

Item-Unique Identification Implementation Template for DoD Maintenance Depots



Ron Durant

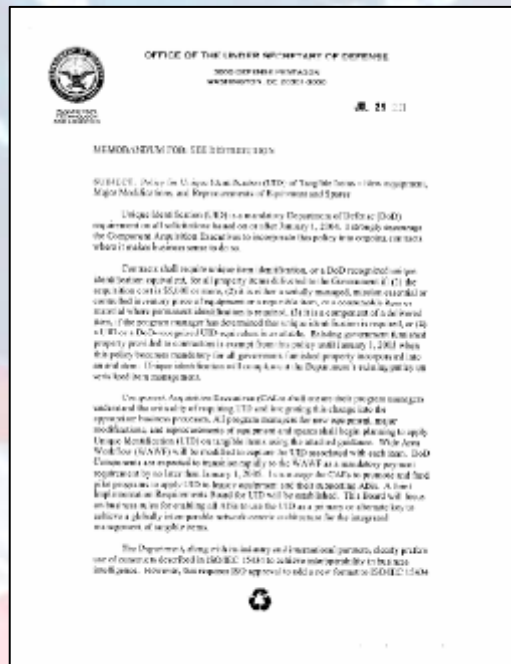
LMI

Supporting OADUSD (MR&MP)

23 October 2006

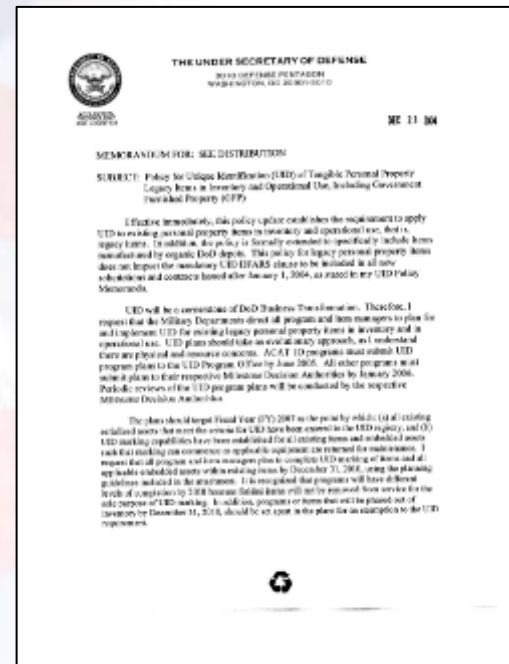
Implementation: Translating Policy into Action

USD(AT&L) Policy Memo 29 July, 2003



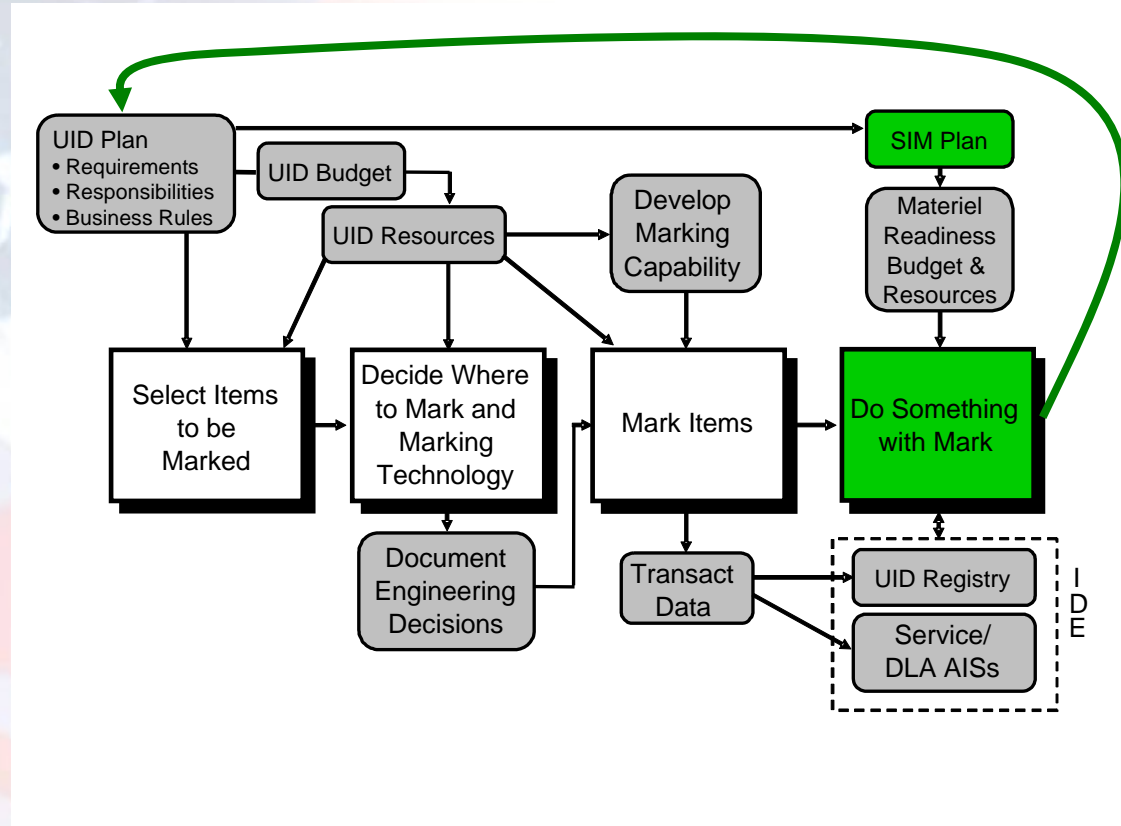
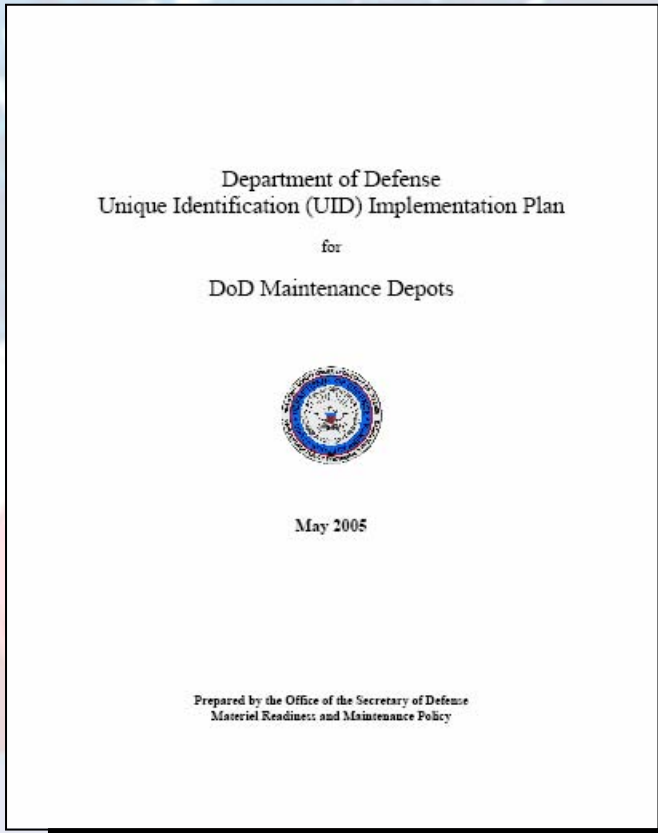
- **New tangible items**
 - Begin NLT 1 Jan 2004
 - commercial purchases
 - Begin NLT 1 Jan 2005
 - depot manufactured items

USD(AT&L) Policy Memo 23 December, 2004



- **Legacy items in inventory**
 - IOC Jul 2005
 - pilot depots
 - Complete NLT Sep 2007
 - all existing serialized items
 - Complete all items NLT Dec 2010

Legacy UID Implementation Plan for Maintenance Depots



Issued May, 2005

Approach to UID IOC at DoD Maintenance Depots

**Approach to Unique Identification (UID)
Initial Operating Capability (IOC)
at
DoD Maintenance Depots**



May 2005

**Prepared by the Office of the Secretary of Defense
Materiel Readiness and Maintenance Policy**

Developed a 3 phase approach:

- 1. Establish the Capability to Responsibly Plan and Manage UID Implementation at the Depot.**
- 2. Establish the Capability to Implement Approved UID Automated Information System (AIS) Plans and Policies.**
- 3. Establish the Capability to Implement Approved UID Parts Marking Plans and Policies.**

IUID Implementation Template for DoD Maintenance Depots

**Item-Unique Identification
Implementation Template
for
DoD Maintenance Depots**



October 2006

Prepared by the Office of the Secretary of Defense
Materiel Readiness and Maintenance Policy

Defines the outcome of the 3 phase depot implementation approach derived from successful examples:

- 1. Depot IUID processes and associated doctrine.**
- 2. Capability to uniquely identify and mark items using DoD sanctioned serialization schemas and parts marking techniques (plates, labels, DPM)**
- 3. Capability to automatically capture, modify, and query UID data in a local database and to transmit that data to a DoD centralized registry.**

Describes organized steps to plan and successfully execute implementation and achieve outcomes

1. Establish depot IUID processes and associated doctrine

1. Establish IUID team

2. Initiate preliminary research and planning efforts

- Develop an IPT Plan of Action and Milestones
- Research candidate items
- Research parts marking sourcing options (contract or organic)
- Determine local serialization schema
- Initiate engineering analysis (where and how)
- Investigate resource requirements (e.g., local DB, communication API, facility, training)

3. Map current processes

2. Determine the new business environment and develop a marking plan for initial items

1. Develop an implementation schedule for initial items

- Selection of best candidates
- Setting production goals and timelines

2. Establish local serialization schema

3. Address parts marking technical requirements

- Obtain tech data
- Determine where and how to mark items
- Develop necessary changes (processes, materiel specs, standards, engineering drawings, etc)

4. Establish sourcing options (initiate contracts as necessary)

5. Determine and map the new environment

- Determine accurate as-is then move to “to-be”
- Materiel handling processes
- Information processes

2. (continued) Determine the new business environment and develop a marking plan for initial items

- 6. Ready parts marking capability**
 - Establish local DB or integrate with existing system
 - Develop interface with UID registry for both depot manufactured and legacy items
- 7. Establish management structure (roles – responsibilities, performance outcomes/expectations)**
- 8. Draft depot doctrine (e.g., instructions, management plans, SOPs, performance metrics)**
- 9. Set up QC/QA processes for marking and to monitor performance metrics**
- 10. Prepare Budget**
- 11. Create final plan for initial parts marking items**

3. Execute Marking Plan and Develop a Full Implementation Plans for Remaining Items






- 1. Implement the plan for initial items**
 - Mark and register
 - Document experiences and monitor/measure performance outcomes
- 2. Develop full implementation plan for all other items**
- 3. Finalize depot doctrine (e.g., instructions, management plans, SOPs, performance metrics)**
- 4. Review and adjust funding as necessary**
- 5. Execute the implementation plan (now becomes the depot IUID program)**
- 6. Initiate CPI program**

Special Considerations

- **Alignment within Services (coordination, collaboration, courtesy)**
- **Single solution (“holistic” not always possible)**
- **Information flow (interoperability)**
- **IUID IPT (internal vs external)**
- **AIS interfaces ... tough nut to crack**

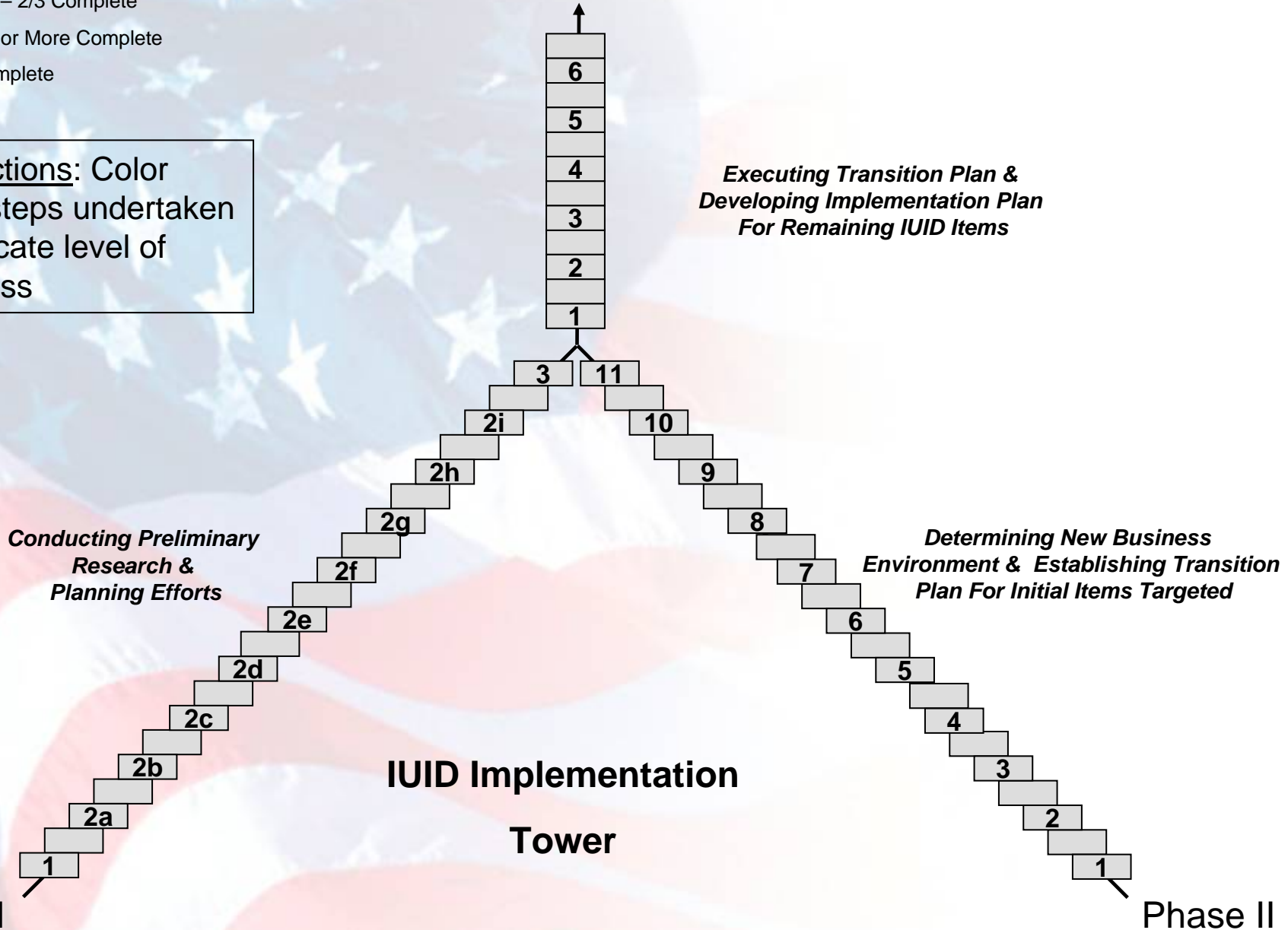
The background of the slide is a stylized, semi-transparent American flag. The stars and stripes are visible but faded, creating a patriotic backdrop for the text.

Measuring Progress

-  Haven't initiated
-  0 – 1/3 Complete
-  1/3 – 2/3 Complete
-  2/3 or More Complete
-  Complete

Instructions: Color code steps undertaken to indicate level of progress

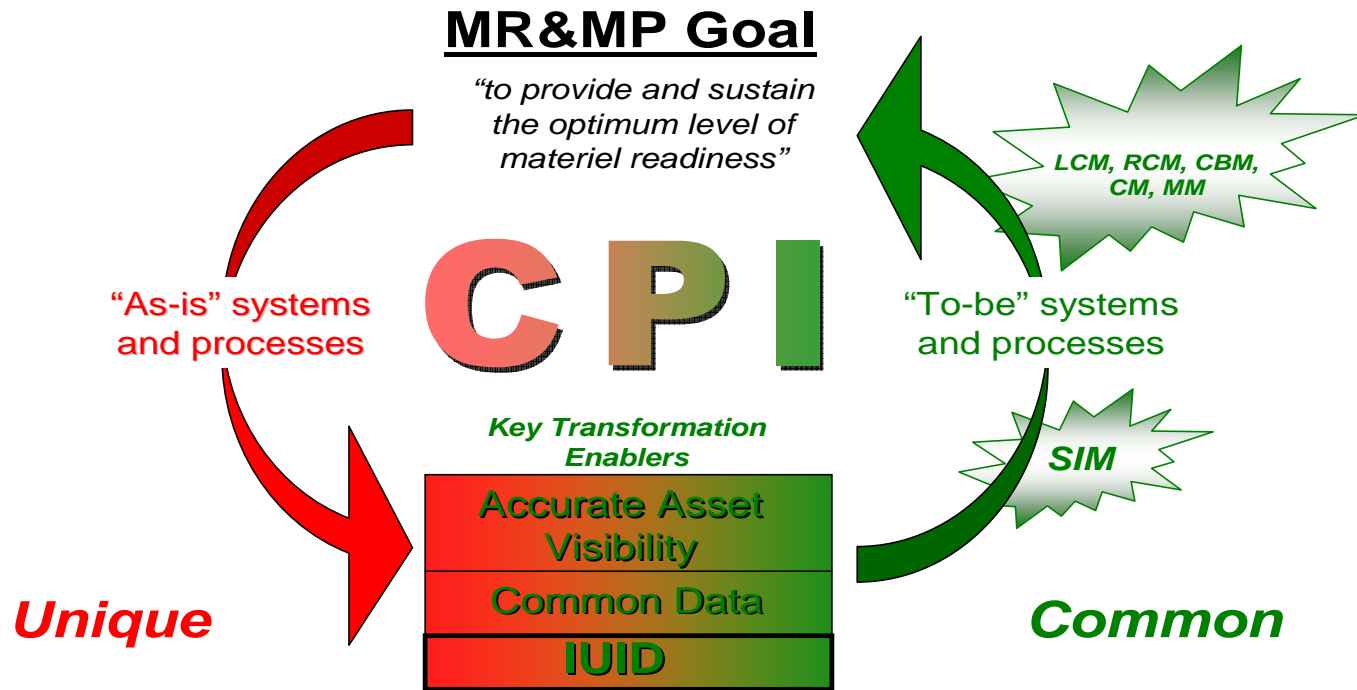
Phase III





Questions?





Transition from “unique” to “common” systems

- IUID is the key base management transformation enabler
- Enables advanced management and CPI for sustained optimization

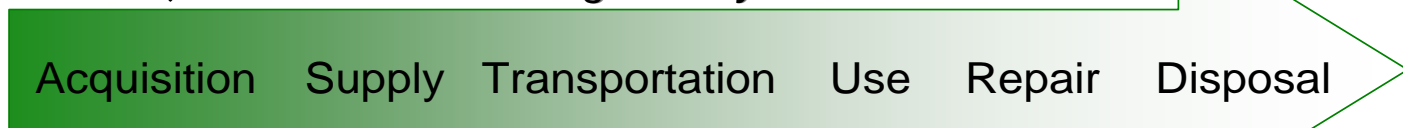
Business Processes



Required Strategic Capability



Logistics System



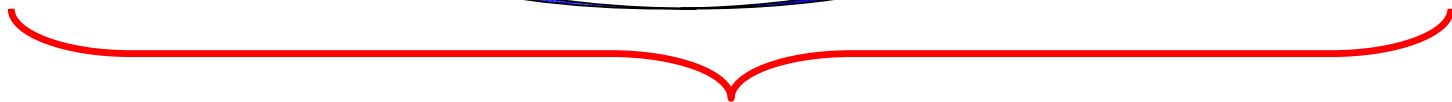
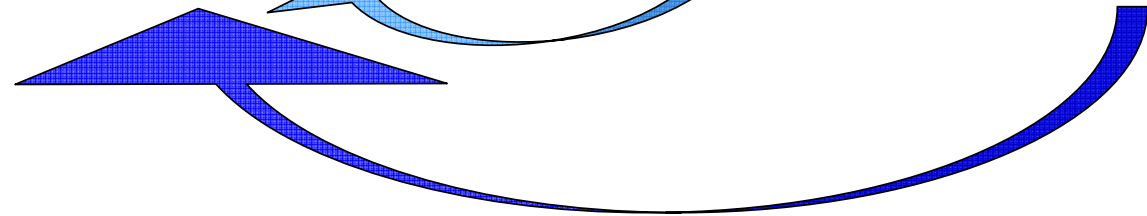
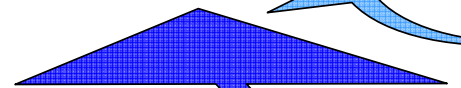
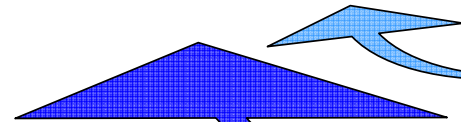
Acquisition Supply Transportation Use Repair Disposal

Sustainment Requirements



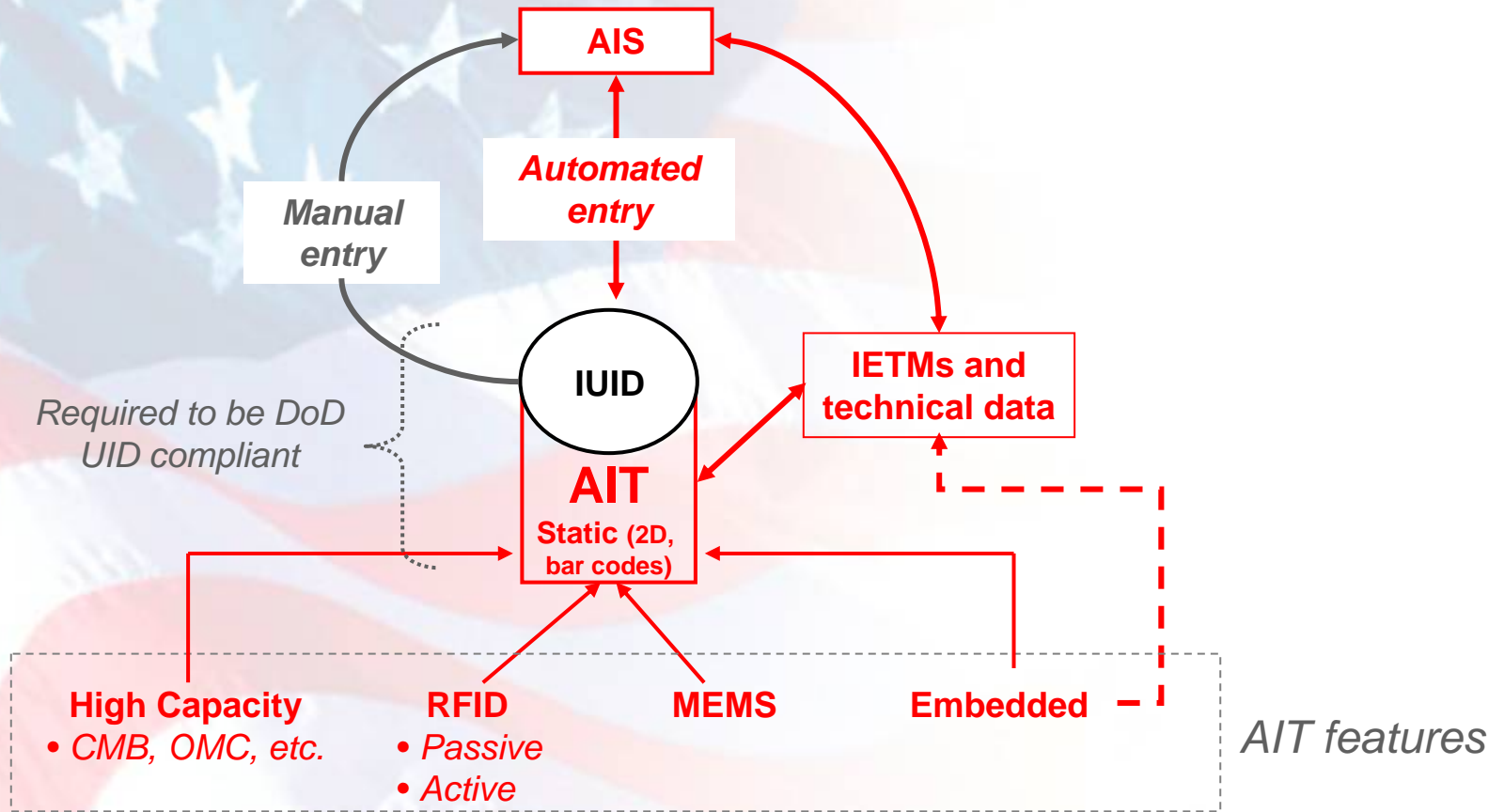
Matériel Management

Maintenance Management



Matériel Readiness

- **IUID – AIT – AIS relationships**
 - The point of common data and data standards



- AIS – SIM – network – functional information relationships

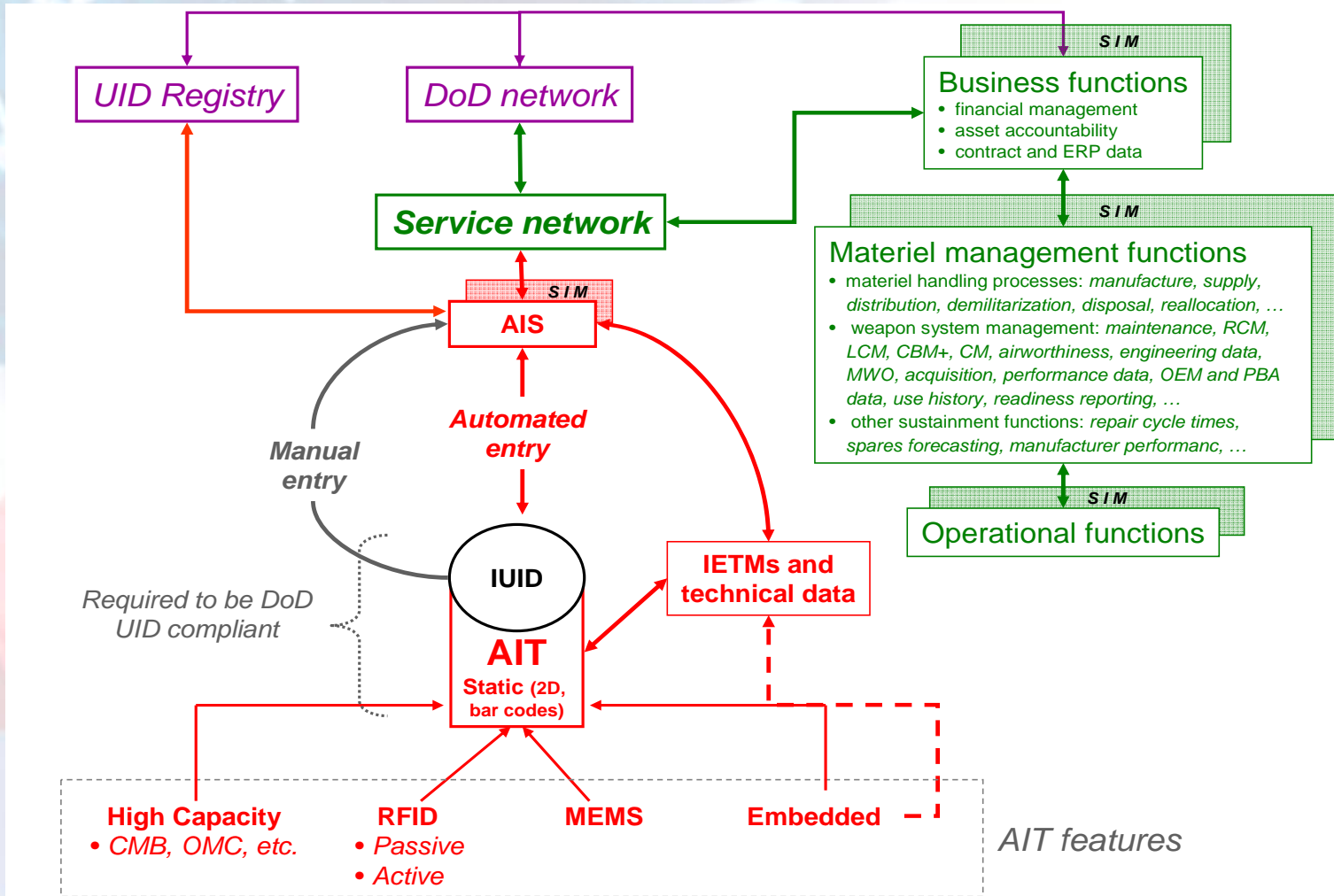


FIG 3-04

Sustain Materiel Readiness (Optimized)

Total Asset

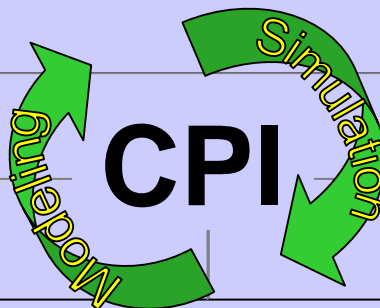
Management

Life Cycle Management

Condition Based Maintenance

Configuration Management

Reliability Centered Maintenance




Maintenance and Materiel Management

Design Configuration Model	Serial Number Tracking	Purchasing	Invoicing	Scrap Parts	Unapproved Parts	Electronic Documentation	Warranty	Repair	Exchange Parts	Loan/Borrow	Cost-to-Repair	Shop Tear Down Report	Line Removal Data	Schedule Interruption Data	System Configuration	System Performance	Engineering Data	Pilot and Maint. Log	Operational Hrs & Cycles	
	Total Asset Visibility										Serialized Item Management									
	Item Unique Identification (IUID) of Parts																			
	DoD Common Data / Data Exchange Sets (DEXs)																			

Implementation: Where are we today?

USD(AT&L) Policy Memo 23 December, 2004

Milestone	Responsibility	Q1 FY05	Q2 FY05	Q3 FY05	Q4 FY05	FY06	FY07	FY08	FY09	FY10	FY11
Quality Assurance Plan for UID	DCMA		Jan-05								
OSD UID Budget Guidance to Components	OSD AT&L			Apr-05							
Legacy UID Implementation Plan for DoD Depots	OSD L&MR			May-05							
UID Program Plans (ACAT 1D)	Pgm Mgr			Jun-05							
IOC Legacy Marking Capability at Pilot Organic Depots	Military Departments				Jul-05						
FOC UID CONOPS for DoD Maintenance	OSD L&MR					May 06					
UID Program Plans (All Programs)	Pgm Mgr/Item Mgr					Jan-06					
All GFE Meets UID Policy Requirements	Pgm Mgr/Item Mgr					Jan-06					
All Existing Serialized Assets Entered in UID Registry	Pgm Mgr/Item Mgr						Sep-07				
FOC Legacy Marking Capability at All Organic Depots	Military Departments						Sep-07				
Complete UID Marking of All Legacy Items	Pgm Mgr/Item Mgr										Dec-10

 = Program Office Plans

 = Maintenance Community Plans



Current Status (≈)

IUID Enables Improved Material Asset Tracking & Cost Accounting
(New Items)
Access Data
Transact Data
WAWF/AIT Infrastructure
IUID Registry/Service DSS
Mark Items
Engineering
Funding
Implementation Plan
IUID Policy
Requirements Statement

IUID Enables Improved Material Maintenance
(New Items)
Access Data
Transact Data
WAWF/AIT Infrastructure
IUID Registry/Service DSS
Mark Items
Engineering
Funding
Implementation Plan
SIM Policy
Requirements Statement

IUID for Improved DoD Asset Tracking and Financial Accounting

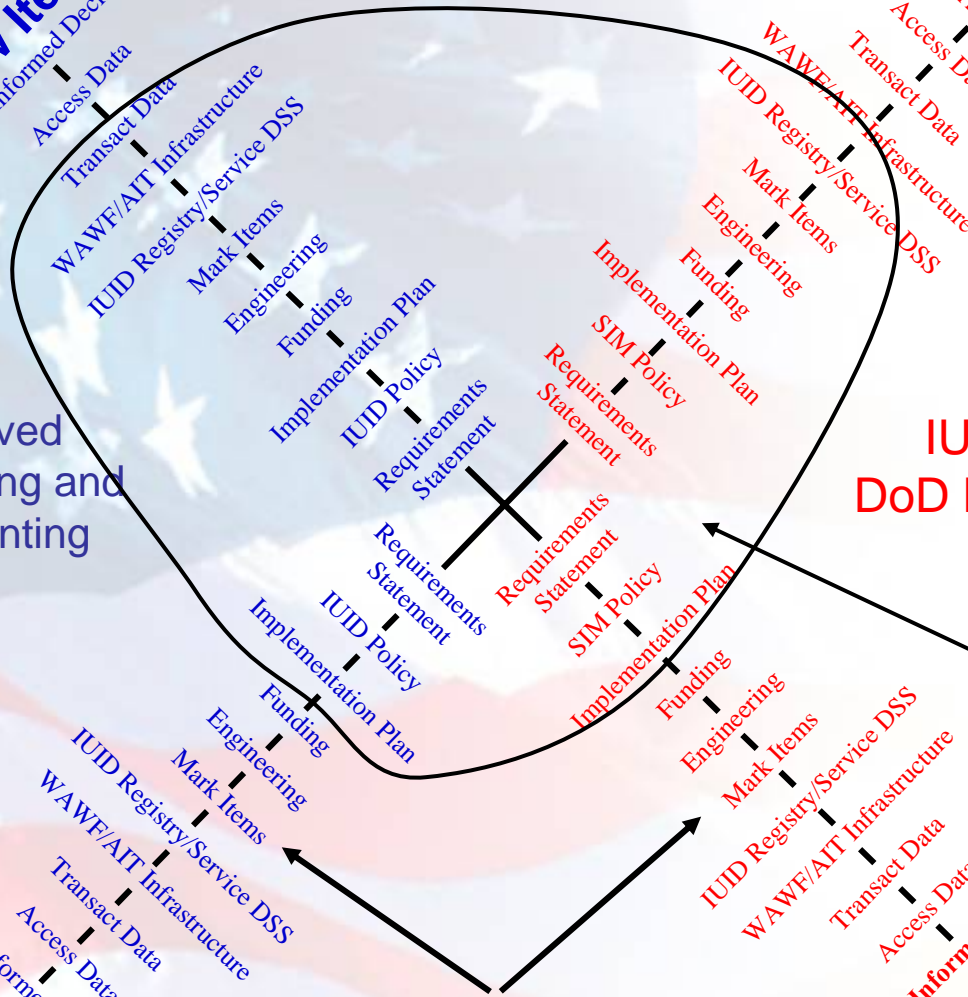
IUID for Improved DoD Materiel Readiness **(SIM)**

Overall current implementation status

IUID Registry/Service DSS
WAWF/AIT Infrastructure
Transact Data
Access Data
IUID Enables Improved Material Asset Tracking & Cost Accounting
(Legacy Items)

Pilot Projects

IUID Registry/Service DSS
WAWF/AIT Infrastructure
Transact Data
Access Data
Make Informed Decisions
IUID Enables Improved Material Maintenance
(Legacy Items)



Roles and Responsibilities

Roles	Responsibilities
Program Managers	<ul style="list-style-type: none"> • Define population of individual items to be marked, tracked or serial managed • Work with engineering community, item managers, contractors and depots to mark items • Work with information systems to develop IUID-enabled SIM processes for advanced management functionality
Contracting Officers	<ul style="list-style-type: none"> • Get IUID requirements on contract • Insert IUID clause in all supply contracts • Develop and insert appropriate SIM information requirement clause for applicable contracts
Supporting Contractors	<ul style="list-style-type: none"> • Delivers IUID and registers pedigree data • Maintains stewardship of Government Furnished Property • Provides accountability of contractor items placed into government installations and facilities
Defense Contracting Management Agency	<ul style="list-style-type: none"> • Inspects and accepts IUID items • Provide oversight of Government Furnished Property • Provide oversight of initial IUID-enabled SIM information requirements per contract clauses • Provide program and technical support using IUID associated data for analyzing the cost, schedule and technical performance of contractor programs and systems
IUID Registry Administration	<ul style="list-style-type: none"> • Establish interfaces with WAWF and Property Systems • Maintain the IUID Registry • Establish interfaces with item history, maintenance, system configuration, and other pertinent technical databases
Supply Systems	<ul style="list-style-type: none"> • Issue, receipt, transfer, and storage transactions involving IUIDs
Transportation Systems	<ul style="list-style-type: none"> • Track reparable asset shipments and transportation transactions using IUID
Top Level Accountability Systems	<ul style="list-style-type: none"> • Receipt transactions involving IUIDs • Maintain IUID accountable property records current and correct in the applicable system of record. Report lost, destroyed or expended IUIDs to the appropriate information systems and databases
Maintenance Activities	<ul style="list-style-type: none"> • Incorporate IUID processes into all relevant transactions • Mark legacy items as required • Associate maintenance events to IUID items • Coordinate the development of IUID processes and SIM requirements with the appropriate information systems
Defense Reutilization and Marketing Offices	<ul style="list-style-type: none"> • Receipt transactions involving IUIDs • Report disposition of IUIDs
Component Headquarters	<ul style="list-style-type: none"> • Provide oversight of respective maintenance and materiel management IUID efforts. • Establish effective policy and business rules for the use of IUID-enabled SIM processes within maintenance and materiel management processes

Online Resources

- UID Website
 - <http://www.acq.osd.mil/dpap/uid>
- IUID Toolkit
 - <http://www.iuidtoolkit.com>
 - Four tracks: PMs, Suppliers, Depot, Warfighter
- DAU UID Special Interest Area
 - Within Acquisition Community Connection
https://acc.dau.mil/simplify/ev.php?ID=18058_201&ID2=DO_TOPIC