



2019

Annual **INCOSE**
international workshop

Torrance, CA, USA

January 26 - 29, 2019

Architecture

www.incose.org/iw2019

Architecture



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CHAIR

Mike Wilkinson (mike.wilkinson@atkinsglobal.com)

MEMBERS

10 core, 150 occasional

CO-CHAIRS

Richard Martin (richardm@tinwisle.com)

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INCOSE CONNECT ADDRESS



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

INCOSE WEB PAGE



<http://www.incose.org/Chapters/Groups/WorkingGroups/process/architecture>

Charter Summary



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WG PURPOSE/MISSION

The purpose of the AWG is to expand the practice of architecture and advance the body of knowledge. Architecture is an integral part of the concepts and practice considered by Systems Engineering (SE) and other disciplines/specialities, and it must evolve with ongoing advancements whatever their origin. Therefore a standing working group is needed to facilitate and focus ongoing advances in all levels and types of Architecture and to support collaboration across INCOSE, across disciplines/specialities and with other international bodies that have a common interest.

WG GOAL(S)

The primary stakeholders of the AWG are practitioners, researchers, domain experts and tool developers in all levels and types of Architecture. The AWG seeks to accomplish standing goals and goals are established each year at the INCOSE IW.

Within the context of Systems Engineering, the AWG pursues the following standing goals:

- Advance and evolve the body of knowledge on architecture
- Promote the use and practice of architecture
- Share best practices for the use of architecture
- Expand the effort in architecture related standards and specifications.

These goals are conducted in association with other bodies where appropriate. For example, over several years the ISO working groups JTC1/SC7/WG42 and TC184/SC5/WG1 have been 'customers' for AWG input and collaborations with the IEEE, OMG and FEAP0 have been established.

WG SCOPE

The AWG will address Architecture in relevant areas (such as Traditional Systems, Enterprises and Software) as it relates to Systems Engineering applied to all levels and types of systems.

IW Outcomes



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IW Outcomes

Total attendance – 34

Presentation, including Q&A, from editors of both SE Handbook and SE Body of Knowledge

Agreed to respond to Tools Database inquiries as a WG rather than individually

Agreed to continue supporting UK Architecture Styles initiative

Agreed to support work by UK and India Chapters to produce guides/primer for System Architecting and encourage both chapter to work with INCOSE on international distribution

Discussed need to continue alignment and convergence of the various civil and military oriented architecture frameworks (i.e. NAF, UAF, TOGAF, Archimate, etc.) as a single effort beyond 90% to avoid confusion in user community

Discussed ways in which architecture facilitates dialog between system science and system engineering communities (result of presentation on use of Effects-based Models)

Agreed to support continued work to complete standards documents in process – ISO/IEC/IEEE/WD 42010.2, ISO/IEC/IEEE 42020, ISO/IEC/IEEE 42030, ISO 15704.2, and ISO/IEC/NW 42021

Discussed use of 420xx standards and UK styles approaches to architecture in context of product lines

Discussed terminology concerns of INCOSE liaison w.r.t. ISO 15704.2 and need for better explanation of term use and meaning

Planned Work past IW



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PLANNED ACTIVITIES

Support to SE Handbook and SE Body of Knowledge updates

Support to Tools Database initiative

Support to alignment and convergence of the various civil and military oriented architecture frameworks (i.e. NAF, UAF, TOGAF, Archimate, etc.)

Cross WG activity involving System Science and Architecture Working Groups

Support to standards documents in process – ISO/IEC/IEEE/WD 42010.2, ISO/IEC/IEEE 42020, ISO/IEC/IEEE 42030, ISO 15704.2, and ISO/IEC/NW 42021

PLANNED WORK PRODUCTS

Specific inputs to SE Handbook and SE Body of Knowledge, to be determined

Domain specific inputs to Architecting Styles initiative, to be determined

Production of International AWG introductory guide for System Architecting, based on work by UK and India Chapters