

OntoCommons

Ontology-driven data documentation for Industry Commons

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ABSTRACT

OntoCommons lays the foundation for interoperable and standardised data documentation across all materials and manufacturing domains, thereby facilitating data sharing and pushing data-driven innovation to bring out a truly Digital Single Market and new business models for European industry to meet the opportunities of digitalisation and sustainability challenges.

This will be achieved by coordinating a wide range of EU stakeholders for the development of an Ontology Commons EcoSystem (OCES) that comprises a set of ontologies and tools following specific standardisation rules. OCES provides a sustainable approach to harmonised data documentation through ontologies, making the data FAIR (Findable, Accessible, Interoperable and Reusable), and implementing practical and user-friendly mechanisms of intra- and cross-domain interoperability focusing on materials and manufacturing sectors. Demonstration cases with strong industrial involvement covering a wide range of NMBP application domains and stakeholders' feedback loops will guide the OCES development to prove its effectiveness in accelerating data-driven innovation.

OntoCommons represents relevant stakeholder knowledge by bringing together a consortium from a wide range of communities, including subject-matter experts (e.g. material scientists), ontologists (e.g. philosophers, semantic web experts), implementers (e.g. database experts), industrial end users (e.g. manufacturers), and application developers.

OntoCommons will achieve its aims through activities consistent with its CSA nature, building on communication, networking, coordination and cooperation between EU and international stakeholders connected with relevant National, European and international projects, initiatives and bodies (incl standards organisations) facilitating the access to the available state of the art and emerging tools and solutions as well as the harmonisation of already existing EU funded initiatives, making efficient use of EU resources.

REFERENCES

<https://ontocommons.eu/>



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