Technology in support of ILS Standards
A solution providers perspective
Industry Segments – PTC Perspective

Aerospace and Defense

- Aerospace
  - Commercial Aerospace
  - Civil Aerospace (Passengers)

- Defense
  - Defense OEM
    - Prime Contractor/OEM
    - Sub Contractor Supplier
    - PBL Requirements

- Industrial/Commercial
- Med Equipment High Tech

- Service User/Operator
  - Service Depot
  - Service PBL

Key Business Drivers
- Lean Processes/Profit/Market share
- Mission Assurance
Defense Industry Trends in SLM

- Reduced acquisition of new platforms
- Increased service life of existing platforms
- Increased OEM involvement in service lifecycle (Performance Based Logistics)
- Technology reset as equipment returns from theatre of operations
- Move to integrated (lean) tools and processes
- Adoption of new data standards – S1000D etc..
- Introduction of new technologies and new thinking (iPads, Prognostics, etc)
Commercial Aerospace Industry Trends in SLM

- Increased competition from emerging markets (China, Japan)
- Increased supplier integration and collaboration requirements
- Increased expectations from customers around service lifecycle management processes
- Adoption of new data standards (S1000D, ATA2300)
- Willingness to integrate these standards (MSG3>S1000D>ATA2300)
- Introduction of new technologies and new thinking (iPads, Self Help Portals, Prognostics, etc)
Where does technology fit in?

As a solution provider we drive...

- **Adoption**
  - Without physical solutions specifications are purely theoretical

- **Enablement**
  - Compliance with all of the standards is complex and requires automation

- **Guidance**
  - In many cases complex standards require solution provider input
    - ISO 10303, IGES, CGM, S1000D, MBE

- **Integration**
  - True lifecycle support requires the integration of multiple data streams, data types and processes
ASD’s “S” Series Vision of Lifecycle Support

Operational & Maintenance Data Feedback – Functional Coverage by S5000F

Design of Systems and Support Equipment

Logistics Support Analysis

Provisioning

Order Admin

S2000M

OPS Data

LSA data

Provisioning Data

Logs Material and Data

S3000L

S4000M

S1000D

IN SERVICE

USE

Equipment Identification Design Data

Design Data

LSA tasks / data

Technical Data

Tech docs, IETM, other media

ASD – Aerospace and Defence of Europe
Closed-Loop SLM process view - PTC
Closed-Loop SLM process view - ASD

Product Lifecycle Management

S3000L
S4000M
S2000M
S1000D
S5000F
S5000F
S1000D

Design of Systems and Support Equipment
Requirements
Service Planning

Service Lifecycle Management

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What impact do solution providers have on ILS and Product Support?

- **Enablement**

- Cost effective means of industry compliance, coupled with agility, ease of use, and known commercial best practices
  - Source data creation – Make this easy, rich, robust and cost effective
  - Data Integration – Make the data flow seamlessly from process to process
  - Re use of data – Make the data compatible with other tools/consumers
  - Workflow – Make the work find the right resource
  - Metrics and reporting – Visibility and Metrics into the program
  - Materiel tracking – Where is my stuff?
  - Predictive Analytics – How should it be performing?
  - Condition Based Maintenance/Health management – How is it performing?
  - Systems engineering processes – continuous design improvement – Make it: better…faster..cheaper…last longer