



2020
Annual **INCOSE**
international workshop
Torrance, CA, USA
January 25 - 28, 2020

Knowledge Management & Ontologies

www.incose.org/IW2020

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MEMBERS
16

CO-CHAIRS

Jean Duprez (jean.duprez@airbus.com)

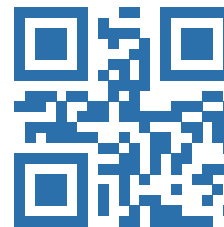
Robert Nilsson (robert.nilsson.2@volvocars.com)

INCOSE CONNECT ADDRESS



<https://connect.incose.org/WorkingGroups/KnowledgeManagement/Pages/Home.aspx>

INCOSE WEB PAGE



Not updated

Charter Summary



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WG PURPOSE/MISSION

The purpose of the Knowledge Management (KM WG) is to expand and promote the application, education and theory of knowledge management (in the form of all possible knowledge representation schemas, including Ontology) for Systems Engineering as a means to reduce or eliminate existing barriers in the SE practice.

WG GOAL(S)

We propose the application of knowledge management (using ontology and other knowledge representation structures) as a driver within systems engineering practice to enable processes, methods and tools harmonization. More specifically, the intention of this working group is to create outcomes that enable the harmonization and interoperability of initiatives, processes or activities and to remove or overcome existing barriers (computational, social, linguistic, etc.) among them.

WG SCOPE

Activities relating to best practices for Knowledge Management:

- Application of the knowledge management process activities to concrete implementations in industry.
- Knowledge Organization Systems (KOS)
- Ontologies Definition, Construction and Representation
- Models and knowledge information Indexing and Retrieval
- Knowledge Comparison, Visualization, Access and Trace
- Ontologies Management and Evolution
- Ontologies Verification and Valid

IW Outcomes



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IW Outcomes

- Presentation of new chairs
- Refreshed Charter
- Status review of the work on primer / white paper 2019
- Collaboration with other working groups e.g. SoS, Architecture and System Science deepened
- Open discussion of principles and case of applications

Planned Work past IW



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PLANNED ACTIVITIES

- WG meetings - first "kick off" for further planning, 11 February, 10-11 am, contact-person for participation Jean Duprez
- Contact with members of other WG
- Discussion on feedback on "upper ontology" to share knowledge across WG is to be deepened e.g. SoS, Smart City and Architecture
- Practical Use Case for using ontology as a mean for applying semantic approaches to MBSE, contact-person KM-WG is Jean Duprez
- Filling in TPP for Knowledge Management Primer / Product
- Set up KM homepage at INCOSE properly
- On request support TechOps with a first WG-graph-setup, contact-person KM-WG is Robert Nilsson
- Collaborate with ArchWG on a guide of how to use Arch standard 42020, contact-person KM-WG is Robert Nilsson

PLANNED WORK PRODUCTS

Knowledge Management Primer to be released 2020/2021

Knowledge Management White Paper to be released 2020

Paper for IS2021