

Tools and Data Subcommittee

Standards as Digital Data

SDD Taxonomy / Ontology Project

- Description

- Authoritative vocabulary for product data interoperability

“A list of subject headings or descriptors usually with a cross-reference system for use in the organization of a collection of data for reference and retrieval” *From the definition of thesaurus.*

- Objectives

- Common structure / taxonomy for data across enterprise
- Open Standard
- Ultimately owned and maintained by an SDO

SDD Taxonomy / Ontology

- Capabilities
 - Ability to seamlessly share SS data
 - Within enterprise
 - Throughout supply chain
 - With partners and customers
 - With digital tools
 - Ability to create Web Scale Interoperability
 - How to organize data

SDD Taxonomy / Ontology Open Standard

Output Deliverables

- High Level Data Structure
 - Names
 - Characteristics
 - Tree – Relationships
- Business Case
 - Arguments for Adoption
 - Benefits of Adoption
 - How to Get Started and Implement

Semantic Web for Interoperable Specs and Standards (SWISS)

- An open standard and platform to create and share fully electronic, interoperable documents as digital models. The SWISS model enables:
 - Composite documents: organized collection of references
 - To precise fragments
 - From authoritative sources
 - Change aware
 - *Smart-Links* to navigate between related concepts
 - Documents as Data
 - Multiple applications to share across an enterprise, its customers and suppliers:
 - Purchase Requirements
 - Manufacturing work instructions
 - Test procedures

Semantic Web for Interoperable Specs and Standards)

- SWISS extends parts management technology to manage complex product requirements based on diverse industry, commercial and military specifications and standards.
- SWISS Business benefits for the end user in component, manufacturing and quality engineering:
 - Derivative work uses authoritative sources for standards data
 - Consistency in standards interpretation between different users reduces costly quality problems
 - Getting to the right information faster significantly reduces time-to-knowledge
 - Change management is less time consuming
 - Reduce IP leakage
- SWISS Business benefits for Standards Development Organizations:
 - Reduce IP leakage and expand user base
 - Understand the impact of external changes
 - Understand how users use standards

Intersection of SDD Vocabulary & SWISS

- SDD Vocabulary will be developed in collaboration with SWISS Consortium
- Vocabulary will be used as part of SWISS data structure
- Vocabulary will be mapped to related terms (including synonyms and aliases)
- APPs may be developed using mapping
 - Searching
 - Integration with existing systems
 - Regulatory Impacts