Report from IEC/SC 3D to MoU/MG on January 2023

G. Rossi / IEC/SC 3D secretary

IEC/SC 3D at a glance

15
P-Members

16
O-Members

20
Liaisons

9
Publications

2
Publications as DB Standard

4
Projects under development

4
Working Groups

2
Officers
Chair: Lan YAMASHITA
Secretary: Gernot ROSSI

3
UN SDGs supported

IEC/SC 3D: Actual projects and tasks

Projects

- Development of **IEC 61360-1 ED5**
- Development of **IEC 61360-6 ED2** with a new title and extended scope
- Development of **IEC 62656-1 ED2**
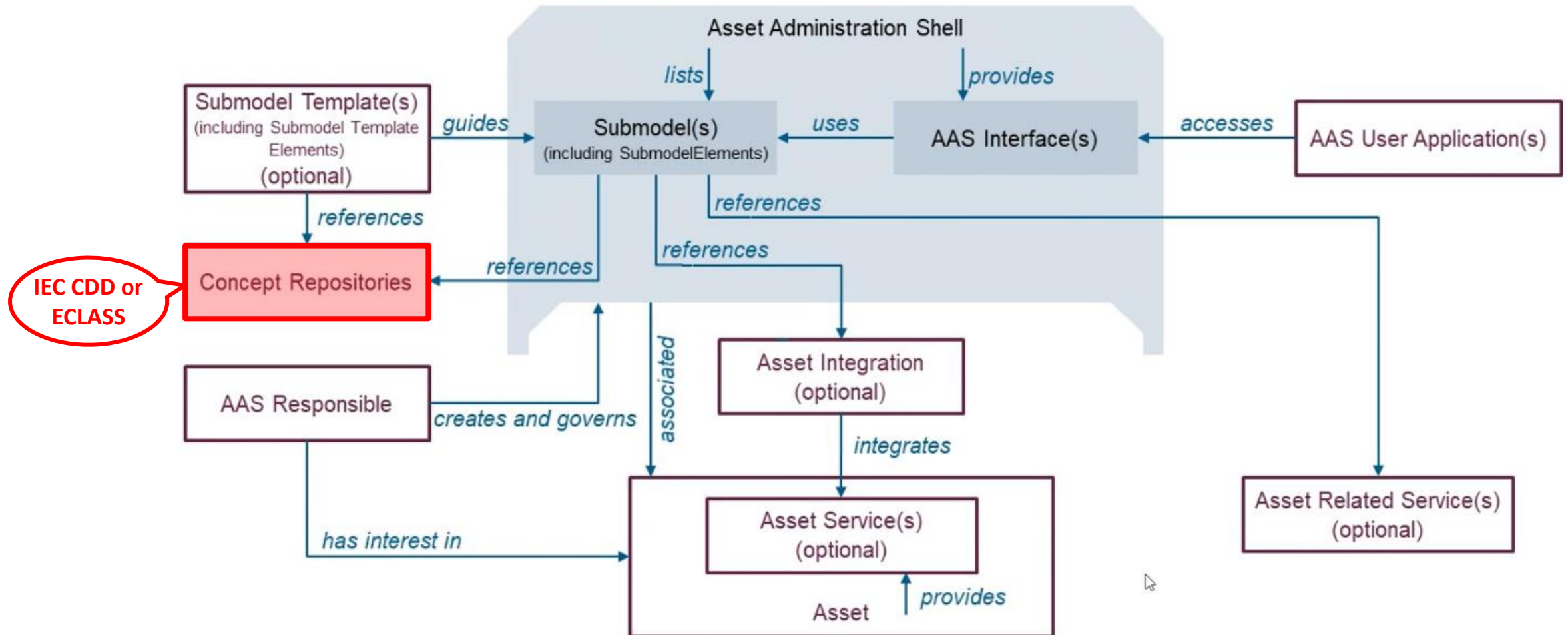- Maintenance of **IEC 62720 (UNITS OF MEASUREMENT)** in machine-readable form

Tasks

- Maintaining the **IEC CDD** (https://cdd.iec.ch). IEC CDD (Common Data Dictionary) is an IEC 61360-4 DB standard and serves as an essential means for publishing product data dictionaries based on ISO and IEC (content) standards.
- IEC CDD is an essential means for supporting unambiguous information exchange (**semantic interoperability**) in Industry 4.0, Smart Manufacturing and other domains
- Driving the "**SDB content procedure**" (according to Annex SK) to publish standards in IEC CDD
- Supporting several IEC and ISO TCs/SCs developing classification standards for publication in IEC CDD
- Supporting IEC SMB SG12 on the recommendations for **digital standards** (e.g. SIM - Standard Information Model)
- Starting collaboration with **IEC/TC111 on properties for PCF/GHG** (recommendation from IEC SMB ahG94)
- Supporting the **COMDO project** with partners from ECLASS, IEC and ISO to host the IEC CDD at a 2nd location (at ECLASS CDP) and to closer collaborate with ECLASS (e.g. harmonization of classes and properties).

IEC/SC 3D secretary - G. Rossi

IEC CDD (and ECLASS) are the two CONCEPT REPOSITORIES referenced by Submodels / Submodel Templates

COMDO (Common Data Repository): The IDEA

To sufficiently support the market needs a <u>single</u> COMMON DATA REPOSITORY for INDUSTRY 4.0 and other domains is requested. The two "big players" in the market - ECLASS and IEC - can provide such a REPOSITORY.

<u>Status:</u> This REPOSITORY is developed in 2 phases. Phase 1 (hosting of IEC CDD at a 2nd location - at ECLASS CDP) is in progress.

Common Data Repository
[based on IEC 61360/ISO 13584-42]

ECLASS CDP

ECLASS sector

ISO/IEC sector

⊕ Based on ECLASS standards
⊕ Developed and maintained by EGs
⊕ Responsibility and ownership for content: ECLASS
⊕ CR process: ECLASS

⊕ Based on ISO/IEC standards
⊕ Developed and maintained by WGs
⊕ Responsibility and ownership for content: ISO/IEC
⊕ CR process: IEC (ANNEX SK)

Content <u>development</u>

Content <u>export</u> (e.g. XML) to PDM, things and AAS

Web <u>services</u> (API)

IEC CDD

Content <u>exchange</u> (IEC 62656)