Future Direction of Standards in Logistics Engineering
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Jim Colson
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Standards Environment

- Background
- ASD Suite of Standards
- TechAmerica Standards
- ISO 10303 Standards
- MIL Standards
- Summary
Where we were…
Where we are going - Logistics View
TechAmerica Standards (Formerly GEIA)

• **GEIA-STD-0007, Logistics Product Data**
  - Data Exchange Standard
  - Based on cancelled MIL-STD-1388-2B/MIL-PRF-49506
  - Stepping Stone to Implementation of ISO 10303, AP239, PLCS Data Exchange Sets

• **EIA-836A, Configuration Management Data Exchange and Interoperability**
  - Replaces MIL-STD-2549

• **EIA-649, Configuration Management**
  - Re-instatement of MIL-STD-973 Under Consideration

• **EIA-632, Processes for Engineering a System**

• **EIA-859, Data Management**
ASD Standards Implementation

- **S1000D**, International specification for technical publications
  - MIL-STD-3031, Army Business Rules for S1000D

- **S2000M**, Materiel Management
  - GEIA-STD-0007, Logistics Product Data (Initial Provisioning Data)
  - Future Harmonized Data Exchange Set (S2000M/GEIA-STD-0007)

- **S3000L**, International procedure specification for Logistics Support Analysis
  - Similar Data Model with GEIA-STD-0007
  - Mixes Normative and Informative - Difficult to Contract For
  - Re-instatement of Logistics Support Analysis Military Standard - Normative Approach

- **S4000M**, International procedural handbook for developing scheduled maintenance programs
  - SAE JA 1011/1012 RCM Standard/Guide

- **S5000F**, Specification for Operational and Maintenance Data Feedback
  - MIMOSA, Open Systems Architecture for Enterprise Application Integration/Condition Based Maintenance
ISO 10303 STEP
Standard for the Exchange of Product Model Data

• STEP is an established international standard for the exchange, integration and sharing of product data via Application Protocols (APs)
  – Geometry
  – Product structure
  – Manufacturing interfaces
  – Drawings
  – Finite Element Analysis
  – Printed Circuit Assemblies
  – Wiring looms
  – Mechanical Design
  – Construction industry

• Supports wide range of IT – ASCII, databases, XML, XMI,…..

• Process modelling independent of information in EXPRESS
• Defines all activities required to develop, field and sustain a product (IDEFO Model)

• Includes Complex Data Model

• Implementation of Data Model Via Data Exchange Sets (DEXs)
• Current OASIS (Organization for the Advancement of Structured Information standards) AP239 Data Exchange Sets (DEX)
  – Aviation Maintenance
  – Faults Related to Product Structures
  – Item Identification
  – Maintenance Plan
  – Operational Feedback
  – Product as Individual
  – Product Breakdown for Support
  – System Requirements
  – Task Set (Published)
  – Work Package Definition
  – Work Package Report

LOGSA Working On Nine DEXs Using GEIA-STD-0007

New Industry Standard for Exchange of Acquisition Logistics Data
Military Standards

• Recently Renewed MIL Standards
  • MIL-STD-31000  Tech Data Packages
  • MIL-STD-3031 Army Business rules for S1000D Tech Pubs
  • MIL-STD-46855 Human Factors Engineering

• Other MIL Standards revitalized?
  • MIL-STD-973  Configuration Management
  • MIL-STD-1388-1  Logistics Support Analysis
  • Etc...
Striking the Best Balance
For Acquisition Logistics Data
Questions?