2019
Annual **INCOSE**
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Telecommunications Working Group

www.incose.org/iw2019

Telecommunications Working Group

CHAIR
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MEMBERS
17

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INCOSE CONNECT ADDRESS   INCOSE WEB PAGE

Charter Summary

WG PURPOSE/MISSION

The main purpose of the Telecommunications Working Group (WG) is to improve telecommunications services by developing a body of knowledge that advances systems engineering of telecommunications solutions.
The Telecommunications WG will lead this effort within INCOSE; in liaison with external telecommunications experts, standardization bodies, organizations and communities.

WG GOAL(S)

To improve delivery of telecommunications services and solution by demonstrating practical application of systems engineering best practices.

To develop a community of telecommunications specialists within INCOSE (pool of knowledge) through various efforts including, but not limited to:

- Developing papers to be presented during International Symposia
- Establishing project specific working relations with telecommunications experts, standardization bodies, organizations and communities; a living N^2 document shall be maintained to show these relationships
- Enhancing the INCOSE Systems Engineering Book of Knowledge (SEBoK) and the INCOSE Systems Engineering Handbook to show how systems engineering improves delivery of telecommunications services and solutions
- Initializing project specific working relationships with other INCOSE WGs; a living N^2 document shall be maintained to show interaction with other INCOSE WGs.

To promote, encourage, supervise and perform research where it specifically improves practice of systems engineering for telecommunications.

WG SCOPE

This WG will address processes, methods and tools; organizational aspects; business and information requirements; as well as human aspects (competencies) related to engineering of telecommunications systems.
The WG aims to support telecommunications systems providers and major users, such as:

Charter Summary

- Large communications network providers
- Critical and emergency services telecommunications networks
- Defense, transportation and other government telecommunications networks

The WG will focus on collaboration with other relevant WGs/Initiatives and with external experts and bodies or organizations will be explored and established as appropriate.

The WG will also reach out to various industries, government and academia to widen their representation within the WG. (non-goal: duplicate other WGs in this forum. The goal is to keep this WG group very small to minimize duplication and maximize influence).

IW Outcomes

IW Outcomes

Working Group Session 1:

- 17 attendees in total (10 in Torrance; 7 remote), with 9 from Australia, and 8 from the US.
- Introduction of Working Group achievements in last 12 months (as Australian-based), and plans for INCOSE WG
- Review of a "Guide for the Application of Systems Engineering to Communications Systems" with aim to publish as INCOSE product; with many actions to update.
- Update key working group associations based on more recent contacts and ideas (CIPR, Resilience, Agile, Systems Security, MBSE, SoS)
- System-of-Systems consideration (for "ad-hoc" networks etc.)

Working Group Session 2:

- Review of Draft WG Charter
- Further review of Guide
- Develop plans for 2019 projects

Planned Work past IW

PLANNED ACTIVITIES

Planned Formalization of WG:

- INCOSE TechOps agreement on plan for formal establishment of INCOSE Telecommunications WG by end Feb 2019, including INCOSE Technical Director approval on Charter
- INCOSE Telecoms WG plan reviewed, with an agreed plan by have it published on the INCOSE WG site by end Mar 2019

Project Proposals:

- (1H2019) – Model Based Systems Engineering for Telecommunications (deliverable paper & presentation at SETE2019 / presentation at IS2019, formal paper for subsequent IW, IS, ASEW, SETE)
- Security Systems Engineering for Telecommunications (2H2019)
- Resilience of Critical Telecommunications Infrastructure (2H2019)
- Agile SE for Telecommunications (2H2019)

Opportunities for ongoing engagement:

- WG meetings, International Telecommunications WG meeting established by Feb 2019 (weekly meeting rhythm, time, place, mailing lists); INCOSE WG page set up.

PLANNED WORK PRODUCTS

- INCOSE Telecoms Guide to the Application of Systems Engineering for Communications Systems reviewed, with an agreed plan for its publication as INCOSE Technical Publication by end March 2019
- Reference Model for MBSE of Telecommunications Network Systems