

UNCLASSIFIED



**ITEM UNIQUE IDENTIFICATION (IUID)
GROUND EQUIPMENT IMPLEMENTATION PLAN**

United States Marine Corps

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1. Background

Item Unique Identification was mandated by the Office of the Undersecretary of Defense, Acquisition, Technology and Logistics, USD (AT&L), in 2003. The Marine Corps is implementing IUID in order to improve logistics processes within the Marine Corps, primarily in the areas of property accountability (PA), Intensive Item Management (IIM), and Product Lifecycle Management (PLM).

The purpose of this Implementation Plan is to consolidate and capture the way ahead to complete IUID implementation within the Marine Corps. Though IUID implementation crosses a number of domains and organizations, efforts have been primarily led by HQMC, Installations and Logistics (I&L), Marine Corps Systems Command (AC ALPS), Marine Corps Logistics Command, and Combat Development and Integration.

Implementation of IUID has been executed by: 1) IUID marking equipment and registering the UUI, 2) fielding IUID capable Automated Information Systems (AIS) and Automatic Identification Technology (AIT), and 3) Business process integration. The Marine Corps established the Enterprise IUID Working Group (EIWG) in 2007 with HQMC, Installations and Logistics as the lead and Marine Corps Systems Command (MCSC) as the IUID Program lead. Legacy equipment IUID marking began at Maintenance Centers, Albany and Barstow in 2008 and has matured to other maintenance activities as well as seek-and-apply applications within the Marine Corps Forces.

Marine Corps source documents supporting IUID implementation include an IUID Statement of Need, a Marine Corps order (MCO 4410.28, "IUID of Ground Equipment"), and an "IUID Concept of Operations for USMC Ground Equipment" at appendix A, and a Marine Corps Serialized Item Management (SIM) Policy (MCBUL 4130). This document provides additional detail to the IUID implementation concepts established in MCO 4410.28 and the CONOPS at appendix A. It also supports IUID implementation coordination, per the Plan of Action and Milestones at Appendix B. This document will be updated periodically as IUID implementation progresses and as the means to best exploit IUID.

2. Resources

2.1 Background. To ensure a uniform approach to IUID marking HQMC tasked MCSC to execute legacy marking. Prior to 2011, all programmed support was provided via end of fiscal year re-allocation. In 2011, an IUID Marine Corps Project Code (MCPC) budget line was established for Fiscal Year (FY) 2012 with a minimal funding level applied through the Future Years Defense Planning (FYDP). This funding is used to support the legacy marking mandates promulgated by OSD.

Overseas Contingency Operations (OCO) associated funding for IUID support has been justified through improving situational awareness, i.e., location, status and history of critical Marine Corps assets, to include "Resetting the Force" in coordination with LOGCOM, marking and status. This occurs at "Points of Entry" employed through use of IUID Site Managers (ISM) assigned to each Marine Expeditionary Force (MEF), Marine Corps Logistics Command (Albany and Barstow), and Hawaii in order to fully exploit IUID/UUI capabilities.

Continued support for IUID is focused on two inter-related efforts across the USMC enterprise for full-implementation of IUID: 1) MCSC Assistant Commander ALPS: Identifying, marking, data management, and registering each of the approximate 1.3 million serially-tracked items in the USMC active inventory, as well as ~2.1 million embedded critical components to the IUID standard and 2) HQMC, I&L (LPC): Development and management of IUID strategy and planning documents, coordination of MARCORSYSCOM IUID marking and AIS integration, coordination with Department of Navy, OSD and other Joint policy actions and data calls, as well as development and staffing of IUID-related policy and program documentation across related organizations.

2.2 Current Approach. There is a requirement to establish and transition IUID as a program of record at MCSC in order to ensure dedicated resources to sustain the baseline marking and engineering activities. Additionally, I&L must move beyond basic compliance to achieve the Joint Logistics Board identified process improvements enabled by IUID in Property Accountability (PA), Intensive Item Management (IIM) and Product Lifecycle Management (PLM). These improvements are calculated at the DoD-level to save \$2-4B annually through improved efficiency and decision support for equipment management. This effort will tie into current Existence, Completeness and Valuation (E,C&V) and Financial Improvement Audit Readiness (FIAR) efforts to establish proper accountability, improve business and financial processes and information, support critical management assertions, and establish effective management of mission critical assets.

2.3 Establishing a Cost Per Mark. In order to estimate quantities of CL VII and IX assets for marking in a fiscal year, a price per mark was established. Costs were broken down across the Work Break-Down Structure (WBS) associated with the USMC Legacy Marking Approach, discussed in Section 2.1 of this document and illustrated in Table 2-1. Costs per mark were calculated for each element of the WBS as well as for the total cost to include hardware and software procurements.

Table 2-1. Cost Per IUID Mark, WBS Breakdown

Work Breakdown Structure	TOTALS	Cost Per Label
Planning & Program Support	\$ 6,714,996.29	\$ 5.17
Logistics Plans & Policy	\$ 470,500.00	
Pedigree Data Collection & Management (TDS)	\$ 6,851,274.30	\$ 5.27
Engineering Assessments	\$ 6,055,778.20	\$ 7.57
Mobile Marking (Surge & Sustainment)	\$ 30,173,995.10	\$ 37.72
Management & Administration	\$ 3,616,835.40	\$ 2.78
TOTAL LABOR	\$ 44,388,007.29	
ODC/Travel	\$ 7,239,765.12	\$ 5.57
TOTAL CONTRACT VALUE	\$ 51,627,772.41	
IMC (Scanners, Marking Cart, Verifiers, Laptops, Software, Training)	\$ 1,804,502.00	\$ 1.39
Labels	\$ 356,101.00	\$ 0.27
Scanners (70)	\$ 326,121.00	\$ 0.25
Total Materials	\$ 2,486,724.00	
Total Cost	\$ 54,114,496.41	\$ 65.99

2.3.1 Cost Per Mark Depreciation. As the legacy marking approach matured, the cost per mark will reduce as recurring costs decrease for functional elements like engineering analysis and equipment costs. Table 2-2 depicts the depreciation values used in the subsequent completion percentages across the resourced FYDP.

Table 2-2 Cost Per Mark Depreciation Values

Cost Per Mark Depreciation	
Cost Per Mark (FY13 & FY14) Equals Total Cost Less IMCs, Scanners, & Labels	\$ 64.08
Cost Per Mark (FY15-18) Equals Total FY14 Total Cost less Engineering Assessments	\$ 56.51

2.4 Timeline to Legacy Marking (Classes II, VII and IX). The total population of what will be marked is covered in Chapter 6 - IUID Marking. Based on the current funding available for the USMC IUID program, approximately 75.4% of CL VII legacy equipment and 3.3% of CL IX inventory will be IUID marked by the end of the current FYDP. Figure 2-1 depicts the population percentages achieved each fiscal year based on the current funding profile.

Figure 2-1 Legacy Marked/Captured Population Percentage – Current Funding Profile

Mark/Capture Strategy	FY13		FY14		FY15		FY16		FY17		FY18		FY19	
	CL VII	CLIX	CL VII	CLIX	CL VII	CLIX	CL VII	CLIX	CL VII	CLIX	CL VII	CLIX	CL VII	CLIX
Quantity To Be Marked/Captured	125,846	31,461	17,728	4,432	9,995	2,499	9,981	2,495	10,150	2,538	10,334	2,584	10,504	2,626
Percent Complete (End FY)	70.0%	2.5%	71.4%	2.7%	72.2%	2.8%	72.9%	3.0%	73.7%	3.1%	74.6%	3.2%	75.4%	3.3%

3. Business Process Integration

As marking progresses to the point of critical mass and AIS become IUID-enabled, the Marine Corps will be able to realize the significant benefits of IUID in the value streams of Property Accountability (PA), Intensive Item Management (IIM), and Product Lifecycle Management (PLM) by integrating IUID into business processes within these realms. Property accountability is the initial focus for development of these value streams.

3.1 Property Accountability

Improvements to PA will be achieved through use of AIT and the serialized data collection and sharing as applied to PA and related life cycle management activities. As items enter or leave the service inventory, are modified, damaged, accumulate hours, rounds, miles or expend life units in any prescribed manner, IUID will be used in allocating these adjustments to individual asset values, which are then rolled-up into Marine Corps and DoD financial reports. The physical inventory process will be AIT and IUID enabled, and therefore significantly faster and more accurate. These inventory checks are augmented with each instance of scanning an IUID mark – this information will be captured and available to assist in locating an item within the inventory, to include the use of shipment documents or RFID tags for locating items in storage or in movement.

3.2 Inventory Management

3.2.1 Existence and Completeness (E&C) IUID will assist in preparing for auditability and substantiating existence and completeness. The IUID Temporary Data Storage will be used to cross-reference the various serial numbers captured during the IUID marking

process, the serial numbers being used with the accountability system of record, and the systems used for tracking items within the Military Equipment Valuation process.

3.2.2 Military Equipment Valuation (MEV) To support valuation requirements for new *Property, Plant and Equipment (PP&E)*, to include *Military Equipment (ME)* related *Statements of Federal Financial Accounting Standards (SFFAS)*, financial transaction details for upgrades or service life extension programs will be available to adjust the value or impact depreciation schedules tied to item-specific service entry dates.

3.2.3 Disposal To ensure an accurate inventory is maintained, end of lifecycle events will be recorded and UII transitioned to an inactive status in the DOD IUID Registry. By the end of FY13, disposal transactions will be automatically captured and systems updated.

3.3 Shipyard Management

Blount Island Command (BIC) in Jacksonville, Florida, is the activity responsible for the execution of the Marine Corps Maritime Prepositioning Force (MPF), IUID legacy equipment marking as well as capturing OEM marked items using Integrating Placement and Registration of Identified Materials and Equipment (IPRIME) software. BIC includes the UII in pRFID tags in support of asset automatic identification and accountability. By mid-FY13, BIC will enhance the capabilities of IPRIME in conjunction with pRFID and IUID to include a Real Time Location System (RTL) for functions of automated supply chain processing, automated container and mobile load inventory accountability, warehouse asset visibility, and yard management. Additionally, Mobile Marking Stations will print IUID labels and embed UIIs in pRFID tags in support of the Distribution Management Office (DMO) maintaining asset visibility during receiving, stowing, allocation, picking and shipping.

3.4 SIM Alignment

The Marine Corps Serialized Item Management (SIM) policy will be updated to reflect a transition from a system based on multiple identifiers to accurately identify an item (serial number, National Item Identification Number, etc.) to a system using the UII. The UII as the common identifier will eliminate the need to transcribe or translate data between logistics command and control, supply, maintenance, and other stakeholders. It will allow the association of data on an item's attributes, condition and history.

4. Automated Information Systems (AIS) Compliance

Logistics, supply, financial, and acquisition AIS that execute individual item traceability functions will be IUID-compliant with the UII as the common identification standard for each item. It will enable the accumulation of volumes of information on a particular item using multiple IUID-enabled AISs. There are ongoing efforts to identify all of the AIS for IUID compliance. The primary supply and maintenance system, and first to be IUID-compliant, is the Global Combat Support System – Marine Corps (GCSS-MC).

4.1 Marine Corps Enterprise Resource Planning (ERP)

The Marine Corps' ERP, GCSS-MC, will be IUID-enabled. During FY13, the USMC Temporary Data Storage (TDS) will provide UIIs and legacy data to GCSS-MC. GCSS-MC will be the Marine Corps' authoritative data source for UIIs. During the equipment acceptance process, GCSS-MC will receive UIIs of new acquisitions from the Wide-Area Work Flow (WAWF). Thereafter, GCSS-MC will have

the capability to update the OSD IUID Registry during lifecycle events, including changes in custody, changes to parent/child relationships, and disposal.

Implementation of an IUID-enabled GCSS-MC begins with the Warehouse Management System (WMS), a retail-level supply initiative to be implemented at the Supply Management Units (SMU). This capability will undergo a field user evaluation during 2012 and will be implemented throughout the Marine Corps on a yet to be determined schedule.

GCSS-MC capabilities beyond those listed above will be developed and fielded incrementally, including:

- Establishing Inventory Valuation of Fixed Assets via the use of the UII to augment USMC Clean Audit initiatives and IUID ROIs.
- Establishing business processes for asset appreciation/depreciation and gains and losses based on lifecycle events and distribution.
- Establishing warranty tracking capability in conjunction with asset appreciation/depreciation
- Implementing IUD Technology, processes and AIT tools to support maintenance business processes.
- Implementing IUID Technology, processes and AIT tools to support remaining Supply Chain Management processes.

4.2 Logistics Portfolio AIS

In conjunction with implementation of GCSS-MC, AIS within the Logistics Portfolio will be evaluated during 2012 for IUID requirements. Those requiring IUID capability will be prioritized and implementation plans established for each to ensure they are IUID compliant by December 2015.

The designated MARCORSYSCOM IUID Program Office, AC ALPS, will support compliance by:

- Supporting the development of compliance plans by AIS advocates.
- Providing expertise and guidance on available technology for enabling AIS, including low-cost alternatives such as Government "off-the-shelf" (GOTS) bridge systems, middleware, or edge ware until formal software change requests are executed.
- Certifying IUID compliance of USMC against DoD and USMC enterprise IUID standards.
- Supporting the development of training standards for Marines on IUID and IUID enabled AIS.

4.3 TLCM-OST 3.0

Under the Total Life Cycle Management Operational Support Tool (TLCM-OST), the IUID information will be fused into the current asset inventory dashboard. This dashboard will provide the information on inventory currently reported at the unit level along with discrepancies associated to on hand quantities and/or duplicate reporting of serial numbers. The IUID information will be evaluated based on NSN and serial number matches to determine the quantity of legacy items remaining to be marked. IUID will be used to track the lifecycles of items from initial acquisition through disposal to include detailed maintenance reporting.

5. Automatic Identification Technology (AIT)

The IUID AIT requirement is part of a larger enterprise effort to affect solutions for multiple initiatives (transportation, distribution, supply and maintenance). There is an AIT Initial Capabilities Document (ICD) in development to advance an enterprise solution to provide a common level of functionality across single or multiple segments of the supply chain and the operational environment where AIT is employed. AIT functionality includes the ability to identify an item and originate, store and facilitate transmission of asset source data to higher level information systems in support of identification as well as providing location and physical condition or status of assets. All portable bar code scanners fielded will be able to read 2D bar codes. The implementation of bar code equipment is dependent on the AIT functionality of fielded logistic systems. The below depicts the current state of fielded AIT equipment:

Distribution (AMS-TAC) – Fielded

Transportation (CMOS) – Fielded

Unit Move/Preposition (MDSS II) – Fielded

Intermediate Supply (STRATIS) – Fielded (GCSS-MC WMS will use the same hardware)

Retail Supply (GCSS-MC) – TBD

Maintenance (GCSS-MC) – TBD

6. IUID Marking

6.1 Legacy Marking

6.1.1 Introduction

Since the DoD Item Unique Identification (IUID) policy was introduced in 2003, the Marine Corps has actively embraced IUID to improve data quality, standardize serialization, and take advantage of the automated data capture to revolutionize existing business processes. In 2004, Marine Corps Logistics Base Albany, established a UID/RFID working group comprised of various service components to include DLA, PP&O, MCSC and I&L; this later evolved into the IUID Enterprise Working Group (IEWG). The IEWG was chartered to address issues such as Technical Data Package preparation and review, movement of assets, and policy for marking standardization, serialization, and centralized coordination and reporting.

Individual Program Offices began implementing IUID policy by marking legacy equipment and inserting DFARS clause 252.211-7003 in all new contracts. In 2004/05, MCLB Albany Maintenance Directorate began marking legacy equipment and embedded items with the intent to have a fully implemented “opportunity and apply” IUID program by FY07 at the Marine Corps Depots. In 2007, the Headquarters USMC Lifecycle Management Team partnered with the Norwegian Defense Logistics Organization (NDLO) to conduct a pilot program in which the “seek and apply” methodology was tested on USMC Prepositioned equipment. As part of the pilot, a new adhesive was tested for a “peel and stick” type of label/adhesive specifically designed for Chemical Agent Resistant Coating (CARC).

6.1.2 Methodology for Width and Depth of Population

The identification of items and quantity for IUID marking includes Principle End Items (PEI) and Secondary Repairable (SecReps) items (Class VII, II, VIII, and IX). PEI that will remain in inventory after 2012 according to the Total Force Structure Management System was the basis for the calculation of total legacy items to be marked (~1.2M). The population of SECREPS to be marked was calculated using the quantity of items that were identified in inventory as well as the quantity of SecReps installed on PEI. The Marine Corps technical data repository was used to identify which National Stock Numbers (NSN) are embedded as SecReps within PEIs. The total quantity of inventory on the shelf at the various inventory control points plus the quantity of items installed on a PEI (based on the total quantity of PEI in inventory) less NSNs that were identified as circuit cards and wiring harnesses totaled ~2.1M items.

To assist Program Managers with marking of legacy Class VII Principle End Items (PEI) Class IX, MCSC, Assistant Commander, Acquisition Logistics and Product Support (ALPS) developed and executed an USMC Enterprise Level Three-Phased marking approach. Mission Essential Phase I (MEP-I) addressed Mission Essential Equipment as outlined in Marine Corps Bulletin 3000 (2007). Legacy Phase 2 (MCI-LP2) included controlled items in the USMC inventory. The final phase, Legacy Phase 3 (MCI-LP3) consisted of serialized items, items over \$5,000, and other items requested by the Program Manager (PM).

6.1.3 Methodology and Process

6.1.3.1 Pedigree Data Collection & Data Management

The data behind the Unique Item Identifier (UII) is essential to successful implementation and enables true life cycle management. The MCSC ALPS marking team initiated the identification of pedigree data elements for all of the equipment identified for marking. In coordination with Headquarters Marine Corps (HQMC) and the IEWG, 58 data elements were identified for capture and use in GCSS-MC and other Automated Information Systems (AIS). Once the 58 data elements were defined, the pedigree data was collected and provided for final review to each respective MCSC Program Manager for verification and approval. The pedigree data identification and collection was critical for all the subsequent steps of the IUID Legacy Process. It provided the foundation for information on the IUID label and the data stored in the USMC Temporary Data Storage (TDS), which will ultimately migrate to GCSS-MC.

MEP-I consists of over 162 national stock numbers (NSNs), roughly 70,000 PEIs for supply Class VII and approximately 320,000 PEIs for supply Class IX and secondary repairables (SECREPs). MCI-LP2 consists of over 340 NSNs, approximately 396,000 PEIs, for supply Class II and Class VII. Additionally, over 164 NSNs were identified for Class IX and SECREPs. MCI-LP3 consists of over 607 NSNs, approximately 367,000 PEIs, for supply Class II, VII, and VIII. For supply Class IX and SECREPs, approximately 31 NSNs were identified. Data was collected and validated with a mobile application developed to interface with TDS. In September 2011, USMC Legacy marking transitioned from MCI-L3 to sustainment and residual marking of remaining legacy items. The pedigree data team cross referenced the Master Data

Repository (MDR) with Unit DoD Activity Address Codes (DoDAACs) to identify items remaining to be marked. To date, over 513,000 items have been identified.

6.1.3.2 Engineering Analysis

Once the pedigree data was collected, an engineering analysis was conducted to identify the optimal IUID mark location, type, size, and adhesive. Critical to this analysis was the requirement of no impact to form, fit, or function and compliance with MIL-STD 130N. The analysis considered the marking environment (climate, temperature and conditions) and the item's site preparation. Requirements for ambient air temperature minimums/maximums and humidity level maximums were established to ensure proper adhesion. Testing included material analysis to eliminate degradation of human readable information and the 2-dimensional UII mark. The MCSC ALPS Legacy Marking Team pursued an initiative to authorize marking of legacy equipment with an IUID label in the vicinity of the data plate in (1) below, (2) above, (3) left and (4) right placement priority. This approach streamlined the development of marking instructions, relieving the requirement for Engineering Change Proposals (ECPs), design changes, configuration management and/or documentation processes thus significantly reducing time and costs. Technical authority remained with the end item Program Manager while removing the administrative burdens of developing a program-unique IUID process.

6.1.3.3 Mobile Marking Teams (MMTs)

The IUID marking effort for legacy equipment deployed Mobile Marking Teams (MMTs) for all three phases. The MMTs executed the "Seek and Apply" and "Seek and Validate" methodology at the Marine Expeditionary Forces (MEFs), Marine Forces Reserve (MFR) sites, Marine Corps Special Operations Command (MARSOC), and Bases and Stations. Marine Corps Logistics Command implemented an opportunistic marking approach as assets received Depot Level service; this methodology was also employed by Blount Island Command (BIC) while servicing equipment/material from Maritime Prepositioning Force (MPF) ships. To support effective planning and communication of the mobile marking surge efforts, a Mobile Marking Execution Plan (MMEP) was developed for each location outlining resources, marking team movement, schedule, and resources (number of markers and materials) required. This ultimately provided decentralized simultaneous execution at multiple sites in support of overlapping CONUS/OCONUS execution.

6.1.3.4 USMC IUID Temporary Data Storage (TDS)

TDS is a repository for data associated with legacy PEIs marked in the USMC to include fleet legacy equipment, external organization marking efforts, i.e., Marine Corps Logistics Command (MCLC), SPAWAR, Precision Weapons Systems (PWS), and OEM marked equipment. The goal for TDS was to collect and maintain accurate legacy data for migration to GCSS-MC, MDR and/or other AISs as they are identified. Additionally, a cleansing and quality assurance (QA) capability was incorporated into TDS. Through a combination of automated data checks, record comparisons, and manual corrections, the accuracy of the records in TDS continually improve. TDS transitioned into an enterprise level, web-based data system capable of accepting internal/external reports and storing and processing data.

It provides the capability to create labels, track marked items and upload data to the DoD UID Registry via Extensible Markup Language (XML) transaction.

6.1.4 IUID Equipment Procurement & Acquisition

6.1.4.1 IUID Integrated Marking Carts (IMCs) & Scanners

Equipping the Mobile Marking Teams (MMTs) at each Marine Expeditionary Force (MEF) was a significant undertaking. MCSC ALPS conducted a detailed Market Research/Analysis of lasers, scanners, verifiers, and integrated marking equipment solutions available from industry and developed constructive requirements for an integrated mobile marking solution. The A2B Corporation's Integrated Marking Cart (IMC) was selected via a MCSC/General Services Administration (GSA) streamlined acquisition process. The IMC includes a laser engraver, scanner, verifier, and a laptop computer which uses two software drivers (Bartender™ and UID Comply!™) to compile and print merge a compliant 2D Matrix and Human Readable Information. A2B provided MCSC with service and support as well as on-site training on the equipment and software for the MMT. Market research also discovered label material and adhesive types available on the GSA schedule which are useable with the IMC CO₂ laser.

6.1.4.2 IUID Labels

Following engineering analysis, MCSC ALPS defined specific label/adhesive requirements and developed procurement packages for pre-printed labels and three large blank label contracts. During MEP I, pre-printed labels were procured by the Air Force PM AIT, using the pedigree data collected from source documents. Due to inaccuracies found in source data, the IUID Team transitioned to blank labels. In Phase II, equipment was inventoried, capturing pedigree data directly from the equipment's data plate with labels being printed at each of the MEFs. This process was found to be an effective way to collect accurate data but required re-visit of each piece of equipment twice. As a result, the Program Office converted to Construct I (composed of Issuing Agency Code, an Enterprise Identifier, and a Serial Number unique within the Enterprise), minimizing marking and application errors, and implemented a mobile application on the scanner to be able to collect the pedigree information and directly interface with TDS.

6.2 Sustainment Approach

Current marking efforts are provided as third party logistics support services. As marking efforts gain momentum and GCSS MC provides enhanced capabilities to use the IUID marking within supply and maintenance functions, the need grows for the ability to sustain the IUID marks in the field. The current Marine Corps approach is to provide regionally centralized replacement mark capabilities. Currently, this replacement mark will be provided under the same third party logistics support and over time will need to transition to an organic capability sustained as part of maintenance and material handlers' core functions. As items with an IUID labels become unscannable and require replacement, the unit identifying the deficiency will contact the regional ISM to request a replacement label. The ISM and requesting unit will coordinate the

production of the replacement IUID label and the application in the proper location. Specific ISM functions and the associated methodology are described in the following paragraphs.

6.2.1 Residual Marking of Legacy Assets (Non-OEM Marked Equipment). Unit supply records will be constantly monitored and reconciled with the TDS. Where it is found that Legacy PEIs or SECREPs require an IUID mark, a label will be created, applied in accordance with current marking instructions. Once scanned, this data will be entered into the TDS according to current procedures.

6.2.2 Data Cleansing. All scanner generated data will be analyzed prior to induction into TDS. Existing TDS data will be continuously monitored and corrected where applicable.

6.2.3 Label Maintenance (Including OEM Marks). Labels will be monitored as part of the sustainment effort. Labels needing replacement due to condition will be accomplished according to current procedures. Weather, wear, adhesive failure or user removal will require a label to be replaced using the previously established UII. Label replacement may be required for either MCSC ALPS applied or OEM applied labels. OEM labels will be replaced outside of warranty cases due to normal wear and tear. OEM labels still covered by warranty will be addressed by the Product Quality Deficiency Report (PQDR) process addressed below.

6.2.4 Equipment Maintenance & Label Inventory. Integrated Marking Carts (IMCs) with associated hardware and scanners will be maintained by MCSC ALPS according to existing instructions. This includes monthly inventories, performing software updates, and normal preventive maintenance. Label inventories will be maintained and reported to cognizant personnel to ensure an available balance to support sustainment operations.

6.2.5 Liaison Actions and Training. IUID Sustainment efforts include providing liaison support and training on all IUID matters to the MARFORs and MCLB's FSDs. At the MARFORs, IUID teams will interface with the Initial Issue Point's Equipment Receiving and Distribution Team (ERDT) to capture the UIIs of new equipment being fielded to the MEF. They will provide liaison support and training to the FSAMO teams and other MEF IUID stakeholders.

6.3 Contracts Compliance

Implementation of IUID in Contracts is a three level approach using training, metrics, and process improvement. The USMC began implementation with structured IUID training throughout the Contracts Competency in 2007. Compliance metrics for the DFARS Clause 252.211-7003 have been monitored twice yearly with sampling and direct review of 30 supply contracts each cycle since 2009. This review was initiated in response to OSD policy, and has reinforced the initial training.

In 2011, under the guidance of the EIWG, USMC initiated a second round of upgraded metrics and training to address the increased maturity and complexity of IUID in Contracting. USMC developed quantitative metrics covering all contracts, based on data extracts from Army Contracts Business Intelligence System (ACBIS). This method identifies all compliant and non-compliant IUID-qualifying contracts for each quarter, and reports by individual requiring unit. The method provides metrics for each unit, summary metrics for HQMC and MCSC, and lists of non-compliant contracts for each unit to investigate and remediate. A second, advanced IUID

Contracts training will be provided this next fiscal year through the Contracts Competency organization to ensure implementation of the new GFP and warranty DFARS clauses, and the detailed item attachments required to create accurate requirements for the Contracting Officers to execute.

The third level, process improvement, will be used initially to address a known weakness, the lack of specific item information for execution of the DFARS clause attachments from the requiring organizations. USMC will provide the requiring Program and Project teams - especially logisticians and engineers - with improved tools such as a PM Guide with decision charts, process flows, and modified Purchase Request Builder and Statement of Work, CDRL, And Tracking Tool (SCATT), to simplify and standardize unique item information in the requirements packages. The quantitative metrics approach will then be used to monitor compliance, identify organizational and process gaps and best practices. Further training and process improvement will be utilized until the USMC reaches full compliance in all qualifying contracts.

6.4 OEM Discrepancies

6.4.1 OEM UII Capture and Discrepancy Reporting. Fielded equipment with OEM marks will be scanned and uploaded to the TDS. In cases where it is found that the OEM mark is not in accordance with Mil-Std 130N, a sufficient Marine-Corps wide sample will be conducted by MCSC ALPS to determine the extent of the problem. Where warranted, the problem will be documented and reported using the PQDR via the Product Data Reporting and Evaluation Program (PDREP), according to existing procedures. The resulting determination made jointly by both the applicable PM and the UIID program office may require the label to be replaced by the program office (Marine Corps) vice the OEM contractor.

6.4.2 OEM WAWF Discrepancies. The USMC will ensure capture of UIIs from OEMs by enhancing the visibility of mark quality during OEM manufacture, acceptance, and post-delivery. USMC will use five means to address current gaps in OEM capture: 1) increased contracts with mandatory quality inspections before delivery; 2) tests for WAWF capture in the Registry; 3) simplified transmission of multiple-level embedded configuration to the Registry; 4) comprehensive PQDRs; and 5) validation in maintenance processes. For instance, USMC will provide a Data Item Description (DID) for contractor mark verification to the Program and Project managers to implement the OSD DPAP requirements for verification of marking before delivery. The Program and Project managers will also use the Registry and Temporary Data Storage (TDS) to monitor successful registration of valid UIIs for the systems. The OSD DID for multiple embedded items will ensure this more complicated data is submitted to the Registry.

Once OEM UIIs have been identified as defective on items that will be accepted, MCSC is developing policy to enable PQDR processes specific to the USMC. This will allow effective metrics, accountability to the program by vendor, and visibility of mark quality in the Past Performance Information Retrieval System (PIRS). Finally, to address the large problem of valid OEM marks with unregistered UIIs, the Depot SOWs, Depot Maintenance Interservice Support Agreements (DMISA), and Commercial Repair Contracts are now required to

validate all IUID marks with the IUID Registry during induction for repair. This provides a 360 degree monitoring and remediation environment for OEM UIIs.

6.5 Depot Marking Activity

Each item Depot Maintenance Statement of Work (SOW) is updated with instructions specific to the execution of marking PEI and SecReps with an appropriate IUID label, with a preference of incorporating the IUID matrix into the data plate. Working with the Depot Maintenance Engineering activity and the program office, computerized drawings are developed and used to integrate the creation of the IUID matrix within the established procedure for data plate replacements. Additionally, each SOW calls out that items inducted for maintenance with a UII already affixed to them will maintain that same UII until a new data plate is affixed. In the future, our depots may be required to do direct part marking in order to provide a more durable mark that will remain scannable until the next depot maintenance cycle. For the items the maintenance centers produce, they will ensure the uniqueness of the UII and register them with the OSD Registry for IUID. After registration, an electronic record will be provided to the Marine Corps IUID TDS and eventually GCSS MC.

7. Future Implementation Plans

7.1 Overview

Current and future activities will build on USMC progress to date in executing tasks that successfully improve IUID implementation. Supporting implementation plans will build on the infrastructure, business processes and system improvements implemented to-date and primarily expand the use of IUID where an identified improvement opportunity exists that would measurably benefit from its application.

7.2 Periodic Progress Reviews

A management review of progress in achieving the milestones/expected outcomes/measures of success of all supporting activities will be convened quarterly in conjunction with the IUID Enterprise Working Group. At this progress review, the lead organizations will provide updates on IUID activities. An Executive review will occur annually and the implementation plan will be revised as necessary.

8. Summary

The Marine Corps' and DOD's plan for improvements to the value chains of property accountability, intensive item management, and product lifecycle management rely on the implementation of IUID. The breadth of implementation within the logistics, financial and acquisition communities demands ongoing coordination to ensure a logical and efficient effort to achieve the end state. This implementation plan will provide a means of aligning and communicating the implementation efforts, and will be updated periodically to reflect current conditions and emerging planning developments.