Electronic Publication Working Group
EPWG Overview

Name of presenter: Robert Pearson

Rank/title of presenter: Senior Analyst

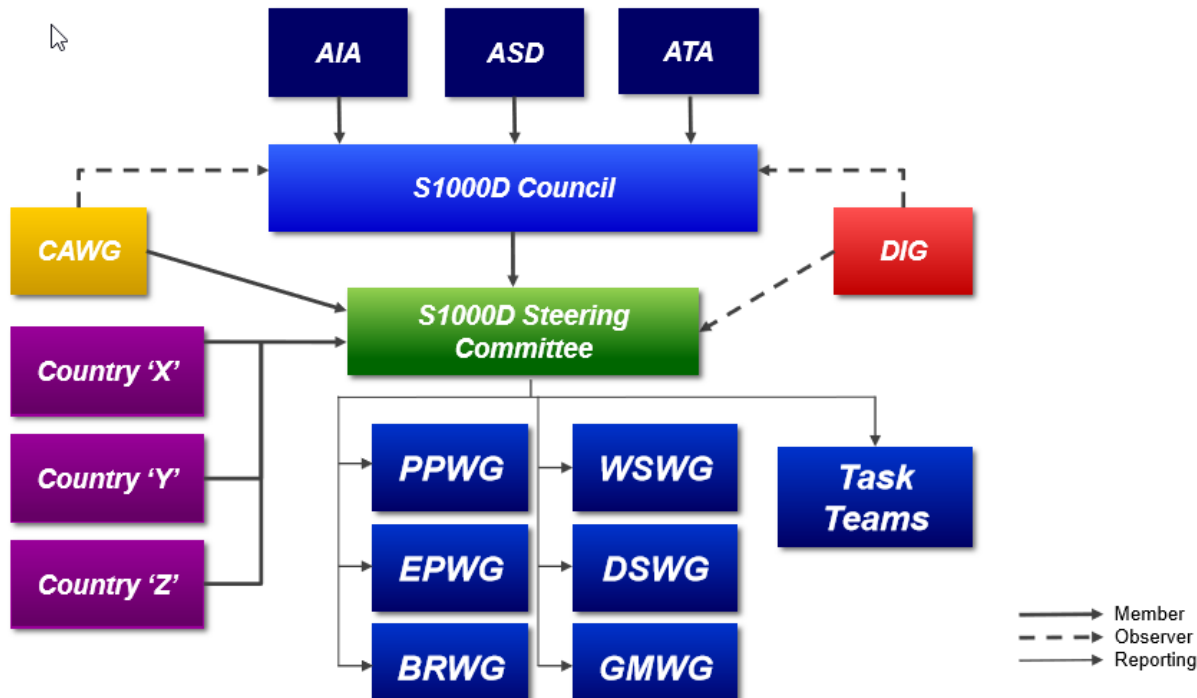*Company/organization:* Pentecom, LLC.

S1000D User Forum, London   *October 14-16, 2019*

- The Electronic Publication Working Group (EPWG) reports directly to the S1000D Steering Committee.

S1000D Organizational Structure

The Electronic Publication Working Group

- The EPWG is responsible for all relevant electronic aspects of the Specification
  - XML Schemas
  - Graphic standards
  - Exchange procedures
- The overall ASD/AIA/ATA S1000D organization and membership rules for participation in working groups apply to the EPWG accordingly.

- The EPWG is responsible to create and maintain the following Artifacts which are intended to assist end users in the implementation and authoring of the Specification:
  - XML Schemas
  - Default Business Rules Exchange (BREX) for S1000D
  - Bike Samples for S1000D
  - Data Dictionary for S1000D
  - Units of Measure for S1000D

XML Schemas

- The data structure that is described in the S1000D specification is enforced through the use of XML Schemas.

- Individual schemas have been created for each of following information types:

  – Descriptive information

  – Procedural information

  – Fault Isolation information

  – Maintenance Planning information

  – Crew/Operator information

  – Illustrated Parts Data (IPD) information

  – Business Rules Documentation

  – Battle Damage Assessment and Repair (BDAR) information*

    * To be included in a future change

- Wiring data
- Process data
- Common information repository data
- Container data
- Learning data
- Maintenance checklist and inspection data
- Service bulletin information
- Front matter information
- Shareable Content Objects (SCO) information
- Update information
- Information Control Number (ICN) Metadata information

- The EPWG creates and maintains the Default S1000D Business Rules EXchange (BREX) document.
- The BREX data module includes
  - Firm rules expressed in the specification text, not supported by the schema structures, however, such that they can be represented by an XPath expression and such that a CSDB object can be automatically be verified against these XPath rules
    - Software verifiable. Software can ensure correct data in accordance with the project rules
  - Narrative rules expressed in the specification text, not supported by the schema structures, and not possible to formalize in an XPath expression, hence, not useful in an automatic rules checking procedure
    - Authoring rules that cannot be verified by software
  - The delivery package includes an HTML version of the Business Rules Exchange Document (BREX) in human readable form.
  - Future planned enhancements include multimedia checking

Bike Samples

- The EPWG provides, as part of each Issue of the specification, a data sample showing example markup for each of the schema types.

- These samples are known as the "Bike Samples" since the product that is described in the technical data is a bicycle.

- These samples provided as a reference aid showing a general example of how the data is structured while still being simple from a technical standpoint.

- The EPWG provides, as part of each Issue of the specification, a data dictionary which defines each of the elements and attributes in the specification.

- The data dictionary is an HTML reference aid that includes diagrams that show the elements in context as well as the definition of the intent of each element and attribute.

Data Dictionary

Elements

A

accessDoorOrPanel	The element <accessDoorOrPanel> contains information abou opened for getting access to the electrical equipment.
accessFrom	The element <accessFrom> enables specifying the zone(s) an from which the functional item can be reached.
accessory	The element <accessory> is contained in the list of accessorie <accessoryGroup>. The list of accessories is a child element standard parts element <standardPartGroup>. It contains information concerning the properties of accessorie wiring.
accessoryGroup	the list of accessories
accessPoint	The element <accessPoint> contains information that describe provides further information related to the access point based

S1000D 5.0
Data Dictionary

Choose a category:

Elements | **XML Schema** | **Attributes**

A
B
C
D
E
F

- The EPWG provides, as part of each Issue of the specification, a listing of the units of measure that are used within the specification and schemas.

- The Unit of Measure document lists the definition, quantity type, and the symbol used in S1000D for each unit of measure.

Units of Measure Information:

Table of Base Units

Name	Quantity Type	Catalog Name	S1000D UoM Symbol	
inverse henry	reluctance	POSC	1/H	
per Kelvin	volumetric thermal expansion linear thermal expansion	POSC	1/K	
per kilogram	per mass	POSC	1/kg	
per meter	per length wave number	POSC	1/m	

- On an ongoing basis, the activities of the EPWG include:
  - Reviewing Change Proposal Forms (CPFs) for technical content and implementation and making recommendations where needed.
  - Creating CPFs for specification changes directed by the steering committee which affect the EPWG artifacts.
  - Investigate new and relevant technologies for inclusion in the specification.
  - Maintain the EPWG artifacts, Schemas, Data Dictionary, etc.

EPWG Schedule

- The EPWG holds a teleconference every two weeks.
- The EPWG generally has 2 face-to-face meetings per year, one in the US and one in Europe.

EPWG Information

- For more information about the EPWG and how to become involved, contact:
  - epwg-chair@members.s1000d.org

Questions?