Item Unique Identification

The Basics

May 2010
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Introduction

One of the cornerstones of the Department of Defense (DoD) business transformation process is the implementation of Unique Identification (UID) across the Enterprise. This includes personal property, real property, personnel and roles, and will enable accountability and valuation of property, and provide the tools to manage historical data, status of personnel and equipment, and inter-organizational relationships. This guide addresses the personal property component of UID, which includes DoD owned items, and is referred to as Item Unique Identification (IUID). The guide is designed to provide an opportunity for the Department of Defense (DoD) Components, Military Services, and industry to gain insight into the Department’s initiative on improving asset management through uniquely identifying property, plant and equipment, operating materials and supplies. The guide will examine the relationship between the legislative and regulatory environment motivating this program, the policy, implementation, business rules, marking, and valuation process.

The definitions below form the basis of the discussion about the DoD Item Unique Identification (UID) policy.

DoD Item Unique Identification means a system of marking items delivered to DoD with unique item identifiers that have machine-readable data elements to distinguish an item from all other like and unlike items.

A Unique Item Identifier (UII) is a set of data elements marked on an item that is globally unique and unambiguous.

The leading military mission given to the U.S. military forces under the transformed defense strategy is:

- Defend the U.S.
- Assure friends and allies;
- Deter aggression and coercion forward in critical regions;
- Swiftly defeat aggression in two overlapping major conflicts while preserving for the President the option to pursue a decisive victory in one of those conflicts including the possibility of regime change or occupation; and
- Conduct a limited number of smaller-scale contingency operations.
Regulatory Environment
The last several years, the General Accounting Office (GAO) has been critical of the Department’s accountability and control over property, plant and equipment, and its lack of compliance with financial management reform legislation. This has included the inability to achieve a “clean audit”, and the inability of many of the Department’s property systems to properly support the need for asset visibility, engineering analysis and logistics support. As a result, the Department initiated a business transformation process that includes IUID, which will enable the Department to value property to achieve a clean audit, and provide the tools for total asset visibility across the Defense Enterprise. The result will be improved financial management, engineering and logistics support through the ability to link and analyze data.

Item Unique Identification Policy
The Item Unique Identification (UID) policy is the foundation for enabling DoD to reach established goals and objectives through enhanced item visibility, improved lifecycle item management and accountability, and enabling clean financial audits.

"In every troop deployment this century, DoD has been plagued by a major difficulty—the inability to see assets as they flow into a theater and are in storage. This situation has led to direct and significant degradation in operational readiness. When assets in the pipeline are not visible, they are difficult to manage. Property is lost, customers submit duplicate requisitions, superfluous material chokes the transportation system, and the cycle continues. Assets at the retail level that are not visible and, therefore, not available for redistribution, further compound the degradation of operational readiness.” Joint Total Asset Visibility Strategic Plan, January 1999, Joint Total Asset Visibility Office, DoD.

The use of the machine-readable marks required by the IUID policy will significantly improve the quality of data, enable speedy and precise automatic data capture, streamline processes for data accumulation and processing, and ensure integration and interoperability across multi-operational boundaries.

It will also facilitate item tracking in DoD business systems and provide reliable and accurate data for program management, engineering and accountability purposes.

With the ability to distinguish one item from another, IUID ensures data integrity and data quality throughout life, and supports multi-faceted business applications.
and users. This will enable the achievement of a globally interoperable network-centric architecture for the integrated management and valuation of items.

**Why IUID?**

**Answer**

**IUID**

1) Improves inventory management and strategic purchasing
2) Enables clean audit/valuation
3) Enables speedy and precise automatic data capture
4) Enables capability-based operational readiness
5) Lowers life cycle management costs
6) Enables reliable accountability and visibility
The Policy and Regulations

Policy
On July 29, 2003, the "Policy for Unique Identification (UID) of Tangible Items - New Equipment, Major Modifications, and Reprocurements of Equipment and Spares," was issued making IUID a mandatory DoD requirement on all solicitations issued on or after Jan. 1, 2004.

Significant UID Policy Memoranda:

<table>
<thead>
<tr>
<th>IUID Implementation</th>
<th>Announcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy for Unique Identification (UID) of Tangible Items - New Equipment, Major</td>
<td>USD (AT&amp;L) Memo of July 29, 2003</td>
</tr>
<tr>
<td>Modifications, and Reprocurements of Equipment and Spares</td>
<td></td>
</tr>
<tr>
<td>Contract Pricing and Cost Accounting – Compliance with DFARS 252.211-7003, &quot;Item</td>
<td>USD (AT&amp;L) Memo of July 9, 2004</td>
</tr>
<tr>
<td>Identification and Valuation&quot;</td>
<td></td>
</tr>
<tr>
<td>Policy for Unique Identification (UID) of tangible personal property legacy items</td>
<td>USD (AT&amp;L) Memo of December 23, 2004</td>
</tr>
<tr>
<td>in inventory and operational use including Government Furnished Property (GFP)</td>
<td></td>
</tr>
<tr>
<td>Policy update for item Unique Identification of tangible personal property including</td>
<td>USD (AT&amp;L) Memo of May 12, 2005</td>
</tr>
<tr>
<td>government property in the possession of contractors</td>
<td></td>
</tr>
</tbody>
</table>

The Policy Memorandum of July 9, 2004 provides guidance for DoD contracting personnel in pricing and accounting associated with implementing the DFARS clause 252.211-7003.

The Policy Memorandum of December 23, 2004 defines step-by-step procedures for IUID management, milestones, procedures and processes of legacy items in inventory and operational use as well as government furnished property. The key points of the memorandum include:

- Planning guidelines for IUID implementation
- Guidance for preparation of Program Plans
- Establishment of Depot capabilities for management of IUID
- Identification of IUID International standards
- IUID Quality Assurance Standards
- Policy on IUID data for embedded items
- Policy on Virtual Unique Item Identifiers
- Rules for data capture of legacy items
- Information on UID Web Site updates

The Policy Memorandum of May 12, 2005 provides updated policy and implementation guidelines, establishes requirements for applying IUID to DoD property in the possession of contractors (PIPC) and provides policy for
furnishing government property in general. The key points of the memorandum include:

- Principles for electronic property management
- Milestones for PIPC compliance with IUID requirements
- Direction that all acquisition milestone reviews address IUID Implementation
- Revisions to logistics policy to support IUID
- Development of AIS to support IUID
- Updated milestone criteria for IUID Program Plans
- Policy clarification associated with Part Number changes

A key aspect of implementing IUID for PIPC is the transition away from the paper-based DD Form 1662, DoD Property in the Custody of Contractors, to an electronic PIPC environment using the IUID Registry to report government property in the contractor’s possession. Additional guidance on transitioning from the current reporting process for PIPC is provided at http://www.acq.osd.mil/dpap/UID/attachments/guides/DD1662-Transition-Instructions-Final-20060428.pdf

Additional policy information can be accessed through the IUID website at:


**When did the requirement take effect?**

**Answer**

January 1, 2004 for all new DoD solicitations and orders.

**Acquisition Regulation**

The Federal Acquisition Regulation (FAR) is the body of regulations, which is the primary source of authority for the government procurement process. The Defense Federal Acquisition Regulation Supplement (DFARS) is a supplement to the FAR that includes clauses particular to DoD contract procurement. The DFARS contains the rules used by DoD and its suppliers to comply with IUID policy when solicitations are issued.

The DFARS rule for IUID is DFARS clause 252.211-7003, Item Identification and Valuation (June 2005) with updated rules April 2008. It provides policy, definitions, contractor requirements, criteria for marking, reporting criteria, rules for embedded assets, data submission and subcontract pass-through criteria.
The DFARS rule and pertinent clauses are located http://www.acq.osd.mil/dpap/pdi/eb/docs/DFARS_Case_2007-007.pdf

**IUID Life Cycle**

The IUID enables traceability of the item throughout its life within the DoD inventory and maintenance systems. Figure 1 illustrates the IUID lifecycle and the business rules at each phase. Business rules illustrated in Figure 2 on the subsequent page have been developed to determine when an item is to be marked.

![IUID Lifecycle Diagram](image-url)

Figure: 1 – The Item Unique Identification (IUID) Lifecycle
What Items to Unique Identify

All solicitations, contracts or delivery orders for tangible items delivered to the Government will require item unique identification or a DoD recognized unique identification equivalent, if:

- All delivered items\(^1\) for which the Government's unit acquisition cost is $5,000 or more
- Items for which the Government's unit acquisition cost is less than $5,000, when identified by the requiring activity as serially managed, mission essential, or controlled inventory
- Items for which the Government's unit acquisition cost is less than $5,000, when the requiring activity determines that permanent identification is required
- Regardless of value --
  - Any DoD serially managed subassembly, component, or part embedded within a delivered item; and
  - The parent item (as defined in 252.211-7003(a)) that contains the embedded subassembly, component, or part.

Figure 2 contains a decision tree defining the business rules for determining what items should be uniquely identified. The DoD requiring activity issuing the solicitation is responsible for identifying items for IUID when they are under the $5,000 threshold or are embedded items.

---

\(^1\) A single hardware article or unit formed by a grouping of subassemblies, components, or constituent parts. [DFARS 252.211-7003(a)]
Who is responsible for determining what items require IUID?

**Answer**

The contracting office issuing the solicitation should reference DFARS 252.211.7003 and define and list the items requiring identification and/or valuation.

The portion of the clause addressing the decision tree is DFARS 252.211.7003 ©

(c) *Unique item identification.*

(1) The Contractor shall provide DoD unique item identification, or a DoD recognized unique identification equivalent, for--

(i) All delivered items for which the Government's unit acquisition cost is $5,000 or more; and

(ii) The following items for which the Government's unit acquisition cost is less than $5,000:

<table>
<thead>
<tr>
<th>Contract line, subline, or exhibit line</th>
<th>Item description:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(iii) Subassemblies, components, and parts embedded within delivered items as specified in Attachment Number ------.

*Note Contracting Office Must Fill In Based On Input From The Requiring Activity*
Item Unique Identification Mark

2D Data Matrix

The Unique Item Identifier (UII) identifies an item with a set of data that is globally unique and unambiguous. The symbology used for the mark on an item is a 2-dimensional (2D) Data Matrix symbol with Error Correction Code 200. The UII is encoded into a Data Matrix symbol with a software package.

Data Matrix symbols have a checkerboard appearance, with each uniformly spaced square shaped cell corresponding to a data bit. They are constructed of a mosaic of light and dark elements that must all be read before any characters can be recognized. Matrix symbols are encoded with a binary code requiring an imager to read them. A Data Matrix can store from 1 to about 2,000 characters. The symbol is square or rectangular and can range from 0.001 inch per side up to 14 inches per side.

The Data Matrix can be marked directly on the item surface or by affixing a label or data plate to the item, as long as it remains permanent through the life and not damaged or destroyed in use.

Some of the benefits of using 2D Data Matrix Technology versus a standard barcode are as follows:
- Can contain 100 times the data as the same space in a barcode;
- Can be read omni-directionally;
- Can be damaged but still return accurate data;
- Can be scaled up or down to fit within available marking space.

An imager is used to retrieve the UII data elements from the item, which can then be assembled into a concatenated UII and transmitted to a database. Data Matrices cannot be read using an ordinary linear barcode laser scanner.

The Data Matrix will contain data represented in a uniquely identified code assigned to an individual item. The code will either contain the necessary data elements to construct the concatenated UII or will contain a DoD-approved IUID Equivalent.

Constructed Item Unique Identification

The set of data elements encoded in the Data Matrix is driven by the method used to construct the UII. The UII can be one of the following:

1) a UII Construct #1, serialization within the enterprise identifier
2) a UII Construct #2, serialization within the original part, lot or batch number
3) a DoD recognized IUID Equivalent.
An enterprise is the entity responsible for assigning the unique identifier to an asset. The enterprise identifier of the enterprise that assigned the serial number to the item is the only enterprise identifier in the IUID machine-readable code that can use a IUID data qualifier for enterprise identifier.

**Construct 1: Serialization within the Enterprise Identifier**

For items that are serialized within the enterprise identifier, unique identification is achieved by a combination of the issuing agency code (IAC)\(^2\), enterprise identifier (EID)\(^3\), and the serial number, which must be unique within the enterprise identifier. The unique serial number within the enterprise identifier is a combination of numbers or letters assigned by the enterprise to an item that provides for the differentiation of that item from any other like or unlike item and is never used again within the enterprise identifier. The data elements of enterprise identifier and unique serial number within the enterprise identifier provide the permanent identification for the life cycle of the item.

**UII Construct #1**

EID MFR 0CVA5
Serial No. SER 786950

**UII Construct #1**

D0CVA5786950

\(\text{IAC} \quad \text{EID} \quad \text{Serial No.}\)

This example uses ATA Text Element Identifiers.

**Construct 2: Serialization Within the Original Part, Lot or Batch Number**

For items that are serialized within the original part, lot or batch number, unique identification is achieved by a combination of the issuing agency code (IAC), enterprise identifier (EID), the original part, lot or batch number, and the serial number. The original part number is a combination of numbers and letters assigned by the enterprise at asset creation to a class of items with the same form, fit, function, and interface. The lot/batch number is an identifying number assigned by the enterprise to a designated group of items, usually referred to as either a lot or a batch, all of which were manufactured under identical conditions. The serial number within the original part, lot or batch number is a combination of numbers and

\(^2\) The issuing agency code, or IAC, is that assigned by the Registration Authority for ISO/IEC 15459-2, Registration Procedures. The current Registration Authority of ISO/IEC 15459-2 is NEN–Nederlands Normalisatie-instituut. The IAC represents the agency that issued the enterprise identifier. The IAC can be derived from the data qualifier for the enterprise identifier and does not need to be marked on the item.

\(^3\) An enterprise identifier is a code uniquely assigned to an enterprise by a registered issuing agency.
letters assigned by the enterprise to an item that provides for the differentiation of that item from any other like item. The data elements of enterprise identifier, original part, lot or batch number and serial number within the original part, lot or batch number provide the permanent identification for the life cycle of the item.

**IUID Equivalents**

The policy adopts, to the maximum extent practical, DoD recognized IUID equivalents. A commercial identifier can be considered for use as a DoD IUID equivalent if it meets the following criteria:

1. Must contain an enterprise identifier,
2. Must uniquely identify an individual item within an enterprise identifier, product or part number, and
3. Must have an existing Data Identifier (DI), Application Identifier (AI) listed in ANSI MH10.8.2, Data Identifier and Application Identifier Standard.

There are currently four commercial unique identifiers meeting these criteria that are recognized as IUID Equivalents, as follows:

1. The **EAN.UCC Global Individual Asset Identifier** (GIAI) for serially-managed assets,
2. The **EAN.UCC Global Returnable Asset Identifier** (GRAI) for returnable assets when they are serialized,
3. The **ISO Vehicle Identification Number** (VIN) for vehicles, and
4. The **Electronic Serial Number** (ESN) for cellular telephones only.

**Encoding the UII Data**

In order to be encoded into the Data Matrix, the data elements must be named, as demonstrated in the examples above. Data qualifiers are used to name each data element. Specific data qualifiers are used to tell the imaging devices whether to derive the unique identification by using Construct #1, Construct #2, an already constructed UII format, or a DoD Recognized IUID equivalent.

A data qualifier is a specified character or string of characters that immediately precedes a data element and defines the general category or intended use of the data that follows. There are three types of data qualifiers being used: Data Identifiers (DIs) (Format 06), Application Identifiers (AIs) (Format 05), and, within the aerospace industry, Text Element Identifiers (TEIs). Table 1 outlines the available data qualifiers for the IUID data elements. When deriving the
concatenated unique item identifier (UII), the data qualifiers are eliminated from the final number.

<table>
<thead>
<tr>
<th>Data Qualifiers</th>
<th>Construct #1</th>
<th>Construct #2</th>
<th>DoD Recognized IUID Equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Identifiers</td>
<td>18S 25S</td>
<td>17V, 12V, 3V, 18V 1P or 1T S</td>
<td>1 22S</td>
</tr>
<tr>
<td>Application Identifiers</td>
<td></td>
<td>95 01 or 10 21</td>
<td>8002 8003 8004</td>
</tr>
<tr>
<td>Text Element Identifiers</td>
<td>CAG, MFR or SPL, DUN, EUC SER or UCN USN or UST</td>
<td>CAG, MFR or SPL, DUN, EUC PNO, LOT or BII SEQ UID</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Data Qualifiers and Their Usage by Constructs/Equivalents

For additional information on these data qualifiers, please refer to [http://www.acq.osd.mil/dpap/UID/attachments/DoDUIDGuide.pdf](http://www.acq.osd.mil/dpap/UID/attachments/DoDUIDGuide.pdf)

**Issuing Agency Codes for Use in Item Unique Identification**

Once the UII data elements are encoded in the Data Matrix, the concatenated UII can be constructed and forwarded to the IUID Registry. The concatenated UII consists of adding an Issuing Agency Code to the string of UII data elements encoded in the Data Matrix (the IAC is not physically marked on the item but derived from the EID). The imaging device can be programmed to recognize the IAC from the type of enterprise identifier being used. Table 2 shows the more common enterprise identifiers in use and their associated IACs.

<table>
<thead>
<tr>
<th>Issuing Agency Code</th>
<th>Issuing Agency</th>
<th>Enterprise Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 9</td>
<td>GS-1</td>
<td>EAN.UCC</td>
</tr>
<tr>
<td>LB</td>
<td>Telcordia Technologies, Inc</td>
<td>ANSI T1.220</td>
</tr>
<tr>
<td>UN</td>
<td>Dun &amp; Bradstreet</td>
<td>DUNS</td>
</tr>
<tr>
<td>D</td>
<td>Allied Committee 135</td>
<td>CAGE/NCAGE</td>
</tr>
<tr>
<td>LD</td>
<td>U.S. Department of Defense</td>
<td>DoDAAC</td>
</tr>
<tr>
<td>LH</td>
<td>European Health Industry Business Communications Council</td>
<td>EHBCC</td>
</tr>
</tbody>
</table>

Table 2. Data Qualifiers and Their Usage by Constructs/Equivalents
Table 3 summarizes the business rules for creating each of the UII Constructs.

<table>
<thead>
<tr>
<th>Based on current enterprise configurations</th>
<th>If items are serialized within the Enterprise</th>
<th>If items are serialized within Part, Lot or Batch Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>UII is derived by concatenating the data elements IN ORDER:</td>
<td>Issuing Agency Code* Enterprise ID Serial Number</td>
<td>Issuing Agency Code* Enterprise ID Original Part # Serial Number Last Batch # Serial Number</td>
</tr>
<tr>
<td>Data Identified on Assets Not Part of the UII (Separate Identifier)</td>
<td>Current Part Number**</td>
<td>Current Part Number**</td>
</tr>
</tbody>
</table>

*The Issuing Agency Code (IAC) represents the registration authority that issued the enterprise identifier (e.g., Dna and Broadstreet, ZANU/CC). The IAC can be derived from the data qualifier for the enterprise identifier and does not need to be marked on the item.

**In instances where the original part number changes with new configurations (also known as part number roll), the current part number may be included on the item as a separate data element for traceability purposes.

**Table 3. Unique Item Identifier (UII) Construct Business Rule**

Data elements for item unique identification (enterprise identifier, serial number and, for Construct 2 only, original part, lot or batch number) will be placed on qualifying items in accordance with the standard practice of the current version of MIL-STD-130 (http://www.acq.osd.mil/dpap/pdi/uid/attachments/MIL-STD-130N-20080111.pdf) Identification Marking of U.S. Military Property. The compliant mark is the 2D Data Matrix, and is required for all UIIs, including IUID Equivalents. For a greater understanding of the marking methods, please refer to most recent version of the DoD Guide to Uniquely Identifying Items (http://www.acq.osd.mil/dpap/UID/attachments/DoDUIDGuide.pdf), as well as Tips on Constructing the UII (http://www.acq.osd.mil/dpap/UID/attachments/Tips%20on%20Constructing%20the%20UII.pdf).

Who decides what UII construct to use?

Answer

The enterprise assigning serialization to the item is responsible for deciding which construct to use.
A delivered item may include embedded items, such as subassemblies, components and parts, which have been specified for IUID marking. The prime contractor will pass down appropriate specifications, including the IUID marking requirements, to the tiered vendors for subcontracted subassemblies, components and parts. Spares may be purchased directly from the vendors or through the prime contractor. IUID qualifying spare items have to be marked appropriately with the IUID data elements. So, when the prime delivers the end item—that is one UII. The spares are delivered with their own UIIs. The Government will require the prime to provide the data on all UIIs including IUID-qualifying embedded items in the delivered item.

DoD program offices and industry partners continue to share best practices on IUID part marking that minimizes financial and physical impact. The UID Policy Office has ongoing working groups that meet with DoD stakeholders in order to share approaches. For more information, please go to http://www.acq.osd.mil/dpap/pdi/uid/index.html

**Reader Technology**

As stated earlier, the data matrix symbol requires a 2D imager; they cannot be read using an ordinary linear barcode laser scanner. Automatic Identification Technology (AIT) is the basic building block in the Defense Department's efforts to provide timely asset visibility. AIT gives the Department the capability to electronically capture information about items as they move through the operational environment, providing both reliable and accurate data capture and transmission throughout the item lifecycle.

The AIT reader will accurately and reliably machine read the data elements and output a UII. The data will be transmitted to a DoD automated information system. The data can then be used as a primary or alternate key across DoD databases.

A number of resources are available to provide more information on AIT Technology:

1) The Defense Acquisition University Special Interest Area provides AIT solution provider information, in addition to a host of other IUID-related information. It is accessible at the secure link https://acc.dau.mil/uid

2) Association for Automatic Identification and Mobility (AIM) is a global trade association comprising providers of components, networks, systems, and services that manage the collection and integration of data with information management systems (www.aimglobal.org)

3) Product Manager, Joint-Automatic Identification Technology (PM J-AIT) is the Army’s Center of Excellence for the automatic reading technologies that are an integral part of the implementation of the UID. It supports its
DoD customers with AIT reading equipment, devices, supplies, and technical assistance (http://www.ait.army.mil).

Accounting and Valuation of Items

The first part of this guide focused on the IUID program, implementation and item marking. The final section of this guide will focus on the accounting and valuation process. The purposes of the DFARS clause is to both uniquely identify and value items to provide better asset accountability and valuation through the IUID life cycle mentioned in Figure 1 on page 8. A number of DoD Directives provide internal guidance on DoD Program responsibilities related to properly accounting and valuating items. IUID costs are allowable. The DoD Directives can be found in Appendix A.

Accountability of items begins when equipment, reparables, materials and consumables are acquired through purchase, lease, or other means.

1. DoD Instruction 5000.64 requires that accountability records be established for all property (i.e., property, plant and equipment) purchased, having a unit acquisition cost of $5,000 or more, and items that are classified or sensitive, or items located at third parties, regardless of acquisition cost.

2. For material covered under the DoD 4140.1-R publication, accountability records are established for all material received, regardless of cost.

All property delivered to the Government must be delivered on a contract line item number (CLIN), sub-line item number (SLIN) or exhibit line item number (ELIN). The acquisition cost of each item entering the Government property inventory is captured on CLIN, SLIN, or ELIN.

Both the unique identification and value of items delivered under the contract need to be reflected in the DoD property accountability and management information systems. The valuation of property is addressed in DoD Instruction 5000.64 and states that unit acquisition cost should be the basis for valuation of property. The contract type determines the proper method of calculating unit acquisition cost.

1) For fixed-price type CLIN, SLIN, or ELIN items, it is the unit price identified in the contract at the time of delivery
2) For cost-type or undefinitized CLIN, SLIN, or ELIN items, it is the contractor's estimated fully burdened unit cost to the Government at the time of delivery
3) For items delivered under a time-and-materials contract, it is the contractor's estimated fully burdened unit cost to the Government at the time of delivery.

The Government's unit acquisition cost of subassemblies, components, and parts embedded in delivered items need not be separately identified.

Data Submission
Wide Area Work Flow (WAWF) - Receipt and Acceptance is the standardized data capture mechanism for transmitting IUID data from contractors to DoD for new acquisitions of tangible items. WAWF is an electronic DoD-wide application designed to eliminate paper from the receipt, acceptance and invoicing process of the DoD contracting lifecycle. A secure, web-based application, WAWF enables authorized Defense contractors and DoD personnel to create, capture, and process receipt, acceptance, and payment-related documentation and to access contract related documents electronically.

Vendors can submit invoices and receiving reports electronically into WAWF using existing Electronic Commerce methods. Choices include Web interactive forms and electronic submission from Vendor automated systems. Vendors can access the WAWF system via the web interface at https://wawf.eb.mil and follow the link called "Self Register to use WAWF (New Users)", where they will be walked through the process of gaining access to the WAWF system. A WAWF training site is located at http://www.wawftraining.com.

Because not all parties responsible for submitting data to the IUID Registry are WAWF-enabled, a number of alternative direct submission methods are available. There are four methods that can be used to submit IUID data directly – three electronically and one manually. Electronically, data may be submitted via an X12 Ship Notice/Shipment and Billing Notice (856/857) transaction, an IUID XML transaction, or a WAWF IUID Receiving Report/Combo User Defined Format (UDF). All three electronic submission methods require access to the Global Exchange Service (GEX). Manually, data may be entered via the IUID Web Entry site. Existing WAWF users would continue to use WAWF for IUID data submission.

IUID Registry
The IUID Registry is the ultimate repository where all IUID data will be captured. The IUID Registry will serve as an acquisition gateway to:

- Identify what the item is;
- Identify who receives the item originally;
- Identify the initial value of the item;
- Identify the contract and organization the item is acquired from;
- Intersect with other systems (e.g., property management, logistics, inventory management).
The registry is located on the internet at https://www.bpn.gov/iuid.

Prior to using the Controlled Access portion of the IUID Registry, each user must register in order to be given login credentials and access rights. In order to be provided with a login, you will need to be a government employee or a U.S. Government Contractor with approval from a DoD Program Manager or equivalent. Prior to registering with the IUID Registry, commercial manufacturers and government manufacturing activities must be registered with the Central Contractor Registration (CCR) system, which can be accessed online at https://www.bpn.gov/ccr/default.aspx. Verification of IUID submission does not require controlled access, but all other functions do.

Data Elements in the IUID Registry

For new items, the IUID Registry will capture pedigree information about items at the time of delivery. In addition to some data already captured on the Material Inspection and Receiving Report, item specific information will be required for each item, including:

1) Concatenated unique item identifier; or DoD recognized unique identification equivalent
2) Unique item identifier type
3) Issuing agency code (if concatenated unique item identifier is used)
4) Enterprise identifier (if concatenated unique item identifier is used)
5) Original part number
6) Lot or batch number
7) Current part number (if not the same as the original part number)
8) Current part number effective date
9) Serial number
10) Unit acquisition cost

The Integrated List of Existing Item Unique Identification Definitions and Acronyms defines these terms and others (http://www.acq.osd.mil/dpap/UID/attachments/Integrated%20List%20of%20Existing%20IUID%20Definitions.doc). In addition to new items, IUID data will be registered for legacy items, and Property in the Possession of Contractors (PIPC).

Embedded items will also need to be recorded if they meet the UID requirements. Two additional data elements are required for embedded items: 1) the concatenated unique item identifier or DoD recognized unique identification equivalent of the parent item delivered under a contract line, subline, or exhibit line item that contains the embedded subassembly, component, or part, and 2) the unit of measure. Also to note at this time, the IUID data on items embedded in newly procured items cannot be reported via WAWF. After acceptance of the

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4 The item assembly, intermediate component or subassembly that has an embedded item with a unique item identifier or DoD recognized unique identification equivalent. [DFARS 252.211-7003]
end item, the embedded items' IUID data can be provided by direct submission via the IUID XML or the IUID Registry’s web entry capability.

For more information on data submission and the full list of data elements within the Registry, please refer to the IUID Registry Data section of the IUID website (http://www.acq.osd.mil/dpap/pdi/uid/data_submission_information.html).

Summary
This Guide provides users a broad overview of the IUID Program. It is designed to expose DoD program offices and contractors to the key aspects of UID policy and implementation process. IUID is integral to transforming DoD business processes and, although it will be challenging, DoD is committed to this effort to provide the warfighter and key decision makers with the information they need when they need it.

Transformation is not an event – it is a process. There is no point at which the Defense Department will move from being “untransformed” to “transformed.” Our goal is to set in motion a process and a culture that will keep the United States several steps ahead of potential adversaries.

Secretary Rumsfeld
May 14, 2003

The desirable end state that DoD envisions is the integration of item data across DoD, Federal and industry asset management systems, enabling improved data quality and global interoperability and rationalization of systems and infrastructure. Unique identification of items will help achieve that goal by:

- Improved item management and accountability.
- Improved asset visibility and life cycle management.
- Enabling clean audit opinions on item portions - Property, Plant and Equipment; Inventory; and Operating Materials and Supplies - of DoD financial statements.

With ongoing cooperation between DoD program offices and contractors, strides are continually being made to ease the transition. For further information or questions, please visit our website at http://www.acq.osd.mil/dpap/pdi/uid/index.html or e-mail us at iuid.helpdesk@bpn.gov.

IUID background materials, previous IUID policy memos, and implementation guidelines are available at http://www.acq.osd.mil/dpap/pdi/uid/index.html
Appendix A: Referenced Directives for the UID Policy

The DoD Directives System was established to provide a single, uniform system of DoD issuances and directive-type memorandums used to convey DoD policies, responsibilities, and procedures. The DoD Directives System provides for the orderly processing, approval, publication, distribution, internal review, and records management of DoD Directives, DoD Instructions, and DoD Publications. The DoD Directives System also includes the Office of the Secretary of Defense (OSD) Federal Register System.

DoD Directive:

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<td>MILITARY STANDARD TRANSACTION REPORTING AND ACCOUNTING PROCEDURES (MILSTRAP)</td>
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Appendix B: Industry References

The standards documents are available for purchase from these organizations.

ATA Spec 2000 Chapter 9  www.airlines.org
ATA CSDD  www.airlines.org
ANSI MH10.8.2  www.ihs.com
ISO 15434  www.iso.com
GS-1  www.ean-ucc.org