



International Council on Systems Engineering

A better world through a systems approach

INCOSE

FuSE

The Professional Society for Systems Engineering

PRESENTER: TOM STRANDBERG



INCOSE

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A better world through a systems approach



CONNECT



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PROSPER

INCOSE is the premier choice of systems engineers for professional development. With over 30 years of experience, we are shaping the future of systems engineering. We interact with systems engineers across the globe on a daily basis to set standards.



21,000

**Members and
CAB Associates**



126

**Corporate
Members**



52

Working Groups



65

**Chapters
Worldwide**



75

**Countries with
Active Members**



Mission and Vision

VISION: A better world through a systems approach.

MISSION: To address complex societal and technical challenges by enabling, promoting, and advancing Systems Engineering and systems approaches.

OBJECTIVE: Global leader for systems engineering professionals for career development.

FUTURE: Lead the future of systems engineering, academically, in emerging domains, and in practice.

Conferences and Events

Human Systems Integration 2022



International Workshop 2023



2023
Annual **INCOSE**
international workshop
HYBRID EVENT
Torrance, CA, USA
January 28 - 31, 2023

Europe, Middle East, Africa (EMEA) Workshop and Systems Engineering Conference (WSEC) 2023



International Symposium 2023

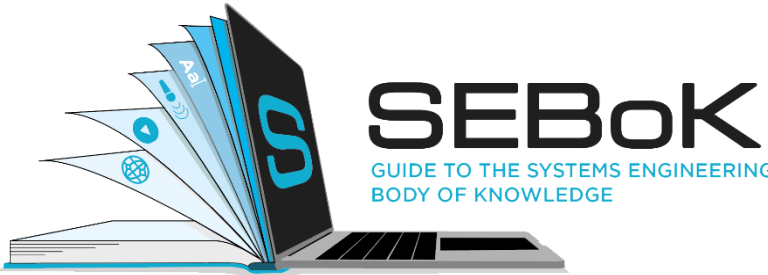


33rd Annual **INCOSE**
international symposium
hybrid event
Honolulu, HI, USA
July 15 - 20, 2023

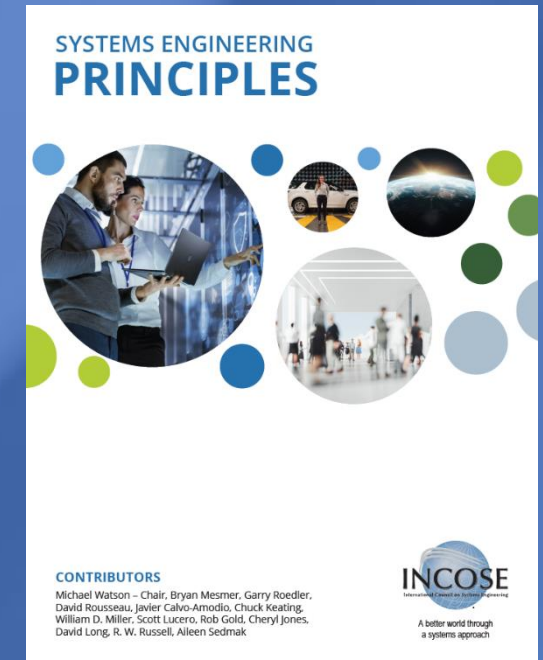
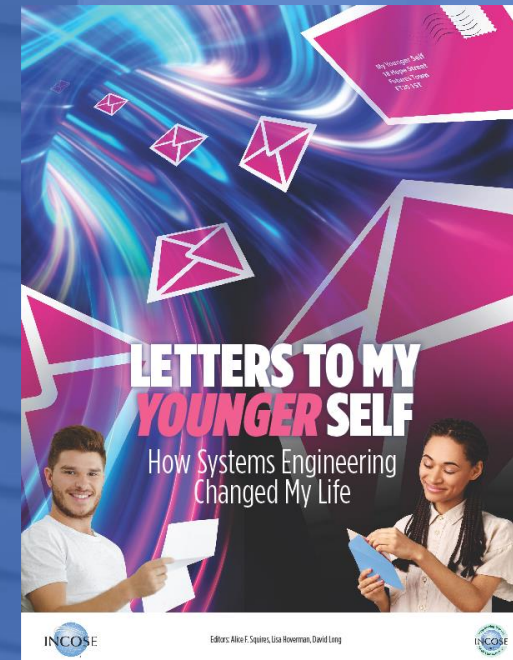
LEARN MORE:

incose.org/events-and-news

Resources



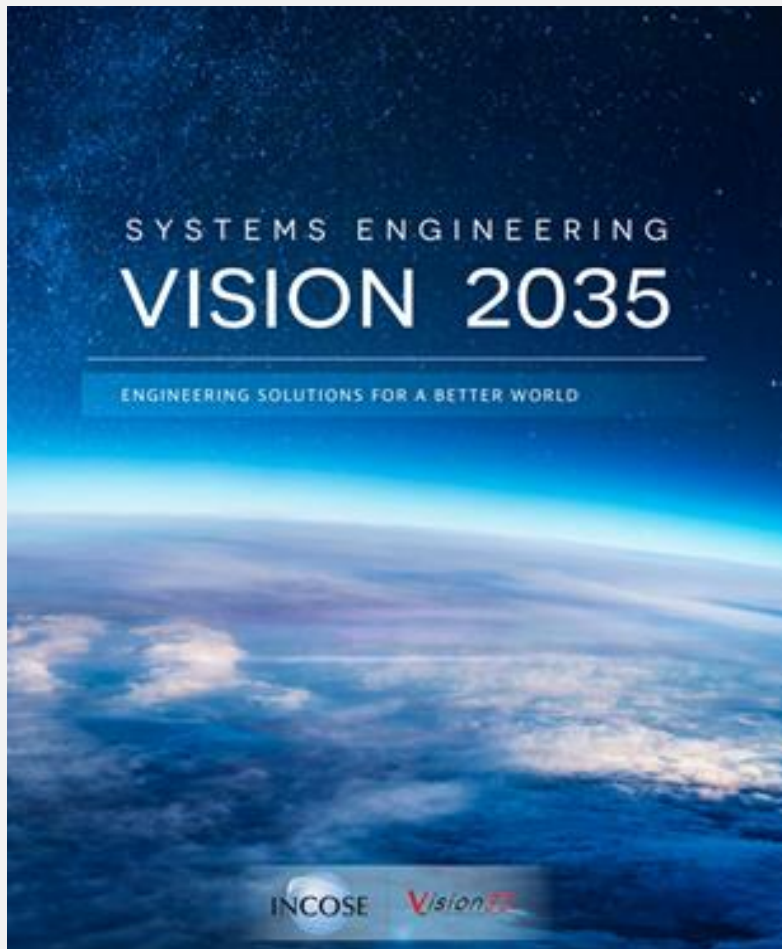
Publications



LEARN MORE:

<http://connect.incose.org/store>

Systems Engineering Vision 2035



This Systems Engineering Vision was sponsored by INCOSE and produced by a team of leaders from the systems community, with inputs from across industry, academia, and government. The Systems Engineering Vision 2035 addresses:

- The **Global Context for Systems Engineering**
- The **Current State of Systems Engineering**
- The **Future State of Systems Engineering**
- **Realizing the Vision**

We encourage you to work with INCOSE to help realize this vision.

The complete **Systems Engineering Vision 2035** is available as a website and PDF

LEARN MORE: incose.org/seivision

Future of Systems Engineering Program
FuSE, our vision is:

**Inspire the global
community to realize
the Vision of SE**

FuSE Program Mission Statement



Engage and inspire the systems engineering community by Realizing the SE Vision 2035 to sustain the future of systems engineering.



FuSE refines and evolves the SE Vision 2035 across competencies, research, tools & environment, practices, and applications.



FuSE identifies critical gaps towards the vision realization and initiates & supports relevant actions



FuSE fosters involvement and collaboration within and outside of INCOSE.



FuSE educates, shares success, and expands.

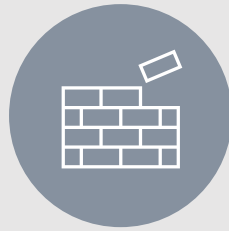
FuSE Streams



VISION & ROADMAPS

The Systems Engineering Vision and Roadmaps stream continuously refines, evolves, and complements the SE Vision 2035.

Furthermore, we create an integrated set of roadmaps.



FOUNDATIONS

The SE Foundations stream has its basis in both theory and industrial practice. First goal is to assess the adequacy of the foundations and identify gaps to determine future directions



METHODOLOGY

The SE Methodology stream guides the advancement of practices, methods, and tools for engineering systems to be fit for purpose.



APPLICATION EXTENSIONS

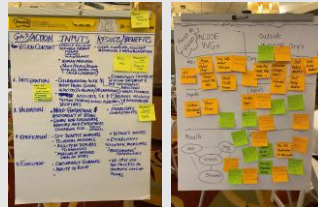
The SE Application Extensions stream integrates social sciences and soft systems into systems engineering practice to address grand challenges.

Example of latest FuSE results.

Generated at IW and in the FuSE mini event series.

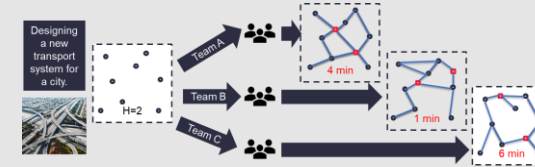
Vision & Roadmaps

- Feedback on the SE Vision 2035 roadmap and challenges.
- Identification and prioritization of gaps in the Vision document
- Inventory of topics to address and link to INCOSE working groups



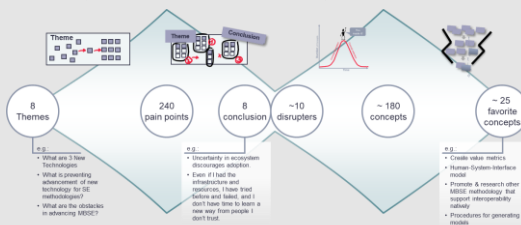
Foundations

- Survey on Systems Engineering Maturity
- Experiments to validate the proposed “first law of complexity”
- Introduction on technical and organizational complexity



Methodologies

- Identification and prioritization of disrupters to advance Systems Engineering including specific solution proposals
- Identification of key SE methodologies for the future of SE



Application Extensions

Stating the value and derivation of measures that Systems Engineering can add to the application areas

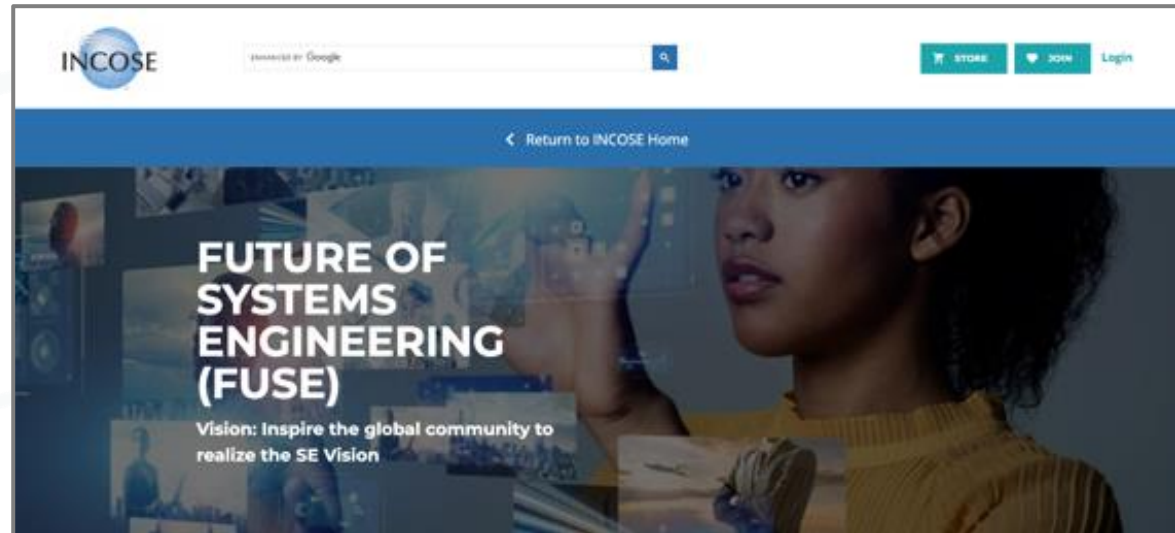
- smart cities,
- innovation,
- asset management, and
- grand challenges



The FuSE Vision: Inspire the global community to realize the INCOSE SE Vision 2035.

<https://www.incose.org/about-systems-engineering/fuse>

- Break up boundaries and unleash new potential
- Widen the network, and branch out to new partners, promoters and recipients
- Foster the INCOSE community and leverage its capabilities across the globe
- Share success and drive education.
- Share these goals with us – be a sponsor you will be able to use your own platforms to disseminate information and news on topics relevant to your company.



Let's connect.

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