Architecture

www.incose.org/IW2021

CHAIRS

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INCOSE WEB PAGE

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

INCOSE CONNECT ADDRESS

http://www.incose.org/ChaptersGroups/WorkingGroups/proce
ss/architecture

20 regular members and over 250 corresponding members

Charter Summary

WG PURPOSE/MISSION

The purpose of the ArchWG is to expand the practice of architecture in Systems Engineering and advance the body of knowledge. Architecture is an integral part of the concepts and practice of Systems Engineering (and other disciplines) and must evolve with ongoing advancements whatever their origin. Therefore a standing working group facilitates and focuses ongoing advances in all extents and types of Enterprise and System Architecture and supports collaboration across INCOSE, across disciplines and with other international bodies that have a common interest in SE-based architecture.

WG GOAL(S)

The stakeholders of the ArchWG are practitioners and researchers in all kinds of Enterprise and System Architecture. The ArchWG seeks to accomplish standing goals and goals established each year at the INCOSE IW event.
Standing goals are defined as follows:

- Advance and evolve the architecture body of knowledge
- Promote the use and practice of architecture principles in systems engineering
- Share best practices for the use of architecture in enterprise and systems engineering projects
- Develop the practice of architecture within ArchWG members? home organizations
- 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/IEC working group JTC1/SC7/WG42 has been a ?customer? for ArchWG input. Collaborations with the IEEE and the OMG have been established.

Charter Summary

WG SCOPE

The ArchWG addresses the domain of Enterprise and System Architecture as it relates to Systems Engineering applied to all kinds of systems.

OUTCOMES (PRODUCTS/SERVICES)

The ArchWG aims to provide a variety of products and services, including:

- Support to events at chapter and sector level
- Conference and journal papers
- Publicly available discussion papers
- Guidance documents and tutorials
- Review and input to external publications (e.g. standards)

Current projects include:

- Review and comment for ISO/IEC/IEEE/DIS 42010 Ed2 Architecture description
- Update revisions for SE Handbook sections on architecture and design
- Preparation of a Guide to 42020
- Revision of FEAPO white paper - A Common Perspective on Enterprise Architecture

The detailed program of activities varies on an annual basis.

IW OUTCOMES

1.1   Guide to ISO/IEC/IEEE 42020 - Architecture Processes

1)   Total Attendance ? 54 (Use Case for 42020 Session 1 and Session 2)
2)   Interactive Presentation, including Q&A, from editors of the Guide
3)   Released Working Draft 1 of the Guide to ISO/IEC/IEEE 42020:2019 INCOSE product for review
4)   Prepared Overview of ISO/IEC/IEEE 420x0 standards as background material for the guide
5)   Prepared 4 Case Studies as background material for the guide
6)   Discussed ways in ArchWG members can contribute to the Guide
a.   Review of the Guide
b.   Contribution as Author to some sections in the Guide
7)   Agreed to collaborate with Knowledge Management WG for modeling the ontology, the vocabulary of Architecture and scenarios

1.2   Review of ISO/IEC/IEEE/DIS 42010 Ed2 ? Architecture Description

1)   Draft shared for review by ArchWG members, INCOSE India ArchWG, AFIS ArchWG and INCOSE UK ArchWG

1.3   EA Process Guide for Unified Architecture Framework (UAF)

1)   Attendance - 71
2)   Informed audience about UAF development strategy and progress
3)   Presented example model
4)   Answered questions regarding UAF modeling and tools

IW Outcomes

PLANNED ACTIVITIES AFTER IW

1.1　Guide to ISO/IEC/IEEE 42020 Product

1) Working draft 1 to be reviewed by ArchWG Members
2) Comments from Reviewers to be resolved
3) Contributions from ArchWG members to be incorporated in the working draft
Note: aim is the publish the Guide as a ISO Technical Report in 2023.

1.2　Review of the Final Draft of International Standard of ISO/IEC/IEEE 42010

1) Draft to be shared for review by ArchWG members, INCOSE India ArchWG, AFIS ArchWG and INCOSE UK ArchWG

1.3　SE Handbook Edition 5

1) Propose a new section on Architecture Characteristics for Part 5
2) Propose a new case study on Search and Rescue Architecture for Part 6
3) Propose a new case study on Product-Service Systems Architecture for Part 6
4) Update Draft A based on the review comments from SE Handbook editors
5) Wider circulation Draft to be shared for review by ArchWG members, INCOSE India ArchWG, AFIS ArchWG and INCOSE UK ArchWG
6) Comments from Reviewers with regard to Architecture sections (3.5.4, 3.5.5, 1.6, 4.2) to be resolved
7) Update Draft based on the review comments from wide circulation review

1.4　UAF v1.2

1) Review UAF v1.2 draft and submit comments to OMG

IW Outcomes

PLANNED WORK PRODUCTS AFTER IW

1.1 Guide to ISO/IEC/IEEE 42020 Product

1) Working draft 2 to be released by IS 2021
2) Working draft 3 to be released by IW 2021