DORIC-MM @ESWC2021: Highlights from 15/03

OntoCommons focused workshop

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FW 3.1: goals and outcome in a nutshell

- **Goals:** support the semantic landscape analysis in the materials and manufacturing (MM) field

- **Target:** both ontologists and MM domain experts

- **Outcome (partial, as the event is not over yet):**

    - List of relevant domain ontologies
    - List of relevant initiatives
    - Example of use cases (as brief texts)
    - Ideas on semantic and usage landscape (what is there) and gaps (what is missing) in four domains. Namely: Physics and Chemistry, Mechanical and Industrial Engineering, Thermal and Process Engineering, Material Science
    - Opinions and ideas about standardization, semantic technologies, and strategies (in general and for the MM field).

The 7th June event is addressing, *via* specific examples, conceptual, technical and cultural/political aspects, such as: Ontology design, ontology extension, technology uptake

Where are we?

- Where are we?
- Where do we want to go?
- How do we get there?

Text adapted from E. Cecioni, "Uso della carta topografica", 1987.

Highlights from the 15 March event: Mentimeter

- "What are the <u>main difficulties for standardization</u> in general?" → "<u>Conceptual:</u> building a good framework", closely followed by "<u>Cultural/political:</u> reaching an agreement".

- What are the main adverse factors for standardization of data documentation <u>in M&M</u>? → "<u>Lack of long term and community vision</u>".

- "Do you know where to find ontologies for your field?" Only 25% said "Yes" →<u>There is an issue with findability.</u>

- "Do you have a clear understanding of how semantic technologies can support your work?" 50% said "Yes", and 50% "Maybe" or "No". → Clearly, <u>to improve the uptake of semantic technologies, their benefits need to be further explained/demonstrated to MM domain experts.</u>

Highlights from the 15/03: final plenary

- Different levels of standardization in the domains: while in some of our domains we have standards at the level of ISO, in others we are very far from that (e.g., a CWA).

- Standards are key, but very hard/impossible to be produced within the timescale of a typical EU project. Unless the project is really about just producing the standard, this tipically needs extra funding and time to be realized after the project is over.

- *De facto* standards are also important, and for that it is needed to get commercial partners on board (could be manufacturers, software vendors).

- What is the incentive for large vendors, who might prefer their own proprietary standards? If industrial end-users push for this, it is possible to get large vendors on board too (see e.g. the case of Cape-Open).

Highlights from 15/03: final plenary (cont.)

- Importance of <u>demonstrators</u>.

- <u>Meaningful data sharing</u> is becoming more and more a clear need.

- <u>Global semantic alignment</u> is a requirement.

- Industry, Standardisation organisations, Universities, Supporters of data spaces are all relevant actors.

Note: you can see a copy of the **full 15/03 Miro board** at the bottom of the one we are using today

And the results for the Mentimeter interactive presentation here

https://ontocommons.eu/sites/default/files/DORIC-MM_kick-off_interactive_talk_with_results_SC.pdf

Thank you for your contribution!

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