Service Provider Perspective in Meeting S1000D Requirements
Agenda

• Different approach and challenges of the service provider supporting:
  – Airframe/Engine manufacturers
  – Component manufacturers
• Key source data requirements
• System independent tools/techniques
• Best practices when generating data modules and illustrations
• Repurposing of legacy data into S1000D
• Flexibility
Different Approach – Airframe versus Component

• Airframe
  – Large percentage of data modules are of procedural type
  – Well defined and stable business rules and style guides
  – Initial DMRL is provided
  – Templates/samples of data modules are available for reference
Different Approach – Airframe versus Component

- Component
  - Top layer business rules and style guides are defined by the airframe/engine manufacturer
  - The traditional iSpec 2200 compliant data is often the starting point
    - DMRL often follows the structure of iSpec 2200 manuals
    - Traditional page blocks need to be mapped into data module types
Key Challenges

• Content development may start prior to the final release of engineering documents
• DMRL is fluid – data modules can be added or removed in the process
• Content has to be evolved to be compliant with Simplified English requirements of S1000D
Key Challenges

• When traditional data is available, it becomes more of a data migration task than content authoring task

• Processing of the CAD data for illustration development
Key Source Data

• Defined business rules – BREX data module
• Style guides
  – Writing
  – Illustration
• Version of the specification
• DMRL
Key Source Data

• Sample data
  – Samples of each type of data module
  – Sample artwork
• STE glossary for approved technical names
• Any additional data
Usage of DMRL

• DMRL
  – Helps to plan for new data modules
  – Keeps the data organized
  – Helps to keep track of the progress
  – Living document: data modules added and deleted in the process
System Independent Tools/Techniques

- Creation of DMRL
- STE checker
- Output of XML data into paper/IETM format
- Repurposing existing data to S1000D spec
- Simplifying authoring environment
  - Templates/structure for each data module type
  - Familiar interface to reduce the learning curve
  - Tabular editing environment for the IPD data modules
Generating Data Module Content – Best Practices

• Working data modules in sets by subject or location on aircraft
  – Synchronized development of Remove/Install data modules
  – Synchronized development of Description of Function/Component Location data modules
Generating Illustrations – Best Practices

- Developing illustration library for locators and components
Generating Illustrations – Best Practices

- Being mindful of the file size; simplifying data coming from CAD application.

**BEFORE**
4360 elements

**AFTER**
887 elements
Generating Illustrations - Best Practices

• Working illustrations in sets by subject or location on aircraft
• Illustration re-use
• Hotspots
  – Need to define the rules for hotspot implementation
Repurposing of Legacy Data into S1000D

• More planning and upfront set-up before authoring can start
• iSpec 2200 page blocks map into S1000D data modules
• Illustrations
  – May require rework to meet the S1000D standard
• Writing
  – Review for adherence to Simplified Technical English
Flexibility

• Interpretation of the specification
  – Learning your customer’s preferences
• Gathering key source data to meet S1000D requirements
• Evolving DMRL
• Changing engineering data/established baseline
• Collaboration with the customer throughout the implementation process
Thank you

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