



Item Management Using Item Unique Identification (IUID)

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What Problems Need Fixing?

- Item identification must be unique
- Machine - readable language for AIT devices must be interoperable
- Item valuation and property transfer process must be consistent



What Problems Need Fixing?

- Maintenance data must be exchanged in a common format
- Tracking and traceability of items is inconsistent
- Data keys are critical; standards can be useful
- Identification + Track = Management
(Formula for Success)



Categories of Individual Items – Current State

Individual Items that are –

- Marked and Tracked
- Marked and Not Tracked
- Tracked and not Marked
- Not tracked or marked but should be



Categories of Individual Items – Current State

Individual Items that –

–Should not be marked or tracked because

- Life cycle data at the item level is not a management goal
- Asset visibility is required at the class not item level



Machine – Readable IUID Enabled Capabilities

Note: SNT/UIT do not uniformly enable machine-readable data capture

Classes of Supply	Tracking Item Performance	Failure Analysis	Maintenance Productivity	Supply Productivity	Safety and Accountability
Class I - Subsistence				IUID	IUID
Class II – Clothing & Individual Equipment	IUID	IUID	IUID	IUID	IUID
Class III – Fuels				IUID ¹	IUID ¹
Class IV – Construction	IUID ²	IUID ²	IUID ²	IUID ²	IUID ²
Class V - Ammunition	IUID	IUID	IUID	IUID	IUID
Class VI - Personal					
Class VII – Major Items	IUID/SNT ³	IUID/SNT ³	IUID/SNT ³ /UIT ⁴	IUID	IUID/SNT ³ /UIT ⁵
Class VIII - Medical	IUID/SNT ⁶	IUID	IUID/SNT ⁶	IUID/SNT ⁶	IUID/SNT ⁶
Class IX - Repairables	IUID/SNT ⁷	IUID/SNT ⁷	IUID/SNT ⁷ /UIT ⁸	IUID/SNT ⁷	IUID/SNT ⁷

Notes: 1 – Packaged products; 2 – Installed equipment; 3 – Classified assets; 4 – TAMMS TEDB; 5 – SASP; CIC CAT 1 Items; RATTs, Tritium, CCI; 6 – DLMSS; 7 - High-value parts, aviation safety of flight parts, missile components; 8 – NDLR, TAMMS-A
SNT/UIT – Legacy item tracking programs



Re-engineering Property Transfers

- DoD has countless property management systems ranging from paper to automated systems, spanning accountability, maintenance, disposal, inventory, and distribution
- Currently personal property handoffs occur inconsistently (probably at least 75 different processes)

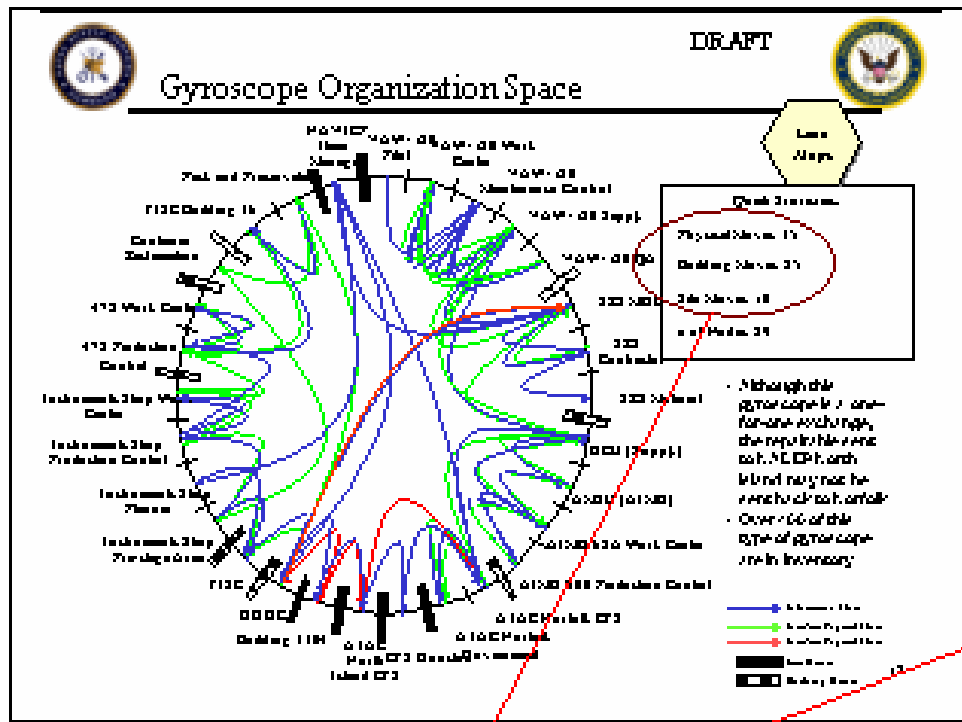


Re-engineering Property Transfers

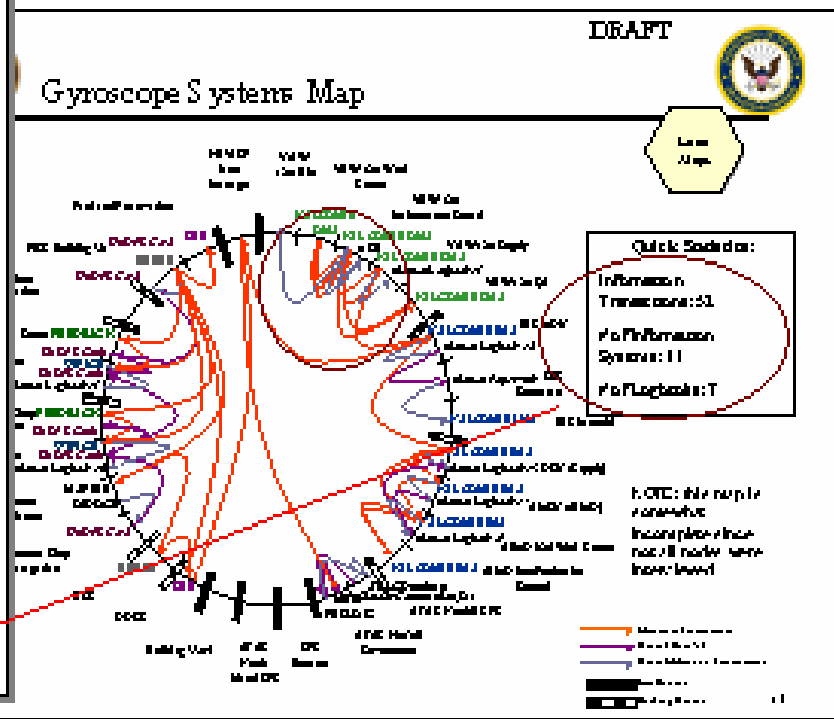
- Target three receipt and acceptance approaches – Will take five years to re-engineer all; deployment undetermined
 - Step one – DoD and Business Partners (Include GFP Registry)
 - Step two – Internal DoD
 - Step three – External Federal and Foreign
- Re-engineering effort will be directed by AT&L



Property Transfer Environment



- 35 Physical Moves
- 25 Building Moves
- 10 Sites Moves
- 52 IT Transactions
- 11 Info Systems
- 7 Logbooks



- *No End-to-End Management*
- *Lack of Visibility*
- *Long-Cycle Times*
- *Increased Inventory Levels*
- *Limited Ability to Forecast*



Future Property Environment Principles

- Create data one time, reuse often
- Property should only be in one accountability system at a time
- Items should be issued from the supply system using the Unique Item Identifier (UII)



Future Property Environment Principles

- Acquisition value will only be recorded and updated in the IUID registry
- IUID Registry will -
 - ✓ Never be an accountability system; but will be the audit trail of current and previous accountability systems
 - ✓ Maintain basic/master IUID data, including acquisition value

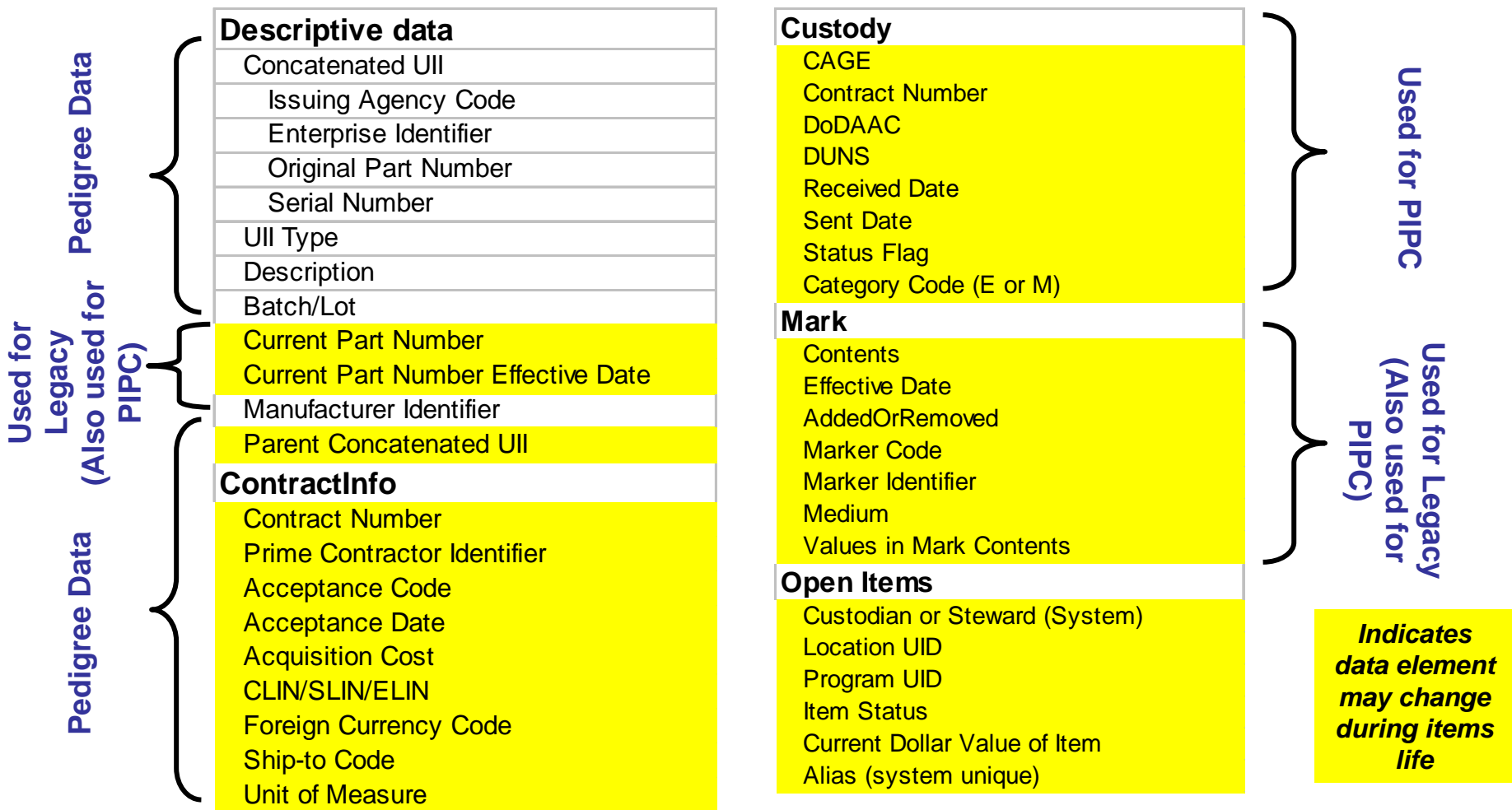


Future Property Environment Principles

- IUID Registry will -
 - ✓ Not maintain contextual data (full life cycle); the registry will point to supply, accountability and maintenance system(s)
 - ✓ Will be updated with key transaction events
- The concatenated UII will be the common data key across systems



Fixed and Variable Item Master Data



Indicates data element may change during items life



CONOPS – Item UID

- A common sense approach:
 - Mark items with **machine readable** unique identifiers
 - **Centrally register** pedigree data and value for each marked item
 - Retrieve unique identifier from item in use through **automatic data capture**
 - **Associate and retrieve** data on item value, maintenance history and accountability
 - Identify and define collaboratively high priority scenarios for **step-wise application**



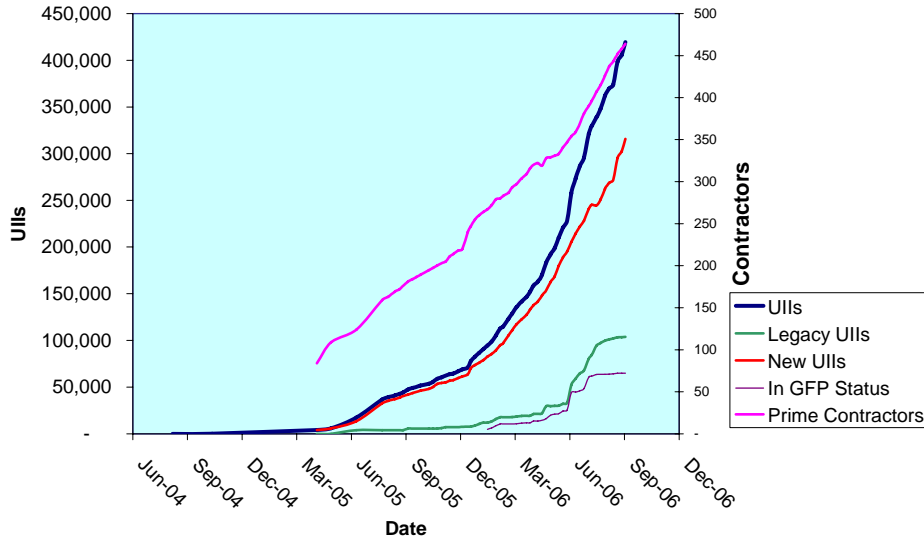
CONOPS – Item UID

- Achieve value and extend resources:
 - Exploit **automatic data capture** to improve productivity
 - Enhance **precision** of logistics, contracting, and financial business transactions
 - **Consistently capture** the value of items DoD buys, control these items during their use, and improve item performance
 - **Track items** in property accountability, inventory, and financial management systems toward achieving compliance with the Chief Financial Officers Act

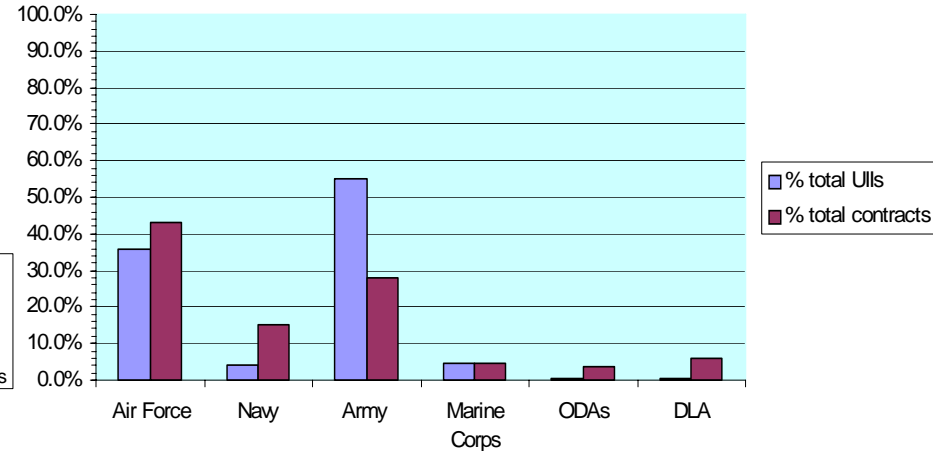
IUID Registry Population

(through 5 September 06)

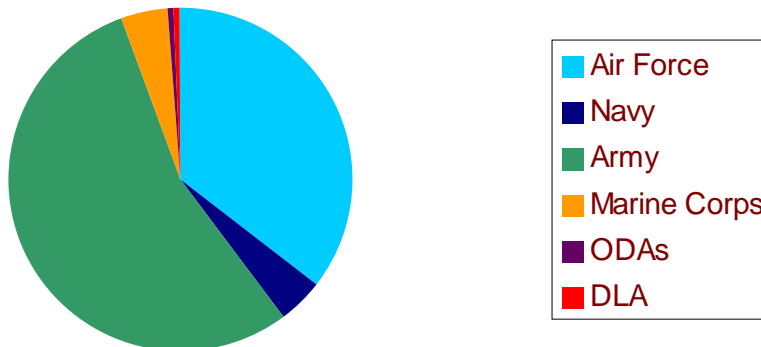
IUID Registry Population



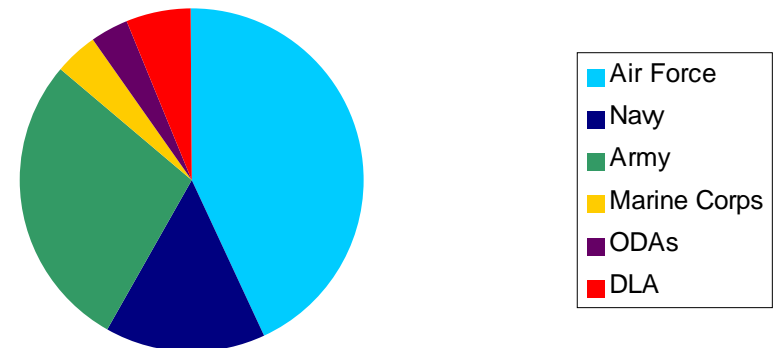
Data Submission by Component
(New Ulls)



New Ulls



Contracts with Delivered Ulls



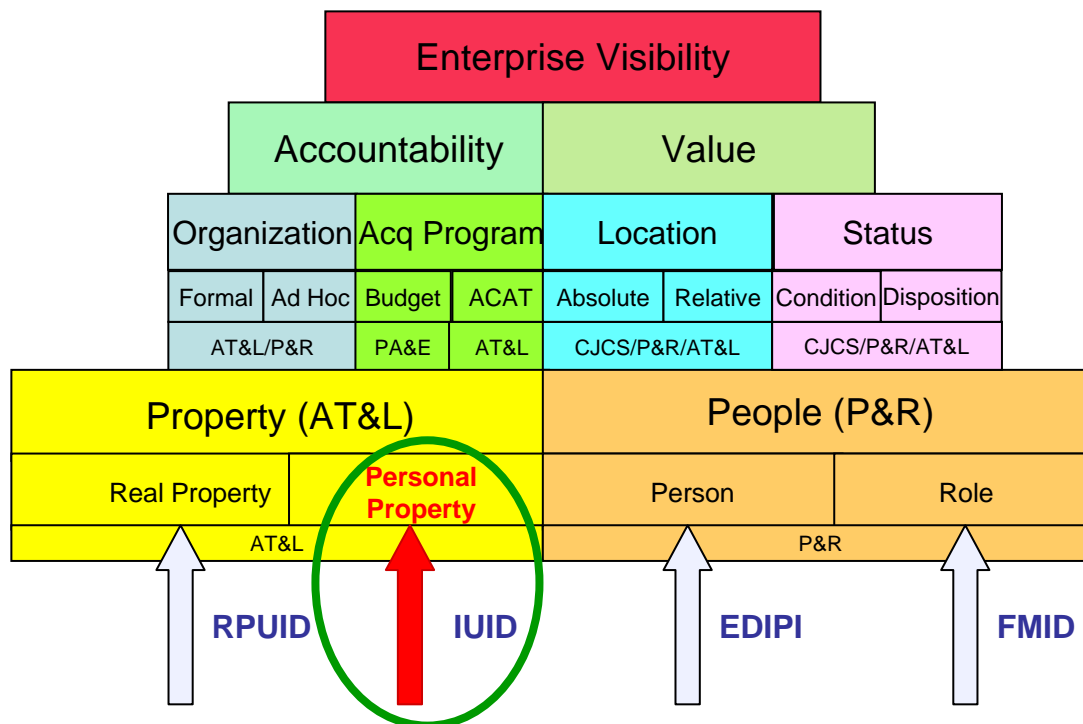
Non ACAT 1D Program UID Plan Status

- 911 Non ACAT 1D Programs*
 - 866 Programs Require Plan Submittal *
 - Percentage Submitted by Organization
 - Air Force = 81%*
 - Army = 100%
 - Navy = 24%
 - USSOCOM = 62%
 - Defense Agencies = 0%
 - Defense Field Activities = 10%
- * Includes Only Air Force Non-Space Programs



Unique Identification Capstone View

US DoD Vision of UID



Time Line
2007-2008

2006-2007
Ability to value
and account

2005- 2006
Ability to describe

2002-2005

Related ISO UID Initiative - ISO 15459 proposal describes uniqueness for transportation units, location and item unique identification

What have we learned?

- Establishing DoD central registries are just the beginning
- Data integration requires cross functional business rules and implementation plans
 - AT&L established a Asst Deputy level SES steering group
 - Services have shaped the journey; countless working groups

What have we learned?

- Industry has been a critical partner on the Item UID; Senior advisory group established
 - SES Leadership Groups established as needed across AT&L/Comptroller/P&R/PA&E/Joint Staff/NII
- Transactional UIDs emerged (Demand and System) Functional implementation roadmaps that integrate enterprise-wide e-business solutions are critical
- Service leadership key
 - Business Transformation Agency role critical

IUID Measures of Success

- **Supplier Acceptance**
 - **75% Top DoD suppliers submitted IUIDs**
 - **65 % all records -Small Businesses**
- **Paperless GFP (50% complete)**
- **Program Plans**
 - **Milestone Criteria established**
 - **ACAT 1D – 88% submitted (32 of 36)**
 - **Non-ACAT-1D – 47% submitted (404 of 866)**

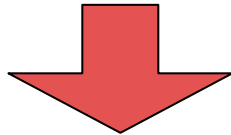
IUID Measures of Success

- **Initial Depot Capability Established (30% of depots)**
- **Property Re-engineering Underway**
 - **SOCOM**
 - **AF & Army**
 - **Defense Medical Logistics**
- **Standards Integration**
 - **NATO and ISO adoption**
 - **Coast Guard and Homeland Security adoption pending**



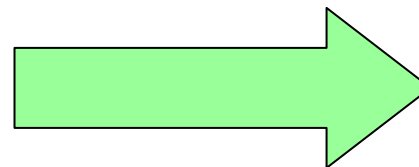
Automatic Identification Technologies - an Important Enabler

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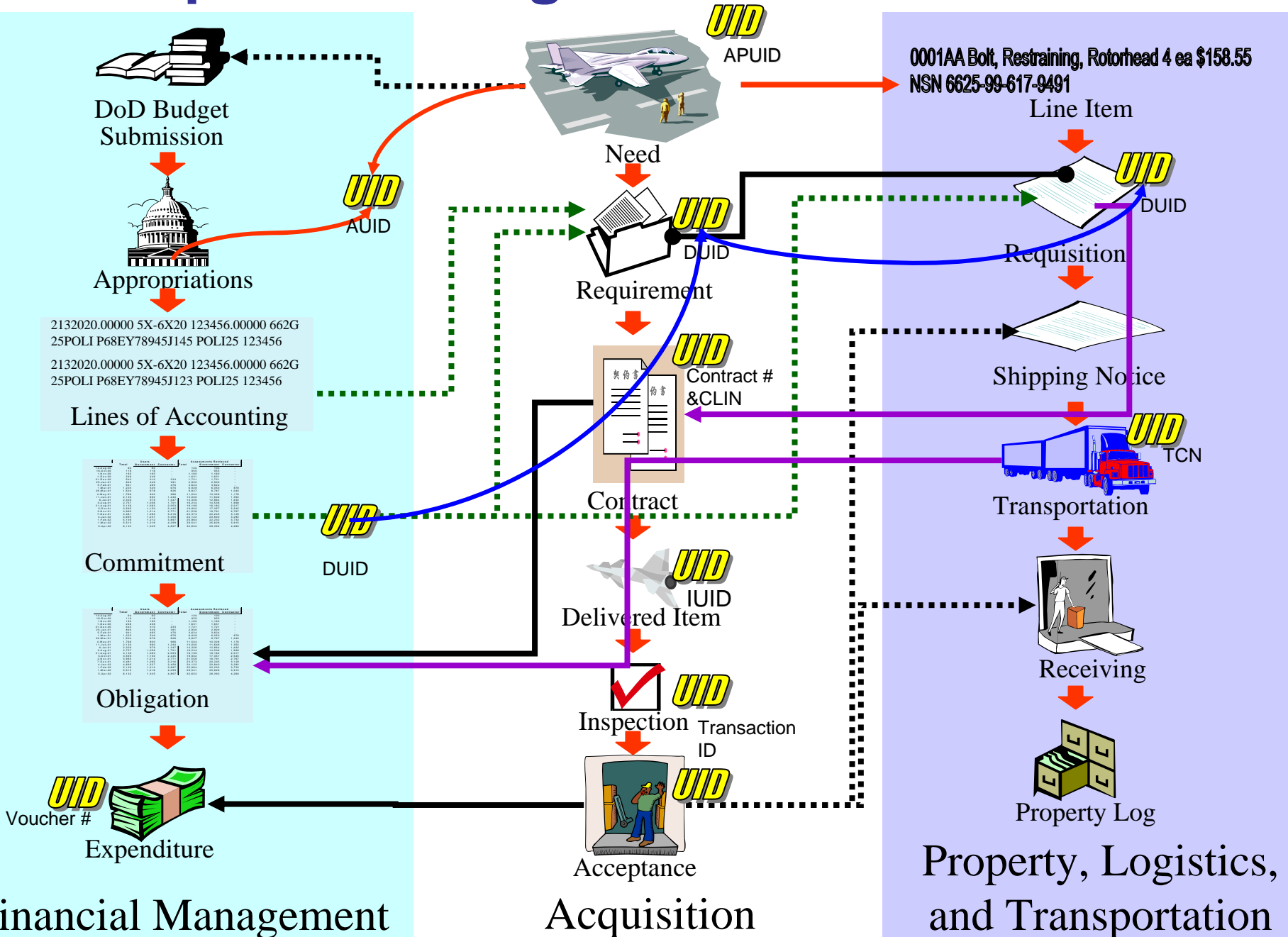


UII can contain up to **78** characters

AIT enables **error-free data transfer!**



Enterprise UID Digital Data Flow Potential





Scenarios

- Real Property and Personal Property
- Property transfer
- Government Furnished Property
- Military Equipment Valuation
- SIM/SNT/UIT
- Maintenance
- Supply
- Transportation



Challenges

- Policy integration
- Program Planning and Cost of adding IUID
- Get requirements consistently and correctly placed in applicable contracts
- Facilitate global standards
- Existing item data management practices
- Embedded Item Data Capture



What's Next for IUID?

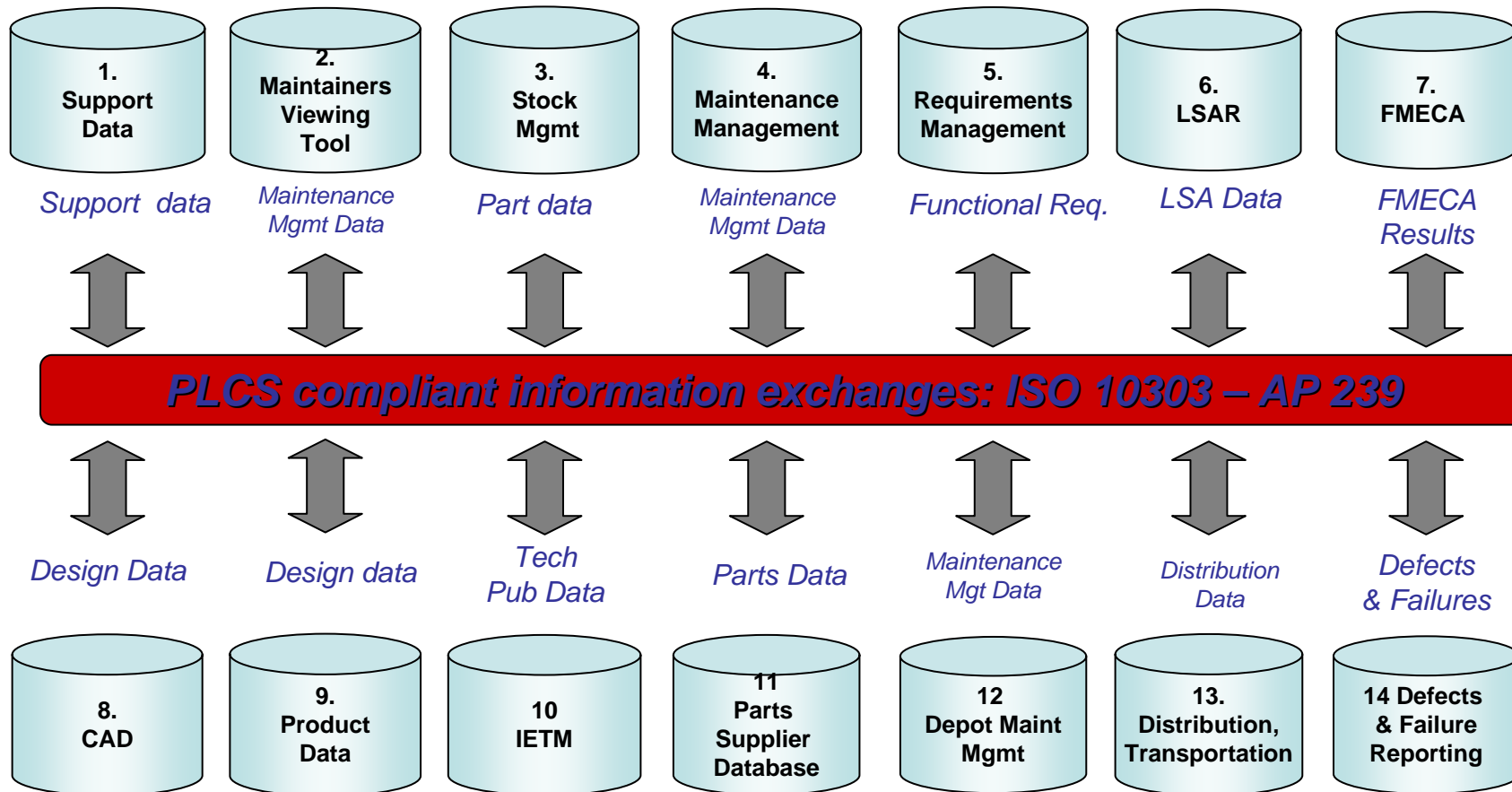
Data Additions

- Warranties
- FMS requirements
- UID Engine
- NATO Integration
- Tracking and Traceability of IUID data



Product Life Cycle Support (PLCS)

PLCS will enable cost effective information exchanges



In future, support system integration will be easier to implement