Department of Defense
Standard Operating Procedure

Acquisition/Procurement Guide
for Unique Item Traceability
Data Integrity

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Office of the Director, Defense Procurement and
Acquisition Policy
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Tables</td>
<td>ii</td>
</tr>
<tr>
<td>List of Figures</td>
<td>ii</td>
</tr>
<tr>
<td>Preface</td>
<td>1</td>
</tr>
<tr>
<td>Intended User</td>
<td>1</td>
</tr>
<tr>
<td>Disclaimer</td>
<td>1</td>
</tr>
<tr>
<td>Note to the Reader</td>
<td>1</td>
</tr>
<tr>
<td>Level of Knowledge</td>
<td>2</td>
</tr>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Purpose</td>
<td>3</td>
</tr>
<tr>
<td>Background</td>
<td>3</td>
</tr>
<tr>
<td>What is IUID?</td>
<td>3</td>
</tr>
<tr>
<td>What is IUID Compliance in Terms of DoD Requirements?</td>
<td>3</td>
</tr>
<tr>
<td>What is an IUID Data Matrix?</td>
<td>4</td>
</tr>
<tr>
<td>Who Puts an IUID Data Matrix on an Item?</td>
<td>4</td>
</tr>
<tr>
<td>IUID Requirements for Packaging</td>
<td>5</td>
</tr>
<tr>
<td>Marking of U.S. Military Property</td>
<td>5</td>
</tr>
<tr>
<td>Situation</td>
<td>5</td>
</tr>
<tr>
<td>Data Matrix is IUID compliant; UII is registered</td>
<td>5</td>
</tr>
<tr>
<td>Data Matrix is IUID compliant; UII is not registered</td>
<td>5</td>
</tr>
<tr>
<td>Data Matrix is not IUID compliant; UII is registered</td>
<td>6</td>
</tr>
<tr>
<td>Data Matrix is not IUID compliant; UII is not registered</td>
<td>7</td>
</tr>
<tr>
<td>Data Matrix is IUID Compliant; UII is Registered</td>
<td>8</td>
</tr>
<tr>
<td>Determining DoD Compliance</td>
<td>8</td>
</tr>
<tr>
<td>Step 1 – Check Message String Syntax</td>
<td>8</td>
</tr>
<tr>
<td>Step 2 – Check Format Indicator, Data Elements and Data Qualifiers</td>
<td>8</td>
</tr>
<tr>
<td>Verifying UII Registration</td>
<td>9</td>
</tr>
<tr>
<td>Step 1 – Query the DoD IUID Registry Directly</td>
<td>9</td>
</tr>
<tr>
<td>Data Matrix is IUID Compliant; UII is Not Registered</td>
<td>12</td>
</tr>
<tr>
<td>Confirm the Non-Registration</td>
<td>12</td>
</tr>
<tr>
<td>Step 1 – Contact the DoD IUID Registry Helpdesk</td>
<td>12</td>
</tr>
<tr>
<td>Step 2 – Determine Who is Responsible for UII Uniqueness</td>
<td>12</td>
</tr>
<tr>
<td>Step 3 – Determine if Contractor Marking was Required</td>
<td>15</td>
</tr>
<tr>
<td>Step 4 – Confirm Non-Registration with the Responsible Enterprise</td>
<td>16</td>
</tr>
<tr>
<td>Take Corrective Action</td>
<td>17</td>
</tr>
<tr>
<td>Step 1 – Seek Permission from the Responsible Enterprise to Register</td>
<td>17</td>
</tr>
<tr>
<td>the UII</td>
<td>17</td>
</tr>
<tr>
<td>Step 2 – Registering the UII</td>
<td>17</td>
</tr>
<tr>
<td>Step 3 – Notify the Responsible Enterprise of Their Failure to Register</td>
<td>18</td>
</tr>
<tr>
<td>Data Matrix is not IUID Compliant; UII is Registered</td>
<td>19</td>
</tr>
<tr>
<td>Determine Who is Responsible for UII Uniqueness</td>
<td>19</td>
</tr>
<tr>
<td>Step 1 – Verify Responsible Enterprise was Required to Mark</td>
<td>19</td>
</tr>
<tr>
<td>Step 2 – Confirm Non-Compliance with the Responsible Enterprise</td>
<td>19</td>
</tr>
<tr>
<td>Report the Non-Compliant Mark and Take Corrective Action</td>
<td>20</td>
</tr>
<tr>
<td>Step 1 – Submit Product Quality Deficiency Report</td>
<td>20</td>
</tr>
</tbody>
</table>
Step 2 – Seek Permission from the Responsible Enterprise to Replace Mark with DoD-Complaint Mark ................................................................. 20
Data Matrix is not IUID Compliant; UII is not Registered ......................... 22
Confirm the Non-Compliance and Non-Registration ................................. 22
Step 1 – Determine Who is Responsible for UII Uniqueness .................. 22
Step 2 – Determine if Marking was Required ......................................... 22
Step 3 – Confirm Data Matrix Non-Compliance and Non-Registration with the Responsible Enterprise ......................................................... 23
Report the Non-Compliant Data Matrix and Unregistered UII and Take Corrective Action ............................................................................. 23
Step 1 – Submit Product Quality Deficiency Report ............................... 23
Step 2 – Seek Permission from the Responsible Enterprise to Replace with an IUID Data Matrix and Register the UII ........................................... 23
Reporting and Remediation of Contractor Non-Compliance ....................... 24
Step 1 – Report Contractor Non-Compliance ......................................... 24
Step 2 – Notify the Cognizant Contracting Office .................................... 24
Appendix .......................................................................................... 25
Is this an IUID Data Matrix? ................................................................. 25
What Does a Data Matrix Look Like? .................................................. 25
How Do You Get Data From the Data Matrix? ...................................... 25
How Do I Decipher the Message String? ............................................. 25

List of Tables
Table 1. Data Qualifiers for UII Data Elements ........................................ 27

List of Figures
Figure 1. DoD IUID Registry Landing Page ............................................. 9
Figure 2. DoD IUID Registry Registration Page ..................................... 10
Figure 3. DoD IUID Registry Single Item Query Search Page ............... 10
Figure 4. DoD IUID Registry Single Item Query Results ..................... 11
Figure 5. BINCS Search Page .............................................................. 13
Figure 6. BINCS CAGE Code Query Results ...................................... 14
Figure 7. Construct #1 with TEIs ......................................................... 26
Figure 8. Construct #2 With DIs ......................................................... 27
Figure 9. DoD IUID Equivalent with AIs ............................................. 27
INTENDED USER

This guide is intended for use by contractors, contracting offices, or anyone performing contract administration prior to contract closeout.

DISCLAIMER

If you discover a non-compliant Data Matrix, you should submit a Product Quality Deficiency Report (PQDR) or a Supply Discrepancy Report (SDR) to report the incident or provide the item to your local quality assurance representative for submission of a PQDR or SDR and subsequent adjudication. If you subsequently receive direction to correct the non-compliant Data Matrix, then follow the instructions in this guide.

If you are pre-authorized locally to correct a non-compliant Data Matrix, then follow the instructions in this guide.

NOTE TO THE READER

This standard operating procedure (SOP) was written for a targeted audience. The targeted audience is the user of automatic identification technologies, such as barcodes and barcode readers.

Data that identifies an item is encoded in a barcode. The barcode is then placed on the item. The user retrieves the identification data with a barcode reader and sends it to a database.

The Department of Defense (DoD) uses the ECC200 Data Matrix barcode for IUID.

For the purpose of this document, the term “IUID Data Matrix” is used to describe a Data Matrix compliant with all DoD IUID policies and business rules. This is equivalent to the terms UII Data Matrix Symbol, IUID compliant Data Matrix, IUID MRI mark, and Data Matrix containing the UII data set used in other IUID documents. A Data Matrix not meeting all DoD IUID policies and business rules is
referred to as a “non-compliant Data Matrix”. The term “Data Matrix” is used to describe a Data Matrix barcode which may or may not meet all DoD IUID requirements.

**LEVEL OF KNOWLEDGE**

The reader needs to be familiar with the basic DoD IUID policies and practices. If new to you, the fundamentals of IUID can be found in the Defense Acquisition University (DAU) Continuous Learning Module CLM 200, Item Unique Identification, at [http://icatalog.dau.mil/onlinecatalog/courses.aspx?crs_id=245](http://icatalog.dau.mil/onlinecatalog/courses.aspx?crs_id=245).

The reader also needs to be familiar with the fundamentals of IUID marking. They can be found in the DAU Continuous Learning Module CLE 040, IUID Marking at [http://icatalog.dau.mil/onlinecatalog/courses.aspx?crs_id=1680](http://icatalog.dau.mil/onlinecatalog/courses.aspx?crs_id=1680).
Introduction

PURPOSE

This SOP provides the process of what to do when you find a Data Matrix on an item of DoD property that: (a) is not compliant with DoD policy, or (b) is not registered in the DoD IUID Registry, or both.

BACKGROUND

What is IUID?

IUID is a system of unique identification to mark and identify items of property. This system utilizes symbols (often referred to as barcodes) printed or marked on items. These barcodes encode data which can be used to derive a Unique Item Identifier (UII)\(^1\). In order for this to work, UIIs have to be globally unique and unmistakable. You cannot have duplicates. An item’s UII stays with it for its lifetime.

What is IUID Compliance in Terms of DoD Requirements?

The conditions that must be satisfied for an IUID Data Matrix are described below in the subsection entitled “What is an IUID Data Matrix?”

The DoD IUID compliance requirements are as follows:

- The organizational entity responsible for the item being uniquely identified must guarantee the uniqueness of the UII.
- The UII must be entered into the DoD IUID Registry to guarantee the UII uniqueness.

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\(^1\)A UII is a string of letters and/or numbers no longer than 50 characters. An IUID Data Matrix will have additional data beyond the UII. An IUID Data Matrix may not encode all of the characters within the UII. Regardless, a properly encoded barcode can always provide enough information to derive the entire UII through the use of business rules found in the [DoD Guide to Uniquely Identifying Items](https://www.dod.gov) and the barcode’s data.
What is an IUID Data Matrix?

The appendix has a brief tutorial on what an IUID Data Matrix is and how to tell if the mark is IUID compliant.

The UII is usually a set of data elements, like issuing agency code (IAC)\(^2\), CAGE\(^3\) codes, part numbers and serial numbers, which are strung together. The data elements have to be tagged by a data qualifier that tells what the data element is.

These data elements are carried in a very specific type of barcode called an ECC200 Data Matrix (hereafter referred to as a Data Matrix), which is a two-dimensional barcode. They are encoded in the Data Matrix using a standard message string (or syntax)\(^4\). This Data Matrix is permanently placed on an item.

UIIs are read (also called scanning) by an electronic device (imager or reader) to provide specific information for database transactions. They must be encoded properly, or the imager cannot scan the data elements correctly.

Who Puts an IUID Data Matrix on an Item?

Contractors put IUID Data Matrices on new items during production, as directed in the contract. They also register the UIIs in the DoD IUID Registry upon delivery of the marked items to the DoD.

The DoD Components are required to mark IUID Data Matrices on all applicable legacy items in inventory and in operational use and all applicable embedded assets and register them.

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\(^2\) The IAC is assigned by the Registration Authority for ISO/IEC 15459-2, Registration Procedures. The IAC represents the agency that issued the enterprise identifier. The IAC can be derived from the data qualifier for the enterprise identifier and is not marked separately on the item. Scanner devices are programmed to use the embedded IAC, or to deduce the IAC from the data qualifier, but the IAC is not encoded as a separate data element in the Data Matrix symbol. When a UII is encoded in a single data element, such as 25S or UID, the concatenation of the IAC, enterprise identifier and unique serial number is accomplished prior to encoding.

\(^3\) Commercial and Government Entity

Introduction

IUlD Requirements for Packaging

Shippers of DoD military property are required to include UII(s) on the unit pack, intermediate container, and exterior container using the 2D (PDF417) symbol preceded by the following information: “ID DATA INCLUDES UII(s)”.

DoD 4000.25-M, Defense Logistics Management System (DLMS), contains procedures for reporting IUID package marking deficiencies found during shipping operations.

Marking of U.S. Military Property

Items meeting the IUID marking criteria will have UIIs marked on them per the practices described in MIL-STD-130, current version. To be an IUID Data Matrix, the UII data elements, or concatenated UII single data element, must be encoded in a Data Matrix in accordance with the message syntax requirements of ISO/IEC 15434.

SITUATION

This SOP addresses actions you should take in the situation where you are required to read the encoded data in a Data Matrix with a scanner and retrieve the IUID data for the item from the DoD IUID Registry. When you do this, the following outcomes may occur:

Data Matrix is IUID compliant; UII is registered

No corrective action is required.

Data Matrix is IUID compliant; UII is not registered

When this happens:

- Investigate based on the contract number, enterprise identifier, part number or other information to find out if IUID was required of the contractor or an internal DoD Component for the item.

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5 MIL-STD-129P/w Change 4, Paragraphs 4.4.2.3 and 4.4.3.3.1.
6 Specifically, see C17.3.8, Discrepancies in IUID Data, and C19.15, UII RECEIPT DISCREPANCIES.
• Confirm with the cognizant contracting office or enterprise that did the marking that the UII was not registered.

• Request the enterprise identified in the IUID Data Matrix register the compliant UII with all the associated data.

• If they will not, then seek permission from the cognizant contracting office or enterprise identified in the IUID Data Matrix to register the compliant UII and follow the instructions in Chapter 5, Reporting and Remediation for Contractor Non-Compliance.

Data Matrix is not IUID compliant; UII is registered

When this happens, you need to:

• Investigate based on the contract number, enterprise identifier, part number, or other information to find out who incorrectly marked the Data Matrix, either the contractor or an internal DoD Component.

• Confirm with the cognizant contracting office or enterprise that did the marking that the Data Matrix is not IUID compliant.

• Request the cognizant contracting office or the enterprise identified on the item or in the contract data re-mark the item with an IUID Data Matrix with all the associated data consistent with the DoD IUID Registry data.

• If they will not re-mark the item, then seek permission from the appropriate authority to create and apply a replacement mark using the correct construction with the original data in the DoD IUID Registry. Remove or obliterate the original, non-compliant mark.

• If the non-compliant enterprise is a contractor, follow the instructions in Chapter 5, Reporting and Remediation for Contractor Non-Compliance.
Data Matrix is not IUID compliant; UII is not registered\(^9\)

When this happens:

- Investigate based on the contract number, enterprise identifier, part number, or other information to find out if the item is required to be marked by the contractor or an internal DoD Component.

- Confirm with the cognizant contracting office or the enterprise that the item was not required to be marked nor registered. If confirmed, take no further action.

- If the item is required to be marked with an IUID Data Matrix, gain permission from the appropriate authority to create, apply, and register a replacement mark using the correct construction with the original data, or apply a new mark using an in-house procedure under your own enterprise identifier. Remove or obliterate the original, non-compliant Data Matrix if one exists.

- If the non-compliant enterprise is a contractor, follow the instructions in Chapter 5, Reporting and Remediation for Contractor Non-Compliance.

\(^9\) This section applies to Data Matrices which appear relevant to IUID because a speculative UII can be derived from the mark. Occasionally manufacturers mark part numbers and/or serial numbers using a Data Matrix completely apart from IUID. These marks are not to be considered in this section. If these types of marks are found, you should look for other Data Matrix marks for one which is an IUID Data Matrix.
Chapter 1
Data Matrix is IUID Compliant; UII is Registered

DETERMINING DoD COMPLIANCE
The steps discussed in this Chapter confirm the Data Matrix on an item is IUID compliant and is registered in the DoD IUID Registry.

Step 1 – Check Message String Syntax
Let us use this Data Matrix to show how you check the message string syntax.
The scanner output shows this message string:

\[
\text{DoD policy requires the message string be encoded using the conventions of international standard ISO/IEC 15434. The standard requires each message string start with a Compliance Indicator. This Compliance Indicator is globally unique; it can only mean a message string was encoded using ISO/IEC 15434.}
\]

\[
\text{The Compliance Indicator is the first three characters in the encoded message string. These characters are "[]}>" (left bracket, right parenthesis, greater than). The header "[]}>" confirms the message string was encoded using ISO/IEC 15434 conventions.}
\]

Step 2 – Check Format Indicator, Data Elements and Data Qualifiers
Next, confirm the following information elements within the message string are correct: (a) the format indicator, (b) the data elements within the UII construct, and (c) the data qualifiers, as defined by the format indicator, which are used to tag (identify) the individual UII data elements within the UII construct.

Interpreting the message string against the data in Table 1 of the appendix reveals:
• The format indicator “06” signals Data Identifiers (DIs) are being used.
• Three UII data elements appear in the message string, which means a UII Construct #2 is encoded.
• The enterprise identifier DI “17V” defines a CAGE code, which defines the responsible enterprise that assigned and registered the UII, and that the IAC of “D” associated with the CAGE code must be used to begin the resulting UII.
• The DI “1P” defines the original part number.
• The DI “S” defines the serial number within the original part number.

Based on this information, one can conclude the Data Matrix is an IUID Data Matrix.

The resulting UII for the above data would be:

D95542788R330G013050R.

**VERIFYING UII REGISTRATION**

**Step 1 – Query the DoD IUID Registry Directly**

The DoD IUID Registry has a web interface at [https://iuid.logisticsinformationservice.dla.mil](https://iuid.logisticsinformationservice.dla.mil) (see Figure 1).

![Figure 1. DoD IUID Registry Landing Page](image)

Users with a need to register UIIs and access IUID information from the DoD IUID Registry can request Controlled Access at
https://iuid.logisticsinformationservice.dla.mil/brs (see Figure 2). Users with Controlled Access can add, update, and correct small numbers of items, and check to see whether a UII has been registered.

![Figure 2. DoD IUID Registry Registration Page](image)

The Single Item Query (see Figure 3) is used to check if a UII has been registered. The results from the Single Item Query when checking if the UII with the value “D95542788R330G013050R” is registered are shown in Figure 4.

![Figure 3. DoD IUID Registry Single Item Query Search Page](image)
Figure 4. DoD IUID Registry Single Item Query Results
Chapter 2
Data Matrix is IUID Compliant; UII is Not Registered

CONFIRM THE NON-REGISTRATION

If, after performing the steps in Chapter 1, the Data Matrix is determined to be IUID compliant, but is not registered, take the steps discussed in this Chapter to confirm the non-registration and take corrective action.

Step 1 – Contact the DoD IUID Registry Helpdesk

Sometimes, an attempt to register UIIs may have been rejected by the DoD IUID Registry because the registration failed to pass the internal Registry checks.

If this happens, the Registry Helpdesk works with the contractor/DoD Component to get the UIIs accepted by the registration process.

It is a good idea to first contact the Registry Helpdesk by email at IUID.helpdesk@dla.mil to ask them to check if the unregistered UII is in the process of being properly registered.

If the UII is a disputed registration that the Registry Helpdesk is fixing, then no further actions need to be taken. Ask the Helpdesk to notify you when the registration has been successfully completed.

Step 2 - Determine Who is Responsible for UII Uniqueness

If Step 1 does not resolve the problem, then determine who is responsible for guaranteeing the uniqueness of the UII. This can be done by picking out the enterprise identifier from the message string. The enterprise identifier may be for a contractor or for an internal DoD enterprise.

Identifying the Contractor Enterprise

Let us use the example from Chapter 1 to show how this is done. The message string is:
Check the codes in Table 1 of the appendix for enterprise identifiers. The code “17V” means the value “95542” is a CAGE code.

Next, find out who owns CAGE code “95542”. There is a database called BINCS\textsuperscript{10}. BINCS is a search engine of manufacturers and suppliers. Information in this system is cross-referenced to permit inquiry by CAGE, DUNS\textsuperscript{11}, UPC\textsuperscript{12}, company name, phone number, SIC\textsuperscript{13} Code, and zip code.

The BINCS search page looks like this (See Figure 5):

![BINCS Search Page](image)

Entering CAGE code “95542” returns the results shown in Figure 6.

\textsuperscript{10} The Business Identification Number Cross-reference System. Accessible at \url{https://www.logisticsinformationservice.dla.mil/BINCS/begin_search.aspx}.

\textsuperscript{11} Dun and Bradstreet Number System

\textsuperscript{12} Uniform Product Code

\textsuperscript{13} Standard Industry Classification
The organization responsible for the uniqueness of the item UII, and how to contact them is now known. But it is unknown if the contractor in this case was responsible for the IUID Data Matrix and its registration in the DoD IUID Registry on a DoD contract.

The point of contact for the SAM\textsuperscript{14} information can be called and asked to find a person who can be contacted about the non-registration.

If that does not work, then find the contract number following the instructions in Step 3 below.

**Identifying the Internal DoD Enterprise**

We will use this Data Matrix for a legacy item.

The internal DoD enterprise example has this message string:

Check the codes in Table 1 of the appendix for enterprise identifiers. The code “7L” means the value “W81N8L” is a DoDAAC15 code.

To identify the organization associated with the DoDAAC, query-only capability to the DoD Activity Address Directory (DoDAAD) can be obtained by requesting the URL for the Defense Activity Addressing System Inquiry (DAASINQ) via email to daasinghelp@dlamil. Or you may request the URL from the Transaction Services Help Desk at DSN 986-3247 or commercial (937)656-3247.

For contractors working with a legacy item who do not know who the DoDAAC is and cannot get the URL for DAASINQ access, contact your customer for assistance.

In this case, W81N8L is the AH-64D Apache Helicopter Program Office at Redstone Arsenal, Alabama.

**Step 3 – Determine if Contractor Marking was Required**

The contract number may be marked on the item’s data plate, or it may be printed on the item’s packaging or shipping documentation that came with the item. If not found in these places, contact the cognizant contracting office for help in tracking down the contract number.

Let us say you were successful in finding the contract number, and it is “FA850406D0002”. Next find out if IUID marking was required by the contract. There are two ways to do this: (a) get a copy of the contract from the Electronic Document Access (EDA)16 database, or (b) ask the cognizant contracting office for help.

Since searching databases can be time-consuming and tedious, perhaps the first effort should be to get the cognizant contracting office to help. They should already have access to the various databases. If they are unable...
to help, then proceed as discussed in the following paragraphs.

Users must register for access to EDA, and contractors may only access information in EDA for their company. If you are registered and can retrieve the contract, look for DFARS Clause 252.211-7003, Item Identification and Valuation. If that clause is present, then marking was probably required\(^\text{17}\), and the UII should have been registered.

An alternative method is to determine the contracting office DoDAAC from the first six numbers of the contract number, FA850406D0002. In this case, the contracting office DoDAAC is FA8504. A DoDAAC look-up shows that FA8504 is the 330th Aircraft Sustainment Group (an Air Force group) with the office code of GFKA (the organization within the group), which is located at Warner Robbins Air Logistics Center.

The next step is to ask the cognizant contracting office to verify the item required IUID marking. If IUID marking was required, ask the cognizant contracting office to confirm with the enterprise identified in the IUID compliant mark the UII was not registered.

### Step 4 – Confirm Non-Registration with the Responsible Enterprise

The cognizant contracting office can contact the contractor and confirm the UII was not registered by them. The reasons for not registering the UII should be obtained from the contractor at the same time.

For a legacy item UII that is not registered, contact the internal DoD enterprise identifier (usually DoDAAC or CAGE code) for confirmation the UII was not registered.

\(^{17}\) The contract requirements should reflect the marking requirements of the version of DoDI 8320.04, Item Unique Identification (IUID) Standards for Tangible Personal Property that was effective on the date of the contract.
TAKE CORRECTIVE ACTION

Step 1 – Seek Permission from the Responsible Enterprise to Register the UUI

The responsible enterprise for the UUI can either be a contractor or internal DoD enterprise.

If the responsible enterprise is a contractor, the item with an unregistered UUI will have been accepted by the Government. In this case, it falls on the Government to register the item’s UUI. If the cognizant contracting office is able to help, they can contact the contractor and request the contractor register the UUI. If the contractor does not agree to register the UUI, then the contractor should be notified the Government will register the UUI.

If the responsible enterprise is an internal DoD enterprise, then contact them and request they register the UUI. It is their responsibility to do so.

Step 2 – Registering the UUI

There are four different methods for registering UIIs depending on the situation. To register a single UUI there is a process to enter information through the internet via a web browser. This method requires hand entry of information and is not suitable for large numbers of UIIs. For large numbers of new acquisition UIIs the Wide Area WorkFlow (WAWF) is best. This method is not likely to be useful if you are reading/using this document to register unregistered UIIs. This is the step that was most likely missed. The last two methods for bulk upload of UII information rely on file transfer through the Global Exchange (GEX) to the IUID Registry. There are two accepted file formats; one is a flat file and one is an extensible markup language (XML) file. To use either of these methods a file needs to be created according to formatting requirements and a GEX account will need to be established. Contacting the IUID Helpdesk is the starting point for establishing a GEX account. File formatting requirements are occasionally updated; the Helpdesk can direct you to the most current version of these documents.

18 The IUID Help Desk can be reached via email at iuid.helpdesk@dla.mil.
For the very small number of UII entries where the data will be manually submitted to the DoD IUID Registry, controlled access to the DoD IUID Registry is required to register a UII. Controlled access for the DoD IUID Registry can be requested at https://iuid.logisticsinformationservice.dla.mil (see Figure 2). Since the unregistered UII is on an item already in the DoD inventory, it will have to be registered in the role of a “Legacy Submitter”.

If you need help or additional information, please email the IUID Help Desk.

Step 3 – Notify the Responsible Enterprise of Their Failure to Register

An e-mail should be sent to the responsible enterprise (contractor or internal DoD enterprise) that marked the UII on the item. If the organization is a contractor, also address the e-mail to the cognizant contracting office that awarded the contract to the contractor and the contract administration office identified on the contract.

Recall the methods to identify the responsible enterprise were discussed above in Chapter 2, under the section entitled “Confirm the Non-Registration”, “Step 2 - Determine Who is Responsible for UII Uniqueness”.
Chapter 3

Data Matrix is not IUID Compliant; UII is Registered

Determine Who is Responsible for UII Uniqueness

There may be instances where the Data Matrix is not encoded properly, yet the UII is registered. Since the UII is registered, the IUID data can be retrieved, which will identify the enterprise responsible for ensuring the UII is unique. To do this, Controlled Access as a “Legacy Submitter” is required, as described above in Chapter 2, under the section entitled “Take Corrective Action” in “Step 2 – Registering the UII”.

Step 1 – Verify Responsible Enterprise was Required to Mark

Follow the procedures above in Chapter 2 under the section entitled “Confirm the Non-Registration”, “Step 2 – Determine Who is Responsible for UII Uniqueness”.

If the responsible enterprise was an internal DoD enterprise, then you can assume that marking was required without further investigation.

If the responsible enterprise was a contractor, follow the procedures in Chapter 2 under the section entitled “Confirm the Non-Registration”, “Step 3 – Determine if Contractor Marking was Required”.

Step 2 – Confirm Non-Compliance with the Responsible Enterprise

If the responsible enterprise was a contractor and the cognizant contracting office is able to help, they can contact the contractor and confirm with them that the UII is not compliant. The reasons for marking a non-compliant UII should be obtained from the contractor at the same time.
For a legacy item non-compliant Data Matrix, contact the internal DoD enterprise identifier (usually DoDAAC or CAGE code) for confirmation the UII is non-compliant.

**REPORT THE NON-COMPLIANT MARK AND TAKE CORRECTIVE ACTION**

**Step 1 – Submit Product Quality Deficiency Report**
A product quality deficiency is a defective or non-conforming condition which limits or prohibits the item from fulfilling its intended purpose. These include deficiencies in design, specification, materiel, manufacturing and workmanship. A non-compliant Data Matrix is reportable. See Chapter 5, Reporting and Remediation of Contractor Non-Compliance.

**Step 2 – Seek Permission from the Responsible Enterprise to Replace Mark with DoD-Complaint Mark**
The responsible enterprise for the UII can either be a contractor or internal DoD enterprise.

If the responsible enterprise is a contractor, the item with a non-compliant Data Matrix will have been accepted by the Government. In this case, it falls on the Government to get the item’s non-compliant Data Matrix replaced with an IUID Data Matrix, unless the item is under a contractor warranty. If the item marking is covered under warranty, the item can be returned to the contractor to replace the non-compliant Data Matrix.

If the cognizant contracting office is able to help, they can contact the contractor and request the contractor replace the non-compliant Data Matrix. If the contractor does not agree to replace the non-compliant Data Matrix, then the contractor should be notified the Government will replace the non-compliant Data Matrix. The non-compliant Data Matrix should be removed or obliterated during the replacement process.

The cognizant contracting office can seek remedies to a contractor’s failure to correctly mark. See Chapter 5,
Reporting and Remediation for Contractor Non-Compliance.

If the responsible enterprise is an internal DoD enterprise, contact them and request they replace the non-compliant Data Matrix. It is their responsibility to do so.
Chapter 4
Data Matrix is not IUID Compliant; UII is not Registered

CONFIRM THE NON-COMPLIANCE AND NON-REGISTRATION

There may be instances where the Data Matrix is not encoded properly, and the UII is not registered. Since the UII is not registered, the IUID data cannot be retrieved, which means the enterprise that was responsible for UII uniqueness has to be identified from the data in the Data Matrix.

Step 1 – Determine Who is Responsible for UII Uniqueness

The only way left to determine who is responsible for UII uniqueness is to try to deduce from the data elements in the mark a data qualifier for the responsible enterprise identifier. Consult Table 1 in the appendix for a list of the enterprise identifiers.

If the responsible enterprise cannot be identified, then no further action can be taken.

Step 2 – Determine if Marking was Required

If the responsible enterprise for the item can be identified and is a contractor, follow the procedures in Chapter 2 under the section entitled “Confirm the Non-Registration”, “Step 3 – Determine if Contractor Marking was Required”. If marking was not required, then no further action should be taken.

If the responsible enterprise was an internal DoD enterprise, then it can be assumed marking was required without further investigation.

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19 This section applies to Data Matrices which appear relevant to IUID because a speculative UII can be derived from the mark. Occasionally manufacturers mark part numbers and/or serial numbers using a Data Matrix completely apart from IUID. These marks are not to be considered in this section. If these types of marks are found, you should look for other Data Matrix marks for one which is an IUID Data Matrix.
Step 3 – Confirm Data Matrix Non-Compliance and Non-Registration with the Responsible Enterprise

If it is confirmed IUID marking is required, follow the procedures above in Chapter 3 under the Section entitled “Determine Who is Responsible for UII Uniqueness”, “Step 2 – Confirm Non-compliance with the Responsible Enterprise”, to confirm the Data Matrix is non-compliant and the UII is not registered.

REPORT THE NON-COMPLIANT DATA MATRIX AND UNREGISTERED UII AND TAKE CORRECTIVE ACTION

Step 1 – Submit Product Quality Deficiency Report

Follow the procedures in Chapter 3, under the section entitled “Report the Non-compliant Mark and Take Corrective Action”, “Step 1 – Submit Product Quality Deficiency Report”.

Step 2 – Seek Permission from the Responsible Enterprise to Replace with an IUID Data Matrix and Register the UII

The responsible enterprise for the UII can either be a contractor or internal DoD enterprise.

To seek permission to replace the non-compliant Data Matrix, follow the procedures in Chapter 3 under the section entitled “Report the Non-Compliant Mark and Take Corrective Action”, “Step 2 - Seek Permission from the Responsible Enterprise to Replace Mark with DoD-Compliant Mark”.

To register the replacement mark, follow the procedures in Chapter 2 under the section entitled “Take Corrective Action”, “Step 2 – Registering the UII”.

Chapter 5

Reporting and Remediation of Contractor Non-Compliance

Under terms of the contract, the contractor may be liable for damages to the Government if it does not do the work of correctly marking the IUID Data Matrix on the item and registering the UII.

Step 1 – Report Contractor Non-Compliance

The purpose of reporting non-compliance is to determine the cause of supply discrepancies and product quality deficiencies, effect corrective action, prevent recurrence, and provide a measure for contractor past performance. Discrepancies in packaging, deficiencies in marking and registration should be reported.

DoD 4000.25-M contains procedures for reporting IUID package marking deficiencies found during shipping operations. Specifically, see C17.3.8, Discrepancies in IUID Data, and C19.15, UII Receipt Discrepancies.

A non-compliant Data Matrix would be reportable under Code 1AE = IMPROPER MARKING on a PQDR in accordance with policy found in DLAR 4155.24/AR 702-7/SECNAVINST 4855.5B/AFR 74-6, Product Quality Deficiency Report Program.

Quality deficiencies reported via PQDR and supply discrepancies reported via SDR will be investigated within the Inventory Control Point (ICP)/Integrated Materiel Manager (IMM) organization.

Step 2 – Notify the Cognizant Contracting Office

The cognizant contracting office should be informed of the cost to correct the contractor’s failure to correctly mark the IUID Data Matrix and/or register the UII. The contracting officer can then make a determination to recover the Government’s cost of the contractor’s non-compliance based on the merits of the case; and that is consistent with the contract terms.
Appendix

Is this an IUID Data Matrix?

What Does a Data Matrix Look Like?

This is a Data Matrix\(^\text{20}\):

![Data Matrix Image]

You can’t tell what is encoded in this Data Matrix by looking at it with the naked eye.

How Do You Get Data From the Data Matrix?

A device, such as a barcode imager or reader, must be used to see the data.

When this Data Matrix is scanned, the “raw read” (see below) is shown on the output screen unless the imager is set to show other than the raw read:

```
[>0617V95542P738R330G01S3050R
```

This is a Data Matrix compliant with IUID policies and business rules.\(^\text{21}\)

How Do I Decipher the Message String?

First, you have to understand the structure of the string. In the string shown above:

- The “[>” is the compliance indicator that tells you the message string uses the formats of ISO/IEC 15434.
- The “06” is the format indicator that says the data elements are tagged with Data Identifiers (DIs).
- The “17V” is the DI for CAGE code and its value is 95542. This is the enterprise identifier of the

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\(^\text{20}\) This example is an actual UUI that is registered in the DoD IUID Registry.

\(^\text{21}\) The square symbol is the scanner’s depiction of an unprintable ASCII character that is used to separate the data elements in the message string. The symbol used to depict an unprintable ASCII character may vary among scanner manufacturers.
Appendix

enterprise responsible for assuring the uniqueness of the UII.

- The “1P” is the DI for original part number and its value is 788R330G01.
- The “S” is the DI for serial number within the original part number and its value is 3050R.

Second, you have to understand three different format indicators from ISO/IEC 15434 can be used:\(^{22}\):

- Format Indicator “05” indicates Application Identifiers (AIs) are used.
- Format Indicator “06” indicates Data Identifiers (DIs) are used.
- Format Indicator “12” indicates Text Element Identifiers (TEIs) are used.

Each format indicator has a specific set of allowable data qualifiers used for tagging data elements in the message string. Table 1 shows the permissible data qualifiers for each format indicator for each UII data element.

Third, understand the UII can be in any one of three different constructs:

- Construct #1 – Serialization within the enterprise identifier. Figure 11 is an example of a Construct #1 using format indicator 12 for TEIs.

\[\text{ATN: Text Element Identifiers (TEIs)}\]

\[
(>^{12}_{S}S_{MFR}0CVAS\text{SER}674A36458^{(R)}E_{T})
\]

**Figure 7. Construct #1 with TEIs**

- Construct #2 – Serialization within the original part, lot or batch number within the enterprise identifier. Figure 12 is an example of a Construct #2 using format indicator 06 for DIs.

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\(^{22}\) The format code for IUID Data Matrices will always be the 5\(^{th}\) and 6\(^{th}\) characters within the raw read. “05”, “06”, and “12” are currently the only valid format codes. Years ago, “DD” was acceptable. If you see “DD” as a format code, treat it as if it was format code “12”.
• DoD IUID Equivalent – An item unique identification method in commercial use and has been recognized by DoD. Figure 13 is an example of a DoD recognized IUID equivalent using format indicator 05 for AIs.

<table>
<thead>
<tr>
<th>Data Element</th>
<th>Data Identifier (DI)</th>
<th>Application Identifier (AI)</th>
<th>Text Element Identifier (TEI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise Identifier:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAGE/NCAGE</td>
<td>17V</td>
<td>-</td>
<td>MFR , SPL , or CAG</td>
</tr>
<tr>
<td>D-U-N-S</td>
<td>12V</td>
<td>-</td>
<td>DUN</td>
</tr>
<tr>
<td>GS1 Company Prefix</td>
<td>3V</td>
<td>-</td>
<td>EUC</td>
</tr>
<tr>
<td>DODAAC</td>
<td>7L</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Other Agencies</td>
<td>18V</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Serial Number within Enterprise Identifier</td>
<td>-</td>
<td>-</td>
<td>SER or UCN</td>
</tr>
<tr>
<td>Serial Number within Original PIN or within Lot/Batch Number</td>
<td>S</td>
<td>-</td>
<td>SEQ</td>
</tr>
<tr>
<td>Original PIN</td>
<td>1P</td>
<td>-</td>
<td>PNO</td>
</tr>
<tr>
<td>Lot/Batch Number</td>
<td>1T</td>
<td>-</td>
<td>LOT, LTN, or BII</td>
</tr>
<tr>
<td>UII Data Set (Single Element)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete UII</td>
<td>25S</td>
<td>-</td>
<td>UID</td>
</tr>
<tr>
<td>UII not including the IAC (CAGE + Serial Number within CAGE)</td>
<td>18S</td>
<td>-</td>
<td>USN or UST</td>
</tr>
<tr>
<td>IUID Equivalents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIN</td>
<td>I</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ESN/MEID/CMTI</td>
<td>22S</td>
<td>8002</td>
<td>-</td>
</tr>
<tr>
<td>GRAI</td>
<td>-</td>
<td>8003</td>
<td>-</td>
</tr>
<tr>
<td>GIAI</td>
<td>-</td>
<td>8004</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 1. Data Qualifiers for UII Data Elements