL-STD 130 - Overview

- Provides guidance and criteria for implementing machine-readable information (MRI) marking
- Provides criteria for product designers to develop specific identification marking requirements (both human-readable information (HRI) and MRI)
- Provides the basis for contractual marking requirements



MIL-STD 130 Speak

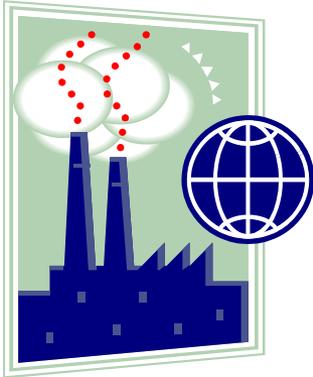
Be careful to read the word “Label” and the word “Mark” as defined within the document.

- **Label** An item marked with the identification information of another item and affixed to that other item.
- **§ 5.1 General.** All requirements in Section 5 apply to the “item mark” as a single entity, which includes all data, HRI, and MRI related to a single PIN identity and configuration.

What's New in MIL-STD 130N Ch1?

- New business rules
 - Encouraged to use “**UID**” to identify the Data Matrix encoded with UII information
 - Allows labels to have text to minimize unintentional removal (e.g., “**DO NOT REMOVE**”)
 - Guidance on serial numbers encoded into a machine-readable mark
 - Guidance for marking very small parts

The Gordian Knot of Serial Numbers



- Sub Contractor
- makes part
 - assigns Serial No.



- Prime Contractor
- buys part
 - assigns Serial No.



- Government
- receives part
 - assigns Serial No.

If you need to make up your own serial number for the UII and now it is different from the other serial number(s) marked on the item – encode the UII as a single element, and do not mark this made up serial number as Human Readable Information. § 5.2.1.2 (b)



[]>^R/_S06^G/_S17V52B26^G/_S1PABC^G/_SS6398^R/_SE_OT

Multiple element UII

[]>^R/_S06^G/_S25SLDN674110001122233334445^R/_SE_OT

Single element UII

Go-to MIL-STD 130 Info

- What if the item can't be marked?

“When items cannot be physically marked or tagged due to a lack of marking space or because marking or tagging would have a deleterious effect, the marking requirements specified in Section 5 shall be:

- (1) Applied to a supplemental container that may or may not provide item protection, becomes a part of the individual item, and is provisioned and managed as a component of that item, or
- (2) Applied to the unit pack in addition to, or in combination with, the identification marking information specified in MIL-STD-129. When combining marking requirements with MIL-STD-129, the manner, method, form, and format of MIL-STD-129 MRI and HRI requirements shall be followed and the informational requirements of this standard shall be fulfilled.” (4.1.b, pg 20)

Go-to MIL-STD 130 Info

- Where should the item be marked?

“Whenever practicable, the location of the marking on the item shall ensure its readability during normal operational use.”

(4.2, pg 20)

- How permanent is permanent?

[IUID Marking] shall be as permanent as the normal life expectancy of the item [including] tests and cleaning procedures and [any applicable] rebuild process.

[If this can't be done] the item shall be marked in a way that will survive up to the point of rebuild.

(4.2, 4.2.a, pg 20)

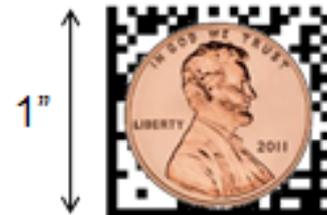
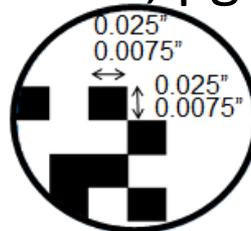
Go-to MIL-STD 130 Info

- How is marking legacy items different from marking newly acquired items?

“...the EID of the organization ensuring the uniqueness shall be the EID used to derive the UII versus any other EID represented in the prior marks.” (5.2.1.5, pg 26)

- What are the size restrictions?

“...module size shall be no smaller than 0.0075 inch and no larger than 0.025 inch...[dimensions of the overall mark] shall not exceed one inch .” (5.2.3.2, pg 27)



DoD Guide - Overview

- “Practical” IUID implementation guidance
- Addresses new acquisition and legacy items
- Provides business rules for IUID implementation

Department of Defense Guide to Uniquely
Identifying Items



Assuring Valuation, Accountability and
Control of Government Property

Version 2.5
September 15, 2012

Office of the Deputy Under Secretary of Defense
(Acquisition, Technology & Logistics)

What's New in DoD Guide v2.5?

- Clarifies ambiguities in IUID requirements
 - Requiring activity identifies items <\$5k which are DoD serially managed and determines permanent identification requirements for mission essential and controlled items <\$5k
 - CAP or GFP special tooling designated for preservation and storage requires IUID
 - Legacy secondary items managed under DoD 4140.1-R that are DoD serially managed and either sensitive, critical safety, or pilferable; reparable; or non-reparable but require item-level traceability during lifecycle require IUID

What's New in DoD Guide v2.5?

- Relaxes minimum Data Matrix size requirements for small, high-risk (e.g., counterfeit, theft) items
- Updates data requirements for the IUID Registry
- Clarifies the use of UII data encoded as a single data element in the Data Matrix (i.e., 18S, 25S, USN, UST , or UID)
- Clarifies ambiguities in business rules
 - Single data element UII human readable marking restrictions (rule #15)
 - Parent item identification restrictions (rule #18)

What's New in DoD Guide v2.5?

– Dealing with Special Characters:

- All special characters, except for dashes (-) and forward slashes (/) shall be deleted from the original part number, lot or batch number, and serial number. **The deletion of the special characters shall be done when the Data Matrix is decoded** to form a UII.
- The UII shall only contain uppercase English alphabet characters A through Z, numeric characters 0 through 9, and the special characters “-” and “/”. If the UII data set elements contain lowercase alpha characters, they shall be converted to uppercase before a UII is derived and encoded in the Data Matrix and/or submitted to the IUID Registry. **When lowercase alpha characters are encoded in the Data matrix UII data set, they shall be converted by the reader to uppercase** alpha characters when the Data Matrix is decoded to form a UII. (#21, pg 54)

Go-to Guide Info

- Decision trees for determining IUID requirements (pg 13,14)
- What is an Enterprise?

“An enterprise, in the context of IUID, is the entity responsible for assigning a UII to an item. This responsibility commits the entity to ensuring the uniqueness of the UII at the time of its assignment and continued uniqueness among future UIIs.” (pg 22)
- Parsing the UII

“Once the UII is created from the separate data elements or a UII data set encoded as a single element placed on the item, the UII shall not be parsed to determine the original elements” (pg 32)

Go-to Guide Info

- Updating the IUID Registry

- Lifecycle events

“When an item that is marked with a UII experiences any of the life cycle events listed above [next slide], the DoD IUID Registry shall be updated by the DoD Component or industry representative that caused the life cycle event to take place.” (pg 34)

- GFP custodianship updates

“DoD Components, when issuing GFP to a contractor, are required to record the transfer of the property in the DoD IUID Registry and its integral GFP module. Contractors, as part of the required receipt of any government property, are required to report to the DoD IUID Registry and its integral GFP module that they have custody of the property, or have returned the property to the government.” (pg 35)

Live Cycle Events

| Term | Element |
|--------------------------------|---|
| Abandoned | Property surrendered by a Federal agency after a written determination that the property has no commercial value, or the estimated cost of its continued care and handling would exceed the estimated proceeds from its sale. An item has no commercial value when it has neither utility or monetary value (either as useable property or as scrap). |
| Consumed | Non-reversibly incorporated into another item |
| Destroyed - Accident | Destroyed during a fire, natural disaster, or other unplanned natural or man-made incident. |
| Destroyed - Combat | Destroyed by the enemy during combat |
| Donated | Surplus property provided to a Service Educational Activity; a State, political subdivision, municipality, or tax-supported institution acting on behalf of a public airport; a public agency; a public body; a charitable institution; or any State or local government agency, and certain nonprofit organizations or institutions. |
| Exchanged - Sold | Provided to a supplier for credit. |
| Exchanged - Repair | Provided to a supplier for an equivalent replacement part. |
| Exchanged - Warranty | Provided to a supplier for an equivalent replacement part or credit while under warranty. |
| Expended - Normal use | Such as in the firing of a missile during combat or consumed during a manufacturing process. |
| Expended - Experimental/Target | Such as the firing of a missile during training exercises and for testing; items destroyed while serving as a target during training exercises and tests. |
| Leased | Property that is granted to a lessee for a period of time in exchange for rent or other consideration. |
| Loaned | owned by a DoD Component and loaned to contractors, scientific institutions or other organizations. |
| Lost | Property that cannot be located or otherwise accounted for. |
| Reintroduced | When an item is returned to DoD service. |
| Retired | Withdrawn from normal service; taken out of use. Includes decommissioned, stricken, sunken, transferred to AMARC/DRMS, etc.; excludes temporary idling of the item. |
| Scrapped | Waste material that will be reused or reprocessed. |
| Sold - Other Federal | Title transferred to non-DoD Federal Agencies with compensation |
| Sold - State/Local | Title transferred to non-Federal governmental entities with compensation |
| Sold - Foreign Govt | Title transferred to non-US governmental entities with compensation |
| Sold - Nongovt | Title transferred to non-governmental entities such as churches, organizations, etc. with compensation. |
| Sold - Historic | Title transferred to a museum or similar entity with compensation |
| Stolen | Lost via theft. |

Go-to Guide Info – Business Rules

- **Contracts and Administration**
 - **FMS Contracts**

“Foreign Military Sales (FMS) contracts are not exempt from IUID.” (#3 pg 50)
 - **Classified Contracts**

“Classified and unclassified contracts require IUID.” (#4, pg 50)
- **UII Construction and Physical Marking**
 - **Life of the UII**

“The UII shall not change over the life of the item. Therefore, the component data elements of the UII shall not change over the life of the item.” (#11, pg 52)

Go-to Guide Info – Business Rules

- UII Construction and Physical Marking

- Extra data in the mark

“Data elements not required to construct the UII shall remain discrete but may be contained within the same mark or media as the UII-required elements, provided that (1) all data elements contained in the mark or media are properly identified with a data qualifier, (2) the added data elements do not introduce ambiguity in the concatenation of the UII, and (3) the added data elements do not violate other business rules stated herein. The UII data elements should appear first in the sequence.” (#13, pg 52)

[>^R/_S06^G/_S17V52B26^G/_S17V1U2R7^G/_S1PF461745J^G/_SS6100057-02^R/_S^EO_T

Go-to Guide Info – Business Rules

- UII Construction and Physical Marking
 - UII length restrictions

“The UII is a non-parsable field, not to exceed 50 characters in length (excludes overhead characters). Overhead characters in the encoded data string, such as syntax and data qualifiers, are not part of the UII and are eliminated when the UII is constructed.” (#19, pg 53)
 - Assigning the UII

“One and only one UII shall be assigned to an item. The UII shall not be transferred from one item to another item once assigned and shall not be reused.” (#27, pg 55)

Go-to Guide Info – Business Rules

- Assigning the UII

“One and only one UII shall be assigned to an item. The UII shall not be transferred from one item to another item once assigned and shall not be reused.” (#27, pg 55)

- Marking of Government property in custody of a contractor

“A UII is not required to be physically marked on tangible personal property items owned by the Government in the custody of a contractor unless the item is moved or delivered to a different location with a different enterprise identifier.” (#35, pg 56)

DFARS 252.211-7007 Overview

- Reporting requirements for GFP into the IUID Registry
 - Requirement criteria
 - Data elements
 - Procedures

Defense Federal Acquisition Regulation Supplement

Part 252—Solicitation Provisions and Contract Clauses

(Revised August 29, 2012)

252.211-7000 Acquisition Streamlining.
As prescribed in [211.002-70](#), use the following clause:

ACQUISITION STREAMLINING (OCT 2010)

(a) The Government's acquisition streamlining objectives are to—

- (1) Acquire systems that meet stated performance requirements;
- (2) Avoid over-specification; and
- (3) Ensure that cost-effective requirements are included in future acquisitions.

(b) The Contractor shall—

- (1) Prepare and submit acquisition streamlining recommendations in accordance with the statement of work of this contract; and
- (2) Format and submit the recommendations as prescribed by data requirements on the contract data requirements list of this contract.

(c) The Government has the right to accept, modify, or reject the Contractor's recommendations.

(d) The Contractor shall insert this clause, including this paragraph (d), in all subcontracts over \$1.5 million, awarded in the performance of this contract.

(End of clause)

252.211-7001 Availability of Specifications, Standards, and Data Item Descriptions Not Listed in the Acquisition Streamlining and Standardization Information System (ASSIST), and Plans, Drawings, and Other Pertinent Documents.
As prescribed in [211.204\(c\)](#), use the following provision:

AVAILABILITY OF SPECIFICATIONS, STANDARDS, AND DATA ITEM
DESCRIPTIONS NOT LISTED IN THE ACQUISITION STREAMLINING AND
STANDARDIZATION INFORMATION SYSTEM (ASSIST), AND PLANS,
DRAWINGS, AND OTHER PERTINENT DOCUMENTS (MAY 2006)

Offerors may obtain the specifications, standards, plans, drawings, data item descriptions, and other pertinent documents cited in this solicitation by submitting a request to:

(Activity) _____
(Complete Address) _____

1998 EDITION 252.211-1

What's new in 252.211-7007?

- Update to the IUID Registry reporting requirements
 - Until December 31, 2013, report serially managed GFP with a unit-acquisition cost of \geq \$5k
 - Beginning January 1, 2014 report all serially managed GFP, regardless of unit-acquisition cost and contractor receipt of non-serially managed items
- Reporting requirements for subcontractors
- Additional data elements required for reporting

IUID Resources

OSD UID Policy Office Website www.uniqueid.org

Trusted site for policy, updates, FAQs, and IUID newsletter

DoN IUID Website

https://acquisition.navy.mil/rda/home/acquisition_one_source/item_unique_identification_iuid

MIL-STD 130 (current version is N Ch1 as of Jan 2013)

Marking standards and requirements

DoD Guide to Uniquely Identifying Items (currently v2.5 as of Jan 2013)

Business rules, additional guidance for legacy items

IUID Toolkit www.iuidtoolkit.com

Role based roadmaps for IUID implementation

Defense Acquisition University (DAU) www.dau.mil

Continuous Learning Courses (CLM200, CLE 040) to increase IUID knowledge

IUID Helpdesk iuid.helpdesk@dla.mil



**QUESTIONS
&
ANSWERS**