ASD S1000D Actors

Information on S1000D actors, their purpose, incorporation of their definitions into the specification, and relation to business rules and implementation documents

This presentation is made on behalf of BRWG

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Scope of the Presentation

The scope of this briefing is to provide:

- ✓ Understanding who are the S1000D actors (user or system that uses S1000D) on the community, organizational and individual role levels, and why they are needed

- ✓ Plans for incorporating definitions of the S1000D actors into the Specification text

- ✓ Considering mapping Business Rules Decision Points (BRDP) against S1000D actors

- ✓ Applying S1000D actors definitions to generation S1000D project business rules and implementation documentation

Introducing and Understanding S1000D Actors

S1000D Actors – General

- **An S1000D actor is a user or system that uses S1000D.**

- Definitions for S1000D actors are suggested and described in CPF 2009-093IGBRTT (initially submitted to the Steering Committee in 2009; being updated regularly). <u>Please note</u>:

  - The CPF was initially submitted under the title "IG Use Cases". Later recognitions made it clear that these are not Use Cases but actors, and that they are not actors of an Implementation Guide but of the whole Specification. Meaning these are those who use S1000D.

  - This briefing will not discuss all S1000D actors and their definitions in details, which are included in the White Paper to the CPF.

S1000D Actors – Three Levels

- Three levels of S1000D actors were identified:
    - Communities
    - Organizations
    - Individual's roles

S1000D Actors – Community Level

- The community level is the highest level of S1000D actors.

- This level covers military and civil/commercial

- Military
  - Air
  - Land
  - Maritime
  - International

- Civil/commercial
  - Aviation
  - Shipping
  - Space
  - Urban
  - General technology

S1000D Actors – Organizational Level

- Organizational level is second highest level

  - Manufacturer

  - Integrator

  - Supplier

  - Suppliers of documentation

  - Technical service providers

  - Software vendors/Supplier of a software solution for documentation handling

  - Consortia

  - Customer acquisition

  - Customer end-user

S1000D Actors – Individual's Role Level

- The third level of the S1000D actors

  - Author

  - Manufacturing Planner (incl. project managers)

  - Customer Acquisition Planner (incl. Logistics project manager)

  - CSDB Administrator

  - QA responsible/QA analyst

  - End-user

  - Software developer / architect

Plans to Implement the Actors into S1000D

Way Forward

- Discuss:

  - BRWG suggested to incorporate the definitions of the S1000D actors into S1000D Chap 1.3 and new sub-chapter(s). SC agreed

  - Applying the concept of S1000D actors for generation of project Business Rules and Implementation Guide

    - Note: the BRWG is considering the inclusion of general guidance in S1000D Chap 2.4 about how to develop a project Implementation Guide/Plan/Roadmap/…

Generating S1000D Project Business Rules and Implementation Documentation by Using brdoc Data Module Schema

Quoting Issue 4.2, Chap 2.5.2, Para 3.1:

- "The business rules document data module is used to create guidance information to be used by the project through life. Example documents are:
  - Data authoring style guide
  - Illustrator's style guide
  - Security rules and procedures
  - SNS definitions
  - Information codes
  - Data exchange processes"

These documents may have different names and contexts for various project and organization.

BRDP Relationships Table (Multi-Sheet) = Business Rule (BR) Template (S1000D Issue 4.1 = MS Excel; S1000D Issue 4.2 = brdoc XML)

	BRDP_ID	BRDP_Definition	Attribute_Indicating_Relationship_to_Config_Att
11	BRDP-S1-00010	Decide whether to use a zoning and access identification system.	None
12	BRDP-S1-00011	Decide which method to use for zoning and identifying access points.	None
13	BRDP-S1-00012	Decide which values to use for the attribute securityClassification and allocate suitable definitions.	securityClassificationAttRelation
14	BRDP-S1-00013	Determine how the security classifications will be used.	securityClassificationAttRelation
15	BRDP-S1-00014	Determine if the policies that apply to security marking, instructions, etc, and how those markings are required to be applied within the given project.	caveatAttRelation
16	BRDP-S1-00015	Decide on the retention of security classifications.	None
17	BRDP-S1-00016	Decide on how the security classifications will be marked and/or indicated.	None
18	BRDP-S1-00017	Decide on the rules for QA of data modules and deliverables.	None
19	BRDP-S1-00018	Decide on the rules for first and second verification. For example, such a rule might be that all data modules that have a safety related procedure must have first verification carried out "On object".	None

◄ ► ... | BRDP - Chap&Para Map | BRDP - BR Category Map | BRDP - S1000D Schemas Map | **BRDP - Config Atts Map** | BRDP Values ... ⊕

(1)   **(2)**   **(3)**   **(4)**

sheets

(1) Location in the document where it is defined
(for BRDP-S1-NNNNN, it is S1000D Chapter and Paragraph)
(2) BR categories
(3) S1000D Schemas
(4) All configurable attributes (project attributes and *@quantityUnitOfMeasure)*

Notes on
BR Relationships (Excel) / BR Template (XML)

- You will find them in the download package of an S1000D Issue, starting with Issue 4.1 (Issue 4.1 = Excel, Issue 4.2 = brdoc XML)

- These should be considered as tools helping to implement the specification. They do not introduce any new information, except reflecting the definitions in the S1000D.

- The mappings of BRDP against BR Categories, S1000D Schemas, S1000D configurable attributes, and maybe in the future also S1000D actors (see next slide), should be considered as guidance and as not mandatory requirements by the Spec to guarantee conformance and compliance.

Idea to add the S1000D actors to the Business Rules Decision Point (BRDP) relationships mapping

A Typical Case of Such a Mapping on a Project Level

- Marking each business rules decision with a flag:
  "Relevant or not to the technical author / writer"

Question to the S1000D Community on the Idea to Add S1000D Actors to the Mapping:
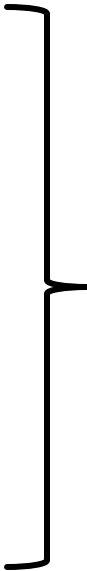
- **Do you agree or disagree with this idea?**
  Please express your opinion and reasoning during Q&A or in the break with Henry and Victoria.
  Thank you in advance!

Typical Examples of BR and Implementation Guide Documents

- Data authoring style guide
- Illustrator's style guide
- Security rules and procedures
- SNS definitions
- Information codes
- Data exchange processes
- Business rules index
- Implementation plan
- Software development rules
- …

Quoted from S1000D Issue 4.2, Chap 2.5.2 Para 3.1

Further Plans in Relation to Implementation Guide

- BRWG has realized that there might be no common and unique Implementation Guide.

- We will provide guidance how to create a project Implementation Plans, Guides, Roadmaps etc.

  - Similar how it is done for the Business Rules Documents generation in Chap 2.5.2 Para 2.2.1. See next slide

Major Steps in Producing Business Rules (S1000D Issue 4.2, Chap 2.5.2, Para 2.2.1)

2.2 Generation of business rules publications
2.2.1 Major steps in producing business rules

The following describes the business rules production process. The process can be amended to include project specific requirements.

1. Identify stakeholders

2. Decide on the layers for business rules documentation

3. Decide on the structure of the business rules publications and how they should be presented

4. Use the BRDP index (Chap 2.5.3) to make the following decisions:
   - BRDP-S1-00003, Which Issue(s) of S1000D are to be used
   - BRDP-S1-00004, Which information sets are to be used
   - BRDP-S1-00005, Which publications are to be produced
   - BRDP-S1-00006, The Schemas that are to be used

   Note

   The decisions on these BRDP must be considered together as they are related, and they depend on the available S1000D environments as well as on the budget of the project or the organizations concerned.

5. If used define the priority for each decision made on each BRDP. This priority sets the sequence of the business rule decisions definition. That is, it indicates the necessary order to address each business rule. Refer to Chap 4.10.1.

6. If used define the business rule severity level for each business rule decision. The business rule severity level indicates the impact magnitude, if a certain business rule decision is not followed. Business rule severity must not be confused with business rule priority. Refer to Chap 4.10.1.

7. Define remaining business rules decisions using BRDP index (Chap 2.5.3). BRDP relationships can determine whether or not a BRDP is applicable. For example, determining the use of the element <wireType> (BRDP-S1-00239) is not necessary when the project has determined that the use of the wiring data description data module (BRDP-S1-00238) is not required. A BRDP that is not required for a project must be annotated accordingly. Refer to Chap 4.10.1.

8. Review all S1000D chapters to determine if any further decisions have to be made which do not have a specific BRDP. Record all the decisions in the business rules document data module.

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9. Define non-context business rules decisions and how they are documented and checked. An example of a non-context BRDP is a decision regarding the frequency of data exchanges between partners.

10. Define use cases for each business rules decision and, if necessary, also for BRDP. In general there will be more than one use case for each BRDP and for each of its business rules decisions. These uses cases can vary from customer products, technical publications, which the given business rules publication addresses, to various roles of the personnel involved in the production and use of technical publications. The use cases must be captured by using applicability on business rules paragraph (containing all the information for the given BRDP) and on business rules decisions. The use cases will be defined on business rules decisions. Differentiation between the applicability of various business rules decision points, especially of project and/or organization specific BRDP, might be necessary. Refer to Para 3.

11. Produce business rules documents and verify them with stakeholders.

12. Produce test data, test and evaluation plan and verify the business rules.

13. Decide on the life cycle maintenance of the project business rules to include:
    - a review process
    - an assessment on schedule and cost impact
    - the update frequency
    - the ownership and governance process
    - responsibilities
    - update process

Conclusions

- Business rules and implementation documentation are closely related and do not exist without each other.

- Introducing S1000D actors will allow to understand the specification better and also to produce business rules and implementation documents extracting information relevant for each of these actors.

- For the time being, the mapping of BRDP and BR decisions for the S1000D actors (e.g. authors) will have to be performed by projects and organizations depending on their context and practices. On the S1000D community level, such mapping is discussed but not agreed upon yet.

Thank You for Listening!
Any Questions?

In case of questions and contributions, please contact:

1. BRWG officers:

    - Victoria Ichizli-Bartels (BRWG chair)

        - vib@optimistwriter.com

    - Henry Ratzer (BRWG co-chair)

        - rcs@flink-email.de

    - Mike Day (BRWG secretary)

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            OR through

2. Your national representative in S1000D SC and working groups