



Leveraging Codification, UID of Items and Common Data Exchange to Facilitate Joint Logistics

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OUSD(AT&L)/DPAP/PDI

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Capability Development

Two scenarios

1. Multi-national Asset Sourcing – Shareable Operational Resources Tool (SORT)
 - “Offering” Nations identify and transmit standard data of sharable assets including the UII and NSN
 - Web-Based SORT Instances expose sharable assets and related data
 - “Needing” Nation requests specific assets based on item-specific data or generic item; purchase/borrow
 - Account balance tracks credit/debit
2. Repair and Return in-theater UID marked and registered Item
 - Marine Corps Identifies a faulty item, sends to NAMSA for repair with UII and associated failure data
 - Repair conducted and UII'd item returned with related repair data
 - Transfers and lifecycle events tracked by UII

Shareable Operational Resources Tool (SORT) FY 12/13 Enhancements

- Incorporation of Services; potential for lead nation in specific areas
- Accommodation for ACSA or bilateral agreements and thresholds (e.g., credit limit)
- Inclusion of NGOs, Contractors
- Exposure of unfulfilled need
- Option for Human entry of offer or need
- Develop electronic (system-to-system) request, confirm, and closure messages
- Use for operation/exercise planning of theater resources

Multinational Task Force (MNA TF)

– Tier 2 Project

- National Ministerial level view of collaborative initiatives aimed at meeting “Smart Defense”
- Managed by NATO Allied Command Transformation. SA recommended as project by
 - Operational Logistics Chain Management Lead, COL Tanguy (FR)
 - Asset Tracking Working Group Lead, COL Reese (US)
 - ACT Deputy, General Bieniek (PO)
- Projects submitted by nations; must have at least 2 nations committed
- SORT has been included by ACT at a Tier 2 project with commitment to participate by Canada and UK

SORT Overview

- **Situation**
 - Multi-national operations
 - Common equipment
- **Problem**
 - Lack of Global Item Identification across nations
 - Inability to share life cycle data
- **Solution**
 - Combine UID of Items and PLCS for interoperable item level lifecycle data sharing
 - Expose in-theater assets that a nation needs or is willing to share
- **Benefit**
 - Increases readiness - ability to share common parts
 - Increases availability - lifecycle tracking of individual items

Foundational Capabilities

UID of Items

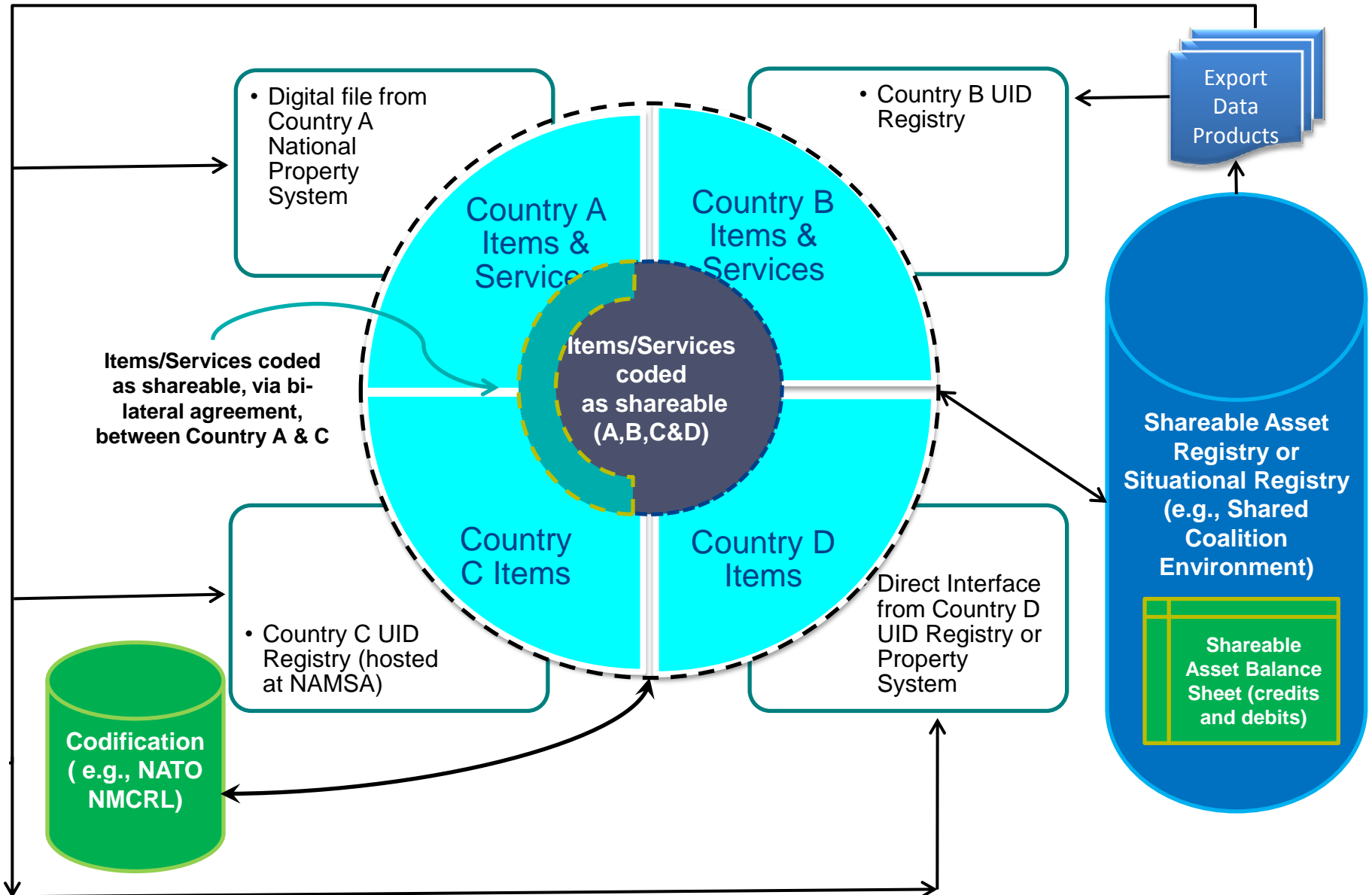
- The Mark (2D data matrix - ISO 15459)
- Provides a common data key for lifecycle traceability
- NATO Promulgated documents
 - STANAG 2290, UID of Items Strategy Document
 - Allied Unique Identification Publication -1 (AUIDP-1) guidance

Product Lifecycle Support

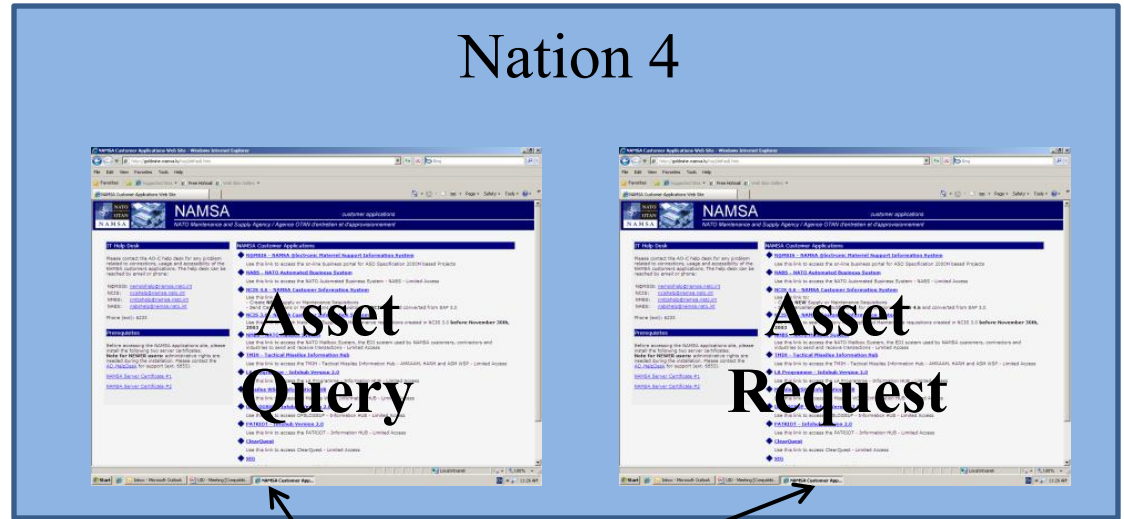
- Data model of through life product and support information; Data Exchange (DEX) provides sharing of PLCS-based data
- STANAG 4461, ASD, AIA and US Air Force advocacy

**UID of Items + PLCS =
A standard way to convey item level lifecycle data**

Initial Concept View - Shareable Asset Visibility Service



Shareable Assets



Nation 1

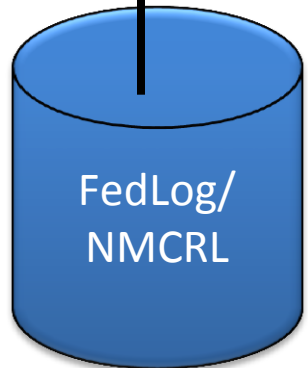
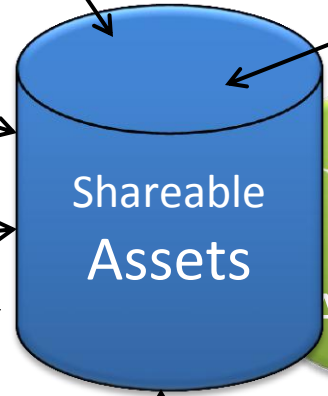
Item - NSN +
RIC (optional)

Nation 2

Item - NSN + UII +
RIC (optional)

Nation 3

Item - NSN + RIC (optional)
+ UII + lifecycle data



Main functions

- Load Shareable Assets
 - Upload to web site or file transfer
- View Assets
 - View Available Assets: browse and select items
 - Shopping Basket: Requestor confirms selected items or delete pending requests
 - Validate Request: Offering country approves or rejects pending requests.
 - Execute Requests: Goods Issue by offering country, Goods Receipt by requesting country
- Reports
 - Debit/Credit balance sheet; General overview



Home

Search this site

Recently Modified

ShareableItemsRequest View

ShareableItemsBalance Detail

ShareableItemsBalance

ShareableItemsChange

ShareableItemsRequest

Recycle Bin

All Site Content

Shareable Items List

Criteria

NSN Nomenclature
CAGE Part
UII Ric
Operation Purchase Borrow Either

Clear

Search

Print

Back

Export CSV

230 record(s) found - page 1/10

Basket	NSN	NOMENCLATURE	PART NUMBER	RIC SERIAL #	UII	USE	CO
	2355015393634	LIGHT ARMORED VEHICLE	03002A0088	531341	D5616110666117-011LAV-0875-K07	Purchase	USA
	2355015393634	LIGHT ARMORED VEHICLE	03002A0088	LAV-0822-E07	D5616110666116-011LAV-0822-E07	Purchase	USA
	2355015393634	LIGHT ARMORED VEHICLE	03002A0088	20091014-1308	D1UKA920091014-1308	Purchase	USA
	2320014947616	LIGHT ARMORED VEHICLE	02001A0006	531816	56161110666118-011LAV-0927-A08	Purchase	USA
	2320014947616	LIGHT ARMORED VEHICLE	02001A0006	531815	56161110666118-011LAV-0925-A08	Purchase	USA
	2320014947616	LIGHT ARMORED VEHICLE	02001A0006	531813	56161110666118-011LAV-0921-A08	Purchase	USA
	2320014947616	LIGHT ARMORED VEHICLE	02001A0006	531812	56161110666118-011LAV-0910-M07	Purchase	USA
	2320014947616	LIGHT ARMORED VEHICLE	02001A0006	531811	56161110666118-011LAV-0907-M07	Purchase	USA

Shareable Items Basket (Needing country - Belgium)

NSN	UII	SERIAL #	Unit	Qty	Price	Currency	Requesting Country	
2355015393634	D5616110666116-011LAV-0822-E07	LAV-0822-E07	EA	<input type="text" value="1"/>	1883020.00	USD	Belgium1	<input checked="" type="radio"/> Draft <input type="radio"/> 1

Shareable Items Request (Offering Country - US)

SERIAL #	Avail Qty	Request Qty	Unit	FinalPrice	Currency	Requesting Country	Status	
16110666116-011LAV-0822-E07	LAV-0822-E07	1	<input type="text" value="1"/>	EA	<input type="text" value="1883020.00"/>	USD	Belgium1	<input type="radio"/> To Approve <input checked="" type="radio"/> Validated

Shareable Items Balance (Needing country - Belgium)

Reporting currency : EUR

Exchange rate of 27/06/2011

2 record(s) found

Country	Debit	Credit	Saldo
US5	50046.18	0.00	50046.18
US1	4117.02	0.00	4117.02

Shareable Items Detail

Main Data

NSN: 2355015393634	Cage:	Part: 03002A0088	UII: D5616110666116-011LAV-0822-E07
UII Type: UID2	Serial: LAV-0822-E07	Quantity: 1 EA	POC Name: RUBEN SERNA
POC Email: bspoden@namsa.nato.int	POC Org: N00164	POC Phone: 760-725-9922	Comments: NO COMMENT
Usage Qty: 916 KILOMETERS	Condition Code: A	Manufacture Date:	Last LTI Date: 01-05-2010
System Identifier: 123	System Instance: 4	Country: USA	Offer Expires on: 30-06-2011
Asset Revision: A2	Operation:	RIC:	USE: Purchase
Offering Price: 0.00	Offering Currency:		

Mission Operational Failure History	FailureDate	RepairedBy
Throttle sticking at end of travel. : Sticks during Travel :	19-05-2010	NSWC CRAN

Modifications	ModifDate
CONVERSION OF MACHINE GUN 7.62MM M240E1 TO M240G CONFIGURATION USED ON L	01-01-1995
INSTALLATION OF AMMUNITION PACK BRACKET RETROFIT ON LIGHT ARMORED VEHICLE	25-02-2000
INSTALLATION OF THE M-30 LIGHT SOURCE CLAMP LOOP ON THE LIGHT ARMORED VE	13-04-2005

Description
SUPPLEMENTARY FEATURES LAV-LA2

Cage (substitutable items)	Part
01365	03002A0088

Nomenclature	Hazardous	Weight	Unit	Volum	Unit	Price	Currency	Unit	Cancelled
LIGHT ARMORED VEHICLE		A2296	LBR	1406311	CFT	1883020.00	USD	EA	

From Item ID
DEX and possible
info from
Maintenance &
Repair DEX
(future)

Pulled from
FEDLOG or
NMCRL

International Data Interoperability

- The ability to share data is key to efficient logistics
 - Multi-national operations
 - Assets used by multiple countries
- UID of Items is the key to item interoperability, enables lifecycle management and efficient logistics
- International standards like PLCS can capture and share data from planning through use to disposal
- The synergistic relationship between codification and UID of Items
 - Can associate codification data to an NSN to an individual item
 - Requires work to define how meta data will be captured, exposed
 - Which countries manage which items using UID of Items

Interoperable Data in SORT

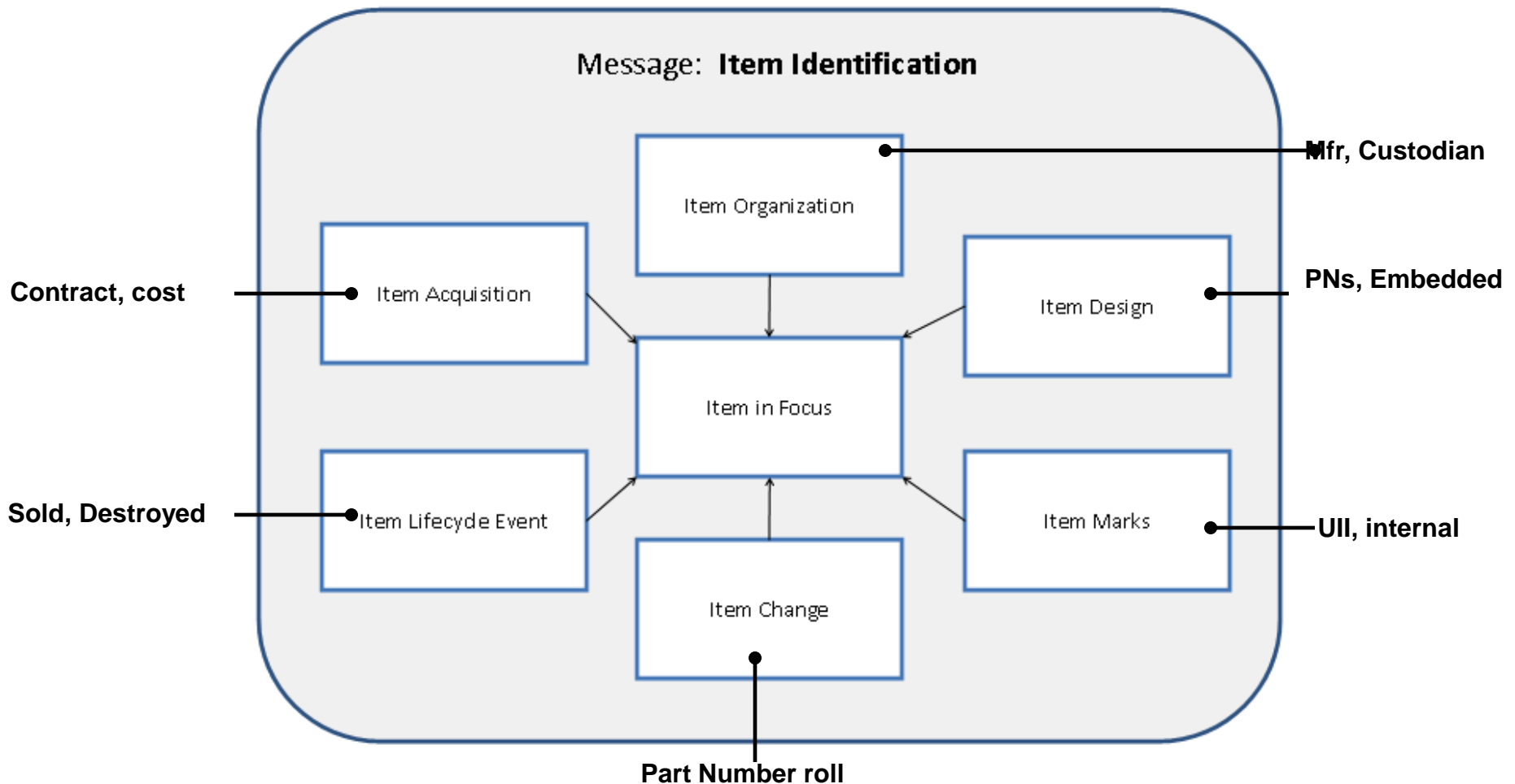
Phase 1 = XML of key data elements

Phase 2 = Item Identification DEX

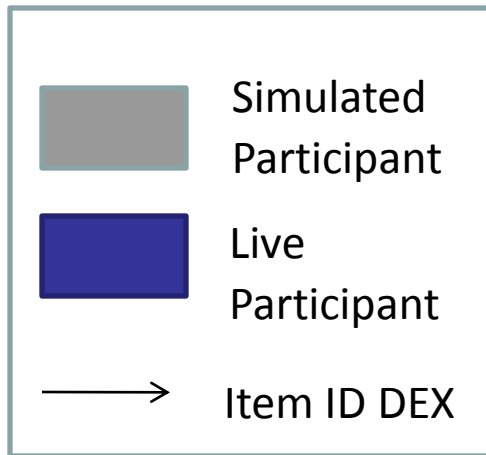
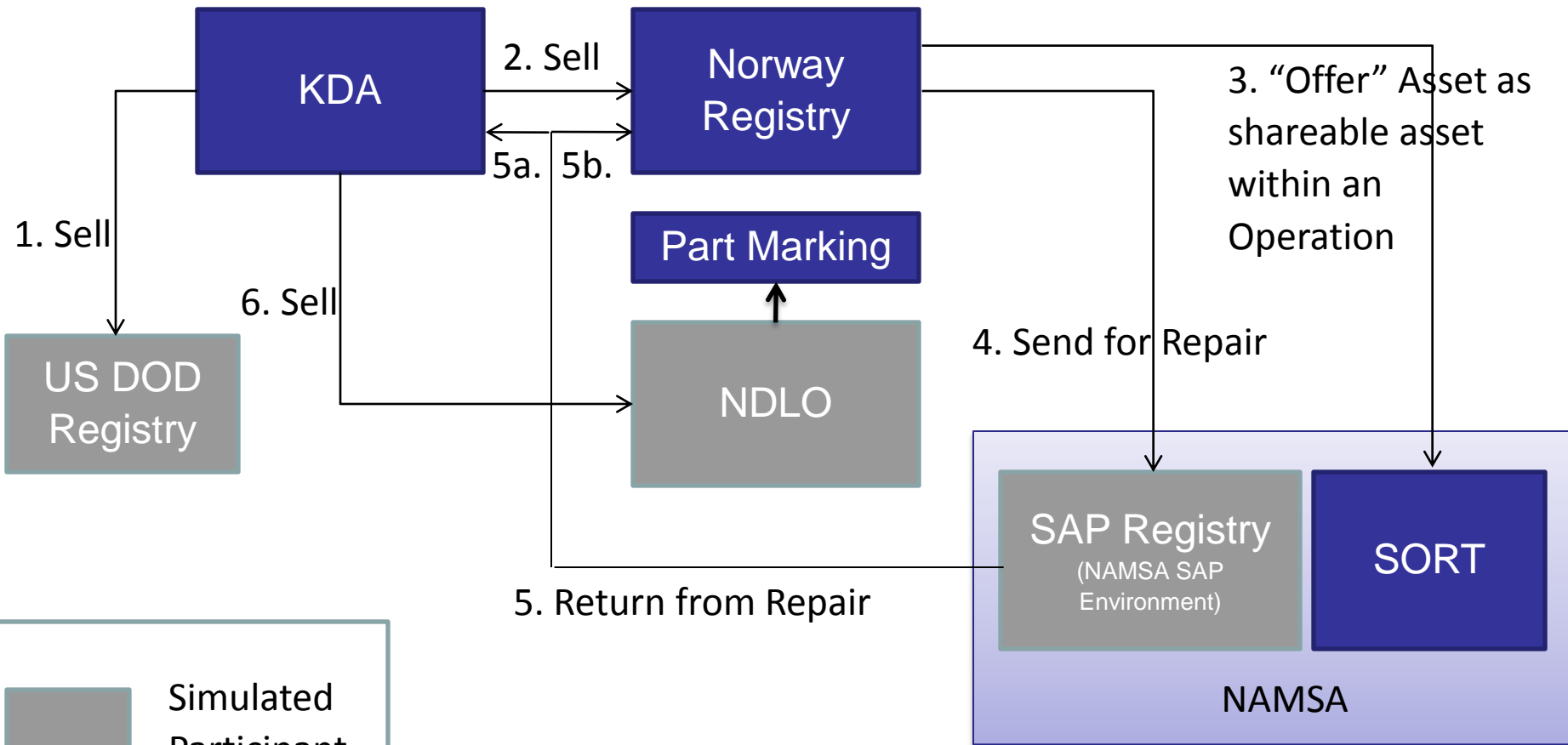
- International ISO 10303 AP 239 Product Life Cycle Support standard (NATO STANAG 4661)
- Contents:
 - US DoD IUID Registry key elements
 - NAMSA SAP UID of Items Registry extensions
 - Lifecycle data (usage, modifications, failures, technical inspection)
- Item ID DEX implementation timeline:
 - Definition Dec 2010
 - Adaptor development Spring 2011
 - Testing July 2011
 - Demonstration 1 Sept with Norway IUID/PLCS Technology Transfer project
- Accommodates UII item definition and UII item with lifecycle usage

After proof, socialization, process, rules, etc discussions are critical

Item ID DEX



Item Identification DEX Demonstration



Two Related DEXs

Item Identification DEX	Maintenance and Repair DEX
Input to SORT	Used in Repair/Return in-theater Asset
Adaptors to SORT, Norwegian UID Registry, Norwegian Industry complete	Mapping completed to NAMSA SAP
Developed as LM/Norway effort by DNV	Developed for Coalition Logistics Interoperability for US Marine Corps by Eurostep
Traditional approach	New Approach
Out for public committee as committee specification draft	Development complete
Foundation: US IUID Registry + NAMSA SAP + SORT requirements	Foundation: parts of DEX 11 + CLI + Item ID DEX requirements

Item ID DEX Contents

Item ID DEX readability:

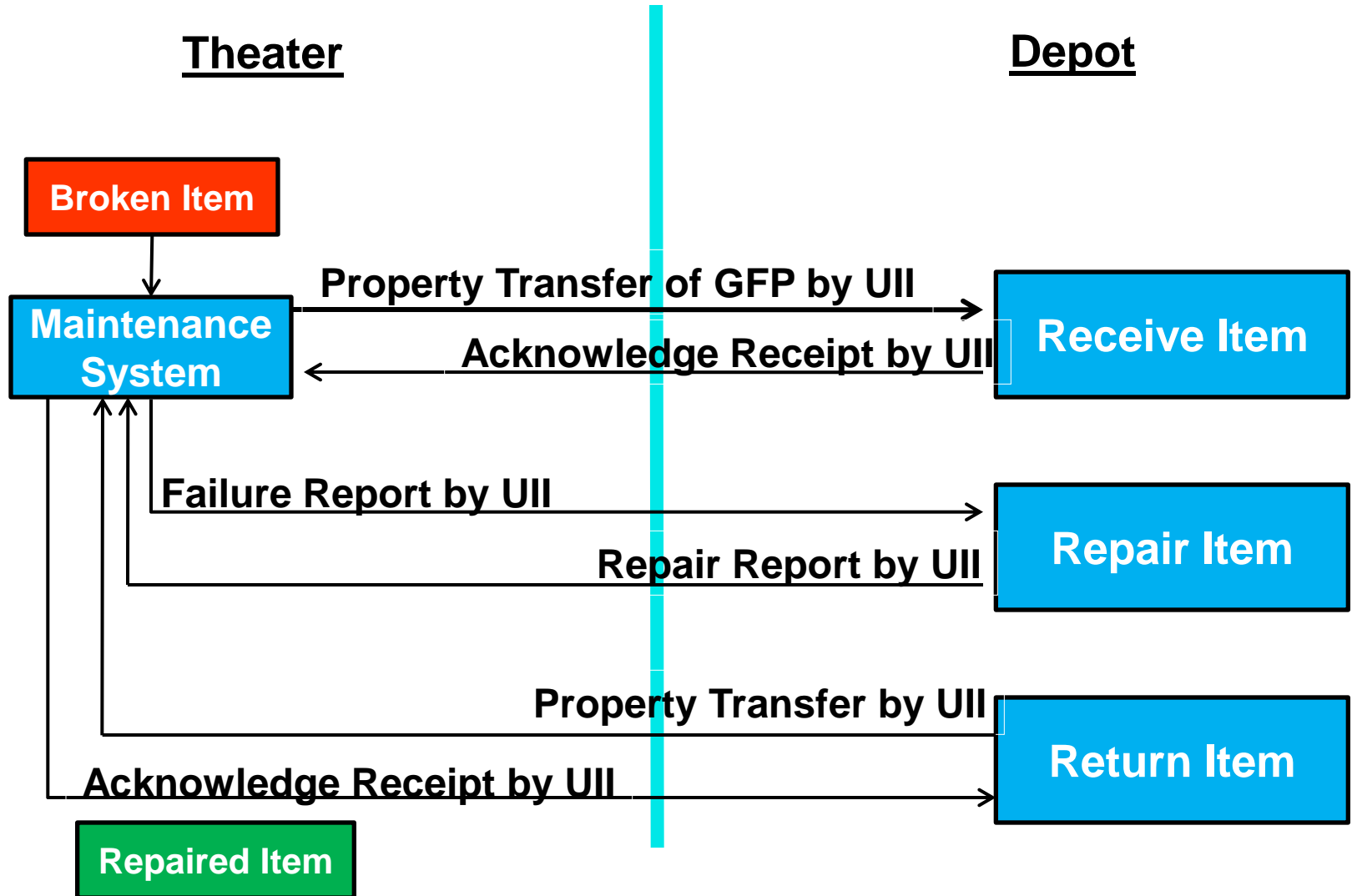
1. Message includes header information

2. Item includes end items and embedded items

3. Interpret item information

- **Part** includes part number related to an item
- **Contract** includes acquisition information
- **Organization** includes all organizations related to the item e.g. Custodian, Owner
- **Mark** includes all marks and mark data related to an item
- **Event** includes major lifecycle events for an item
- **Change** includes all rollover or changes to an item

Repair and Return in Theater UID'd Item



Interoperable Data in Repair and Return

Property transfer message

- Reuses the XML structure from WAWF
- Includes UII and related data of GFP item moving to/from repair

Maintenance Action

- Maintenance and Repair DEX finalized July 2011
- Accommodates Failure Report and Repair Report data
- UII is identification key for NAMSA; method to tie DEX to property transfer message for GFP

Questions & Answers

