

S1000D Users Forum 2010

“Application of S1000D within a state-of-the-art Integrated Logistic Support environment”

**September 27 - September 30, 2010
Aerostar Hotel, Moscow, Russia**

***S1000D Conformance and Compliance
Svante Ericsson
Corena***





Agenda

- Where it all started
- The work
- The current status
- The continuation



Where it all started



The spark ...

In an EPWG meeting in 2007 there was a discussion ...

... that ended in a new CPF ...

- Numbered: CPF 2007-067S1
- Dated: 2007-10-02
- Titled: Definition of conformance





The spark ...

Suggested change:

The EPWG believes the definition of conformance to S1000D should be discussed, agreed, and added to the spec. Clear statements should be added which let users know precisely what they can and cannot do to remain conformant to S1000D

(such as

"Modifying the schema will create a non-conformance",

"Contradicting a 'must' statement will create a non-conformance", or

"A system does not need to implement every schema and every 'must' statement to be conformant").

Supporting reason:

S1000D should remove any room for interpretation of the meaning of conformance.



The work structure

In SC 04.00 (2009-07-02):

- Directive to the SC from Council:
 - *“The next issue (4.1) will therefore focus on the TIRs including better explanations and functionality. **It will include a definition of S1000D conformance and compliance.** It will include the four packages for **SB/CMP/GIPD and MPP.** The SC must therefore provide support in the form of TT for these items.”*
- Decision to initiate a task team - CCTT
(Svante E nominated chair)



The work



- Task team of some 14 members
- Utilizing our forum space for communication (drafts and comments)
- + mail communication
- A couple of webex review meetings (incl SC members)





The Statement Of Work

- Identify the areas, aspects, functions and features of S1000D that should be covered by conformance and compliance statements.
- For each identified case, write the statements defining conformance and compliance when S1000D is concerned.
- Suggest a suitable way to incorporate the conformance and compliance definitions into the S1000D suite of information.



The challenges

- S1000D adaptability
- Where do we find the statements that support our aim?
Is there such a statement?
- Catch/maintain the spirit of the specification
- Do not comprise any project that we all agree is compliant/conformant



WP & chapter amendments

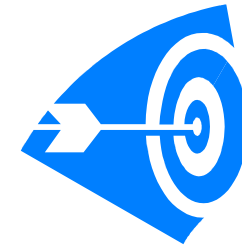
- WP was produced, suggesting
 - a few definitions
 - to enhance a few definitions
 - where to include the news into the S1000D chapter text
- New chapter text to go into Issue 4.1 -
revise Chapter 1.4 to become
 - 1.4.1 Tailoring introduction
 - 1.4.2 Conformance and compliance



The current status ...



Definitions



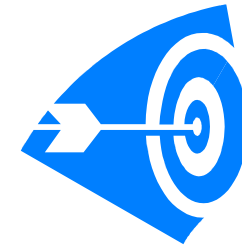
Definition of conformant/conformance:

“Conformant” and “conformance” refer to the similarity in form of one or another object to the specification of how such an object must be formed.

- An object, or a set of related objects, is **conformant** to S1000D if and only if it fulfills the form requirements of such an object, as specified by S1000D - eg a data module can be conformant.



Definitions



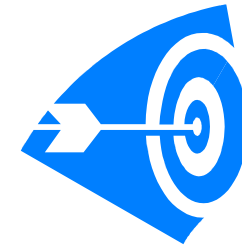
Definition of compliant/compliance:

“Compliant” and “compliance” refer to the adherence to one or another process or procedure as defined by a specification.

- A process step, a procedure, or the like, is **compliant** to S1000D if and only if it is carried out in accordance with what is specified by S1000D, and does not violate the criterion in Para 2.2.1 - eg the assignment of codes to denote responsible partner companies can be compliant.



Definitions



Definitions refined for:

- CSDB
 - CSDB management system
 - CSDB object
-
- Refinements amended to Chapter 4.2, *Information management - Common Source DataBase (CSDB)*



Aspects of S1000D

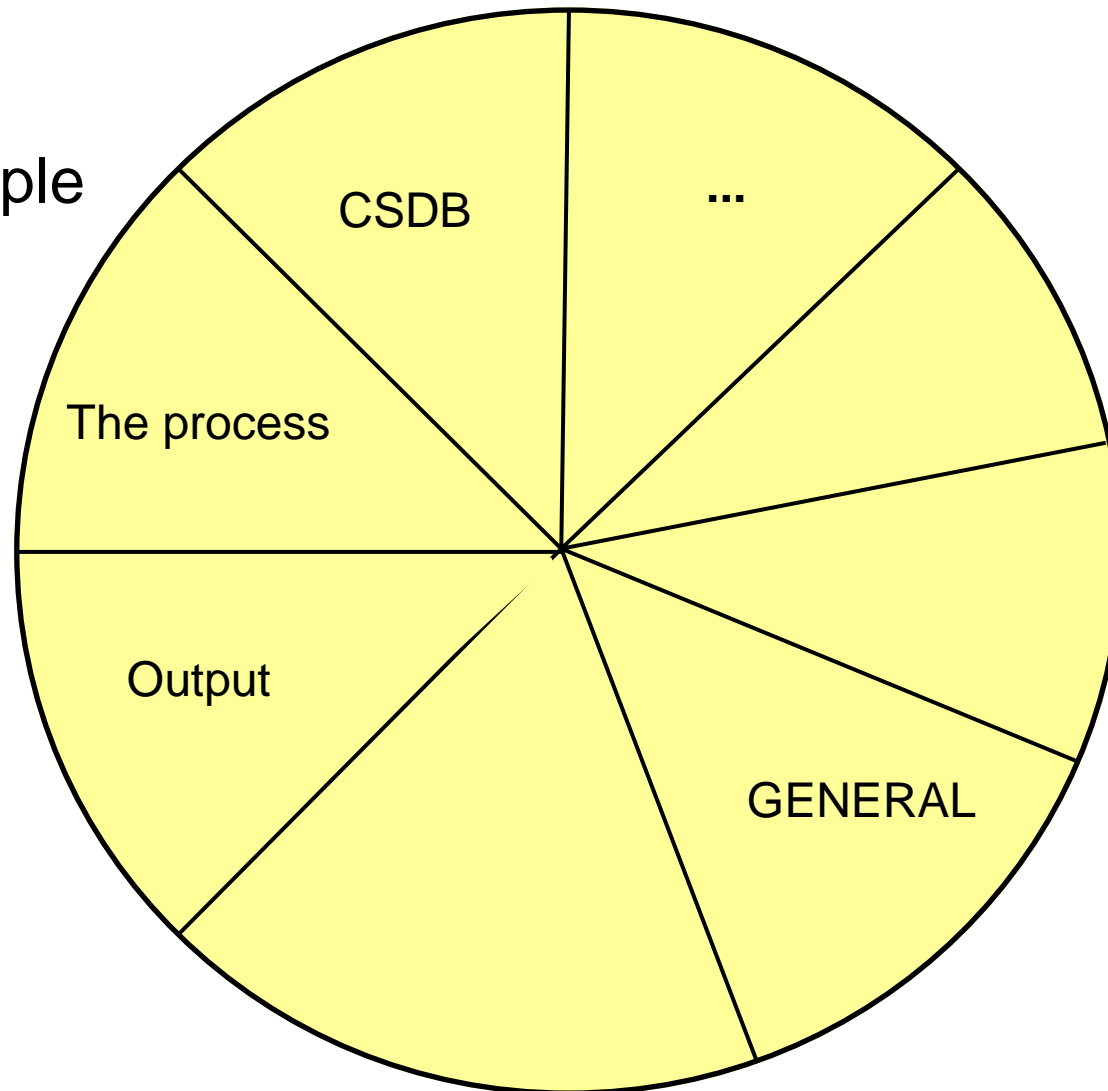
There are many aspects of S1000D

- General, overall properties
- The documentation process
- The CSDB and the CSDB objects that it contains
- Exchange of data between CSDBs
- Delivery and presentation of information to users in page-oriented format
- Delivery and presentation of information to users as IETPs



Aspects of S1000D

The principle





Core vs. options criteria

Core criteria

Criteria that must be fulfilled to achieve S1000D conformance and compliance.

(All of these must be fulfilled to achieve conformance/compliance to S1000D)

Criteria on aspect options

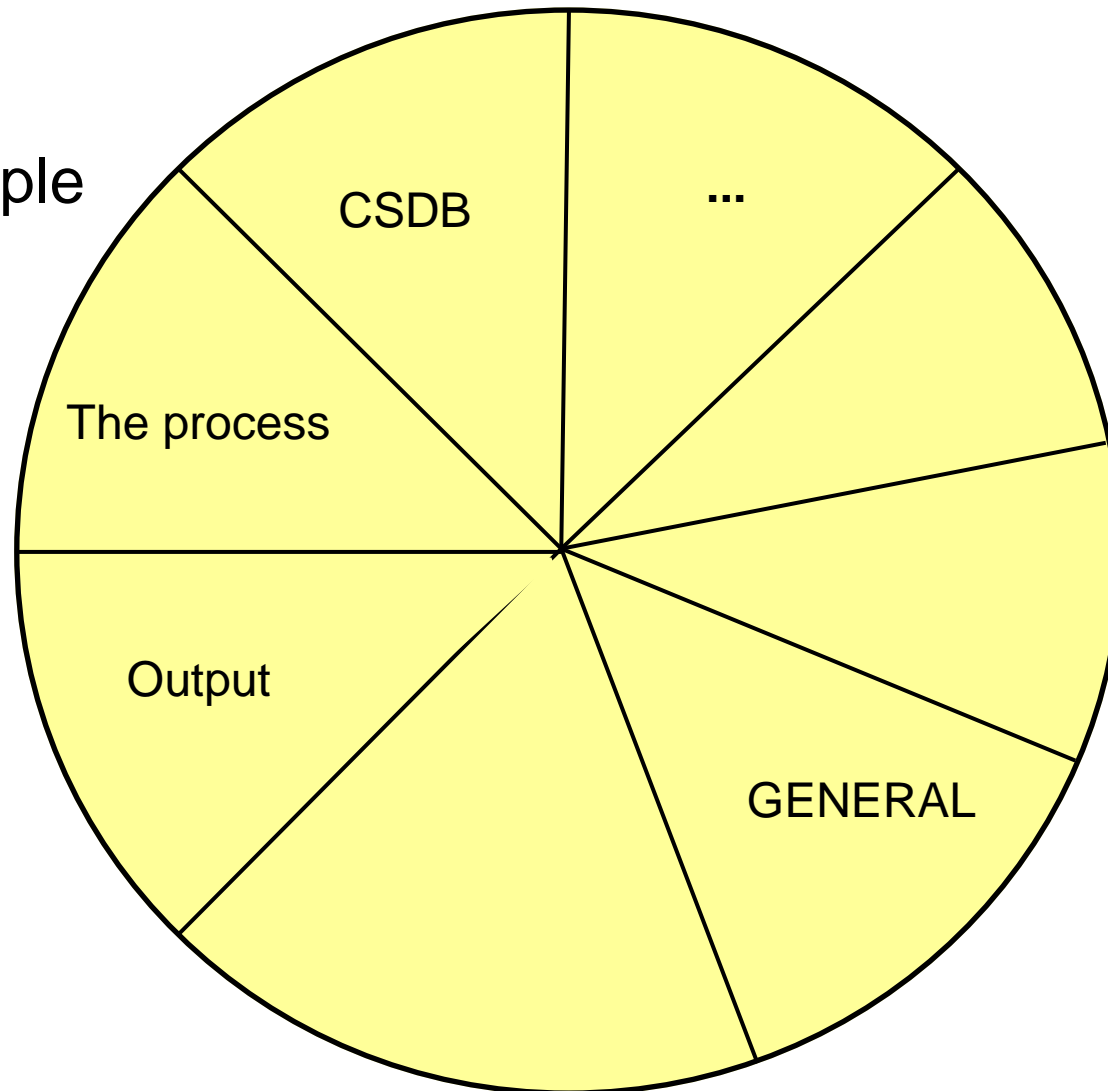
Criteria that must be fulfilled per aspect in order to achieve conformance and/or compliance regarding the aspect concerned.

The aspects themselves, however, may be fully or partially optional.



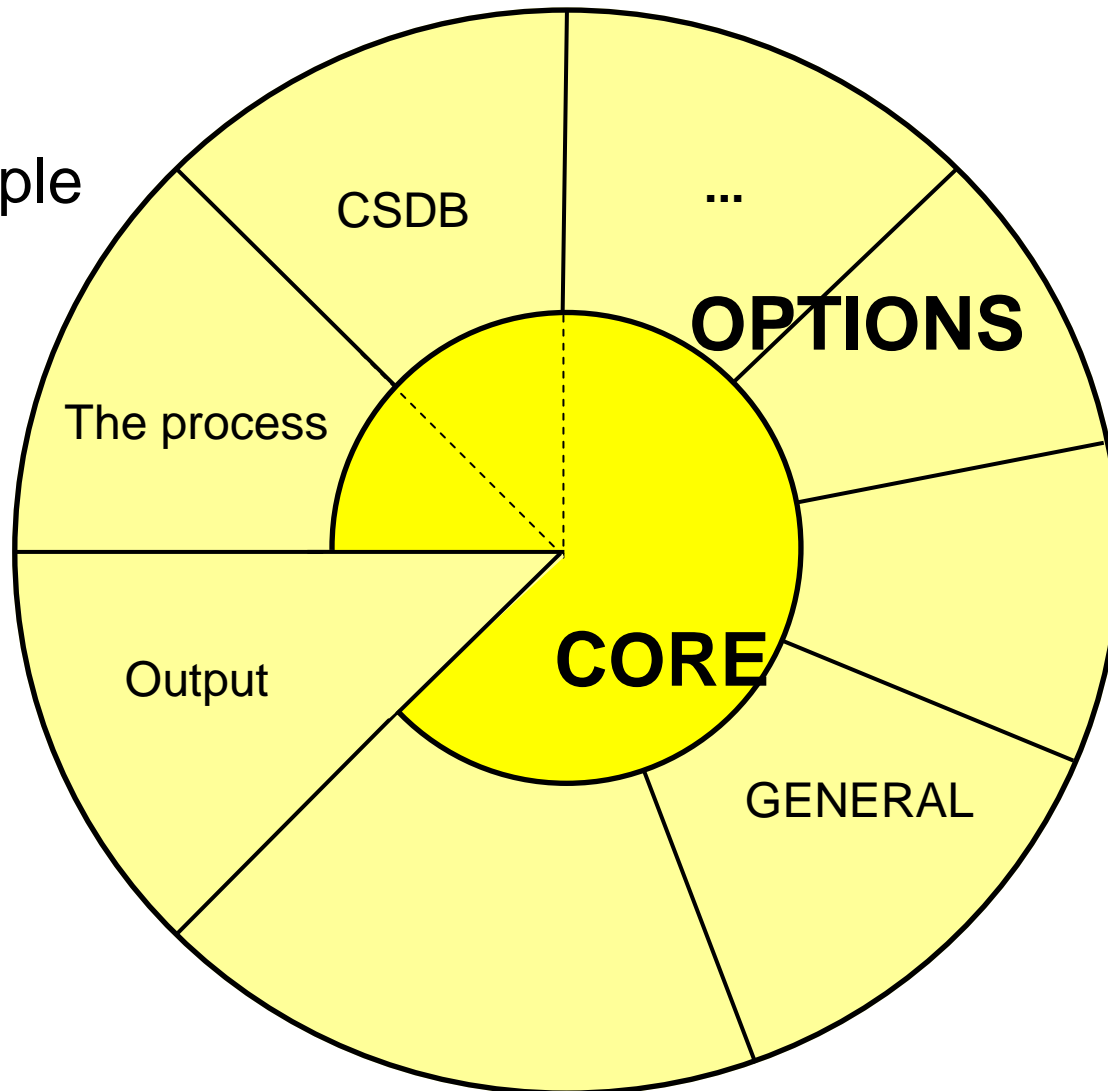
Aspects of S1000D

The principle



Aspects of S1000D

The principle





- There will be no criteria specified concerning software systems/tools because
- ... the Council and the SC will never try to endorse any software product of any kind

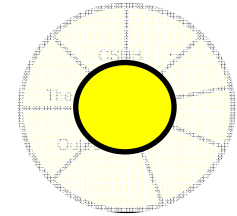


Criteria

(although still under consideration)



General core criteria



Issues of S1000D

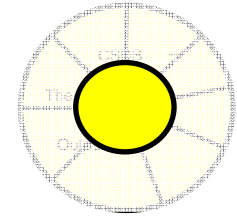
- A CSDB object that fulfills the criteria herein in relation to Issue 4.1 of S1000D is “conformant to S1000D Issue 4.1” (or “S1000D Issue 4.1 conformant”).

Schemas vs specification text

- An S1000D conformant XML object must meet the requirements defined by the applicable specification text **and** by the referred XML Schema. Unless explicitly supported by S1000D, an XML object **must not** depend on namespaces or any other XML data and feature to be fully understandable and possible to render as needed.



General core criteria

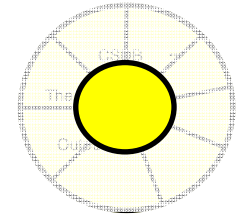


Business rules

- The business rules for a project or an organization must be defined, documented and provided to any party that needs to receive, create, manage or deliver CSDB objects to those rules.
- Business rules valid for a certain level in a layered business rules structure must obey the parent level business rules. Ultimately, business rules for a project or an organization must obey the business rules specified in the S1000D default BREX data module.
- A CSDB object must adhere to the business rules to which it is written and/or to which it refers.



Documentation process core criteria

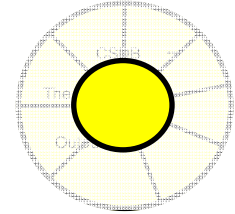


Process critical metadata

- To be S1000D documentation process compliant a documentation process must at a minimum fulfill the requirements described in Chap 3.9.5.1 (incl subchapters) with regard to:
 - Requirements for published and unpublished versions of objects
 - Security and data restriction requirements
 - Quality assurance requirements



CSDB/CSDB object core criteria

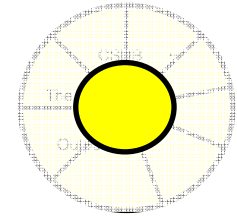


Conformance to Schema

- Any of the XML objects in a CSDB must fully conform to one of the Issue 4.1 Schemas provided by S1000D of (as given in the CSDB object's Schema declaration).
- Any one XML object must contain a reference to an S1000D XML Schema, the structure of which it is aimed to follow as described in the specification (refer to Chap 7.3.1.3).



CSDB/CSDB object core criteria

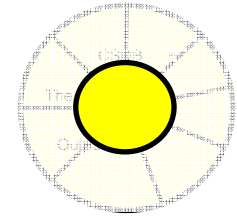


Identification of objects

- The identity of a CSDB object, incl objects not being S1000D recognized XML objects, must fully conform to the identification data structure that applies to its object type.
- Apart from the exceptions offered by the specification, the identification principle of a data module code must be applied to a data module, ie the identification must be built on two parts:
- The first part identifies the product item (up to and including the DCV)
- The second part identifies the type of information about the item



CSDB/CSDB object core criteria



Identification codes

- A CSDB object is S1000D conformant if and only if it does not deviate from the coding schemes offered by the specification.

Status of objects

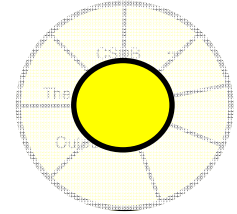
- All XML objects exchanged from a CSDB must be populated with the set of status/metadata items required by the applied issue of S1000D.

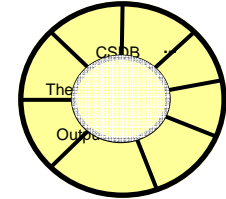


CSDB/CSDB object core criteria

CSDB object content section

- An S1000D conformant object must use the elements and attributes in accordance with the definitions expressed in S1000D including the referred XML Schema and the default BREX.





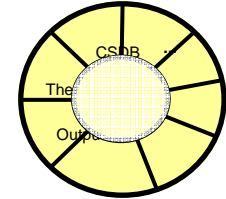
Criteria on aspect options

Criteria that must be fulfilled per aspect in order to achieve conformance and/or compliance regarding the aspect concerned.

The aspects themselves, however, may be fully or partially optional.



Aspect options criteria



Process related criteria

To be **S1000D process compliant**, a documentation process must apply

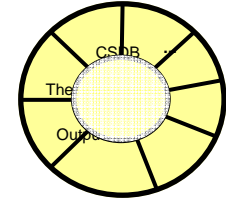
- DMRL/CSL objects in accordance with Chap 4.5
- Comment objects in accordance with Chap 4.6

Transfer criteria

An **S1000D conformant data transfer package** must fulfill all the applicable requirements specified in Chap 4.8 and Chap 7.5.



Aspect options criteria



CSDB delivery criteria

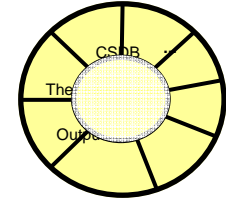
An **S1000D conformant CSDB data delivery package** is a data package defined and transferred in accordance with Para 2.3.1.3, Chap 4.8 and Chap 7.5.

IETP delivery criteria

An **S1000D conformant IETP data package** is a data package defined and transferred in accordance with Para 2.3.1.3 and which consists of objects conformant to IETP neutral repository format specified in Chap 4.8, Chap 7.4.1 and Chap 7.5.



Aspect options criteria



Page-oriented format publication criteria

An **S1000D conformant and compliant page-oriented format data package** must fulfill the requirements specified in Chap 6.2 of the specification.

IETP presentation criteria

An **S1000D conformant and compliant IETP presentation** must fulfill the requirements specified in Chap 6.3 of the specification.



The continuation ...



The new specification structure

- Issue 4.1 the first shot
- An obvious relation between
 - the envisioned new specification structure and
 - the core/options view reflected in new Chapter 1.4.2
- The new modular structure will require a revision of the specification of conformance and compliance
- The current results (Issue 4.1) will therefore be carried over to the new S1000D Modularisation Task Team



Questions?