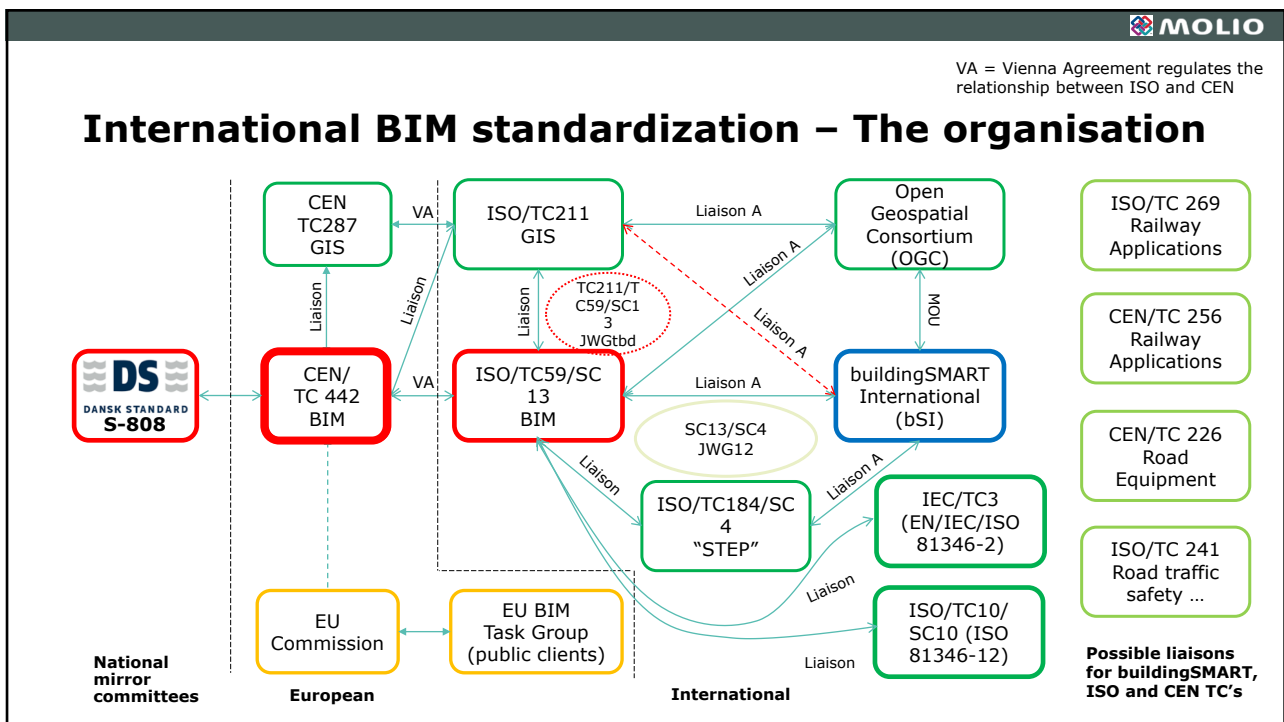# MOLIO

CONSTRUCTION INFORMATION CENTRE

ISO/IEC and CEN standardization activities + buildingSMART

ICIS DA, Cologne, June 2018

Gunnar Friborg, Molio, June 20th 2018

Agenda

- Organization and collaboration within BIM standardization and development

- Ongoing standardization in CEN/TC 442

- Ongoing standardization in ISO/TC 59/SC 13 and CEN/TC 442

- Ongoing standardization in IEC/TC3 + ISO/TC10/SC10

VA = Vienna Agreement regulates the relationship between ISO and CEN

International BIM standardization – The organisation

Ongoing standardization in CEN/TC 442 – 1

- **The 4 buildingSMART-standards** – ISO 16739 about IFC, ISO 29481-1 and -2 about IDM, and ISO 12006-3 about bSDD – are now all agreed as EN-standards

- **Methodology to describe, author and maintain properties** – facilitating property data - standardization process started

- **Product data templates - part 1** – structure for product data/property data and the relationship with IFC - standardization process started

- **Product data templates - part 2** – principles and structure for product data based on harmonized technical specifications (CE) under CPR – standardization process started

Ongoing standardization in CEN/TC 442 – 2

- **Level Of information Need** – about LOD, LOI, LOG, etc. – standardization process started, and first draft is due to be delivered for first internal TC commenting

- **Digital information exchange** – Definition of activities and transactions – use cases of built assets within a framework of steps of maturity and activities – proposals for standardization initiated

- **Interconnected object libraries** – how to structure, set up common standardized rules and API accesses – proposed to be initiated

Ongoing standardization in ISO/TC 59/SC 13 + CEN/TC 442 – 1

- **ISO/EN 19650-1 – Information management using BIM – Part 1** – terminology and principles for roles, procedures, processes and services (UK-proposed and based on PAS 1192-series), to be released in autumn

- **ISO/EN 19650-2 – Information management using BIM – Part 2** - specifies demands for information deliverables (UK-proposed and based on PAS 1192-series), to be released in autumn

- **ISO 16757-1 – Data structures for electronic product catalogues for building services – Part 1** - digital methodology and structure for product data and product catalogues, being connected with building modelling, to be prosed also as a CEN-standard

- **ISO 16757-2 – Data structures for electronic product catalogues for building services – Part 2** – methodology for parametric modelling of geometrically defined objects and their property data/product data, to be prosed also as a CEN-standard

Ongoing standardization in ISO/TC 59/SC 13 + CEN/TC 442 – 2

- **ISO 29481-3 – Information container for data-drop** – formalized structure, process and documentation principles for agreement about quality, time and economy – based on Netherland, Finland and Germany experiences – standardization process started

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- **ISO/EN 12006-3 – Building construction – Organization of information about construction works – Part 3: Framework for object-oriented information** – revision started (the basis for bSDD, terms and property data.

Ongoing standardization in IEC/TC3 + ISO/TC10/SC10

- **EN/IEC/ISO 81346-2 – Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations – Part 2: Classification of objects and codes for classes** – revision process nearly finished – *includes among other contributions defined spaces and component classes* taken from CCS- and CoClass-development work. It is also coordinated with ISO 12006-2 principles and related terminology and classification standards.

- **ISO 81346-12 – Industrial systems, installations and equipment and industrial products – Structuring principles and reference designations – Part 12: Construction works and building services** – the application-standard is just released – *includes among other contributions defined functional and technical systems classes* taken from CCS- and CoClass-development work. It is also coordinated with ISO 12006-2 principles and related terminology and classification standards.

buildingSMART – ongoing activities

- Quantity Take Off

- Energy Estimation

- Model Set up IDM

- Best modeling practice

- Infrastructure (5 development acitivities: IFC Alignment, Integrated Built Environment Life Cycle Model, International IFC-Roads, Infra Asset Management, IFC Bridge)