



- Industry Perspective - IUID Common Approaches, Toolsets & WAWF

NDIA Industry Leadership Advisory Group (ILAG)

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Why Common Approaches & Toolsets?

- ✓ Drives convergence
- ✓ Eliminates redundant labor efforts by utilizing and tailoring existing toolsets and guidance
- ✓ Even though some of the generic toolsets and approaches have not been updated with the most current information...they can easily be used as a baseline in your IUID journey, plan and approach
- ✓ If you are about to start developing a toolset from scratch...**STOP!** Ask for assistance from Industry Masters, your Prime, etc.



Re-Inventing the Wheel Adds



- Major Resources -





Defense Procurement & Acquisition Policy Website

- ✓ **IUID Training & Related Links**
 - ✦ News, Common Tools, etc.
- ✓ **IUID Policy, Reg. & Standards**
 - ✦ Guides
- ✓ **Accounting & Valuation**
- ✓ **Technology**
- ✓ **IUID Data**
- ✓ **Program Office & Groups**
- ✓ **FAQ**

- ✓ **POC: IUID Help Desk**
Phone: (703) 848-7314
E-mail: info@uniqueid.org



[OSD Defense Procurement & Acquisition UID Website](#)



DAU Acquisition Community Connection Website

- ✓ IUID Policy & References
- ✓ PMO IUID Plans (Samples)
- ✓ Contracting Information
- ✓ Engineering Information
 - ✦ [GEIA Joint Marking WG](#)
- ✓ Industry Implementation
- ✓ Solution Providers
- ✓ Training Center

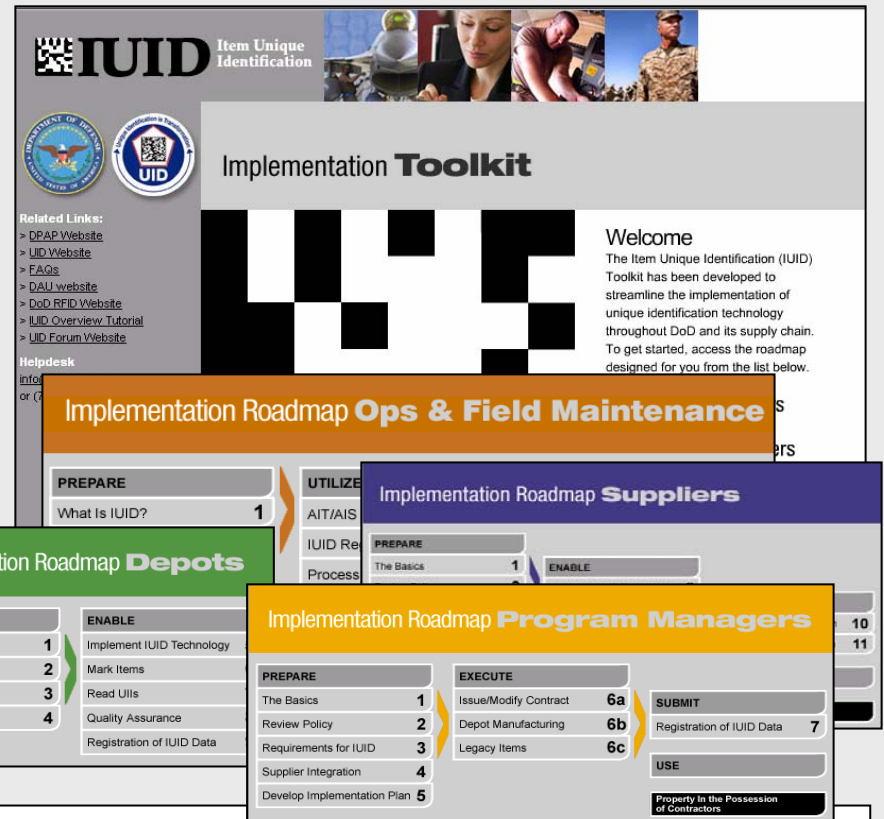
- ✓ **POC: Dr. Tom Edison**
Phone: (619) 524-4815
E-mail: tom.edison@dau.mil



[DAU IUID Website](#)

OSD IUID Toolkit Website

- ✓ Common Toolsets for
 - ✦ Defense Suppliers
 - ✦ Program Managers
 - ✦ Maintenance Depots
 - ✦ Operations & Field Maintenance
 - ✦ Training & Related Links
 - ✦ News, Common Tools & Links
- ✓ Tutorial and Related Links
- ✓ POC: IUID Help Desk
 Phone: (703) 848-7314
 E-mail: info@uniqueid.org



The screenshot displays the OSD IUID Toolkit website interface. At the top, it features the IUID logo (Item Unique Identification) and a navigation menu. The main content area is titled "Implementation Toolkit" and includes a "Welcome" message. Below this, there are several "Implementation Roadmap" sections, each with a "PREPARE" and "ENABLE" phase. The "Depots" roadmap lists steps like "The Basics", "Review Requirements", "Review Policy", and "Develop an Item List". The "Suppliers" roadmap includes "The Basics", "Issue/Modify Contract", "Depot Manufacturing", and "Legacy Items". The "Program Managers" roadmap lists "The Basics", "Review Policy", "Requirements for IUID", "Supplier Integration", and "Develop Implementation Plan". A "Helpdesk" section is also visible on the left side of the page.

[OSD IUID Toolkit Website](#)



Wide Area Work Flow (WAWF) Website

- ✓ Training & Registration
- ✓ News & Links
- ✓ Tool Guidance
- ✓ Overview Briefings



WAWF version 3.0.11

(password required)

- ✓ POC: WAWF Help Desk
Phone: (866) 618-5988
E-mail:
CSCASSIG@CSD.DISA.MIL



The screenshot shows the Defense Contract Management Agency (DCMA) WAWF website. At the top, there is a search bar and a 'Portal LOG IN' button. The main header includes the DCMA logo and the text 'DEFENSE CONTRACT MANAGEMENT AGENCY'. Below the header, there are navigation links for 'ABOUT US', 'CUSTOMERS', 'EMPLOYEES', 'NEWS ROOM', 'eTOOLS', 'SMALL BUSINESS', and 'CAREERS'. The main content area is divided into several sections: 'DoD's Web-Based Invoicing Tool' with a 'What Industry Users Have to Say...' section featuring testimonials from Boeing, CSC, Rockwell Collins, and Parker; 'Training' with links for 'Learn about WAWF' and 'Practice Using WAWF'; 'Get Started!' with a three-step process: 'Step 1: System Requirements', 'Step 2: Registration Instructions', and 'Step 3: Production'; 'Important News!' with several news items including 'Important Notice for DoD Vendors Currently using WINS/EDI or MOCAS Direct for E-Invoicing', 'The Marine Corps Solution for The Missing or Lost Receiving Reports is WAWF', 'Army Material Command (AMC) Continues WAWF Implementation', 'Implementation Guidance for WAWF - Army', 'The Department of Air Force Issues WAWF Mandatory Use', 'Department of the Navy Mandates E-Invoicing (WAWF)', 'Department of the Army Implements WAWF', 'GAO Recommends Full Implementation of WAWF Across DoD - DoD Concur!', 'GAO Recommends Receipt and Acceptance Documents Be Processed Electronically - DoD Concur!', 'DFAS Guidance - "No More Paper Invoices"', 'UID Memo & Final DFARS Announcement', and 'RFID Proposed DFARS Change Published'; and 'Wide Area Workflow' with links for 'DCMA WAWF Guidance', 'DCMA DIL Briefing (4/06)', 'Service/Agency WAWF Links', 'WAWF Briefing - Defense Industry Working Group (9/05)', 'WAWF Overview Briefing', 'Automated Cash Collection System', and 'What Can WAWF Do For You?'. At the bottom, there are links for 'Current WAWF Version' and 'WAWF Support UID'.

[WAWF Website](#)



Strength through Industry & Technology



- Quick Links - Desktop Companion I

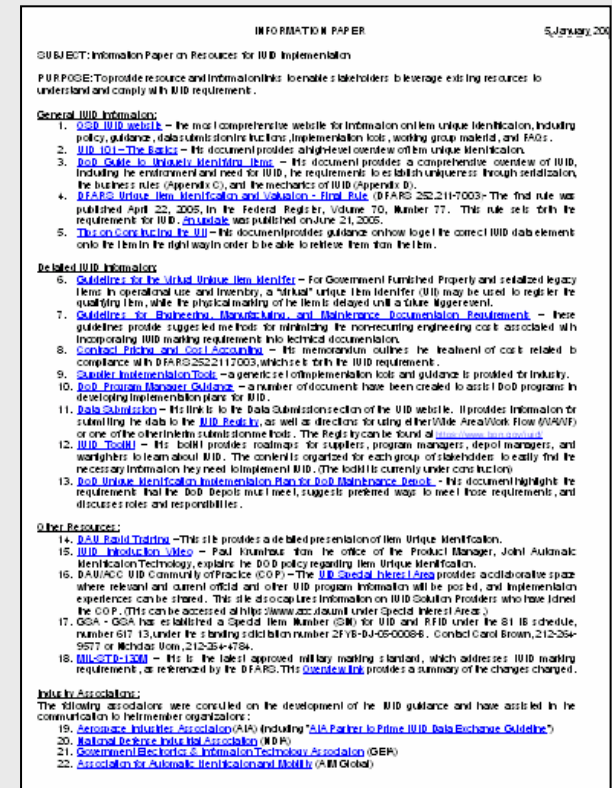
(Used Internet Explorer as Default)





Quick Links - Desktop Companion I

- ✓ **General Information:**
 - ✦ OSD IUID Website
 - ✦ UID 101 - The Basics
 - ✦ DoD Guide to Uniquely Identifying Items
 - ✦ DFARS UID and Valuation
 - ✦ Tips on Constructing the UII
- ✓ **Detailed IUID Information:**
 - ✦ Guidelines for Virtual IUID
 - ✦ Guidelines for Engineering, Manufacturing, and Maintenance Documentation Requirements
 - ✦ Contract Pricing and Cost Accounting
 - ✦ Supplier Implementation Tools
 - ✦ DoD Program Manager Guidance
 - ✦ Data Submission & IUID Registry
 - ✦ IUID Toolkit
 - ✦ DoD Unique Identification Implementation Plan for DoD Maintenance Depots
- ✓ **Other Resources:**
 - ✦ DAU UID Special Interest Area
 - ✦ MIL-STD-130M (change 1)
 - ✦ AIA Partner to Prime IUID Data Exchange Guidelines
 - ✦ DAU, AIA, NDIA, GEIA, AIM Global, GSA



[IUID Reference Paper - Link](#)



- FAQs & Quick Links - Desktop Companion II

(Used Internet Explorer as Default)





FAQs - Desktop Companion II

- ✓ Where do I find Quick Links to IUID Policy and Requirements?
 - ✧ [IUID Reference Paper - Links](#)
 - ✧ [IUID Policy Information](#)
 - ✧ [IUID Requirements Information](#)

- ✓ Where do I find IUID training, overview and newsletter toolsets?
 - ✧ [IUID Tutorial](#)
 - ✧ [Video Overview of IUID Policy](#)
 - ✧ [E-Newsletters and IUID Brochures](#)
 - ✧ [IUID 101](#)
 - ✧ [DoD Guide to Uniquely Identifying Items](#)
 - ✧ [Contract Structure & Format - E-business Environment \(CLC033\)](#)
 - ✧ [Assorted Training](#)



FAQs - Desktop Companion II

- ✓ Where do I find toolsets to help me put together our PMO IUID Implementation Plan?
 - ✧ [PMO Implementation Planning Information & Plan Samples](#)
 - ✧ [PMO Legacy Items Planning Information](#)
 - ✧ **Toolsets to Help Shape IUID Transition Plan**
 - [DoD Guide to Uniquely Identifying Items](#)
 - [NDIA SMART Implementation Guide - Basics](#)
 - [Sample Guidance & Data Sheet for ID'ing Specified IUID Parts \(Part I\)](#)
 - [Sample Guidance & Data Sheet for ID'ing Specified IUID Parts \(Part II\)](#)
 - [Parent Child Relationship - Industry Perspective](#)
 - [Guidelines for Engineering, Mfg, and Maintenance Documentation Reqs](#)
 - [GEIA Joint Marking WG \(Houses Summary Test Data Sheets\)](#)
 - [Contract Pricing and Cost Accounting Memorandum](#)
 - [Reporting Requirements - Non-ACAT 1D IUID Program Plans](#)
 - [DCMA Marking Guidance \(last article in Newsletter\)](#)



FAQs - Desktop Companion II

- ✓ Where do I find toolsets to help me put together our SUPPLIER IUID Implementation Plan?

- ✦ [Supplier Implementation Planning Information & Samples](#)

- ✓ Toolsets to Help Shape IUID Transition Plan

- [DoD Guide to Uniquely Identifying Items](#)
 - [Contract Pricing and Cost Accounting Memorandum](#)
 - [NDIA SMART Implementation Guide - Basics](#)
 - [NDIA SMART Part Marking Masters Perspective](#)
 - [NDIA Supplier Flow-down Lessons Learned](#)
 - [Marking IUID Items \(Constructing Tips, Types, MIL-STD\)](#)
 - [Quality Mark Considerations](#)
 - [Virtual UII Guidelines](#)
 - [Guidelines for Engineering, Mfg, and Maintenance Documentation Reqs](#)
 - [GEIA Joint Marking WG \(Houses Summary Test Data Sheets\)](#)
 - [IUID Data Submission Information](#)
 - [AIA Partner to Prime IUID Data Exchange Guideline](#)
 - [DAU Website - Sample Solution Providers](#)



FAQs - Desktop Companion II

- ✓ Where do I find IUID Supplier Toolsets and Lessons Learned?
 - ✦ OSD IUID Toolkit for Suppliers
 - ✦ NDIA Supplier Flow-down Lessons Learned
 - IUID Supplier Flow-down Decision Tree
 - Flowing Down the DFARS Clause
 - ✦ NDIA SMART Implementation Guide - Basics
 - Compliancy & Simple Rules
 - Examples of Alternate Methods to IUID Insertion
 - Sample Supplier Expectation Letter
 - Sample IUID Proposal Evaluation
 - ✦ NDIA SMART MRI AIDC Masters' Perspective - Leveraging IUID
 - Sample Supplier Expectation Letters
 - Sample IUID Assessment
 - Sample First Article Inspection
 - Technical Information



FAQs - Desktop Companion II

- ✓ Where do I find information and about IUID GFP?
 - ✧ [Policy Update for Legacy and GFP, December 23, 2004](#)
 - ✧ [Policy Update for Govt PIPC, May 12, 2005; Transition Instructions](#)
 - ✧ [DFARS Interim Rule - Reporting Govt PIPC, Sept 13, 2007](#)
 - ✧ [Guide: DFARS Interim Rule Ver 1.0, Sept 21, 2007](#)
- ✓ Where do I find information about the new IUID requirements relating to Government Serialization Marks Registration?
 - ✧ [Unique Item Identifiers \(UIIs\) & Govt Serialization; July 12, 2007](#)
 - ✧ [Guide: End Item Serialization Marks Registration, V.1, June 5, 2007](#)
 - ✧ [IUID Policy Update, Property, Feb 6, 2007](#)
 - ✧ [Program Priority Listing - Phase I, II and III](#)
- ✓ Where do I find information and about IUID and COTS Items?
 - ✧ [Process for COTS Items Requiring IUID](#)



Implementation Approaches





ADVANCED PLANNING

-PMO Total Program Plan-

Lessons Learned!

- ✓ PMO engages an IUID working group
 - ✧ Members: PMO, Prime, Teaming Members, contracts, estimating, GFP, technical, logistics support, Depots, WAWF, Subcontractors, DCMA, etc.
 - ✧ Formalize communications, training, alerts...requirements may change
- ✓ PMO provides Program guidance, identify types of parts affected and define expectations up front
 - ✧ Develop affordable Program implementation plan which achieves IUID conformance (marking/data elements in IUID Registry) NLT Dec 31, 2010
 - ✧ Non-specific expectations breed worse case scenarios, estimates, wasted labor efforts...high cost, high schedule impacts
- ✓ Team develops evolutionary and phased-in approach based on PMO program value propositions, IUID insertion costs/schedule impacts, IUID maturity:
 - ✧ Determines IUID parts and insertion opportunities
 - ✧ Identifies exclusions
 - ✧ Defines trigger events to capture escapes and legacy
 - ✧ Determines contract mod approach, Virtual UII applicability
 - ✧ Identifies cost mitigation opportunities

ADVANCED PLANNING!

- ✓ Preparation
- ✓ Communication
- ✓ Education & Training
- ✓ Assess Current State
- ✓ Develop Future State
- ✓ Execute
- ✓ Optimize!

Path To Implementation - Elements	Date Completed	Common Tools Available (Location)	Common Tools Used (Yes/No)	Action Items
Preparation				
UID Enterprise Process Owner Identified (Exec. Level Owner)				
Identify a UID IPT Team Leader				
Identify a UID IPT Site Team				
Identify Supplier Representation				
Identify Senior Leadership Council				
Establish Briefing Schedule at Local Management Council				
Identify Trained Lean/Six Sigma Facilitator				
Identify A Method To Segregate/Track Preparation & Implementation Costs				
Develop Team Charter & Obtain Senior Leadership Council Approval				
Initiate UID IPT Team Kick-off				
Develop Site Strategy Using COMPANY Strategy & Planning Document				
Initiate Pre-Solicitation/Contract Customer Discussions				
Distribute UID Strategy Document				
Establish Schedule For Leadership And Contributor Reporting				
- Follow COMPANY UID IPT Reporting Schedule				
- Create Your Own Internal Reporting Schedule				
Education/ Training				
Awareness				
UID IPT				
Supplier				
Communication				
Develop UID Communications Flow Process				
Utilize Common Communications Tools				
Assess Current Capabilities				
Identify Number/Types Of UID Items To Be Marked/Valuated				
Identify Supplier Impact & Readiness				
Product Marking Evaluation/Application Needs				
COMPANY Tool Evaluation				
Discussions				
Issues Identified				
Business/Contracts, Estimating, Pricing, Engineering, Planning, Procurement (Supplier); DD250, etc.				
Product Marking And Valuation Insertions) &				

Sample Planning Checklist
<http://www.acq.osd.mil/dpap/UID/attachments/implementationTools/Generic%20Business%20Unit%20Implementation%203.31.04.pdf>



REDUCE COSTS!

✓ Streamline methods to IUID transition

✦ Find creative ways to incorporate IUID requirements into processes

- Leverage existing part marking processes, Single Process Initiatives (SPI), Memoranda's Of Understanding or Agreement to reduce non-recurring costs & minimize individual drawing changes!

✦ Direct part marking may require more engineering analysis than labeling

- Engineering decisions for location and type of application should be made on documented results from previous analysis

Guidelines for Eng, Mfg, and Maintenance Documentation Requirements (Alternate Methods)

<http://www.acq.osd.mil/dpap/Docs/uid/UIEngDocGuidever4120604.doc>



REDUCE COSTS!

✓ **Streamline methods to IUID transition**

✧ **Issue a global engineering change notice**

- **Provides global instructions on how to mark qualifying items**

✧ **Delay changing technical part documentation**

- **No change in form, fit, or function of the part**
- **UII insertion can be accomplished by a coversheet incorporating new marking instructions**
- **Permits consolidation of drawing requirements**
- **Rolling of part number not required**
- **Individual drawings, if required, can be updated on a next touch basis**
- **Negotiate MOA or MOU with DCMA as required**



REDUCE COSTS!

- ✓ **Streamline methods to IUID transition**
 - ✦ **Replace/modify existing data plates with IUID labels**
 - **Use existing data plate documentation**
 - **Current technical data already specifies the material and placement of the data plate**
 - **Labels provide high contrast allowing interrogation of mark by lower cost readers**
 - ✦ **Issue IUID marking work orders or collector drawing**
 - **IUID work orders inserted into existing mfg and enterprise resource planning processes**
 - **Collector drawing which lists all IUID part numbers referenced on all existing drawings, workmanship specs, standard marking drawings**



REDUCE COSTS!

- ✓ Utilize cost effective IUID transition opportunities
 - ✦ During first-time designs
 - ✦ During major change modifications
 - ✦ During minor change modifications if the current marking method can easily be modified to add UII content
 - ✦ During major restores (repairs)
 - ✦ During minor restores if the current marking method can easily be modified to add UII content



SUPPLIER FLOWDOWN

Generic Lessons Learned

- ✓ **Keep supplier flow-down SIMPLE so your supplier has the opportunity to utilize the same internal process they use/would use for other Primes or suppliers requiring IUID**
- ✓ **It is the Prime Contractor's responsibility to ensure the required IUID data is flowed to the DoD IUID Registry. In the case of a drop-ship of parts from a sub-contractor directly to the government, the sub-contractor may be required to pass along associated data elements or update DoD's IUID Registry.**



Streamlined Options - Quick Samples

✓ Nameplates

✦ Option 1: Add IUID to existing plate

✦ Option 2: Add IUID to supplemental plate near existing plate

✓ Direct Mark

✦ Be consistent with existing marking methods

✦ No need for design/structures drawing preparation or approval

✓ Use process spec to fabricate plate and locate marking





Streamlined Options - Quick Samples

✓ Lessons Learned

✦ Standardize UII 2D Data Matrix Placement

- Don't confuse the OEM
- Don't confuse the Maintainer
- Don't confuse the Supply Person

✦ 2-Part labels are a cost effective approach



Provided Courtesy of
The Boeing Company



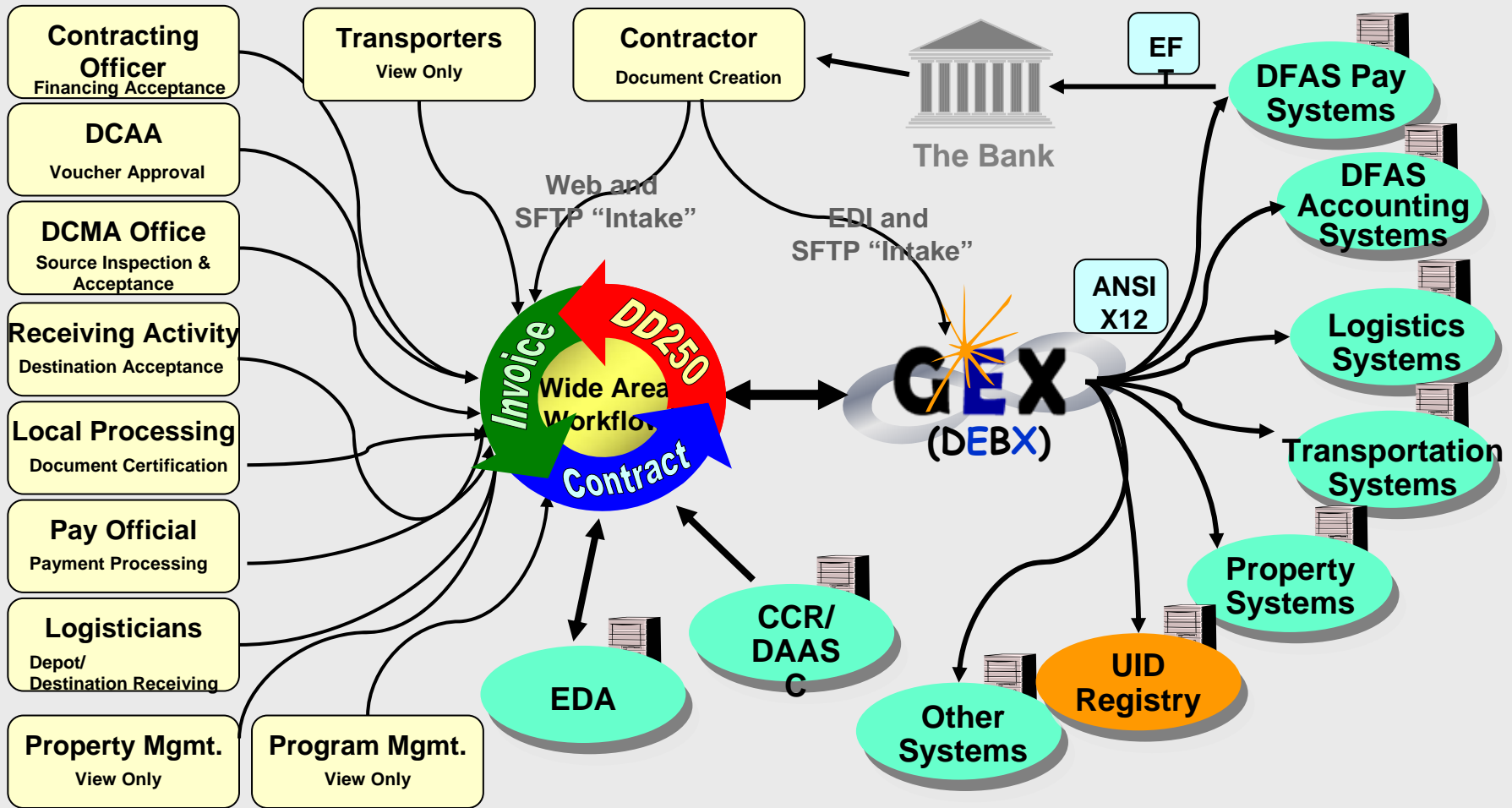
Wide Area Work Flow (WAWF)

It's a secure web-based application that:

- Allows DoD vendors to create, and Government to process, electronic invoices and receiving reports
- Is PKI-enabled and allows Government users to digitally sign electronic documents
- Eliminates paper from the invoicing and receipt / acceptance processes of the DoD contracting life cycle
- Electronically transmits data to the entitlement systems for payment
- Uses system-generated emails to notify workflow users of changes in document status
- Provides global document visibility to authorized users



WAWF is the Center Piece of DoD Architecture



Email notices sent to next workflow user

The Voice of the Industrial Base



WAWF Transactions

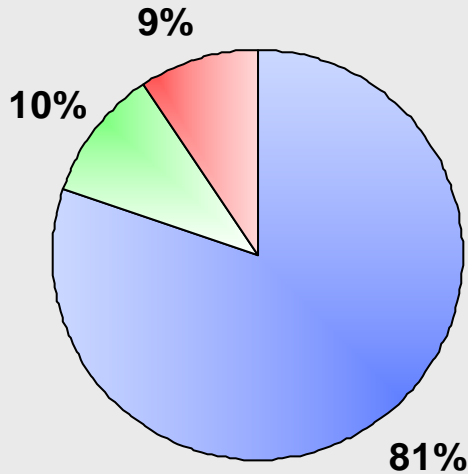
- Receiving Report (DD250) **w/UID & RFID**
- COMBO = Receiving Report + Invoice **w/UID & RFID**
- Commercial Invoice & 2n1
- Cost Voucher
- Progress Payment
- Performance Based Payment
- Pack Update – Special Version of Receiving Report for Delivery of **RFID Data** after Source Acceptance
- Property Transfer



WAWF - Vendor Participation

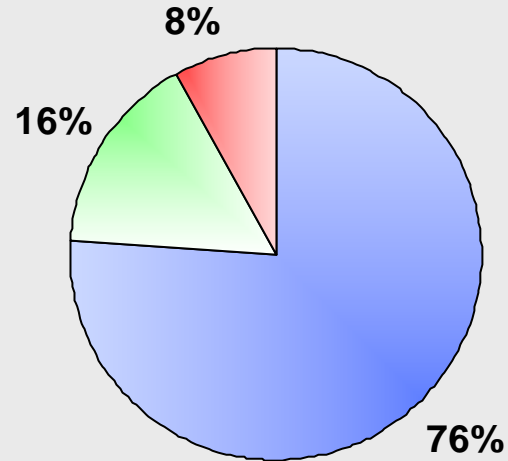
Invoices

n = 6,616 contractors



Acceptances

n = 3,496 contractors





Strength through Industry & Technology



Success Stories





Automated Identification Data Capture (AIDC)

- ✓ Many in industry have begun their transformation journey to one common (2D Data Matrix) part marking methodology for not only OSD compliance but for internal process improvement benefits.
- ✓ Although change is always a challenge...this can really become a “win-win” for many in industry if we begin to plan for this transformation and utilize windows of opportunity to reduce cost impacts to transformation, such as:
 - ✦ Move to 2D Data Matrix part marking technology during the development of new (first-time) designs
 - ✦ When pre-designed parts are going through a major modification/re-analysis, etc.



An MRI Journey - Sample Business Case

Past:

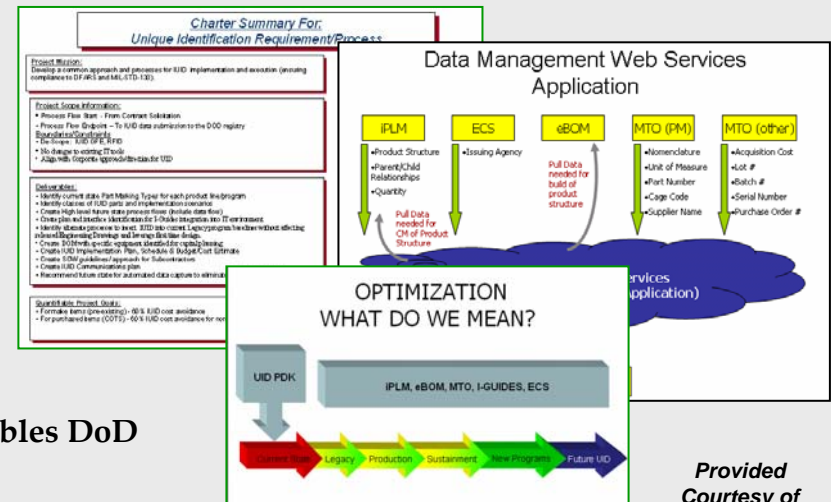
- Multiple part marking technologies
- No MRI with automated data capture
- Numerous manual data entry points and quality errors
- Full drawing changes for IUID insertion
- Exception processes to meet new requirements

Changes Proposed:

- Transition to standardized part marking technology
- Utilize alternate IUID insertion methods & opportunities
- Full MRI with automated data capture
- Reduction of manual data entry points & quality errors

Future State:

- Through optimization, achieves internal improvements & enables DoD compliancy; Min. difference in infrastructure costs
- 2D Data Matrix with automated data capture - Common Processes
- Integration of applications to facilitate automated data capture/exchange



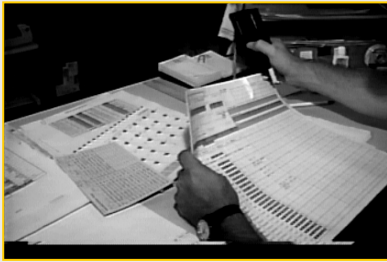
Provided Courtesy of Lockheed Martin

Improvement Categories	Conceptual Results
Reduction of Manual Data Entries per Part	65%
Reduction of Data Entry Error Rate (Industry)	40%
Reduction of "Touch Time" Per Part	84%
Reduction of Non-recurring cost per PN	93%
Reduction of Recurring cost per Part	84%



An MRI Journey - Sample

Automated Transcription of Part Identification Eliminated Part Identification Non-conformities

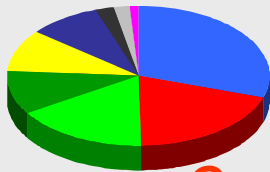


BEFORE

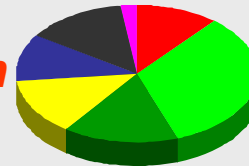
- ✓ Standardized Marking Method
- ✓ Eliminated 115 M characters manually recorded
- ✓ Eliminated 382 K transcription errors



Number of Parts: 870
Number of QN: 160



**Quality Notification
Reduction**



AFTER

Number of Parts: 46
Number of QN: 25

Wrong marking method	Marking illegible	Marking out of limit
Operator manipulation	Wrong marking location	Inspector stamp illegible / missing
Wrong Identification	Missing identification	Others (Vendor, Telesis)

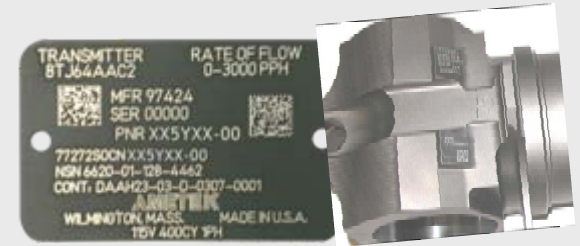
Provided
Courtesy of
Pratt & Whitney



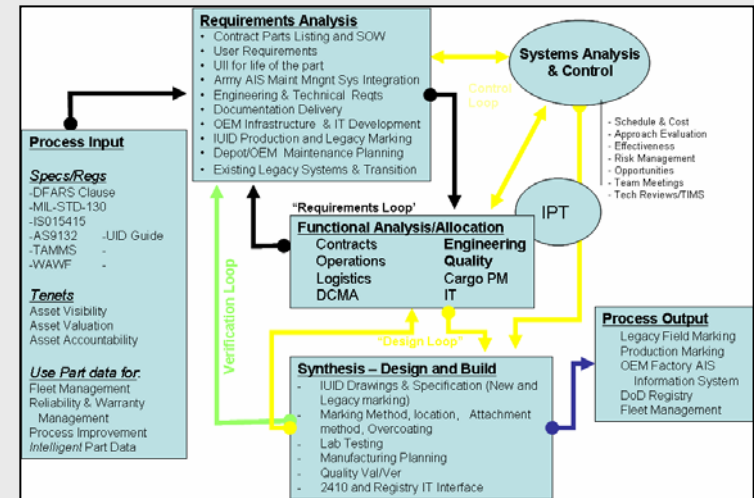
Machine Readable Information (MRI) The Boeing CH-47 Journey



- ✓ D210-13613-1 Labels & Name Plates
- ✓ D210-13613-2 Direct Part Marking
- ✓ BACN13A - Standard UID Label/Nameplate Library
 - ✦ Minimize Inventory
 - ✦ Common Visual Appearance
- ✓ Marking Analysis Templates Developed
 - ✦ Reduce drawing release errors
- ✓ Metallurgical Evaluation of Direct Part Marks
 - ✦ Screen of Marking Method
 - ✦ Effects to Manufacturing Processing
 - ✦ EWR for Fatigue Test Revised
- ✓ 38 CH-47 A/C Delivered With IUID Labels
 - ✦ Scanned 2,775 DoD Compliant IUID Labels
- ✓ 56 Suppliers Qualified for Labels & Nameplates
- ✓ 3 Suppliers Qualified for Direct Part Marking
- ✓ 12,000 Legacy Parts were Registered



A Systems Engineering Approach





Strength through Industry & Technology



Questions?

