Unique Identification (UID) of Tangible Items
DoD Vision for Item Marking

Agenda

• DOD Vision

• Strategic Purpose

• Key Terms

• Data Content

• Way Ahead
To create a policy establishing a strategic imperative for uniquely identifying tangible items relying to the maximum extent practical on international standards and commercial item markings and while not imposing unique government data requirements.

Uniquely identified (UID) tangible items will facilitate item tracking in DoD business systems and provide reliable and accurate data for management, financial, accountability and asset management purposes.
Strategic Purpose of UID is to...

• Integrate item data across government and industry asset management systems, resulting in:
  • Improved data quality and global interoperability
  • Rationalization of systems and infrastructure
• Improve item management and accountability
• Improve asset visibility and life-cycle management through life cycle traceability
• Enable more accurate audit opinions on the property, plant, and equipment and operating materials and supplies portions of financial statements
Efforts Underway

• The Department of Defense (DoD) established a joint international/industry/government Integrated Product Team (IPT) to achieve the following goals:
  • Identify the UID data standard
  • Develop a feasible and rapid implementation strategy
• The IPT consists of four simultaneous efforts:
  • Standards
  • Implementation Strategy
  • Policy
  • UID DFAR Cases
The IPT Standards effort has agreed to the following elements since the first DoD policy memo was published in August of 2002.

**UID is . . .**

**Key Terms**

**Data Content Elements**

**Collaborative Solution**
Unique IDentification (UID) is . . .

UID is . . . the set of data for tangible assets that is globally unique and unambiguous, ensures data integrity and data quality throughout life, and supports multi-faceted business applications and users.
Key Terms

• **Enterprise**: Entity responsible for assigning the unique identifier (UID) to a tangible asset.

• **Registration (or Controlling) Authority**: Organization responsible for assigning a non-repeatable identifier to an enterprise.

• **Enterprise Identifier**: Code uniquely assigned to an enterprise by a registration (or controlling) authority.

• **Serial Number**: Code assigned by the enterprise to an item providing for differentiation of that item from any other like or unlike item. Serial numbers can be unique within the enterprise or unique within the part number.

• **Part Number**: Code assigned by the enterprise to a class of items with the same form, fit, function, and interface. The part number is original if assigned at asset birth and current if reassigned from the original.
Data Content Elements

- For items that are serialized within the enterprise, the UID is a combination of the **enterprise identifier** and a **serial number** that is unique within the enterprise.

- For items that are serialized within the part number, the UID is a combination of the **enterprise identifier**, the **serial number**, and the **original part number**.
## Data Content Elements

<table>
<thead>
<tr>
<th>Based on current enterprise configurations</th>
<th>UID Construct #1</th>
<th>UID Construct #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>If items are serialized within the Enterprise:</td>
<td>Enterprise ID Serial Number</td>
<td>Enterprise ID Serial Number Original Part Number</td>
</tr>
<tr>
<td>If items are serialized within Part Number:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Data on Assets Not Part of the UID (Separate Data Elements)

<table>
<thead>
<tr>
<th></th>
<th>Current Part Number</th>
<th>Current Part Number</th>
</tr>
</thead>
</table>

*Samples of how the unique identifier may be constructed will be included in the policy memo for clarification*
The following illustrates the requirement for uniquely identifying items at birth:

<table>
<thead>
<tr>
<th>EID</th>
<th>370521</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial Number</td>
<td>786950</td>
</tr>
<tr>
<td>Original Part Number</td>
<td>1234</td>
</tr>
</tbody>
</table>

Datamatrix Contains EID & Serial No.

“One Pass Read” Never Changes

If the part number rolls, elements in “A” do not change. “C” illustrates a new identifier:

<table>
<thead>
<tr>
<th>EID</th>
<th>370521</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial Number</td>
<td>786950</td>
</tr>
<tr>
<td>Current Part Number</td>
<td>5678</td>
</tr>
</tbody>
</table>

Datamatrix Contains EID, Serial No. & Current Part No.

“One Pass Read” Changed

Note: This example illustrates the use of bar code symbology. Other AIT media such as RFID or Contact Memory Buttons could also be used.
The following illustrates the requirement for uniquely identifying items at birth:

If the part number rolls, elements in “A” do not change. “C” illustrates a new item identifier.

Note: This example illustrates the use of bar code symbology. Other AIT media such as RFID or Contact Memory Buttons could also be used.
What Does it Mean for Me?

**Product Data**
- **PNR 200H0028**
- **PNR 210H0611**
- **PNR 216H1439**
- **PNR 218H2861**

**Supply Chain**
- Tier 1: **End Item Specs**
- Tier 2: **Subassembly Specs**
- Tier 3: **Component Specs**

**Unique Items**
- **EID 12345**
  - PNR 200H0028
  - SER 003896*
- **EID 54321**
  - PNR 210H0611
  - SER 006392*
- **EID 35421**
  - PNR 216H1439
  - SER 020890*
- **EID 32145**
  - PNR 218H2861
  - LOTNR 105742*

**Item Markings**
- **EID 32145**
  - PNR 210H0611
  - SER 006392*
- **EID 54321**
  - PNR 216H1439
  - SER 020890*
- **EID 35421**
  - PNR 218H2861
  - LOTNR 105742*

**UID (Note)**
- **12345003896200H0028**
  - Delivery to Govt
  - End Item
  - List of Hardware UIDs (Optional)
- **5432106392210H0611**
  - Delivery to Govt
  - Spares
  - List of Hardware UIDs (Optional)
- **354210890216H1439**
  - Delivery to Govt
  - Spares
  - List of Hardware UIDs (Optional)
- **321451105742218H2861**
  - Delivery to Govt
  - Spares

* Serialized within the part number
What Does it Mean for Me?

• UID will be a mandatory requirement for all new weapons systems programs, including major modifications, no later than July 2003 and apply to contracts awarded after 1 Jan 2004

• Because the July 2003 policy memo will be published prior to reaching a conclusion to the ISO amendment process, the policy will provide direction for implementing UID in the interim
How Can You Help?

• Sign the Pledge of Support
• Support and participate in the ISO amendment process
• Contribute to the development and execution of an implementable strategy

A variety of UID background materials and previous UID policy memos can be found at

www.acq.osd.mil/uid