

Meeting Name	Date	Time Start	Time End	Meeting Listing	Room	Meeting Description	Contact Name	Related WG	Type
Saturday									
Systems Thinking RoundTable (STRT)	Saturday	07:00	08:00	In person session	Salon C	Jumpstart your day with the Systems Thinking Roundtable! Enjoy an hour of reflection with colleagues and friends as we share (or just listen) our thoughts on the topic of the day.	Cecilia Haskins		Working Group
Opening Plenary	Saturday	08:00	09:30	Hybrid session and Available for Replay	Salon DE	Kick off the 2024 International Workshop by celebrating the accomplishments of 2023 and hearing a vision for our path forward.	Steve Records, Marilee Wheaton, Ralf Hartmann, Olivier Dessoude		Plenary
Safer Complex Systems Keynote: An introduction to Complex System Safety	Saturday	10:00	11:00	Hybrid session and Available for Replay	Salon DE	The world is becoming more populated, connected and dependent on technology. This has enabled more people than ever to live in levels of comfort and affluence that are unprecedented in history. Alongside this benefit, however, are the risks of a failure of the very systems that sustain modern society. Managing these risks requires a transdisciplinary approach pulling together the wider systems engineering community. Duncan will provide an overview of the current state of the art and state of the practice in Complex System Safety. He will provide an overview of current system safety management approaches and introduce key concepts in Complex Systems that are problematic for conventional safety management approaches. Duncan will introduce some of the key challenges for Complex System safety and provide an overview of the sessions planned at IW 2024 to start to address them.	Duncan Kemp		Safer Complex System
Approaches to Project Tasks - Systems Engineers and Project Managers	Saturday	11:00	12:00	In person session	Pier 7	Purpose: Continue research from the PM-SE Working Group related to how project managers and systems engineers approach common project tasks differently. This will be done as a discussion between attendees that relate their professional experiences.Objective: The PM-SE Working Group has researched the differences in associated documentation (SE Handbook, Project Management Body of Knowledge (PMBOK)) to identify theoretical differences in approach between the two disciplines. At this session we will look for real world experiences in the differences in how PMs and SEs approach similar tasks.	Mark Kaufman	PM-SE Integration;;	Working Group
Architecture WG Meetings	Saturday	11:00	18:00	Hybrid session	Pier 11	IW 2024 Architecture WG Tentative AgendaDay 1: Saturday, 27th Jan 2024 (11:30 to 18:00 – 5 hrs)1 hourFuture of Systems Engineering: Debrief (James Martin)1 hourFuture of Architecting: Debrief (Anand Kumar, Jean-Luc, Rolf Siegers)1 hourINCOSE ArchWG Projects: Debrief (Anand Kumar, Jean-Luc, Rolf Siegers)1 hourISO/IEC 42024 - Architecture Fundamentals: Presentation to INCOSE ArchWG and Discussions (Anand Kumar, James Martin)1 hourISO/IEC 42042 – Reference Architectures: Presentation to INCOSE ArchWG and Discussions (James Martin, Peter Bernus)Day 2: Sunday, 28th Jan 2024 (9:30 to 18:00 – 6 ½ hrs)2 hoursPlaceholder: Reference architecture standards (Richard Martin, Hyman Duan, Mathew Hause, Antonio Kung)2 hoursPlaceholder: Reference Architecture Presentations (Laura Hart, Anand Kumar)2 1/2 hoursWorkshop (in collaboration with NDIA): “Growing an Architect” - soliciting inputs for (Rolf Siegers) skills and competencies; B) learning resources (online and onsite); C) credentials (certifications, degrees, etc.)Day 3: Monday, 29th Jan 2024 (11:00 to 17:00 – 4 ½ hrs)1 1/2 hoursPlaceholder: Future ArchWG Projects (Anand Kumar, Jean-Luc Garnier, Rolf Siegers)1 hourPlaceholder: INCOSE UK ArchWG Presentation (Tim Rabbets, Mike Wilkinson)1 hourPlaceholder: AFIS ArchWG Presentation (Jean-Luc Garnier)1 hourPlaceholder: INCOSE India ArchWG Presentation (Anand Kumar)Day 4: Tuesday, 30th Jan 2024 (8:00 to 11:00 – 3 hrs)1 ½ hoursWorkshop: Enhancing 2024 ArchWG Seminar Series Content - soliciting inputs (Rolf Siegers)B) supplement plans for enterprise, systems, and software architecture awareness and learning sessions1 hourPlaceholder: Community Activities and Closing (Anand Kumar, Jean-Luc Garnier, Rolf Siegers)1/2 hourAny other Discussions (Anand Kumar, Jean-Luc Garnier, Rolf Siegers)	Anand Kumar, Jean-Luc Garnier, Rolf Siegers	Architecture ;;	Working Group
ChatGPT for SE Workshop	Saturday	11:00	12:00	Hybrid session	Salon A	Interactive workshop on the use of chatGPT and other large language models and generative AI in systems engineering. Topics include:- Prompt engineering- Application architecture- Embeddings and vector stores- Retrieval-Augmented Generation (RAG)Participants are encouraged to bring application ideas for discussion and live prototypingPresented by INCOSE AI Systems Working Group	Barclay Brown	Artificial Intelligence Systems;Defense Systems;Digital Engineering Information Exchange;Knowledge Management;Systems Engineering Quality Management (SEQM);FuSE;	Working Group
FuSE 2023 Outcomes Session	Saturday	11:00	12:00	Hybrid session	Salon FG	This session will provide an in-depth presentation, facilitated discussion and general Q&A around the FuSE 2023 outcomes, and the pathway forward in 2024.	Erika Palmer		Working Group
INCOSE Foundation	Saturday	11:00	16:00	Hybrid session	Pier 1	INCOSE Foundation annual meetingTreasurer reportElection of board membersDiscussion of current SE global member projectDiscussion of current/future status	Holly Witte	Business Meeting;INC Foundation annual meeting ;	Business Meeting
INCOSE Mentoring Service Community of Practice (CoP)	Saturday	11:00	12:00	Hybrid session	Pier 3	This is a meeting of INCOSE members who are currently participating in the INCOSE Mentoring Service. This includes mentees, mentors, and team members. This is our first monthly Mentoring Community of Practice (CoP) Meeting to be held as a hybrid meeting. The agenda for the meeting includes: 1) Brief introduction, 2) Break-out groups to discuss mentoring topics, 3) Tips and tricks that mentors and mentees are using as part of their mentoring relationships, 4) A facilitated discussion of future CoP meetings, and 5) Questions/Open Discussion. If you are a part of the Mentoring Service please come and participate.	Regina Griego	Mentoring Service;	Business Meeting
Introduction to Ecosystem Mimicry & Eco-Design & Modelling Applied to SE process	Saturday	11:00	12:00	Hybrid session	Pier 10	Introduction of how to apply Natural System Ecosystem mimicry and Eco-Design and how to implement this using MBSE and digital Engineering. We will cover an overview of the latest research of ecosystem mimicry for System Engineering and show you where to apply it in the SE Life cycle.Presenters:Allison Lyle: Ecosystem mimicry and implementation using MBSE and Digital EngineeringPaul McGoe: Overview and guide for where you would apply in SE life cycleAllison Lyle is a practicing engineering consultant and instructor focused on applying and elevating systems thinking to domains where physical, ecological and social systems intersect. She works with teams to pragmatically apply systems thinking principles and Model-Based Systems Engineering (MBSE) processes and tools to advance product and system development. In her work she draws on experience and expertise from the medical device, agriculture and sustainability domains. She has led the development of multiple medical device systems (surgical and diagnostic) through the full product development cycle, from stakeholder analyses to technical feasibility assessments, design, regulatory approval, manufacturing and commercialization. She is currently focused on analyzing natural systems to understand how we can apply ecological design principles to human engineered systems for improved efficacy, integration and long-term resilience. Mr. McGoe is a Classic Jurassic Systems Engineer, having obtained an MS Eng SE in the previous century followed by a multi-decade career in National Lab, A&E, and Aerospace. He is a CSEP and active NSWG member.	Dennis Tuckowski, Kai Costantini	Natural Systems;;	Working Group
Introduction to Systems of Systems	Saturday	11:00	12:00	Hybrid session	Pier 4	Purpose: To provide an introduction to Systems of Systems Engineering and the SOSWG Objective: To give those unfamiliar with SOSE a basic understanding and the opportunity to participate in the working groupStructure: Short presentation on SOSE basics and opportunities with plenty of time for discussionTiming: 1 hour	Alan Harding, Judith Dahmann	System of Systems;;	Working Group

IS2024 Technical Program Committee meeting	Saturday	11:00	17:00	Closed session	Pier 6	IS2024 Technical Program Committee meeting. CLOSED.	Anabel Fraga, Javier Calvo-Amodio	IS2024 Technical Program Committee meeting;	Business Meeting
KMWG re-set and define	Saturday	11:00	12:00	Hybrid session	Pier 8	Purpose: Organize work 2024Objective: Decide how to proceed and which roles we have and how we want to work and what to develop. What to do with primer.Structure:1. Presentation of participants2. Introduction to WG history3. Presentation of 2023 work4. Decision of how to proceed with "Primer"5. Decisions of future work in general and focus areas - how do we want to work.	Robert Nilsson, Bill Hubbard	Knowledge Management;	Working Group
MBSE Keynote: "A Decade of Digital Engineering Research, Insights Past and Future from the Systems Engineering Research Center"	Saturday	11:00	12:00	Hybrid session and Available for Replay	Salon DE	Digital engineering is updating traditional systems engineering practice to take advantage of computational technology, modeling, analytics, and data sciences. For the past ten years, the Systems Engineering Research Center (SERC) has had a broad research program addressing the many opportunities and potential outcomes of the Digital Engineering (DE) transformation of systems engineering. Broadly this research has covered the enabling digital technologies that are changing how companies do engineering and their approaches to use models for customer engagement and engineering analysis. More narrowly the research analyzed and prototyped new concepts of operation for systems engineering, use of model-based engineering (MBE) to streamline and improve the quality of engineering processes, and the emerging data and model infrastructures. In the process, the research benchmarked DE maturity across government and industry, identified means to measure progress and value, and created new competency models. In addition, the research explored the opportunities to use DE to increase development speed, improve system safety and security, and take advantage of emerging artificial intelligence technologies. The presentation will summarize what we have learned from the research and offer new insight on how DE might further change the future of SE. Highlights for this year's MBSE Workshop: Day 1: During our last INCOSE Symposium MBSE Lightning Round, Dr. Tom McDermott provided insights Systems Engineering Research Center (SERC) progress in Digital Engineering (DE) with some interesting insights that his 18 min time limit didn't provide time to share the details. We've asked Dr. McDermott to come back and keynote/kickoff the MBSE Workshop with those details in hopes it will set the mood to address a variety of issues impeding our progress in implementing MBSE in our organizations. After a break we will have our Working Group Round Robin where various working groups sharing their MBSE related We strongly encourage proactive planning of the meeting agenda to maximize effectiveness and impact. The POST method is a simple way to give clarity before attendees join a meeting, and serves as a starting agenda outline.Purpose: What is the purpose of the meeting? To discuss improvement in academic involvement.Objective: What are you trying to achieve in the meeting, and what does success look like? Formulate 2024 planning. Structure: What is the structure of the meeting we are having? DiscussionTiming: How much time is allocated to the meeting? 1 hour	Tom McDermott	MBSE Workshop	
President-Elect Academic Involvement Discussion	Saturday	11:00	12:00	Closed session	Hideaway	We strongly encourage proactive planning of the meeting agenda to maximize effectiveness and impact. The POST method is a simple way to give clarity before attendees join a meeting, and serves as a starting agenda outline.Purpose: What is the purpose of the meeting? To discuss improvement in academic involvement.Objective: What are you trying to achieve in the meeting, and what does success look like? Formulate 2024 planning. Structure: What is the structure of the meeting we are having? DiscussionTiming: How much time is allocated to the meeting? 1 hour	Michael Watson	Business Meeting;;	Business Meeting
SETDB Working Session	Saturday	11:00	12:00	Closed session	Pier 2	Purpose: To review status of the JIRA assignments for SETDB Operational Procedures and System V&V and assign work tasks and priorities for the following sessions at the IW.	John Nallon, Rene King	SE Tools Database;;	Working Group
Systems Engineering & Lawmaking (SELAW)	Saturday	11:00	12:00	Hybrid session	Salon B	The purpose of this WG meeting is to discuss our progress on efforts to apply systems engineering practices to lawmaking. We would also like to welcome the many new members to our WG since our last IW in 2023. Our objective is the creation of lawmaking process that follows international standards (ISO), such as the IEEE 15288. There are many facets of this process; therefore, our short term objective is the creation of models that will approximate the cost, effective sanctions, and risks associated with a law. This meeting is estimated to cover the material in 45 minutes.	Greg Bulla, David Schrunk	Systems Engineering and Lawmaking;;	Working Group
TechOps Leadership Session	Saturday	11:00	12:00	Closed session	Esplanade				Business Meeting
TWG Annual Planning Meeting + Infrastructure Annual planning Meeting	Saturday	11:00	12:00	Hybrid session	Pier 9	IWG SegmentIntroductions (time permitting) & Intro to the IWGIWG Organization & Call for volunteersMember Impressions (open feedback from the last year)Overview of activities at and since IW2023Co-chairsProducts: Standards, Newsletter, Case StudiesEvents: IW, IS, Monthly Joint WebinarsServices: Website Update, LinkedIn, survey/censusMembership: Outreach, ContactsWorking Group CommunicationsPlans for 2024 (see each item above)Presentation - Marcel	Dale Brown	Infrastructure;Transportation;;	Working Group
Safer Complex Systems Working Session: Engineering the Social System for Safer Complex systems	Saturday	13:00	15:00	In person session	Salon FG	v Uncover the complexities of the underlying realization system – the people, organizations, and business processes.v Design strategies for a realization system capable of delivering a safe operational system.v Explore the role of social systems in ensuring the safety of complex engineering projects.	Jon Wade		Safer Complex System
Safer Complex Systems Working Session: Integration of Diverse Models for Safer Complex Systems	Saturday	13:00	15:00	In person session	Salon E	v Examine the integration of diverse models crucial for delivering safer complex systems.v Discuss the types of models and modeling methodologies needed.v Explore strategies to ensure consistency of understanding across the entire supply network.	Tom McDermott		Safer Complex System
Safer Complex Systems Working Session: Safety Paradigm for Complex Systems	Saturday	13:00	15:00	In person session	Salon D	v Delve into unconventional safety approaches for systems with inherent complexities.v Address challenges in ensuring safety when full system analysis is not feasible.v Explore innovative mitigation strategies and best practices.	Dean Beale		Safer Complex System
Complex Systems Working Group Kick off meeting (Orientation, progress report and future opportunities)	Saturday	15:30	17:00	Hybrid session	Hideaway	Purpose: To report progress on CSWG activities, orientate the attendees to make the most of the IW and discuss future plansObjective: Provide opportunities for INCOSE members to understand and engage in the work of the CSWGStructure: 1) Introductions2) Activity progress and IS2024 plans3) IW sessions and collaboration opportunities4) Future activities and collaboration opportunitiesTiming: 2hrs	Dean Beale, Mike Watson	Complex Systems;;	Working Group
DEIXWG Leaders Meeting	Saturday	15:30	16:30	Closed session	Pier 9	60 minutes for DEIXWG leaders to tag up and plan for the conference.**This is a closed session**	Terri Chan, Celia Tseng	Digital Engineering Information Exchange;Business Meeting;;	Working Group
Empowering Women Interactive Workshop on Persistence in Leadership	Saturday	15:30	17:30	Hybrid session	Salon FG	Not for Women Only. This workshop session leverages the "Letters To My Younger Self: How Systems Engineering Changed My Life" (see https://www.incose.org/ltmys) for an interactive workshop on persistence in technical leadership throughout one's journey in life.Purpose: To reflect on one's leadership journey and explore the factors that enable versus inhibit persistence in technical leadershipObjective: To share personal stories of how to overcome obstacles and persist in technical leadership; to write about and develop images that support one's persistence in technical leadershipStructure: Interactive workshop with AI component; Participants should walk away with personal artifacts that they can expand upon to create their story of how systems engineering has changed their life and how they have persisted in systems engineering and technical leadership.Timing: 2 hours	Alice Squires, Federica Robinson-Bryant	Empowering Women Leaders;	Working Group

Working Group Round Robin...	Saturday	15:30	16:10	Hybrid session and Available for Replay	Salon DE	INCOSE Working Group round update, relating MBSE content from a variety of working groups(Select Working Group Overviews)Measurement, Decision Analysis, CM, Smart Cities, Patterns, Automotive,...		MBSE Workshop	
Working Group Speed Dating Event	Saturday	15:30	17:30	In person session	Pier 5	The ICT Working Group would like to invite all other working groups to join us in a 1.5-2 hour speed dating event so we can all get to know each other better. I know there is usually a poster session event at the end of IW but may folks have left by then and it isn't really structured. This event would be allow for 10 minutes to "get to know each other" as groups move around the room. The goal is to be able to talk about commonalities to see if/ how/ where we can combine resources so that we better align ourselves when working on different perspectives of the same problem.	Susan Ronning	Agile Systems and Group Systems Engineering; Architecture ;Artificial Intelligence Systems;Aut omotive;Co mpetency;C omplex Systems;Con figuration Managemen t;Critical Infrastructur e Protection and Recovery;De cision Analysis;Def ense Systems;Digi tal Engineering Information Certification	
How to apply for Academic Equivalency	Saturday	16:00	17:00	Hybrid session	Salon H	Academic Equivalency is a program where university courses are recognized as covering the same content as the INCOSE knowledge exam. Students who do well in Academic Equivalency courses may bypass the knowledge exam when applying for ASEP or CSEP certification. Academic Equivalency may be offered in any language and need not be part of a systems engineering department. Universities who want Academic Equivalency must apply through INCOSE's Certification Program. This meeting is for university representatives or their corporate partners who want to find out what it takes to apply for and operate an Academic Equivalency.	Courtney Wright	Working Group	
SE Tools Lab Update/Demo	Saturday	16:10	16:30	Hybrid session and Available for Replay	Salon DE	Engineering Tools Lab update/demonstration	Barclay Brown, Heidi Davidz	MBSE Workshop	
MBSE Open Forum	Saturday	16:30	18:00	Hybrid session and Available for Replay	Salon DE	Open mic for MBSE related Q&A and discussion. An opportunity to glean experience and advice for MBSE implementation experts from a variety of industries	Troy Peterson, Mark Sampson	MBSE Workshop	
DEIXWG Leaders Meeting	Saturday	17:00	18:00	Closed session	Pier 9	60 minutes for DEIXWG leaders to tag up and plan for the conference.**This is a closed session**	Terri Chan, Celia Tseng	Digital Engineering Information Exchange;B usiness Meeting;; Decision Analysis;Res ilient Systems;Ris k Managemen t;The Loss-driven SE Initiative;He uristics Initiative;	
Heuristics Team and Risk Mgmt WG Joint Open Meeting	Saturday	17:00	18:00	Hybrid session	Pier 4	This is an open joint meeting of the INCOSE Heuristics Initiative Leadership Team and the INCOSE Risk Management WG. The purpose of the meeting is to (a) review and comment on already initiative risk, risk management, and "loss-driven" related heuristics, and (b) to provide a meeting time where any and all individuals and groups not currently involved in the initiative can learn more about the activities, and/or consider joining in to help support the effort.	Dorothy McKinney, Jack Stein	Working Group	
INCOSE Foundation Soirée sponsored by the Corporate Advisory Board	Saturday	19:00	21:00	In person session	Lighthouse Ballroom			Social Event	
Sunday									
Systems Thinking RoundTable (STRT)	Sunday	07:00	08:00	In person session	Salon C	Jumpstart your day with the Systems Thinking Roundtable! Enjoy an hour of reflection with colleagues and friends as we share (or just listen) our thoughts on the topic of the day.	Cecilia Haskins	Working Group	
Town Hall: The Future of INCOSE	Sunday	08:00	09:00	Hybrid session and Available for Replay	Salon DE	Join us to learn about INCOSE's new strategic plan, the evolution of our professional staff, and how you can share your insights to help shape the future of INCOSE.	David Long, Steve Records	Plenary	
Certification Exam	Sunday	09:00	12:00	Pre-registration	Pier 11			Business Meeting	
Academic Council	Sunday	09:30	12:00	Hybrid session	Salon G	The meeting will consist of two parts. The first part will be informational. The second part will be a workshop. First part:- Update with findings from past meetings at the INCOSE IW 2023, EMEA Conference/Workshop, and INCOSE IS 2024 - Status of different activities within Academic Matters - Status of the Academic Council. Second part: - We will work on how INCOSE can organize its operations to better serve the academic community at large within INCOSE.	Alejandro Salado	Business Meeting	
Architecture WG Meetings	Sunday	09:30	18:00	Hybrid session	Pier 10	IW 2024 Architecture WG Tentative AgendaDay 1: Saturday, 27th Jan 2024 (11:30 to 18:00 – 5 hrs)1 hourFuture of Systems Engineering: Debrief(James Martin)1 hourFuture of Architecting: Debrief(Anand Kumar, Jean-Luc, Rolf Siegers)1 hourINCOSE ArchWG Projects: Debrief(Anand Kumar, Jean-Luc, Rolf Siegers)1 hourISO/IEC 42024 - Architecture Fundamentals: Presentation to INCOSE ArchWG and Discussions (Anand Kumar, James Martin)1 hourISO/IEC 42042 – Reference Architectures: Presentation to INCOSE ArchWG and Discussions (James Martin, Peter Bernus)Day 2: Sunday, 28th Jan 2024 (9:30 to 18:00 – 6 ½ hrs)2 hoursPlaceholder: Reference architecture standards (Richard Martin, Hyman Duan, Mathew Hause, Antonio Kung)2 hoursPlaceholder: Reference Architecture Presentations (Laura Hart, Anand Kumar)2 1/2 hoursWorkshop (in collaboration with NDIA): "Growing an Architect" - soliciting inputs for (Rolf Siegers) skills and competencies; (B) learning resources (online and onsite); (C) credentials (certifications, degrees, etc.)Day 3: Monday, 29th Jan 2024 (11:00 to 17:00 – 4 ½ hrs)1/2 hoursPlaceholder: Future ArchWG Projects(Anand Kumar, Jean-Luc Garnier, Rolf Siegers)1 hourPlaceholder: INCOSE UK ArchWG Presentation(Tim Rabbets, Mike Wilkinson)1 hourPlaceholder: AFIS ArchWG Presentation(Jean-Luc Garnier)1 hourPlaceholder: INCOSE India ArchWG Presentation(Anand Kumar)Day 4: Tuesday, 30th Jan 2024 (8:00 to 11:00 – 3 hrs)1 ½ hoursWorkshop: Enhancing 2024 ArchWG Seminar Series Content - soliciting inputs (Rolf Siegers) (B) supplement plans for enterprise, and software architecture awareness and learning sessions1 hourPlaceholder: Community Activities and Closing(Anand Kumar, Jean-Luc Garnier, Rolf Siegers)1/2 hourAny other Discussions(Anand Kumar, Jean-Luc Garnier, Rolf Siegers)	Anand Kumar, Jean-Luc Garnier, Rolf Siegers	Architecture ; Working Group	
Automotive WG Plenary	Sunday	09:30	11:00	Hybrid session	Pier 6	Program definition ongoing : this meeting should be the WG plenary hybrid meeting	Alain DAURON	Automotive; Working Group	

Competency Working Group open session	Sunday	09:30	15:00	Hybrid session	Pier 3		Lori Zipes, Cliff Whitcomb	Competency ;;	Working Group
Complex System Safety session planning	Sunday	09:30	11:30	Closed session	Salon C	Review results of workshop sessionsUpdate plan for second sessionDevelop summary messages to brief out	Duncan Kemp, Meaghan Oneil	System Safety;;	Safer Complex System
Critical Infrastructure Protection & Recovery - DHS IDT Workshop	Sunday	09:30	12:00	Hybrid session	Hideaway	Join the CIPR WG and infrastructure system modeling experts to discuss MBSE methods and taxonomies!Purpose: Discuss the US Department of Homeland Security (DHS) Infrastructure Data Taxonomy (IDT) and determine its use with MBSE methods developed by CIPR Working Group.Objective: Learn, apply, and critique the DHS IDT and show its use for various applications in systems engineering. The overall goal of the session is to establish potential projects and studies that support IDT improvement and application by INCOSE members.Structure: Workshop structure with invited presentations by DHS and CIPR WG members alongside group discussionTiming: Tentative all day.	Daniel Eisenberg	Critical Infrastructure Protection and Recovery;;	Working Group
Digital Engineering Information Exchange (DEIXWG) Open Meeting	Sunday	09:30	10:30	Hybrid session	Salon H	Purpose: The Digital Engineering Information Exchange has an exciting year ahead and we would like to share our plans with attendees who may want to join our working group.Objective: DEIXWG product leaders will be sharing their work in progress - the Digital Viewpoint Model, the Digital Engineering Primer, the Digital Engineering Guide, and the Digital Engineering Standards Framework. This session will serve as an introduction to other DEIXWG sessions at IW 2024.	Terri Chan, Celia Tseng	Digital Engineering Exchange;;	Working Group
Empowering Women Leaders Planning for 2024 and Beyond	Sunday	09:30	11:00	Hybrid session	Pier 7	This is a business meeting open to women and men interested in taking a leadership role or participating in planning future events and artifacts to be sponsored or created by the Empowering Women Leaders in Systems Engineering (EWLSE). Attendees can already be members of EWLSE or plan to join EWLSE through their INCOSE profile.Purpose: The main purpose of the meeting is to plan 2024 - 2025 EWLSE-sponsored activities.Objective: To brainstorm ideas for events, articles for the INCOSE newsletter, support for DEI, artifacts to build on INCOSE Insight Diversity in SE, LTMYS ebook, and Emerging Trends in SE book, and other.Structure: We will have an icebreaker for all attendees to share their top leadership goal for 2024, and then move to brainstorming ideas and then narrowing them down and prioritizing in five areas: INCOSE events, articles for the INCOSE newsletter, DEI initiatives, EWLSE products, and other.Timing: Let's see what we can accomplish in 1.5 hours.	Alice Squires, Eric Specking	Empowering Women;	Business Meeting
Events Committee Stakeholders Meeting	Sunday	09:30	10:30	In person session	Pier 1	Purpose: To gather the event stakeholders and discuss the desires for future events - focusing on IW and ISOObjective: Gather the requirements for the year to come on major eventsStructure: Presentation and open discussionTiming: 60 minutes	Donna Long	Business Meeting;;	Business Meeting
FuSE 2024 Products/Session Working Session	Sunday	09:30	11:30	Hybrid session	Salon B	This facilitated open workshop session is an opportunity for the the systems engineering community to provide their input to the FuSE initiative and the products and services that are planned for 2024.	Erika Palmer	FuSE;	Working Group
PLE and CM standards working session for ISO26581	Sunday	09:30	12:00	Hybrid session	Salon A	Product Line Engineering and Configuration Management standards working session for ISO26581 Purpose: Review status and recommendations for ISO 26851 CM for PLE Objective: Collaboration between PLE and CM WG for ISO26581 feedback Structure: Present the current ISO25681 standard, collect feedback and discussion of open topics Timing: This is a full morning meeting, with individual follow up as needed	Rowland Darbin, Marco Forlingieri	Configuratio n Management;Product Line Engineering;	Working Group
Requirements Working Group Meeting (Open to All)	Sunday	09:30	12:00	Hybrid session	Pier 8	Requirements Working Group Agenda:Purpose: Working Group Meeting and CoordinationObjective: Debrief WG for activities and status, share new concepts for discussion, obtain inputs on new products, recruit new supportMeetings will span two days to enable all objectives to be met (Sat, Sun)	Tami Katz, Lou Wheatcraft	Requiremen ts;;	Working Group
SE Handbook Editors Discussion Sessions	Sunday	09:30	12:00	In person session	Pier 4	The SE Handbook editors will be meeting in a closed session for special topics with specific attendees and Tech Ops leadership. 2.5 hours have been allocated for 30 minute discussions with editors. Special topics will be identified in advance and invitees will be asked to attend specific times.	Thomas Shortell	SE Handbook;	Business Meeting
SE in Early Stage R&D Collaboration	Sunday	09:30	10:30	Hybrid session	Pier 2	Purpose: Identify potential working group collaboration Objective: Identify common objectives Structure: Provide overview of SE in Early Stage R&D on the mission & objectives, potential collaborative working groups provide their overview, brainstorm common areas of interestTiming: Meeting with multiple working groups, 30-45 minutes each	Michael DiMario, Ann Hodges	SE in Early Stage Research & Developmen t;	Working Group
SysML v1 to SysML v2 Transition Information Session	Sunday	09:30	12:00	Hybrid session and Available for Replay	Salon DE	This full day information session is intended to provide information to assist organizations and practitioners in their transition from SysML v1 to SysML v2. The session will include results from the SysML v1 to SysML v2 Transition Guide Project that is sponsored by the Director of Digital Engineering, Modeling and Simulation within the DoD Office under Secretary of Defense for Research and Engineering (OUSD(R&E)). This effort was initiated at a workshop at the INCOSE IW 2023 to elicit needs on the types of transition guidance that the community felt would be helpful.The transition from SysML v1.x to SysML v2 will require careful planning to update the modeling practices, methodology, and tools, and the training to ready the workforce. There are also important questions of when a project should make the transition to SysML v2 and how to make that transition. These topics and more will be covered in the information session. The topics include:- Introduction- SysML v2 basicsa. Overviewb. Comparing SysML v2 with SysML v1c. Walkthrough of a SysML v2 starter model- SysML v1 to v2 transition planninga. General approachb. Organizations sharing their initial SysML v2 transition plansc. Vendors sharing their SysML v2 roadmaps- SysML v1 to v2 model conversion approachThis session provides critical information to help kick start your efforts to transition from SysML v1 to SysML v2 and leverage the SysML v2 capability to advance your MBSE approach and improve the quality of your system models. BackgroundThe Object Management Group® (OMG®) approved the Systems Modeling Language (SysML) version 2 beta specifications on June 30, 2023 and the specifications entered the finalization phase. The final adopted specifications are anticipated to be available in 2024. Several tool vendors have announced their plans to support SysML v2 and are actively developing their SysML v2 implementations.SysML v2 enables the modeling of increasingly complex systems as part of the evolving practice of model-based systems engineering. This next-generation systems modeling provides improved precision, expressiveness, consistency, usability, interoperability, and extensibility over SysML version 1. SysML v2	Daniel Hettema, Franck Salvatore, Sanford Friedenthal, Chris Schreiber		MBSE Workshop

Towards a Vision for Ensuring SE's Enduring Value	Sunday	09:30	10:30	Hybrid session	Salon F	Workshop Background:The world is facing an increasing number of complex problems that are interconnected and vary in their technical, social, and ecological nature. Furthermore, society is witnessing a rapid transformation due to the emergence of powerful new technologies that can potentially cause disruptive changes. In light of these challenges, it is imperative to reconsider how SE can continue to address complex problems and provide enduring value in the future. Similarly, INCOSE must also rethink its approach to deliver on its vision of "A better world through a systems approach." The FuSE project by INCOSE was established to address concerns about the future relevance of Systems Engineering (SE) in light of the changes mentioned above. The FuSE project created the "Bridge Team," consisting of three INCOSE Fellows: Peter Brook, Mike Pennotti, and David Rousseau, and it has recently added Javier Calvo-Amodio. The Bridge Team's purpose is to investigate 1) how SE principles and heuristics could be improved, 2) how SE could evolve to make better use of its "guiding propositions," and 3) how that might support FuSE's vision of ensuring the enduring value of SE. To fulfill its purpose, the Bridge Team seeks to encourage and facilitate a conversation within INCOSE and the wider SE community to deepen our collective understanding of the essential nature of SE, how to describe and quantify its value, how it can help solve increasingly complex problems in the future, and how its evolution can be guided towards that end. Workshop Scope:During the workshop, we will delve into various questions and issues related to systems engineering (SE) evolution. An introduction to the joint initiative between FuSE, the Bridge Team, the Systems Science Working Group, the Systems Engineering Journal, and INSIGHT magazine will kick off the session. This session will include 2 parts.Part 1: Modularity of Natural Systems and Systems Engineering Modularity in Nature is the archetype for agile adaptive, iterative and resilience patterns in materials and processes. It teaches us and forms a basis for Agile, Resilience Thinking and MBSE in SE. Presented by: Curt McNamara Part 2: What can Designing Systems within the constraints of Nature positive Designs look like? A tentative formulation of a stage gated approach for "Nature Integration Readiness Levels of Systems" What could bioinspired design as a regenerative pathway towards nature positive SE look like? A brief introduction will set the stage for collective exploration using a sample industry and two intractable sustainability problems to illustrate the problem space. Join us for an exploration of what this could look like." Presented by: Kai Costantini	Javier Calvo-Amodio, David Rousseau, Peter Brook, Mike Pennotti	Systems Science;Bridge Team FuSE;	Working Group
Modularity of Natural Systems and Systems Engineering/ What can Designing Systems within the constraints of Nature positive Designs look like?	Sunday	10:00	11:30	Hybrid session	Pier 5	This session will include 2 parts.Part 1: Modularity of Natural Systems and Systems Engineering Modularity in Nature is the archetype for agile adaptive, iterative and resilience patterns in materials and processes. It teaches us and forms a basis for Agile, Resilience Thinking and MBSE in SE. Presented by: Curt McNamara Part 2: What can Designing Systems within the constraints of Nature positive Designs look like? A tentative formulation of a stage gated approach for "Nature Integration Readiness Levels of Systems" What could bioinspired design as a regenerative pathway towards nature positive SE look like? A brief introduction will set the stage for collective exploration using a sample industry and two intractable sustainability problems to illustrate the problem space. Join us for an exploration of what this could look like." Presented by: Kai Costantini	Dennis Tuckowski, Kai Costantini, Curt McNamara	Natural Systems;;	Working Group
NAFEMS-INCOSE Systems Modeling & Simulation WG community	Sunday	10:00	12:00	Hybrid session	Esplanade	This session intended for SMS WG members and other interested parties to come together and interactively work on developing the WG products and roadmap for 2024.The selected products will be decided closer to the event.	Peter Coleman, Frank Popielas, Phyllis Marbach	NAFEMS-INCOSE Systems Modeling & Simulation;;	Working Group
SEQM Information Review	Sunday	10:00	10:30	Hybrid session	Pier 9	This is our annual Systems Engineering Quality Management (SEQM) working group meeting. The agenda is introductions, a review of our on-going education efforts, present information for new members and discuss work on this years primer. A hybrid session with international attendees. Session may only need 30-45 Minutes, so a 30 min slot can be used.	William Scheible	Systems Engineering Quality Management (SEQM);;	Working Group
INCOSE Fellows Selection Committee	Sunday	10:30	13:30	Hybrid session	Salon H	Discussion on Fellows nominations, followed by the Selection Committee voting.	Danielle DeRoche, Bob Kenley, Michael Ryan	INCOSE Fellows;	Business Meeting
Social Systems Engagement Session	Sunday	10:30	12:00	Hybrid session	Pier 2	Overview of current work in progress Including the following:Published Paper by Dana, Charlotte and ErikaFollow up in-progress paper by Shams, Dana and ErikaPrimer update by Charlotte (introduction to the TemplatesNew Items to discuss include the following:Request for help on Primer with Templates (do any of our members have social science expertiseOpen call for desired outputs or activities for the Working Group to consider.	Dana Polojärvi, Charlotte Dunford, Shamsnaz Bhada	Social Systems;;	Working Group
TWG Annual Planning Meeting + Infrastructure Annual planning Meeting	Sunday	10:30	12:00	Hybrid session	Pier 9	TWG SegmentIntroductions (time permitting) & Intro to the TWGTWG Organization & Call for volunteersAPTA & INCOSE: MOU and collaborationMember Impressions (open feedback from the last year)Overview of activities at and since IW2023Co-chairsProducts: Standards, Newsletter, Case StudiesEvents: IW, IS, Monthly Joint WebinarsServices: Website Update, LinkedIn, survey/censusMembership: Outreach, ContactsWorking Group CommunicationsPlans for 2024 (see each item above)Presentation - APTA SLE Standard Project Update – Dale	Dale Brown	Infrastructure;Transportation;;	Working Group
AFIS/AFNET Engagement Planning	Sunday	11:00	12:00	Closed session	Pier 1	Working Group Leadership meeting with AFIS/AFNET representatives to discuss collaboration and engagement opportunities.	John Nallon, Juan Mendo	Tools Integration & Model Lifecycle Management;	Working Group
Embedding SE into enterprises - new working group launch	Sunday	11:00	13:30	Hybrid session	Pier 7	This is the launch of a new working group - building on strategy session from 2022 on the issue of helping organisations embed systems engineering appropriately to the needs of the organisation.Purpose - Formal launch / initiation of a new working groupObjective: There are a number of objectives 1) Agree Charter for working group, including defining leadership and meeting arrangements 2) General introduction to the overall purpose / objective of the working group (full / long term purpose) 3) Overview of existing preparatory material 4) definition / agreement of first deliverables (proposal is a "scope of the problem that WG is addressing", and a review of sources of existing material (and potential sources from other WGs) that can help address the problem 5) opportunity for WG members to meet and understand their willingness / ability to contributeStructure: The structure will be a timed agenda, working through focused discussions to address the objectives above - not necessarily in the order above Timing: 2 hours	Richard Beasley	embedding SE into Organisation	Working Group
IS2024 Technical Program Committee meeting	Sunday	11:00	17:00	Closed session	Pier 6	IS2024 Technical Program Committee meeting. CLOSED.	Anabel Fraga, Javier Calvo-Amodio	IS2024 Technical Program Committee meeting;	Business Meeting
Board of Directors Meeting	Sunday	13:00	17:30	Closed	Pier 5				Business Meeting
Digital Engineering Primer and Guide Working Meeting	Sunday	13:00	15:00	In person session	Salon B	Purpose: Digital Engineering Primer and Guide Review and DiscussionObjective: DE Primer and DE Guide are two of the projects under the DEIXWG. This session will be a working meeting to solicit comments on the content of the draft material in both. The meeting will be separated into two discussions, one leading to the next, as both products are related in nature.	Terri Chan, Darryl Howell, Melissa (Missy) Wallace, Celia Tseng	Digital Engineering Information Exchange;;	Working Group
Ecosystem mimicry & Eco-Design & Modelling applied to SE process: working session	Sunday	13:00	15:00	Hybrid session	Pier 4	Continuation and working session of learning how to apply Natural System Ecosystem mimicry and Eco-Design and how to implement this using MBSE and digital Engineering. We will build off the opening sessions overview of the latest research of ecosystem mimicry for System Engineering and show you where to apply it in the SE Life cycle.Presenters:Allison Lyle: Ecosystem mimicry and implementation using MBSE and Digital EngineeringPaul McGoey: Overview and guide for where you would apply in SE life cycle	Dennis Tuckowski, Kai Costantini	Natural Systems;;	Working Group

MBSE Interoperability Forum	Sunday	13:00	17:00	Hybrid session	Salon FG	The MBSE Interoperability Forum will present for discussion several published and in-work standards and use cases that enable collaborative Model Based Systems Engineering practices across Extended Enterprise environments. The topics identified include: MoSSEC - (ISO 10303-AP243 Introduction and planned activities); LOTAR for MBSE - model archival and retrieval.	John Nallon, Kyle Hall	Tools Integration & Model Lifecycle Management; PDES Inc. / LOTAR;	Working Group
SOS Engineering Roundtable on Implementation Approaches	Sunday	13:00	17:00	Hybrid session	Pier 9	Purpose: Share information on approaches to implement SOS EngineeringObjective: To identify a range of current approaches to offer the communityStructure: Participants will provide short presentations on approachesTiming: 4 hours	Alan Harding, Judith Dahmann	System of Systems;	Working Group
SysML v1 to SysML v2 Transition Information Session	Sunday	13:00	15:00	Hybrid session and Available for Replay	Salon DE	This full day information session is intended to provide information to assist organizations and practitioners in their transition from SysML v1 to SysML v2. The session will include results from the SysML v1 to SysML v2 Transition Guide Project that is sponsored by the Director of Digital Engineering, Modeling and Simulation within the DoD Office under Secretary of Defense for Research and Engineering (OUSD(R&E)). This effort was initiated at a workshop at the INCOSE IW 2023 to elicit needs on the types of transition guidance that the community felt would be helpful.The transition from SysML v1.x to SysML v2 will require careful planning to update the modeling practices, methodology, and tools, and the training to ready the workforce. There are also important questions of when a project should make the transition to SysML v2 and how to make that transition. These topics and more will be covered in the information session. The topics include: Introduction- SysML v2 basics. Overviewb. Comparing SysML v2 with SysML v1c. Walkthrough of a SysML v2 starter model- SysML v1 to v2 transition planninga. General approachb. Organizations sharing their initial SysML v2 transition plansc. Vendors sharing their SysML v2 roadmaps- SysML v1 to v2 model conversion approachThis session provides critical information to help kick start your efforts to transition from SysML v1 to SysML v2 and leverage the SysML v2 capability to advance your MBSE approach and improve the quality of your system models. BackgroundThe Object Management Group® (OMG®) approved the Systems Modeling Language (SysML) version 2 beta specifications on June 30, 2023 and the specifications entered the finalization phase. The final adopted specifications are anticipated to be available in 2024. Several tool vendors have announced their plans to support SysML v2 and are actively developing their SysML v2 implementations.SysML v2 enables the modeling of increasingly complex systems as part of the evolving practice of model-based systems engineering. This next-generation systems modeling provides improved precision, expressiveness, consistency, usability, interoperability, and extensibility over SysML version 1. SysML v2 General	Daniel Hettema, Franck Salvatore, Sanford Friedenthal, Chris Schreiber		MBSE Workshop
Systems Security WG General Meeting	Sunday	13:00	15:00	Hybrid session	Pier 2	meeting to review activities, projects in process, new project proposals, and information of relevance.	Rick Dove	Systems Security Engineering;	Working Group
WG collaboration opportunities when dealing with complexity	Sunday	13:00	15:00	Hybrid session	Esplanade	Purpose: To provide an opportunity for WG's handling complex problems to share a summary of their activities and needs, to help identify synergistic collaboration and coordination activities.Objective: Improve coordination between working groups and launch new collaborationsStructure: 1) Introduction and purpose2) Each Working Group Summary of activities and needs (this can be informal or formal) 3) Apply WS techniques to enable collaboration e.g. affinization and N-squared matrices.4) Discussion of ways to leverage synergies and enable collaboration in future activitiesTiming: 2hrs	Dean Beale	; Agile Systems and Engineering; Complex Systems; Decision Analysis; Enterprise Systems; Human Systems Integration; Lean Systems Engineering; Natural Systems; Professional Competencies & Soft Skills; Resilient Systems; Social Systems;	Working Group
Critical Infrastructure Protection & Recovery - DHS IDT Workshop	Sunday	13:30	16:00	Hybrid session	Hideaway	Join the CIPR WG and infrastructure system modeling experts to discuss MBSE methods and taxonomies!Purpose: Discuss the US Department of Homeland Security (DHS) Infrastructure Data Taxonomy (IDT) and determine its use with MBSE methods developed by CIPR Working Group.Objective: Learn, apply, and critique the DHS IDT and show its use for various applications in systems engineering. The overall goal of the session is to establish potential projects and studies that support IDT improvement and application by INCOSE members.Structure: Workshop structure with invited presentations by DHS and CIPR WG members alongside group discussionTiming: Tentative all day.	Daniel Eisenberg	Critical Infrastructure Protection and Recovery;;	Working Group
Decision Analysis Working Group Review of the Decision Analysis Data Model (DADM)	Sunday	13:30	15:30	Hybrid session	Salon C	Purpose: This meeting is to introduce people to the Decision Analysis Working group and review ongoing workproducts.Objective: We plan to review the Decision Analysis Data Model (DADM) and accept it as the first release.Structure: This meeting will use slides to communicate the DADM TTP, We will also review the DADM model.	Frank Salvatore	Decision Analysis; Digital Engineering Information Exchange; Knowledge Management; MBSE Initiative; MBSE Patterns; Measurement; NAFEMS-INCOSE Systems Modeling & Simulation; Process Improvement; Tools Integration & Model Lifecycle Management;	Working Group
INCOSE Risk Management WG - Open Meeting	Sunday	13:30	15:00	Hybrid session	Pier 7	This is an Open General (hybrid) Meeting of the Risk Management WG. The status of current activities of the WG will be reviewed and proposals for updating and adding activities considered. A detailed agenda will be provided and updated as the meeting time approaches.	Jack Stein, Bob Parro	Risk Management;	Working Group
MBSE Patterns Working Group Meetings	Sunday	13:30	16:30	Hybrid session	Salon H	Meeting agenda and time line to be posted.	Bill Schindel	MBSE Patterns;;	Working Group

Requirements Working Group Meeting (Open to All)	Sunday	13:30	17:00	Hybrid session	Pier 8	Requirements Working Group Agenda: Purpose: Working Group Meeting and Coordination Objective: Debrief WG for activities and status, share new concepts for discussion, obtain inputs on new products, recruit new support Meetings will span two days to enable all objectives to be met (Sat, Sun)	Tami Katz, Lou Wheatcraft	Requirements;	Working Group
SBSSE WG	Sunday	13:30	15:00	Hybrid session	Pier 1	Introduce competed drafts for submission of Deployment Packages (DP) and the SE Profile SBSSE Guide. We will review the Project Management, Configuration Management, and Needs and Requirements Engineering DPs. Plan for next work product phase for the Functional and Physical Architecture, Integration, and Interface DPs.	Angela Robinson	Small Business Systems Engineering;	Working Group
ChatGPT for SE Workshop	Sunday	14:00	16:00	Hybrid session	Pier 11	Interactive workshop on the use of chatGPT and other large language models and generative AI in systems engineering. Topics include:- Prompt engineering- Application architecture- Embeddings and vector stores- Retrieval-Augmented Generation (RAG) Participants are encouraged to bring application ideas for discussion and live prototyping Presented by INCOSE AI Systems Working Group	Barclay Brown	Artificial Intelligence Systems; Defense Systems; Digital Engineering Information Exchange; Knowledge Management; Systems Engineering Quality Management (SEQM);	Working Group
Space Systems Working Group Tagup	Sunday	14:00	15:00	Hybrid session	Salon A	Purpose: Set direction for SSWG for 2024 Objective: Select activities and Technical Products for SSWG to pursue in 2024 Structure: Hybrid guided group discussion Timing: 1hr mtg: 5 min - warmup; 15 min - propose and review activity and product list; 20 min - discussion on activities and product list; 10 min - prioritize activities and product list; 5 min - initial assignments; 5 min - wrapup	Jim Adams, Alex Levi	Space Systems;	Working Group
Enterprise Value Working Group - Start Up & Direction Finding	Sunday	15:00	17:00	Hybrid session	Pier 7	Focal Question: 1. What is enterprise value (EV)? How does EV help Systems Engineers leverage their capacity to do Systems Engineering beyond the program/project? Purpose: To explore perspectives on Enterprise Value for Systems Engineers Objective: To improve the understanding of enterprise value and its relevance of 'what is good' for system engineers and INCOSE Structure: Axiology - the Science of Value Perspectives on value Relevance for systems engineering Challenges to raising systems engineers from technical projects to broader enterprise issues Finding directions for EVWG Timing: 2 hours	Richard Hodge, Joseph Bradley	Complex Systems; Enterprise Systems; Social Systems; System of Systems; Systems Science; Value Proposition Initiative;	Working Group
Complexity Definition discussion with Oli DeWeck	Sunday	15:30	17:30	Hybrid session	Pier 3	Meeting agenda: Purpose: Agree on a single definition of complexity for INCOSE to use Objective: Have a common basis for research work (such as Oli de Weck is doing), heuristics, difficulty assessment, and identification of complexity in systems and their environment Structure: Discussion Timing: Two hours	Dorothy McKinney, Dean Beale	Complex Systems;	Working Group
PM-SE Integration WG Big Ideas Showcase	Sunday	15:30	17:30	Hybrid session	Pier 4	Join the PM-SE Integration WG for our Big Ideas Showcase! It's a collection of short presentations highlighting the ways that some of our members are integrating PM and SE disciplines in their own practice. The session goal is to generate discussion at IW, and also to gauge enthusiasm for more in-depth presentations at future PM-SE members' meetings in the coming year. Individual presentations: Big Ideas and Hot Topics in PM-SE integration Bad News, Good News, and Team Tools: A secret formula to project success - Molly Kovaka (10 min) "As a PM, how do you convince a project owner to include Systems Engineering and a Systems Engineer in the team from the start? This is my client-facing pitch for why PM and SE collaboration is vitally important to project success - and how to harness it by combining a secret formula with existing tools." Integrating PM and SE and suiting standard processes at the program and system life cycle data - John Metcalf (20 min) "Using Design Structure Matrix (DSM) Techniques in a Major Defense Acquisition Program (MDAP) to Define the Product Development (PD) Work Products" PM-SE Integration with LML and Innoslate - Steven Dam (20 min) "The Lifecycle Modeling Language (LML) was designed from its inception in 2013 as a means to provide an effective ontology for systems engineering and program management. More recently it was updated to expand the program management capabilities of the language. This open standard has been incorporated in SPEC Innovations' Innoslate tool." A life cycle from a PM's POV (Project General Meeting- the Mission of the RSWG- location and types of RSWG work products- planned RSWG products	Molly Kovaka, Steven Dam, Tina Srivastava	PM-SE Integration;	Working Group
Resilient Systems Working Group Showcasing a specialized AI agent for bioinspired design to solve large challenges	Sunday	15:30	16:30	Hybrid session	Pier 1	A life cycle from a PM's POV (Project General Meeting- the Mission of the RSWG- location and types of RSWG work products- planned RSWG products	John Brtis, Ken Cureton	Resilient Systems;	Working Group
	Sunday	15:30	17:00	Hybrid session	Pier 2	The Natural Systems working group is testing a specialized AI for Bio Inspired Design in conjunction with NASA to solve large Bioinspired design challenges. We will share an overview of the work using BIDARA AI Agent. Bidara is designed to structure the bio-inspiration design process following the Biomimicry 3.8 bio inspired design methodology. We will present an overview of our learning journey with Bidara. Presenters: Randy Anway Brandon Ruffridge Brandon Ruffridge is a software engineering lead at NASA. He is currently leading a cross-functional team of students, faculty, commercial partners, engineers, biologists, and computer scientists in the development of PeTaL, a novel, innovative, open-source, machine-learning-based system to help researchers and engineers discover solutions in nature.	Dennis Tuckowski, Kai Costantini	Natural Systems;	Working Group

SysML v1 to SysML v2 Transition Information Session	Sunday	15:30	17:30	Hybrid session and Available for Replay	Salon DE	This full day information session is intended to provide information to assist organizations and practitioners in their transition from SysML v1 to SysML v2. The session will include results from the SysML v1 to SysML v2 Transition Guide Project that is sponsored by the Director of Digital Engineering, Modeling and Simulation within the DoD Office under Secretary of Defense for Research and Engineering (OUSD(R&E)). This effort was initiated at a workshop at the INCOSE IW 2023 to elicit needs on the types of transition guidance that the community felt would be helpful. The transition from SysML v1.x to SysML v2 will require careful planning to update the modeling practices, methodology, and tools, and the training to ready the workforce. There are also important questions of when a project should make the transition to SysML v2 and how to make that transition. These topics and more will be covered in the information session. The topics include:- Introduction- SysML v2 basics. Overviewb. Comparing SysML v2 with SysML v1c. Walkthrough of a SysML v2 starter model- SysML v1 to v2 transition planninga. General approachb. Organizations sharing their initial SysML v2 transition plansc. Vendors sharing their SysML v2 roadmaps- SysML v1 to v2 model conversion approachThis session provides critical information to help kick start your efforts to transition from SysML v1 to SysML v2 and leverage the SysML v2 capability to advance your MBSE approach and improve the quality of your system models. BackgroundThe Object Management Group® (OMG®) approved the Systems Modeling Language (SysML) version 2 beta specifications on June 30, 2023 and the specifications entered the finalization phase. The final adopted specifications are anticipated to be available in 2024. Several tool vendors have announced their plans to support SysML v2 and are actively developing their SysML v2 implementations.SysML v2 enables the modeling of increasingly complex systems as part of the evolving practice of model-based systems engineering. This next-generation systems modeling provides improved precision, expressiveness, consistency, usability, interoperability, and extensibility over SysML version 1. SysML v2 This meeting will be a continuation of our Saturday WG meeting, and will focus on actual work products that the team created since Jan 2023, to include SysML modeling, a concept of operations (CONOPS), and initial work on the cost and sanction models. All members and those interested in joining SELAW are welcome and encouraged to attend.	Daniel Hettema, Franck Salvatore, Sanford Friedenthal, Chris Schreiber	MBSE Workshop	
Systems Engineering & Lawmaking (SELAW)	Sunday	15:30	16:30	Hybrid session	Salon B		Greg Bulla, David Schrunck	Systems Engineering Group and Lawmaking;;	Working Group
MBSE Social with MBSE Propeller Hat Awards	Sunday	18:00	19:00	In person session	The Strand				Social Event
Monday									
Heuristics Team	Monday	07:00	07:50	Hybrid session	Pier 8	The Heuristics Team will meet on Monday, January 29 from 7 am to 7:50 am, Pacific time. We will discuss progress and plans for the Journal paper we are writing.	Dorothy McKinney	Heuristics;	Working Group
Systems Thinking RoundTable (STRT)	Monday	07:00	08:00	In person session	Salon C	Jumpstart your day with the Systems Thinking Roundtable! Enjoy an hour of reflection with colleagues and friends as we share (or just listen) our thoughts on the topic of the day.	Cecilia Haskins		Working Group
On Guard En Garde: Beyond Reliability Toward Trust in Human Robot Interaction (HRI)	Monday	08:00	09:00	Hybrid session and Available for Replay	Salon DE	On Guard En Garde: Beyond Reliability Toward Trust in Human Robot Interaction (HRI) explores our tenuous relationship with artificial intelligence as generative pretrained platforms confront us with the ontological implications of emergent, algorithmically-derived sensibilities once believed to be the unique domain of being human. The role of physically embodied interaction serves in this work as a methodology grounded in praxis toward refining distinctions between reliability and trustworthiness in assessing levels of safety and learning in various forms of human robot interaction (HRI). The performance lecture (KEYNOTE) describes the theoretical basis for studying the issues of trust indirectly by exploring the element of surprise in strategic game play in human-robot interaction (HRI). An original short play written with a generative pretrained transformer and performed by live actors will serve as a Turing Test. Discussion will encourage contemplation of who (and what) might properly be considered an embodied intelligence.	Hortense Gerardo		Safer Complex System
Safer Complex Systems Working Session: Engineering the Social System for Safer Complex systems	Monday	09:30	11:00	In person session	Esplanade	v Uncover the complexities of the underlying realization system – the people, organizations, and business processes.v Design strategies for a realization system capable of delivering a safe operational system.v Explore the role of social systems in ensuring the safety of complex engineering projects.	Jon Wade		Safer Complex System
Safer Complex Systems Working Session: Integration of Diverse Models for Safer Complex Systems	Monday	09:30	11:00	In person session	Salon E	v Examine the integration of diverse models crucial for delivering safer complex systems.v Discuss the types of models and modeling methodologies needed.v Explore strategies to ensure consistency of understanding across the entire supply network.	Tom McDermott		Safer Complex System
Safer Complex Systems Working Session: Safety Paradigm for Complex Systems	Monday	09:30	11:00	In person session	Salon D	v Delve into unconventional safety approaches for systems with inherent complexities.v Address challenges in ensuring safety when full system analysis is not feasible.v Explore innovative mitigation strategies and best practices.	Dean Beale		Safer Complex System
SOS Engineering Business Meeting	Monday	09:30	12:00	Hybrid session	Pier 9	Purpose: Review current and planned activities of the SOSWGObjective: To review our 2023 objectives, what we achieved, and any new opportunities for 2024Structure: Standard structure based on 2023 objectivesTiming: 2.5 hours	Alan Harding, Judith Dahmann	System of Systems;;	Business Meeting
Systems Engineering Body of Knowledge (SEBoK) Editorial Board	Monday	09:30	11:00	Hybrid session	Hideaway	This meeting slot is the SEBoK Governing Board meeting.Special Guests include: INCOSE President Ralf Hartmann and President-Elect Michael WatsonDetailed Planning for SEBoK Releases in 2024Spring 2024Fall 2024Incorporation of MultimediaCoordination with WGsPossible Restructuring	Nicole Hutchison, Christopher Hoffman, Art Pyster	SEBoK;	Business Meeting
Corporate Advisory Board Meeting	Monday	10:00	12:00	Closed session	Pier 5		Ronald Giachetti, Mike Dahlberg		Business Meeting
Architecture WG Meetings	Monday	11:00	17:00	Hybrid session	Pier 11	IW 2024 Architecture WG Tentative AgendaDay 1: Saturday, 27th Jan 2024 (11:30 to 18:00 – 5 hrs)1 hourFuture of Systems Engineering: Debrief(Anand Kumar, Jean-Luc, Rolf Siegers)1 hourFuture of Architecting: Debrief(Anand Kumar, Jean-Luc, Rolf Siegers)1 hourINCOSE ArchWG Projects: Debrief(Anand Kumar, Jean-Luc, Rolf Siegers)1 hourISO/IEC 42024 - Architecture Fundamentals: Presentation to INCOSE ArchWG and Discussions (Anand Kumar, James Martin)1 hourISO/IEC 42042 – Reference Architectures: Presentation to INCOSE ArchWG and Discussions (James Martin, Peter Bernus)Day 2: Sunday, 28th Jan 2024 (9:30 to 18:00 – 6 ½ hrs)2 hoursPlaceholder: Reference architecture standards (Richard Martin, Hyman Duan, Mathew Hause, Antonio Kung)2 hoursPlaceholder: Reference Architecture Presentations (Laura Hart, Anand Kumar)2 1/2 hoursWorkshop (in collaboration with NDIA): “Growing an Architect” - soliciting inputs for (Rolf Siegers), skills and competencies; learning resources (online and onsite); credentials (certifications, degrees, etc.)Day 3: Monday, 29th Jan 2024 (11:00 to 17:00 – 4 ½ hrs)1 1/2 hoursPlaceholder: Future ArchWG Projects(Anand Kumar, Jean-Luc Garnier, Rolf Siegers)1 hourPlaceholder: INCOSE UK ArchWG Presentation(Tim Rabbets, Mike Wilkinson)1 hourPlaceholder: AFIS ArchWG Presentation(Anand Kumar, Jean-Luc Garnier)1 hourPlaceholder: INCOSE India ArchWG Presentation(Anand Kumar)Day 4: Tuesday, 30th Jan 2024 (8:00 to 11:00 – 3 hrs)1 ½ hoursWorkshop: Enhancing 2024 ArchWG Seminar Series Content - soliciting inputs (Rolf Siegers)1 hourPlaceholder: supplement plans for enterprise, systems, and software architecture awareness and learning sessions1 hourPlaceholder: Community Activities and Closing(Anand Kumar, Jean-Luc Garnier, Rolf Siegers)1/2 hourAny other Discussions(Anand Kumar, Jean-Luc Garnier, Rolf Siegers)	Anand Kumar, Jean-Luc Garnier, Rolf Siegers	Architecture ;;	Working Group
Automotive WG #2	Monday	11:00	12:30	Hybrid session	Pier 4	Program definition ongoing	Alain DAURON	Automotive; ;	Working Group

Critical Infrastructure Protection & Recovery - DHS IDT Workshop	Monday	11:00	13:00	Closed session	Hideaway	CIPR WG internal discussion and leadership meeting.	Daniel Eisenberg	Critical Infrastructure Protection and Recovery;;	Working Group
EMEA Sector meeting	Monday	11:00	12:00	Hybrid session	Salon B	EMEA Sector Leaders will meet and members are welcome as visitorsPurpose: Exchange of news on Sector level with chapter leadership and membersObjective: Update and on Board news and planning of 2024Agenda:Welcome and short introductionMeet the board and newsPlanning 2024 Any other business	Sven-Olaf Schulze	Business Meeting;;	Business Meeting
How to Innovate in MBSE within the Context of Technical & Knowledge Debt	Monday	11:00	12:00	Hybrid session	Pier 7	Purpose & Objective:Technical Debt is a known challenge in software development, slowing a team's productivity or increasing the difficulty of implementing updates. Knowledge Debt is an abstracted concept of Technical Debt, applicable across many (if not all) disciplines. Teams that struggle to find relevant information relating to decision history, strategy / roadmaps, impact of change, etc. suffer the incurred cost of Knowledge Debt. While MBSE & systems engineering in general are capable of reducing both Technical & Knowledge Debt, there appears to be ample opportunity for innovation in this context. This meeting aims to:Understand pain points / challenges currently experienced with respect to Technical & Knowledge DebtUnderstand what solutions (ad-hoc or formal) that have been deployed or are being explored to limit accrual of these debt typesDiscuss how historical patterns (historicity) in knowledge documentation may inform future innovationsSuggest how INCOSE may continue this topic of interest beyond IW24Agenda:Short introductory presentation (10-15 minutes)Facilitated discussion**(45-50 minutes)**Depending on audience size, the discussion could be in smaller break-out groups of 5-10	Christopher Hoffman, Matthew Sease	Complex Systems;Knowledge Management;MBSE Patterns;PM-SE Integration; Process Improvement;Professional Competencies & Soft Skills;Systems and Software Interface;Systems Science;FuSE Methodologies;	Working Group
INCOSE Fellows - General Business	Monday	11:00	12:00	Hybrid session	Salon C	General business discussion	Danielle DeRoche, Bob Kenley, Michael Ryan	INCOSE Fellows;	Business Meeting
IS 2024 Project Team	Monday	11:00	12:00	In person session	Pier 2	Purpose: To gather the team that is managing IS 2024.Objective: To ensure that the team is all on the same page for the run up to IS 2024Structure: Presentation and open discussionTiming: 60 minutes	Donna Long	Business Meeting;;	Business Meeting
IS2024 Technical Program Committee meeting	Monday	11:00	17:00	closed	Pier 6	IS2024 Technical Program Committee meeting. CLOSED.	Anabel Fraga, Javier Calvo-Amodio	IS2024 Technical Program Committee meeting;	Business Meeting
MarCom and certification	Monday	11:00	14:00	In person session	Pier 1		Honor Lind, Courtney Wright	MarCom Certification ;	Business Meeting
MBSE Interoperability Forum	Monday	11:00	17:00	Hybrid session	Salon FG	This session will introduce collaborative Model Based Systems Engineering practices across Extended Enterprise environments. Presentations and discussions will include: eFMI (Linking Design Requirements to FMU's for LOTAR compliance), Federated PLM through OSLC (briefing and demonstration); Web Based traceability (using TraceLynx); next steps discussions.	John Nallon, Kyle Hall	Tools Integration & Model Lifecycle Management;PDES Inc. / LOTAR;	Working Group
NAFEMS-INCOSE Systems Modeling & Simulation WG community	Monday	11:00	12:00	Hybrid session	Pier 10	This session intended for SMS WG to present, discuss and get feedback on the working group organization and plans for 2024, including how to get involved in various focus teams activities.The detailed agenda will be decided closer to the event.	Peter Coleman, Frank Popielas, Phyllis Marbach	NAFEMS-INCOSE Systems Modeling & Simulation;;	Working Group
PM-SE Integration Working Group Leadership Meeting	Monday	11:00	12:00	Hybrid session	Salon H	AGENDAPurpose: PM-SE WG business meeting to align leadership and plan for 2024 activitiesObjectives: Confirm any leadership or role changes, approve charter updates, brief updates on initiatives, call for volunteersStructure: Business meeting. To include introductions, agenda review, brief topic discussions, record decisions, identify follow up actions.Timing: One hour. 10 minutes for intro and agenda review, 40 minutes for updates and discussion, 10 minutes for wrap up	Molly Kovaka, Steven Dam, Tina Srivastava	PM-SE Integration;;	Working Group
Resilient Systems Working Group	Monday	11:00	15:00	Hybrid session	Salon A	RSWG Working Session (4 hour session with 1 hour lunch)- Review/Update The Resilience Elevator Speech and How to Justify Resilience- Review/Update Things that frustrate resilience- Review/Update Techniques for achieving resilience (i.e., Taxonomy Layer 3)- Review/Update plan for SEBoK Cycle 10 (May 2024) update- Review/Update outline & plan for Resilience Primer- Review/Update plan for April 2024 Resilience Mini-Conference	John Brtis, Ken Cureton	Resilient Systems;;	Working Group
SE in Early Stage R&D Collaboration	Monday	11:00	12:00	Hybrid session	Pier 3	Purpose: Identify potential working group collaboration Objective: Identify common objectives Structure: Provide overview of SE in Early Stage R&D on the mission & objectives, potential collaborative working groups provide their overview, brainstorm common areas of interestTiming: Meeting with multiple working groups, 30-45 minutes each	Michael DiMario, Ann Hodges	SE in Early Stage Research & Development;	Working Group
SEBoK Governing Board Meeting	Monday	11:30	14:00	Hybrid session	Pier 8	Overview of SEBoK (Analytics, Performance, 2024 Plans)Governing Board Strategy for 2024	Nicole Hutchison, Art Pyster	SEBoK;	Business Meeting
Mentoring Service Open House	Monday	12:00	13:00	In person session	Salon E		Regina Griego, Dorothy McKinney	Mentoring Service;	Business Meeting
FuSE - Foundations Stream	Monday	12:30	13:00	In person session	Salon B	Preliminary results from of experiments conducted at IW 2023 and EMEA 2023 will be presented to deepen our understanding of a proposed 1st law "Conservation of System Complexity", which parallels the Conservation of Energy in Thermodynamics (1st Law) and the Conservation of Mass in continuum mechanics. Such an experiment driven approach has been implemented in order for Systems Engineering methods and tools to be built on foundational principles that are provably true, and based on laws and axioms that can be tested for falsifiability similar to those in other well-established disciplines of science and engineering like Chemical Engineering, Electrical Engineering or Biological Engineering.	Joshua Sutherland	FuSE;	Working Group
2-Hr Collaborative Workshop: How Might System Security Be Enabled & Facilitated by Systems Engineering	Monday	13:00	15:00	Hybrid session	Hideaway	Two-hour collaborative workshop will explore how and what SE might do to make security as fundamental to system design as performance and safety.	Rick Dove	Systems Security Engineering;	Working Group

Corporate Advisory Board (CAB) Executive Leaders Panel Session	Monday	13:00	14:30	In person session	Salon D	Hosted by the CAB Ronald Giachetti, CAB Chair Mike Dahlberg, CAB Co-Chair The CAB is pleased to present an Executive Panel Session on the strategic orientation and direction of the systems engineering discipline. A panel of executive leaders drawn from members of the Corporate Advisory Board will provide their perspectives on the role of systems engineering in their organization and industry, the challenges and/or opportunities facing the systems engineering community, and how they see the systems engineering discipline evolving. Panel Session Participations: Ms. Annika Meijer Henriksson, Head of Design Gripen and Deputy Head of Business Unit Gripen, Saab Aeronautics, Linköping, Sweden Mr. Kevin Bell, Senior Vice President, Space Systems Group, Aerospace Corporation, Los Angeles, CA USA Mr. Doug Ortel, Chief Engineer and Solutions Architect, Leidos, Rancho Santa Fe, CA, USA Mr. Marco Ferrogali, VP Modelling and Simulation, Airbus, Toulouse, France Dr. Douglas Orellana, Vice President of Intelligent Systems Engineering, ManTech, El Segundo, CA USA Moderator:	Ronald Giachetti, Mike Dahlberg, Ms. Annika Meijer Henriksson, Mr. Kevin Bell, Mr. Doug Ortel, Mr. Marco Ferrogali, Dr. Douglas Orellana, Mr. David Long	Business Meeting	
DEIXWG - Taxonomy	Monday	13:00	14:00	Hybrid session	Pier 7		Terri Chan, Celia Tseng	Digital Engineering Information Exchange; Tools Integration & Model Lifecycle Management	Business Meeting
FuSE Crossing the Steams Workshop	Monday	13:00	15:00	Hybrid session	Salon B	In this facilitated workshop session, we invite those interested in developing new innovative and transdisciplinary FuSE themes. The outcome of this session will be brought into the global systems engineering discussion around the innovative edge of systems engineering practice and research, which is the foundation for developing FuSE products and services.	Erika Palmer	FuSE;	Working Group
IVV WG - Systems Integration Guide/Verification guidance	Monday	13:00	15:00	Hybrid session	Pier 3	Purpose: To define content for a proposed Systems Integration Guidebook and identify examples of information not included in the V&V Guide that should be provided to systems engineers. Objective: To gather information necessary to develop the project proposals and plans. Structure: Group discussion on what needs to be included in both products and allow for discussion of typical systems integration of V&V issues. Timing: The first hour will address Systems Integration and the second V&V.	Jim Armstrong	Integration, Verification & Validation;;	Working Group
Product Line Engineering: Education and Outreach	Monday	13:00	14:30	Hybrid session	Pier 4	Outreach Education and Awareness Attendance: Open to all people interested in PLE Purpose: Share the latest PLE information and make contacts with fellow PLE practitioners Objective: This meeting will increase your knowledge of PLE in industry Structure: Open discussion facilitated by PLE WG leadership Timing: 90 minutes Topics: PLE Introduction ISO 26580 Feature Based Product Line Engineering Update SysMI V2 variability introduction and example Recruit for working group roles	Rowland Darbin, Marco Forlingieri	Product Line Engineering; ;	Working Group
Right-size, Real-time Risk Management Workshop	Monday	13:00	15:00	Hybrid session	Pier 5	Draft Abstract for this workshop: Managing risk in practical ways so that information can be passed easily and quickly among all interested stakeholders is an obvious goal for most all organizations with large investments at stake. Often, the size of these investments suggests that complicated and complex, highly-sophisticated systems, processes or tools are needed to capture the plethora of information and data associated with risk that attempt to quantify risks in a manner similar to gambling and fortune-telling. As a result, project teams attempting to work within a defined scope struggle to find meaningful ways to both identify and manage risks as these evolve during the course of the project. The increased need to work collaboratively within a digital collaborative environment elevates the need for faster and more easily accessed solutions in nearly all areas and risk management is not excluded. This tutorial breaks down the risk management process into five main steps and provides tools for working through each of these steps: · Risk Competencies (drawing from ISO 9001:2018, ISO 31000:2015 and CMMI standards and guidance) · Risk Identification and Analysis · Risk Impact and Prioritization · Action Planning to Address Risk · Action Planning Effectiveness and Risk Closure Participants will then gain real-time experience capturing the results of these steps in a common data management solution that any company can develop and implement. Participants will then see how risk analytics are made readily available to answer a number of different questions that leadership may pose.	Carrie Cabak, Craig Leger	Agile Systems and Systems Engineering; Architecture; Automotive; Competency; Configuration Management; Critical Infrastructure Protection and Recovery; Decision Analysis; Defense Systems; Enterprise Systems; Healthcare; Human Systems Integration; Infrastructure; Information	Working Group
SE Lab Vendor Spotlight and Training	Monday	13:00	17:00	Hybrid session	Pier 9	During the meeting, vendors donating to the SE Lab will have an opportunity to present their tool to members, review the access request process, and provide basics on usage. Purpose: Provide SE Lab vendors an opportunity to highlight their tool(s) Objective: Member and working group awareness of available SE Lab tools and process for access Structure: Targeting one-hour sessions for tool vendors who would like to participate Timing: 4 hours	Heidi Davidz, Alexandra Kowalski	MBSE Initiative; Services;	Business Meeting
Standards Development Department Briefing	Monday	13:00	14:00	Hybrid session	Pier 2		Richard Martin, Daniel Siegl	Standards Development	Working Group
Systems Engineering journal Editorial Board meeting	Monday	13:00	14:00	Closed session	Salon H		Clifford Whitcomb		Business Meeting

Decision Analysis Working Group Review of the Decision Analysis Data Model (DADM)	Monday	13:30	15:30	Hybrid session	Salon C	Purpose: This meeting is to introduce people to the Decision Analysis Working group and review ongoing workproducts.Objective: We plan to review the Decision Analysis Data Model (DADM) and accept it as the first release.Structure: This meeting will use slides to communicate the DADM TTP, We will also review the DADM model.	Frank Salvatore	Decision Analysis;Digital Engineering Information Exchange;Knowledge Management;MBSE Initiative;MBSE Patterns;Measurement;NAFEMS-INCOSE Systems Modeling & Simulation;Process Improvement;Tools Integration & Model Lifecycle Management	Working Group
SBSE WG	Monday	13:30	15:00	Hybrid session	Pier 10	We will work to continue to identify funding sources for small businesses to develop technical innovations that need systems engineering.Network to identify small businesses that are working on innovation programs, including both small business set asides (such as SBIR and STTR) and technology transfer as targets for applying systems engineering for small businesses and eventually role models.Consult with CAB Members to provide a means for small businesses to connect to small businesses teaming partners, Small Business Liaison Officers of large firms, universities associated, with INCOSE, and mentors among SBSE WG and INCOSE members.	Angela Robinson	Small Business Systems Engineering;	Working Group
Americas Sector Chapter Leaders	Monday	14:00	16:00	Hybrid session	Salon H	Purpose: Provide information to New and Returning Americas Sector Chapter LeadersObjective: Provide information on available INCOSE resources, personnel, operations, calendar, chapter award process, and new leader trainingStructure: Presentations by Americas Sector, including guest speakers - President Ralf Hartman, Mike McCarthyTiming: 2 hours	Renee Steinwand, Kevin Weinstein	Business Meeting;;	Business Meeting
DEIXWG - Digital Viewpoint Model	Monday	14:00	15:00	Hybrid session	Pier 8		Terri Chan, Celia Tseng	Digital Engineering Information Exchange;Tools Integration & Model Lifecycle Management	Business Meeting
Enterprise Value Working Group - Start Up & Direction Finding	Monday	14:00	16:00	Hybrid session	Pier 7	Focal Question:2. How can we stand up Systems Engineering for all the other parts of an organisation/enterprise? Purpose: To explore directions for EVWGOObjective: To discuss perspectives on the focal question relevant to enterprise value and systems engineering. Success = Shaping EVWG directionStructure: Systems Engineering beyond the project - presentation by Dr Richard HodgeSystems Engineering for Org/Enterprise StrategySystems Engineering for Enterprise OperationsSystems Engineering for Org/ Enterprise MeasuresSystems Engineering for Org/Enterprise GovernanceSystems Engineers as mentorsTiming: 2 Hours	Richard Hodge, Joseph Bradley	Complex Systems;Enterprise Systems;Social Systems;System of Systems;Systems Science;Value Proposition Initiative;;	Working Group
How to apply for ESEP	Monday	14:00	15:00	In person session	Pier 1	This meeting is to share information from the INCOSE Certification Program with individuals who are interested in applying to become Expert Systems Engineering Professionals (ESEP). Attendees will learn about the requirements for ESEP. They will gather the needed application forms and identify the next steps for their application process. This meeting will be successful if participants apply for ESEP in 2024. The meeting will be in-person only to promote comfortable, easy communication and discussion of specific situations. Similar content will be posted in the PDP for remote access.	Courtney Wright	Certification, EWLSE;	Business Meeting
Proposed Sustainability WG	Monday	14:00	16:00	Closed session	Pier 2	This is a closed meeting. Attendees will review results from two events where INCOSE members provided input about what the WG should focus on. In addition, a position paper will be reviewed during this meeting.	Javier Calvo-Amodio, Erika Palmer	Sustainability WG;	Business Meeting
Systems and Software Interfaces Working Group Open House	Monday	15:00	16:00	Hybrid session	Pier 1	We strongly encourage proactive planning of the meeting agenda to maximize effectiveness and impact. The POST method is a simple way to give clarity before attendees join a meeting, and serves as a starting agenda outline.Purpose: What is the purpose of the meeting?Objective: What are you trying to achieve in the meeting, and what does success look like?Structure: What is the structure of the meeting we are having?Timing: How much time is allocated to the meeting?	jeannine sivy	Systems and Software Interface;;	Working Group
Corporate Advisory Board Meeting	Monday	15:30	17:30	Closed session	Pier 5	Business Meeting.	Ronald Giachetti, Mike Dahlberg		Business Meeting
Digital Engineering Tool Selection (DETS) reference guidance	Monday	15:30	16:30	Hybrid session	Salon C	This meeting will be to discuss how to help the community select tools in a digital engineering context	Frank Salvatore	Architecture;Configuration Management;Defense Systems;Digital Engineering Information Exchange;MBSE Initiative;MBSE Patterns;NAFEMS-INCOSE Systems Modeling & Simulation;Object-Oriented Systems Engineering Method (OOSEM);Process	Working Group

Working Group Leadership	Monday	16:00	17:00	Hybrid session	Pier 7	We strongly encourage proactive planning of the meeting agenda to maximize effectiveness and impact. The POST method is a simple way to give clarity before attendees join a meeting, and serves as a starting agenda outline. Purpose: Understand WG needs and improve the efficiency of WG leadership. Objective: Agree on focus areas (types of WGs, WG chair training, leadership renewal...) and build an action plan. Structure: Closed meeting involving TechOps leaders. Timing: 1 hour	Olivier Dessoude	Business Meeting;;	Business Meeting
The Robot Cabaret: An Installation on Embodied Interaction in Humans and Machines	Monday	17:00	19:30	In person session	Salon DE	The Robot Cabaret: An Installation on Embodied Interaction in Humans and Machines will explore various forms of embodied interactions between humans and machines. Three human and five robot interactants unpack the ways that intelligence and creativity require a body through a mix of spoken text, collaborative movement, and embodied interaction. Our presenters in The Robot Cabaret, a creative applied research installation are Hortense Gerardo (movement), CRANE + ROBO DOG (co-robotic arm and a robotic dog with Twomey as operator), PEPPER, NAO, and AIBO (two humanoid robots and one canine robot, with Eguchi as operator) invite attendees to engage with the robots in a variety of embodied games and tasks. Collectively, this group has deep prior experience in performance and movement (Gerardo), creative robotics (Twomey) and human-robot interaction (Eguchi and Twomey). One large group interactive demonstration (Group Rock, Paper, Scissors Game onstage) and five (5) HRI installations will enable attendees to engage in creative play that will contribute to ongoing comparative studies on cognitive learning strategies in preprogrammed versus cognitive learning AI.	Hortense Gerardo		Safer Complex System

Tuesday

Systems Thinking RoundTable (STRT)	Tuesday	07:00	08:00	In person session	Salon C	Jumpstart your day with the Systems Thinking Roundtable! Enjoy an hour of reflection with colleagues and friends as we share (or just listen) our thoughts on the topic of the day.	Cecilia Haskins		Working Group
Agile Systems & SE Working Group General Meeting	Tuesday	08:00	10:00	Hybrid session	Salon B	General meeting to review activities, projects in process, new project proposals, and information of relevance.	Rick Dove	Agile Systems and Engineering;;	Working Group
Architecture WG Meetings	Tuesday	08:00	11:00	Hybrid session	Pier 4	IW 2024 Architecture WG Tentative AgendaDay 1: Saturday, 27th Jan 2024 (11:30 to 18:00 – 5 hrs)1 hourFuture of Systems Engineering: Debrief (James Martin)1 hourFuture of Architecting: Debrief (Anand Kumar, Jean-Luc, Rolf Siegers)1 hourINCOSE ArchWG Projects: Debrief (Anand Kumar, Jean-Luc, Rolf Siegers)1 hourISO/IEC 42024 - Architecture Fundamentals: Presentation to INCOSE ArchWG and Discussions (Anand Kumar, James Martin)1 hourISO/IEC 42042 – Reference Architectures: Presentation to INCOSE ArchWG and Discussions (James Martin, Peter Bernus)Day 2: Sunday, 28th Jan 2024 (9:30 to 18:00 – 6 ½ hrs)2 hoursPlaceholder: Reference architecture standards (Richard Martin, Hyman Duan, Mathew Hause, Antonio Kung)2 hoursPlaceholder: Reference Architecture Presentations (Laura Hart, Anand Kumar)2 1/2 hoursWorkshop (in collaboration with NDIA): "Growing an Architect" - soliciting inputs for (Rolf Siegers) skills and competencies; learning resources (online and onsite); credentials (certifications, degrees, etc.)Day 3: Monday, 29th Jan 2024 (11:00 to 17:00 – 4 ½ hrs)1 1/2 hoursPlaceholder: Future ArchWG Projects (Anand Kumar, Jean-Luc Garnier, Rolf Siegers)1 hourPlaceholder: INCOSE UK ArchWG Presentation (Tim Rabbets, Mike Wilkinson)1 hourPlaceholder: AFIS ArchWG Presentation (Jean-Luc Garnier)1 hourPlaceholder: INCOSE India ArchWG Presentation (Anand Kumar)Day 4: Tuesday, 30th Jan 2024 (8:00 to 11:00 – 3 hrs)1 ½ hoursWorkshop: Enhancing 2024 ArchWG Seminar Series Content - soliciting inputs (Rolf Siegers) supplement plans for enterprise, systems, and software architecture awareness and learning sessions1 hourPlaceholder: Community Activities and Closing (Anand Kumar, Jean-Luc Garnier, Rolf Siegers)1/2 hourAny other Discussions (Anand Kumar, Jean-Luc Garnier, Rolf Siegers)	Anand Kumar, Jean-Luc Garnier, Rolf Siegers	Architecture;;	Working Group
Certification Exam	Tuesday	08:00	11:00	Pre-registration	Pier 11				Business Meeting
FuSE SE Application Extensions - SE & Asset Mgmt	Tuesday	08:00	09:00	Hybrid session	Pier 10	Given the identified synergy between SE and Asset Mgmt, and hence a means to reach out to new applications for SE, a task force with representatives from INCOSE, IAM and AMC was established in 2023. Purpose: The purpose of this meeting is to continue the work on a Primer/Guide for SE for AM. Objective: Bring those interested in contributing into the task force and set up a plan for 2024. Structure: Introduction to the task force, discussion and definition of deliverable(s) and overall plan for action. Timing: One hour, the intent is to set up the program and environment for collaborative online work following IW.	Tom Strandberg	FuSE;	Working Group
IS2024 Technical Program Committee meeting	Tuesday	08:00	11:00	Closed session	Pier 6	IS2024 Technical Program Committee meeting. CLOSED.	Anabel Fraga, Javier Calvo-Amodio	IS2024 Technical Program Committee meeting;	Business Meeting
Object Oriented Systems Engineering Method (OOSEM) WG Scoping and Planning Meeting	Tuesday	08:00	09:00	Hybrid session	Pier 7	Purpose: Reboot the OOSEM WG with new purposes, goals, and planned deliverables. Objective: Achieve some consensus on a new charter for the OOSEM WG and identify interested participants. Structure: Brief proposed new charter, group discussion and brainstorming of suggested updates. Timing: One hour for the initial discussion and collect contact info for follow-up discussions.	Ryan Noguchi	Object-Oriented Systems Engineering Method (OOSEM);;	Working Group
OpenMBEE Workshop	Tuesday	08:00	11:00	Hybrid session	Salon A	Purpose: Discuss the current state of OpenMBEE tools and plan future community objectives. Objective: INCOSE community and MBSE Initiative is up to date on OpenMBEE. Structure: Digital Ecosystems Update - Russell PeakMMS Flexo overview and updateIncorporated OpenMBEE features in Dassault MBSE tools. Timing: Tuesday morning session	Lucas Aviles	MBSE Initiative;;	Working Group
Planning Impactful Products Committee Activities for 2024	Tuesday	08:00	10:00	Hybrid session	Pier 8	Evaluate and discuss the evolving role of the Impactful Products Committee (IPC). This session aims to strategically redefine the technical product plan process, ensuring it aligns seamlessly with our overarching goals for the upcoming year. A significant focus will be on the integration and effective utilization of INCOSE professional staff, highlighting how their expertise and resources can be leveraged to enhance the committee's output. Participants will engage in an interactive discussion, breaking down current processes and brainstorm innovative approaches to maximize the committee's effectiveness in 2024. This session is pivotal for members who are keen on shaping the IPC's direction and role within INCOSE.	Christian Sprague	Business Meeting;;	Business Meeting
So you think you are good with Complex Systems! - CSWG Workshop	Tuesday	08:00	10:00	Hybrid session	Pier 5	Purpose: Describe and discuss a leading edge methodology and tools for investigating, evaluating and solving complex problems in both complicated and complex system. Objective: Enable participants to more effectively identify and deal with sources of difficulty in their systems engineering efforts, using the latest tools and approaches. Structure: 1) Introduction to the new techniques and processes2) Share case studies and working example3) Participant hands on usage of tools to evaluate their own tasks and challenges (Example case studies will be available if participants do not have their own) 4) Discussion of results and next steps. Timing: 2hrs	Dean Beale, Mike Watson	Complex Systems; Human Systems Integration; Natural Systems; Resilient Systems; Social Systems; System of Systems;;	Working Group
Standards Development Department Briefing	Tuesday	08:00	09:00	Hybrid session	Pier 2		Richard Martin, Daniel Siegl	Standards Development Department	Working Group

SysML v1 to SysML v2 Transition Working Session	Tuesday	08:00	11:00	Hybrid session	Salon F	Introduction – Frank Salvatore (10 min)Starter Model Overview and Walkthrough – Sanford Friedenthal (45 min)SysML v1 to SysML v2 Model Conversion Approach – S. Friedenthal (45 min)SysML v1.x to SysML v2 Model Conversion – Gene Shreve (30 min)Open Discussion – All (45 min)Wrap-up – Frank Salvatore (5 min) Introduction – Frank Salvatore (10 min)Starter Model Overview and Walkthrough – Sanford Friedenthal (45 min)SysML v1 to SysML v2 Model Conversion Approach – S. Friedenthal (45 min)SysML v1.x to SysML v2 Model Conversion – Gene Shreve (30 min)Open Discussion – All (45 min)Wrap-up – Frank Salvatore (5 min)	Frank Salvatore	Architecture; Configuration; Management; Defense Systems; Digital Engineering Information Exchange; MBSE Initiative; MBSE Patterns; NAFEMS-INCOSE Systems Modeling & Simulation; Object-Oriented Systems Engineering Method (OOSEM); Process	Working Group
TIMLM - SMS WG Alignment	Tuesday	08:00	09:30	Hybrid session	Pier 3	Schedule alignment for shared or joint sessions in 2024.	John Nallon, Mark Williams, Kyle Hall	NAFEMS-INCOSE Systems Modeling & Simulation; Tools Integration & Model Lifecycle Management;	Working Group
Complex System Safety session planning	Tuesday	08:30	10:30	Closed session	Salon C	Review material from previous sessionPrepare summary for plenary feedback	Duncan Kemp, Meaghan Oneil	System Safety;	Safer Complex System
Americas Sector Chapter Leader Working Session	Tuesday	09:00	11:00	In person session	Salon G	Purpose: Provide Hand-on assistance with Chapter Leader TrainingObjective: Use and understand templates for Chapter Planning and ExecutionStructure: 30 minutes for each topic area to learn and discuss about Chapter OperationsTiming: 4 sessions of 30 min (approximately).	Renee Steinwand, Kevin Weinstein	Business Meeting;	Business Meeting
DEIXWG Collaboration Space	Tuesday	09:00	11:00	In person session	Pier 2	This is to reserve a space for working group collaborations for AIAA/INCOSE/NDIA and DEIXWG/TIMLM/etc	Terri Chan, Celia Tseng	Digital Engineering Information Exchange; Tools Integration & Model Lifecycle Management	Working Group
FuSE Strategy Session (ExCom)	Tuesday	09:00	10:00	Closed session	Esplanade	This is the FuSE ExCom monthly meeting that will be held live at the IW.	Erika Palmer	FuSE;	Business Meeting
Infrastructure Domain Related Applications - Multi-WG Summit	Tuesday	09:00	10:00	Hybrid session	Salon H	Multi-WG Meeting between WGs that have affinity to the infrastructure application domain.Transportation WGInfrastructure WGCritical Infrastructure Protection & Recovery WGInformation Communications Technology WGPowder and Energy Systems WGAutomotive WGSmart Cities InitiativeRound robin to look for ways to improve collaboration and leverage scarce volunteer resources.The first five Application Domains (above) are present on every major transportation project. As ITS and self-driving cars enter the picture, the Automotive manufacturers will also have significant interfaces with the first five domains. The Smart Cities Initiative has significant interfaces and shared interests with the six applications domains cited above.Thoughts & Observations (issues & opportunities) driving the need for a multi-WG summit:A. Decreasing numbers of Active Volunteers observed – worse since the pandemic? – suggest a TechOps survey to chapter leaders and WG leaders (several root cause theories for this...need to check if anecdotal premise is true)B. Civil Engineering norms over the past 100 years drives the glacial SE adoption (ref AIA, ICE and McKinsey Reports). Most of the working groups cited above have common cause and standing to approach the problem collaboratively.C. Multiple viewpoints from active volunteers in these working groups is very valuable – more variety of topics and speakers keeps discussion threads fresh and interesting.D. Leverage precious volunteer time across several working groups (e.g., common, or shared social media moderator, common Webmaster, common U-Tube channel admin, better collaboration on papers, webinars, coordinated IS tracks, monthly workshops, shared outreach burdens to external organizations)E. Explore new areas where INCOSE / TechOps could provide centralized support or services to minimize the use of engineering volunteers to perform tedious administrative functions	Dale Brown, Marcel van de Ven, Erika Palmer	Automotive; Critical Infrastructure Protection and Recovery; Information Systems; Smart Cities Initiative; Transportation;	Business Meeting
RSWG Working Session Continuation	Tuesday	09:00	11:00	Hybrid session	Pier 9	RSWG Working Session Continuation (2 hour session)- Review/Update The Resilience Elevator Speech and How to Justify Resilience- Review/Update Things that frustrate resilience- Review/Update Techniques for achieving resilience (i.e., Taxonomy Layer 3)- Review/Update plan for SEBoK Cycle 10 (May 2024) update- Review/Update outline & plan for Resilience Primer- Review/Update plan for April 2024 Resilience Mini-Conference	Kenneth Cureton, John Britis	Resilient Systems;	Working Group
Systems Engineering Body of Knowledge (SEBoK) Editorial Board	Tuesday	09:00	11:00	Hybrid session	Pier 7	This meeting slot is the SEBoK Editorial Board meeting.Detailed Planning for SEBoK Releases in 2024Spring 2024Fall 2024Incorporation of MultimediaCoordination with WGsPossible Restructuring	Nicole Hutchison, Christopher Hoffman, Art Pyster	SEBoK;	Business Meeting
Vision & Roadmaps Workstream meeting	Tuesday	09:00	11:00	Closed session	Pier 10	Purpose: The purpose of the meeting is to plan and kick-off of the 2023 activities of this FuSE workstream.Objective: Clarify everybodies activities and contribution for the upcoming period.Structure: The precise agenda will be defined on short notice.Timing: 2 hours	Paul Schreinemakers	FuSE;	Working Group
System Adaptability Workgroup Meeting	Tuesday	09:30	11:00	Hybrid session	Hideaway	Purpose: Discuss 2024 planning for INCOSE Systems Adaptability WGObjective: Refresh attendees with system adaptability existing accomplishments and produce a further development planStructure: We will discuss the following items: 1.Refresh existing results on system adaptability 2.Determine relevance and differences with other related disciplines: PM-SE, Resilience, Agile, etc. (will try to invite their core members to join too) 3.Determine a list of priorities to work on in 2024Timing: 3 hours (second part 1.5 hours)	Haifeng Zhu, James Martin	System Adaptability	Working Group
CSWG Future Opportunities planning (Wrap up session)	Tuesday	10:00	11:00	Hybrid session	Pier 1	Purpose: To review IW progress and future next stepsObjective: Ensure the CSWG are aligned and working on the most important activities that contribute to INCOSE purposesStructure: 1) Review feedback on sessions and thoughts of attendees on CSWG activities2) Review and discuss CSWG plan, adjusting for feedback3) Review IS2024 contributions, CSWG products and plans4) Agree WG sessions approach for 20245) Agree Online presence adjustments and plans6) Wrap upTiming: 2 hrs	Dean Beale, Mike Watson	Complex Systems;	Business Meeting

Model Based Capability Matrix (MBCM) Update	Tuesday	10:00	11:00	Hybrid session	Salon B	Purpose: Discuss plans and objectives for an update to the INCOSE Model Based Capability Matrix (MBCM) productObjective: Identify inputs, suggestions, and interested collaborators for an effort to update the MBCMStructure: Group discussion and brainstorming sessionTiming: 1 hour	Ryan Noguchi	Object-Oriented Systems Engineering Method (OOSEM); Business Meeting;FuS E;	Working Group Meeting
Outreach Strategy	Tuesday	10:00	11:00	Closed session	Pier 3	This meeting is for Outreach strategy and FuSE strategy to sync up. We will be developing outreach plans for 2024 during this meeting.	Erika Palmer	Smart Cities Initiative;	Business Meeting
Smart Cities Annual planning	Tuesday	10:00	11:00	Hybrid session	Pier 8	Purpose: Plan annual schedule, work product priority and key leaders for each Objective: make a plan for meetings and effort for the year Structure: Working session: schedule, budget, effort priority Timing: 1 hours	Jennifer Russell	Smart Cities Initiative;	Working Group Meeting
Closing Plenary	Tuesday	11:00	12:00	Hybrid session and Available for Replay	Salon DE	Hear highlights from Safer Complex Systems, MBSE, and Tech Ops as we wrap up a successful workshop. Then join us at the networking lunch to connect once more with colleagues from across the community as you explore INCOSE's many working groups and initiatives.	Olivier Dessoude, Erika Palmer		Plenary
Networking Lunch - WG Market Place	Tuesday	12:00	14:00	In person session	Lighthouse Ballroom				Social Event
Board of Directors Meeting	Tuesday	14:00	18:00	Closed	Pier 5				Business Meeting

Meeting Name	Contact Name	Meeting day(s)	Start time	End time	Meeting Listing	Room	Meeting Description	Related WG	Type
2-Hr Collaborative Workshop: How Might System Security Be Enabled & Facilitated by Systems Engineering	Rick Dove	Mon, 29 Jan	13:00	15:00	Hybrid session	Hideaway	Two-hour collaborative workshop will explore how and what SE might do to make security as fundamental to system design as performance and safety.	Systems Security Engineering;;	Working Group
Academic Council	Alejandro Salado	Sun, 28 Jan	09:30	12:00	Hybrid session	Salon G	The meeting will consist of two parts. The first part will be informational. The second part will be a workshop. First part:- Update with findings from past meetings at the INCOSE IW 2023, EMEA Conference/Workshop, and INCOSE IS 2024.- Status of different activities within Academic Matters.- Status of the Academic Council. Second part: - We will work on how INCOSE can organize its operations to better serve the academic community at large within INCOSE.		Business Meeting
AFIS/AFNET Engagement Planning	John Nallon, Juan Mendo	Sun, 28 Jan	11:00	12:00	Closed session	Pier 1	Working Group Leadership meeting with AFIS/AFNET representatives to discuss collaboration and engagement opportunities.	Tools Integration & Model Lifecycle Management;;	Working Group
Agile Systems & SE Working Group General Meeting	Rick Dove	Tue, 30 Jan	08:00	10:00	Hybrid session	Salon B	General meeting to review activities, projects in process, new project proposals, and information of relevance.	Agile Systems and Systems Engineering;;	Working Group
Americas Sector Chapter Leader Working Session	Renee Steinwand, Kevin Weinstein	Tue, 30 Jan	09:00	11:00	In person session	Salon G	Purpose: Provide Hand-on assistance with Chapter Leader Training Objective: Use and understand templates for Chapter Planning and Execution Structure: 30 minutes for each topic area to learn and discuss about Chapter Operations Timing: 4 sessions of 30 min (approximately).	Business Meeting;;	Business Meeting
Americas Sector Chapter Leaders	Renee Steinwand, Kevin Weinstein	Mon, 29 Jan	14:00	16:00	Hybrid session	Salon H	Purpose: Provide information to New and Returning Americas Sector Chapter Leaders Objective: Provide information on available INCOSE resources, personnel, operations, calendar, chapter award process, and new leader training Structure: Presentations by Americas Sector, including guest speakers - President Ralf Hartman, Mike McCarthy Timing: 2 hours	Business Meeting;;	Business Meeting
	Renee Steinwand, Kevin Weinstein	Mon, 29 Jan	16:00	17:00	In person session	Salon H	Social with refreshments and appetizers for Chapter Leaders	Business Meeting;;	Business Meeting
Approaches to Project Tasks - Systems Engineers and Project Managers	Mark Kaufman	Sat, 27 Jan	11:00	12:00	In person session	Pier 7	Purpose: Continue research from the PM-SE Working Group related to how project managers and systems engineers approach common project tasks differently. This will be done as a discussion between attendees that relate their professional experiences. Objective: The PM-SE Working Group has researched the differences in associated documentation (SE Handbook, Project Management Body of Knowledge (PMBOK)) to identify theoretical differences in approach between the two disciplines. At this session we will look for real world experiences in the differences in how PMs and SEs approach similar tasks.	PM-SE Integration;;	Working Group

Architecture WG Meetings	Anand Kumar, Jean-Luc Garnier, Rolf Siegers	Sat, 27 Jan	11:00	18:00	Hybrid session	Pier 11	<p>IW 2024 Architecture WG Tentative Agenda Day 1: Saturday, 27th Jan 2024 (11:30 to 18:00 – 5 hrs) 1 hour Future of Systems Engineering: Debrief (James Martin) 1 hour Future of Architecting: Debrief (Anand Kumar, Jean-Luc, Rolf Siegers) 1 hour INCOSE ArchWG Projects: Debrief (Anand Kumar, Jean-Luc, Rolf Siegers) 1 hour ISO/IEC 42024 - Architecture Fundamentals: Presentation to INCOSE ArchWG and Discussions (Anand Kumar, James Martin) 1 hour ISO/IEC 42042 – Reference Architectures: Presentation to INCOSE ArchWG and Discussions (James Martin, Peter Bernus) Day 2: Sunday, 28th Jan 2024 (9:30 to 18:00 – 6 ½ hrs) 2 hours Placeholder: Reference architecture standards (Richard Martin, Hyman Duan, Mathew Hause, Antonio Kung) 2 hours Placeholder: Reference Architecture Presentations (Laura Hart, Anand Kumar) 2 1/2 hours Workshop (in collaboration with NDIA): “Growing an Architect” - soliciting inputs for (Rolf Siegers): a) skills and competencies; b) learning resources (online and onsite); c) credentials (certifications, degrees, etc.) Day 3: Monday, 29th Jan 2024 (11:00 to 17:00 – 4 ½ hrs) 1 1/2 hours Placeholder: Future ArchWG Projects (Anand Kumar, Jean-Luc Garnier, Rolf Siegers) 1 hour Placeholder: INCOSE UK ArchWG Presentation (Tim Rabbets, Mike Wilkinson) 1 hour Placeholder: AFIS ArchWG Presentation (Jean-Luc Garnier) 1 hour Placeholder: INCOSE India ArchWG Presentation (Anand Kumar) Day 4: Tuesday, 30th Jan 2024 (8:00 to 11:00 – 3 hrs) 1 ½ hours Workshop: Enhancing 2024 ArchWG Seminar Series Content - soliciting inputs (Rolf Siegers) b) supplement plans for enterprise, systems, and software architecture awareness and learning sessions 1 hour Placeholder: Community Activities and Closing (Anand Kumar, Jean-Luc Garnier, Rolf Siegers) 1/2 hour Any other Discussions (Anand Kumar, Jean-Luc Garnier, Rolf Siegers)</p>	Architecture;;	Working Group
	Anand Kumar, Jean-Luc Garnier, Rolf Siegers	Sun, 28 Jan	09:30	18:00	Hybrid session	Pier 10	<p>IW 2024 Architecture WG Tentative Agenda Day 1: Saturday, 27th Jan 2024 (11:30 to 18:00 – 5 hrs) 1 hour Future of Systems Engineering: Debrief (James Martin) 1 hour Future of Architecting: Debrief (Anand Kumar, Jean-Luc, Rolf Siegers) 1 hour INCOSE ArchWG Projects: Debrief (Anand Kumar, Jean-Luc, Rolf Siegers) 1 hour ISO/IEC 42024 - Architecture Fundamentals: Presentation to INCOSE ArchWG and Discussions (Anand Kumar, James Martin) 1 hour ISO/IEC 42042 – Reference Architectures: Presentation to INCOSE ArchWG and Discussions (James Martin, Peter Bernus) Day 2: Sunday, 28th Jan 2024 (9:30 to 18:00 – 6 ½ hrs) 2 hours Placeholder: Reference architecture standards (Richard Martin, Hyman Duan, Mathew Hause, Antonio Kung) 2 hours Placeholder: Reference Architecture Presentations (Laura Hart, Anand Kumar) 2 1/2 hours Workshop (in collaboration with NDIA): “Growing an Architect” - soliciting inputs for (Rolf Siegers): a) skills and competencies; b) learning resources (online and onsite); c) credentials (certifications, degrees, etc.) Day 3: Monday, 29th Jan 2024 (11:00 to 17:00 – 4 ½ hrs) 1 1/2 hours Placeholder: Future ArchWG Projects (Anand Kumar, Jean-Luc Garnier, Rolf Siegers) 1 hour Placeholder: INCOSE UK ArchWG Presentation (Tim Rabbets, Mike Wilkinson) 1 hour Placeholder: AFIS ArchWG Presentation (Jean-Luc Garnier) 1 hour Placeholder: INCOSE India ArchWG Presentation (Anand Kumar) Day 4: Tuesday, 30th Jan 2024 (8:00 to 11:00 – 3 hrs) 1 ½ hours Workshop: Enhancing 2024 ArchWG Seminar Series Content - soliciting inputs (Rolf Siegers) b) supplement plans for enterprise, systems, and software architecture awareness and learning sessions 1 hour Placeholder: Community Activities and Closing (Anand Kumar, Jean-Luc Garnier, Rolf Siegers) 1/2 hour Any other Discussions (Anand Kumar, Jean-Luc Garnier, Rolf Siegers)</p>	Architecture;;	Working Group

	Anand Kumar, Jean-Luc Garnier, Rolf Siegers	Mon, 29 Jan	11:00	17:00	Hybrid session	Pier 11	IW 2024 Architecture WG Tentative Agenda Day 1: Saturday, 27th Jan 2024 (11:30 to 18:00 – 5 hrs) 1 hour Future of Systems Engineering: Debrief (James Martin) 1 hour Future of Architecting: Debrief (Anand Kumar, Jean-Luc, Rolf Siegers) 1 hour INCOSE ArchWG Projects: Debrief (Anand Kumar, Jean-Luc, Rolf Siegers) 1 hour ISO/IEC 42024 - Architecture Fundamentals: Presentation to INCOSE ArchWG and Discussions (Anand Kumar, James Martin) 1 hour ISO/IEC 42042 – Reference Architectures: Presentation to INCOSE ArchWG and Discussions (James Martin, Peter Bernus) Day 2: Sunday, 28th Jan 2024 (9:30 to 18:00 – 6 ½ hrs) 2 hours Placeholder: Reference architecture standards (Richard Martin, Hyman Duan, Mathew Hause, Antonio Kung) 2 hours Placeholder: Reference Architecture Presentations (Laura Hart, Anand Kumar) 2 1/2 hours Workshop (in collaboration with NDIA): “Growing an Architect” - soliciting inputs for (Rolf Siegers): a) skills and competencies; b) learning resources (online and onsite); c) credentials (certifications, degrees, etc.) Day 3: Monday, 29th Jan 2024 (11:00 to 17:00 – 4 ½ hrs) 1 1/2 hours Placeholder: Future ArchWG Projects (Anand Kumar, Jean-Luc Garnier, Rolf Siegers) 1 hour Placeholder: INCOSE UK ArchWG Presentation (Tim Rabbets, Mike Wilkinson) 1 hour Placeholder: AFIS ArchWG Presentation (Jean-Luc Garnier) 1 hour Placeholder: INCOSE India ArchWG Presentation (Anand Kumar) Day 4: Tuesday, 30th Jan 2024 (8:00 to 11:00 – 3 hrs) 1 ½ hours Workshop: Enhancing 2024 ArchWG Seminar Series Content - soliciting inputs (Rolf Siegers) b) supplement plans for enterprise, systems, and software architecture awareness and learning sessions 1 hour Placeholder: Community Activities and Closing (Anand Kumar, Jean-Luc Garnier, Rolf Siegers) 1/2 hour Any other Discussions (Anand Kumar, Jean-Luc Garnier, Rolf Siegers)	Architecture;;	Working Group
	Anand Kumar, Jean-Luc Garnier, Rolf Siegers	Tue, 30 Jan	08:00	11:00	Hybrid session	Pier 4	IW 2024 Architecture WG Tentative Agenda Day 1: Saturday, 27th Jan 2024 (11:30 to 18:00 – 5 hrs) 1 hour Future of Systems Engineering: Debrief (James Martin) 1 hour Future of Architecting: Debrief (Anand Kumar, Jean-Luc, Rolf Siegers) 1 hour INCOSE ArchWG Projects: Debrief (Anand Kumar, Jean-Luc, Rolf Siegers) 1 hour ISO/IEC 42024 - Architecture Fundamentals: Presentation to INCOSE ArchWG and Discussions (Anand Kumar, James Martin) 1 hour ISO/IEC 42042 – Reference Architectures: Presentation to INCOSE ArchWG and Discussions (James Martin, Peter Bernus) Day 2: Sunday, 28th Jan 2024 (9:30 to 18:00 – 6 ½ hrs) 2 hours Placeholder: Reference architecture standards (Richard Martin, Hyman Duan, Mathew Hause, Antonio Kung) 2 hours Placeholder: Reference Architecture Presentations (Laura Hart, Anand Kumar) 2 1/2 hours Workshop (in collaboration with NDIA): “Growing an Architect” - soliciting inputs for (Rolf Siegers): a) skills and competencies; b) learning resources (online and onsite); c) credentials (certifications, degrees, etc.) Day 3: Monday, 29th Jan 2024 (11:00 to 17:00 – 4 ½ hrs) 1 1/2 hours Placeholder: Future ArchWG Projects (Anand Kumar, Jean-Luc Garnier, Rolf Siegers) 1 hour Placeholder: INCOSE UK ArchWG Presentation (Tim Rabbets, Mike Wilkinson) 1 hour Placeholder: AFIS ArchWG Presentation (Jean-Luc Garnier) 1 hour Placeholder: INCOSE India ArchWG Presentation (Anand Kumar) Day 4: Tuesday, 30th Jan 2024 (8:00 to 11:00 – 3 hrs) 1 ½ hours Workshop: Enhancing 2024 ArchWG Seminar Series Content - soliciting inputs (Rolf Siegers) b) supplement plans for enterprise, systems, and software architecture awareness and learning sessions 1 hour Placeholder: Community Activities and Closing (Anand Kumar, Jean-Luc Garnier, Rolf Siegers) 1/2 hour Any other Discussions (Anand Kumar, Jean-Luc Garnier, Rolf Siegers)	Architecture;;	Working Group
Automotive WG #2	Alain DAURON	Mon, 29 Jan	11:00	12:30	Hybrid session	Pier 4	Program definition ongoing	Automotive;;	Working Group
Automotive WG Plenary	Alain DAURON	Sun, 28 Jan	09:30	11:00	Hybrid session	Pier 6	Program definition ongoing : this meeting should be the WG plenary hybrid meeting	Automotive;;	Working Group
Board of Directors Meeting		Sun, 28 Jan	13:00	17:30	Closed	Pier 5			Business Meeting
		Tue, 30 Jan	14:00	18:00	Closed	Pier 5			Business Meeting

Certification Exam		Sun, 28 Jan	09:00	12:00	Pre-registration	Pier 11			Business Meeting
		Tue, 30 Jan	08:00	11:00	Pre-registration	Pier 11			Business Meeting
ChatGPT for SE Workshop	Barclay Brown	Sat, 27 Jan	11:00	12:00	Hybrid session	Salon A	Interactive workshop on the use of chatGPT and other large language models and generative AI in systems engineering. Topics include:- Prompt engineering- Application architecture- Embeddings and vector stores- Retrieval-Augmented Generation (RAG)Participants are encouraged to bring application ideas for discussion and live prototypingPresented by INCOSE AI Systems Working Group	Artificial Intelligence Systems;Defense Systems;Digital Engineering Information Exchange;Knowledge Management;Systems Engineering Quality Management (SEQM);;	Working Group
	Barclay Brown	Sun, 28 Jan	14:00	16:00	Hybrid session	Pier 11	Interactive workshop on the use of chatGPT and other large language models and generative AI in systems engineering. Topics include:- Prompt engineering- Application architecture- Embeddings and vector stores- Retrieval-Augmented Generation (RAG)Participants are encouraged to bring application ideas for discussion and live prototypingPresented by INCOSE AI Systems Working Group	Artificial Intelligence Systems;Defense Systems;Digital Engineering Information Exchange;Knowledge Management;Systems Engineering Quality Management (SEQM);;	Working Group
Closing Plenary	Olivier Dessoude, Erika Palmer	Tue, 30 Jan	11:00	12:00	Hybrid session and Available for Replay	Salon DE	Hear highlights from Safer Complex Systems, MBSE, and Tech Ops as we wrap up a successful workshop. Then join us at the networking lunch to connect once more with colleagues from across the community as you explore INCOSE's many working groups and initiatives.		Plenary
Competency Working Group open session	Lori Zipes, Cliff Whitcomb	Sun, 28 Jan	09:30	15:00	Hybrid session	Pier 3		Competency;;	Working Group
Complex System Safety session planning	Duncan Kemp, Meaghan Oneil	Sun, 28 Jan	09:30	11:30	Closed session	Salon C	Review results of workshop sessionsUpdate plan for second sessionDevelop summary messages to brief out	System Safety;;	Safer Complex System
	Duncan Kemp, Meaghan Oneil	Tue, 30 Jan	08:30	10:30	Closed session	Salon C	Review material from previous sessionPrepare summary for plenary feedback	System Safety;;	Safer Complex System
Complex Systems Working Group Kick off meeting (Orientation, progress report and future opportunities)	Dean Beale, Mike Watson	Sat, 27 Jan	15:30	17:00	Hybrid session	Hideaway	Purpose: To report progress on CSWG activities, orientate the attendees to make the most of the IW and discuss future plansObjective: Provide opportunities for INCOSE members to understand and engage in the work of the CSWGStructure: 1) Introductions2) Activity progress and IS2024 plans3) IW sessions and collaboration opportunities4) Future activities and collaboration opportunitiesTiming: 2hrs	Complex Systems;;	Working Group
Complexity Definition discussion with Oli DeWeck	Dorothy McKinney, Dean Beale	Sun, 28 Jan	15:30	17:30	Hybrid session	Pier 3	Meeting agenda:Purpose: Agree on a single definition of complexity for INCOSE to useObjective: Have a common basis for research work (such as Oli de Weck is doing), heuristics, difficulty assessment, and identification of complexity in systems and their environmentStructure: DiscussionTiming: Two hours	Complex Systems;;	Working Group
Corporate Advisory Board (CAB) Executive Leaders Panel Session	Ronald Giachetti, Mike Dahlberg, Ms. Annika Meijer Henriksson, Mr. Kevin Bell, Mr. Doug Ortel, Mr. Marco Ferrogali, Dr. Douglas Orellana, Mr. David Long	Mon, 29 Jan	13:00	14:30	In person session	Salon D			Business Meeting
Corporate Advisory Board Meeting	Ronald Dahlberg	Mon, 29 Jan	10:00	12:00	Closed session	Pier 5	Business Meeting.		Business Meeting
	Ronald Dahlberg	Mon, 29 Jan	15:30	17:30	Closed session	Pier 5	Business Meeting.		Business Meeting

Critical Infrastructure Protection & Recovery - DHS IDT Workshop	Daniel Eisenberg	Sun, 28 Jan	09:30	12:00	Hybrid session	Hideaway	Join the CIPR WG and infrastructure system modeling experts to discuss MBSE methods and taxonomies!Purpose: Discuss the US Department of Homeland Security (DHS) Infrastructure Data Taxonomy (IDT) and determine its use with MBSE methods developed by CIPR Working Group.Objective: Learn, apply, and critique the DHS IDT and show its use for various applications in systems engineering. The overall goal of the session is to establish potential projects and studies that support IDT improvement and application by INCOSE members.Structure: Workshop structure with invited presentations by DHS and CIPR WG members alongside group discussionTiming: Tentative all day.	Critical Infrastructure Protection and Recovery;;	Working Group
	Daniel Eisenberg	Sun, 28 Jan	13:30	16:00	Hybrid session	Hideaway	Join the CIPR WG and infrastructure system modeling experts to discuss MBSE methods and taxonomies!Purpose: Discuss the US Department of Homeland Security (DHS) Infrastructure Data Taxonomy (IDT) and determine its use with MBSE methods developed by CIPR Working Group.Objective: Learn, apply, and critique the DHS IDT and show its use for various applications in systems engineering. The overall goal of the session is to establish potential projects and studies that support IDT improvement and application by INCOSE members.Structure: Workshop structure with invited presentations by DHS and CIPR WG members alongside group discussionTiming: Tentative all day.	Critical Infrastructure Protection and Recovery;;	Working Group
	Daniel Eisenberg	Mon, 29 Jan	11:00	13:00	Closed session	Hideaway	CIPR WG internal discussion and leadership meeting.	Critical Infrastructure Protection and Recovery;;	Working Group
CSWG Future Opportunities planning (Wrap up session)	Dean Beale, Mike Watson	Tue, 30 Jan	10:00	11:00	Hybrid session	Pier 1	Purpose: To review IW progress and future next stepsObjective: Ensure the CSWG are aligned and working on the most important activities that contribute to INCOSE purposeStructure: 1) Review feedback on sessions and thoughts of attendees on CSWG activities2) Review and discuss CSWG plan, adjusting for feedback3) Review IS2024 contributions, CSWG products and plans4) Agree WG sessions approach for 20245) Agree Online presence adjustments and plans6) Wrap upTiming: 2hrs	Complex Systems;;	Business Meeting
Decision Analysis Working Group Review of the Decision Analysis Data Model (DADM)	Frank Salvatore	Sun, 28 Jan	13:30	15:30	Hybrid session	Salon C	Purpose: This meeting is to introduce people to the Decision Analysis Working group and review ongoing workproducts.Objective: We plan to review the Decision Analysis Data Model (DADM) and accept it as the first release.Structure: This meeting will use slides to communicate the DADM TTP, We will also review the DADM model.	Decision Analysis;Digital Engineering Information Exchange;Knowledge Management;MBSE Initiative;MBSE Patterns;Measurement; NAFEMS-INCOSE Systems Modeling & Simulation;Process Improvement;Tools Integration & Model Lifecycle Management;;	Working Group

	Frank Salvatore	Mon, 29 Jan	13:30	15:30	Hybrid session	Salon C	Purpose: This meeting is to introduce people to the Decision Analysis Working group and review ongoing workproducts.Objective: We plan to review the Decision Analysis Data Model (DADM) and accept it as the first release.Structure: This meeting will use slides to communicate the DADM TTP, We will also review the DADM model.	Decision Analysis;Digital Engineering Information Exchange;Knowledge Management;MBSE Initiative;MBSE Patterns;Measurement; NAFEMS-INCOSE Systems Modeling & Simulation;Process Improvement;Tools Integration & Model Lifecycle Management;;	Working Group
DEIXWG - Digital Viewpoint Model	Terri Chan, Celia Tseng	Mon, 29 Jan	14:00	15:00	Hybrid session	Pier 8		Digital Engineering Information Exchange;Tools Integration & Model Lifecycle Management	Business Meeting
DEIXWG - Taxonomy	Terri Chan, Celia Tseng	Mon, 29 Jan	13:00	14:00	Hybrid session	Pier 7		Digital Engineering Information Exchange;Tools Integration & Model Lifecycle Management	Business Meeting
DEIXWG Collaboration Space	Terri Chan, Celia Tseng	Tue, 30 Jan	09:00	11:00	In person session	Pier 2	This is to reserve a space for working group collaborations for AIAA/INCOSE/NDIA and DEIXWG/TIMLM/etc	Digital Engineering Information Exchange;Tools Integration & Model Lifecycle Management	Working Group
DEIXWG Leaders Meeting	Terri Chan, Celia Tseng	Sat, 27 Jan	15:30	16:30	Closed session	Pier 9	60 minutes for DEIXWG leaders to tag up and plan for the conference.**This is a closed session**	Digital Engineering Information Exchange;Business Meeting;;	Working Group
	Terri Chan, Celia Tseng	Sat, 27 Jan	17:00	18:00	Closed session	Pier 9	60 minutes for DEIXWG leaders to tag up and plan for the conference.**This is a closed session**	Digital Engineering Information Exchange;Business Meeting;;	Working Group
Digital Engineering Information Exchange (DEIXWG) Open Meeting	Terri Chan, Celia Tseng	Sun, 28 Jan	09:30	10:30	Hybrid session	Salon H	Purpose: The Digital Engineering Information Exchange has an exciting year ahead and we would like to share our plans with attendees who may want to join our working group.Objective: DEIXWG product leaders will be sharing their work in progress - the Digital Viewpoint Model, the Digital Engineering Primer, the Digital Engineering Guide, and the Digital Engineering Standards Framework. This session will serve as an introduction to other DEIXWG sessions at IW 2024.	Digital Engineering Information Exchange;;	Working Group
Digital Engineering Primer and Guide Working Meeting	Terri Chan, Darryl Howell, Melissa (Missy) Wallace, Celia Tseng	Sun, 28 Jan	13:00	15:00	In person session	Salon B	Purpose: Digital Engineering Primer and Guide Review and DiscussionObjective: DE Primer and DE Guide are two of the projects under the DEIXWG. This session will be a working meeting to solicit comments on the content of the draft material in both. The meeting will be separated into two discussions, one leading to the next, as both products are related in nature.	Digital Engineering Information Exchange;;	Working Group

Digital Engineering Tool Selection (DETS) reference guidance	Frank Salvatore	Mon, 29 Jan	15:30	16:30	Hybrid session	Salon C	This meeting will be to discuss how to help the community select tools in a digital engineering context	Architecture;Configuration Management;Defense Systems;Digital Engineering Information Exchange;MBSE Initiative;MBSE Patterns;NAFEMS-INCOSE Systems Modeling & Simulation;Object-Oriented Systems Engineering Method (OOSEM);Process Improvement;Product Line Engineering;Requirements;SE Tools Database;Tools Integration & Model Lifecycle Management;;	Working Group
Ecosystem mimicry & Eco-Design & Modelling applied to SE process: working session	Dennis Tuckowski, Kai Costantini	Sun, 28 Jan	13:00	15:00	Hybrid session	Pier 4	Continuation and working session of learning how to apply Natural System Ecosystem mimicry and Eco-Design and how to implement this using MBSE and digital Engineering. We will build off the opening sessions overview of the latest research of ecosystem mimicry for System Engineering and show you where to apply it in the SE Life cycle.Presenters:Allison Lyle: Ecosystem mimicry and implementation using MBSE and Digital EngineeringPaul McGoey: Overview and guide for where you would apply in SE life cycle	Natural Systems;;	Working Group
Embedding SE into enterprises - new working group launch	Richard Beasley	Sun, 28 Jan	11:00	13:30	Hybrid session	Pier 7	This is the launch of a new working group - building on strategy session from 2022 on the issue of helping organisations embed systems engineering appropriately to the needs of the organisation.Purpose - Formal launch / initiation of a new working groupObjective: There are a number of objectives 1) Agree Charter for working group, including defining leadership and meeting arrangements 2) General introduction to the overall purpose / objective of the working group (full / long term purpose) 3) Overview of existing preparatory material 4) definition / agreement of first deliverables (proposal is a "scope of the problem that WG is addressing", and a review of sources of existing material (and potential sources from other WGs) that can help address the problem 5) opportunity for WG members to meet and understand their willingness / ability to contributeStructure: The structure will be a timed agenda, working through focused discussions to address the objectives above - not necessarily in the order above Timing: 2 hours	embedding SE into Organisation ;	Working Group
EMEA Sector meeting	Sven-Olaf Schulze	Mon, 29 Jan	11:00	12:00	Hybrid session	Salon B	EMEA Sector Leaders will meet and members are welcome as visitorsPurpose: Exchange of news on Sector level with chapter leadership and membersObjective: Update and on Board news and planning of 2024Agenda:Welcome and short introductionMeet the board and newsPlanning 20204 Any other business	Business Meeting;;	Business Meeting

Empowering Women Interactive Workshop on Persistence in Leadership	Alice Squires, Federica Robinson-Bryant	Sat, 27 Jan	15:30	17:30	Hybrid session	Salon FG	Not for Women Only. This workshop session leverages the "Letters To My Younger Self: How Systems Engineering Changed My Life" (see https://www.incose.org/lmys) for an interactive workshop on persistence in technical leadership throughout one's journey in life.Purpose: To reflect on one's leadership journey and explore the factors that enable versus inhibit persistence in technical leadershipObjective: To share personal stories of how to overcome obstacles and persist in technical leadership; to write about and develop images that support one's persistence in technical leadershipStructure: Interactive workshop with AI component; Participants should walk away with personal artifacts that they can expand upon to create their story of how systems engineering has changed their life and how they have persisted in systems engineering and technical leadership.Timing: 2 hours	Empowering Women Leaders;	Working Group
Empowering Women Leaders Planning for 2024 and Beyond	Alice Squires, Eric Specking	Sun, 28 Jan	09:30	11:00	Hybrid session	Pier 7	This is a business meeting open to women and men interested in taking a leadership role or participating in planning future events and artifacts to be sponsored or created by the Empowering Women Leaders in Systems Engineering (EWLSE). Attendees can already be members of EWLSE or plan to join EWLSE through their INCOSE profile.Purpose: The main purpose of the meeting is to plan 2024 - 2025 EWLSE-sponsored activities.Objective: To brainstorm ideas for events, articles for the INCOSE newsletter, support for DEI, artifacts to build on INCOSE Insight Diversity in SE, LTMYS ebook, and Emerging Trends in SE book, and other.Structure: We will have an icebreaker for all attendees to share their top leadership goal for 2024, and then move to brainstorming ideas and then narrowing them down and prioritizing in five areas: INCOSE events, articles for the INCOSE newsletter, DEI initiatives, EWLSE products, and other.Timing: Let's see what we can accomplish in 1.5 hours.	Empowering Women;	Business Meeting
Enterprise Value Working Group - Start Up & Direction Finding	Richard Hodge, Joseph Bradley	Sat, 27 Jan	15:30	17:30	Hybrid session	Pier 7	BackgroundEnterprise Value WG has been reformed from the Enterprise Systems WG with a new charter: "...to advance and promote the application of Systems Engineering principles and practices to help the enterprise as a human endeavour or venture that delivers increasing value to stakeholders. [Noting] enterprises depend highly on the intelligent interaction, creation, management, and use of various forms of knowledge ...This understanding must include a focus on tacit and intangible aspects of organization that may be alien to many systems engineers accustomed to focusing only on the tangible aspects of cyber-physical systems."Purpose: To introduce the new Enterprise Value WG at IW24 and gain members insights to formulate a direction for the next 2-4 years.Objective: To explore the value proposition of the Enterprise Value Working Group. Success = multiple perspectives and insights on value for the WGStructure: Chaired by Dr Joe Bradley to consider and discuss:New CharterCurrent Core groupMembership: inherited 100+ members of old ESWGMeetingsEvents – Tutorial and papers offered for IS2024SEBoK development – as is and to be...What do members want?What does INCOSE / CAB want?Ideas for an agenda over next 2-5 yearsProductsTiming: 2 hours	Complex Systems;Enterprise Systems;Social Systems;System of Systems;Systems Science;Value Proposition Initiative;;	Working Group
	Richard Hodge, Joseph Bradley	Sun, 28 Jan	15:00	17:00	Hybrid session	Pier 7	Focal Question: 1. What is enterprise value (EV)? How does EV help Systems Engineers leverage their capacity to do Systems Engineering beyond the program/project?Purpose: To explore perspectives on Enterprise Value for Systems EngineersObjective: To improve the understanding of enterprise value and its relevance of 'what is good' for system engineers and INCOSEStructure: Axiology - the Science of Value Perspectives on value Relevance for systems engineeringChallenges to raising systems engineers from technical projects to broader enterprise issuesFinding directions for EVWGTiming: 2 hours	Complex Systems;Enterprise Systems;Social Systems;System of Systems;Systems Science;Value Proposition Initiative;;	Working Group

	Richard Hodge, Joseph Bradley	Mon, 29 Jan	14:00	16:00	Hybrid session	Pier 7	<p>Focal Question:2. How can we stand up Systems Engineering for all the other parts of an organisation/enterprise?</p> <p>Purpose: To explore directions for EVWGOObjective: To discuss perspectives on the focal question relevant to enterprise value and systems engineering. Success = Shaping EVWG directionStructure: Systems Engineering beyond the project - presentation by Dr Richard HodgeSystems Engineering for Org/Enterprise StrategySystems Engineering for Enterprise OperationsSystems Engineering for Org/Enterprise MeasuresSystems Engineering for Org/Enterprise GovernanceSystems Engineers as mentorsTiming: 2 Hours</p>	Complex Systems;Enterprise Systems;Social Systems;System of Science;Value Proposition Initiative;;	Working Group
Events Committee Stakeholders Meeting	Donna Long	Sun, 28 Jan	09:30	10:30	In person session	Pier 1	<p>Purpose: To gather the event stakeholders and discuss the desires for future events - focusing on IW and ISOObjective: Gather the requirements for the year to come on major eventsStructure: Presentation and open discussionTiming: 60 minutes</p>	Business Meeting;;	Business Meeting
Events Portfolio Meeting	Donna Long	Sat, 27 Jan	15:30	17:00	Hybrid session	Pier 3	<p>Purpose: To talk about INCOSE Global PortfolioObjective: Understand what events INCOSE has around the globe so that we can better orchestrate an inclusive INCOSE calendar of events.Structure: This will e an open discussion.Timing: 90 minutes</p>	Business Meeting;;	Business Meeting
FuSE - Foundations Stream	Joshua Sutherland	Mon, 29 Jan	12:30	13:00	In person session	Salon B	<p>Preliminary results from of experiments conducted at IW 2023 and EMEA 2023 will be presented to deepen our understanding of a proposed 1st law "Conservation of System Complexity", which parallels the Conservation of Energy in Thermodynamics (1st Law) and the Conservation of Mass in continuum mechanics. Such an experiment driven approach has been implemented in order for Systems Engineering methods and tools to be built on foundational principles that are provably true, and based on laws and axioms that can be tested for falsifiability similar to those in other well-established disciplines of science and engineering like Chemical Engineering, Electrical Engineering or Biological Engineering.</p>	FuSE;	Working Group
FuSE 2023 Outcomes Session	Erika Palmer	Sat, 27 Jan	11:00	12:00	Hybrid session	Salon FG	<p>This session will provide an in-depth presentation, facilitated discussion and general Q&A around the FuSE 2023 outcomes, and the pathway forward in 2024.</p>	FuSE;	Working Group
FuSE 2024 Products/Session Working Session	Erika Palmer	Sun, 28 Jan	09:30	11:30	Hybrid session	Salon B	<p>This facilitated open workshop session is an opportunity for the the systems engineering community to provide their input to the FuSE initiative and the products and services that are planned for 2024.</p>	FuSE;	Working Group
FuSE Crossing the Steams Workshop	Erika Palmer	Mon, 29 Jan	13:00	15:00	Hybrid session	Salon B	<p>In this facilitated workshop session, we invite those interested in developing new innovative and transdisciplinary FuSE themes. The outcome of this session will be brought into the global systems engineering discussion around the innovative edge of systems engineering practice and research, which is the foundation for developing FuSE products and services.</p>	FuSE;	Working Group
FuSE SE Application Extensions - SE & Asset Mgmt	Tom Strandberg	Tue, 30 Jan	08:00	09:00	Hybrid session	Pier 10	<p>Given the identified synergy between SE and Asset Mgmt, and hence a means to reach out to new applications for SE, a task force with representatives from INCOSE, IAM and AMC was established in 2023.Purpose: The purpose of this meeting is to continue the work on a Primer/Guide for SE for AM.Objective: Bring those interested in contributing into the task force and set up a plan for 2024.Structure: Introduction to the task force, discussion and definition of deliverable(s) and overall plan for action. Timing: One hour, the intent is to set up the porgram and environment for collaborative online work following IW.</p>	FuSE;	Working Group
FuSE Strategy Session (ExCom)	Erika Palmer	Tue, 30 Jan	09:00	10:00	Closed session	Esplanade	<p>This is the FuSE ExCom monthly meeting that will be held live at the IW.</p>	FuSE;	Business Meeting
Heuristics Team	Dorothy McKinney	Mon, 29 Jan	07:00	07:50	Hybrid session	Pier 8	<p>The Heuristics Team will meet on Monday, January 29 from 7 am to 7:50 am, Pacific time. We will discuss progress and plans for the Journal paper we are writing.</p>	Heuristics;	Working Group

Heuristics Team and Risk Mgmt WG Joint Open Meeting	Dorothy McKinney, Jack Stein	Sat, 27 Jan	17:00	18:00	Hybrid session	Pier 4	This is an open joint meeting of the INCOSE Heuristics Initiative Leadership Team and the INCOSE Risk Management WG. The purpose of the meeting is to (a) review and comment on already initiative risk, risk management, and "loss-driven" related heuristics, and (b) to provide a meeting time where any and all individuals and groups not currently involved in the initiative can learn more about the activities, and/or consider joining in to help support the effort.	Decision Analysis;Resilient Systems;Risk Management;The Loss-driven SE Initiative;Heuristics Initiative;	Working Group
Homelessness modeling for INCOSE and San Diego	Jennifer Russell	Mon, 29 Jan	15:30	17:00	Hybrid session	Salon A	<p>Purpose: Bring modeling specialists, Smart cities members, and special WG members together to consider the challenge of modeling homelessness</p> <p>Objective: We will review our current model concepts, develop a standard ConOps outline, and identify specific scenarios as a basis for future modeling efforts</p> <p>Structure: Group activities: 30 mins - overview and current concepts, 60 mins - Work on MBSE model in SE lab!</p>	Enterprise Systems;Future of Systems Engineering (FuSE);Infrastructure;MBSE Initiative;Smart Cities Initiative;Social Systems;;	Working Group
How to apply for Academic Equivalency	Courtney Wright	Sat, 27 Jan	16:00	17:00	Hybrid session	Salon H	Academic Equivalency is a program where university courses are recognized as covering the same content as the INCOSE knowledge exam. Students who do well in Academic Equivalency courses may bypass the knowledge exam when applying for ASEP or CSEP certification. Academic Equivalency may be offered in any language and need not be part of a systems engineering department. Universities who want Academic Equivalency must apply through INCOSE's Certification Program. This meeting is for university representatives or their corporate partners who want to find out what it takes to apply for and operate an Academic Equivalency.	Certification;	Working Group
How to apply for CSEP	Courtney Wright	Mon, 29 Jan	16:00	17:00	In person session	Pier 2	This meeting is to share information from the INCOSE Certification Program with individuals who are interested in applying to become Certified Systems Engineering Professionals (CSEP). Attendees will learn about the requirements for CSEP. They will gather the needed application forms and identify the next steps for their application process. This meeting will be successful if participants apply for CSEP in 2024. The meeting will be in-person only to promote comfortable, easy communication and discussion of specific situations. Similar content will be posted in the PDP for remote access.	Certification, EWLSE;	Working Group
How to apply for ESEP	Courtney Wright	Mon, 29 Jan	14:00	15:00	In person session	Pier 1	This meeting is to share information from the INCOSE Certification Program with individuals who are interested in applying to become Expert Systems Engineering Professionals (ESEP). Attendees will learn about the requirements for ESEP. They will gather the needed application forms and identify the next steps for their application process. This meeting will be successful if participants apply for ESEP in 2024. The meeting will be in-person only to promote comfortable, easy communication and discussion of specific situations. Similar content will be posted in the PDP for remote access.	Certification, EWLSE;	Business Meeting

How to Innovate in MBSE within the Context of Technical & Knowledge Debt	Christopher Hoffman, Matthew Sease	Mon, 29 Jan	11:00	12:00	Hybrid session	Pier 7	Purpose & Objective:Technical Debt is a known challenge in software development, slowing a team's productivity or increasing the difficulty of implementing updates. Knowledge Debt is an abstracted concept of Technical Debt, applicable across many (if not all) disciplines. Teams that struggle to find relevant information relating to decision history, strategy / roadmaps, impact of change, etc. suffer the incurred cost of Knowledge Debt. While MBSE & systems engineering in general are capable of reducing both Technical & Knowledge Debt, there appears to be ample opportunity for innovation in this context. This meeting aims to:Understand pain points / challenges currently experienced with respect to Technical & Knowledge DebtUnderstand what solutions (ad-hoc or formal) that have been deployed or are being explored to limit accrual of these debt typesDiscuss how historical patterns (historicity) in knowledge documentation may inform future innovationsSuggest how INCOSE may continue this topic of interest beyond IW24Agenda:Short introductory presentation (10-15 minutes)Facilitated discussion**(45-50 minutes)**Depending on audience size, the discussion could be in smaller break-out groups of 5-10	Complex Systems;Knowledge Management;MBSE Patterns;PM-SE Integration;Process Improvement;Professional Competencies & Soft Skills;Systems and Software Interface;Systems Science;FuSE Methodologies;	Working Group
INCOSE Fellows - General Business	Danielle DeRoche, Bob Kenley, Michael Ryan	Mon, 29 Jan	11:00	12:00	Hybrid session	Salon C	General business discussion	INCOSE Fellows;	Business Meeting
INCOSE Fellows Selection Committee	Danielle DeRoche, Bob Kenley, Michael Ryan	Sun, 28 Jan	10:30	13:30	Hybrid session	Salon H	Discussion on Fellows nominations, followed by the Selection Committee voting.	INCOSE Fellows;	Business Meeting
INCOSE Foundation	Holly Witte	Sat, 27 Jan	11:00	16:00	Hybrid session	Pier 1	INCOSE Foundation annual meetingTreasurer reportElection of board membersDiscussion of current SE global member projectDiscussion of current/future status	Business Meeting;INCOSE Foundation annual meeting ;	Business Meeting
INCOSE Foundation Soirée sponsored by the Corporate Advisory Board		Sat, 27 Jan	19:00	21:00	In person session	Lighthouse Ballroom			Social Event
INCOSE Mentoring Service Community of Practice (CoP)	Regina Griego	Sat, 27 Jan	11:00	12:00	Hybrid session	Pier 3	This is a meeting of INCOSE members who are currently participating in the INCOSE Mentoring Service. This includes mentees, mentors, and team members. This is our first monthly Mentoring Community of Practice (CoP) Meeting to be held as a hybrid meeting. The agenda for the meeting includes: 1) Brief introduction, 2) Break-out groups to discuss mentoring topics, 3) Tips and tricks that mentors and mentees are using as part of their mentoring relationships, 4) A facilitated discussion of future CoP meetings, and 5) Questions/Open Discussion. If you are a part of the Mentoring Service please come and participate.	Mentoring Service;	Business Meeting
INCOSE Risk Management WG - Open Meeting	Jack Stein, Bob Parro	Sun, 28 Jan	13:30	15:00	Hybrid session	Pier 7	This is an Open General (hybrid) Meeting of the Risk Management WG. The status of current activities of the WG will be reviewed and proposals for updating and adding activities considered. A detailed agenda will be provided and updated as the meeting time approaches.	Risk Management;;	Working Group

Infrastructure Domain Related Applications - Multi-WG Summit	Dale Brown, Marcel van de Ven, Erika Palmer	Tue, 30 Jan	09:00	10:00	Hybrid session	Salon H	Multi-WG Meeting between WGs that have affinity to the infrastructure application domain. Transportation WG Infrastructure WG Critical Infrastructure Protection & Recovery WG Information Communications Technology WG Power and Energy Systems WG Automotive WG Smart Cities Initiative Round robin to look for ways to improve collaboration and leverage scarce volunteer resources. The first five Application Domains (above) are present on every major transportation project. As ITS and self-driving cars enter the picture, the Automotive manufacturers will also have significant interfaces with the first five domains. The Smart Cities Initiative has significant interfaces and shared interests with the six applications domains cited above. Thoughts & Observations (issues & opportunities) driving the need for a multi-WG summit: A. Decreasing numbers of Active Volunteers observed – worse since the pandemic? – suggest a TechOps survey to chapter leaders and WG leaders (several root cause theories for this...need to check if anecdotal premise is true) B. Civil Engineering norms over the past 100 years drives the glacial SE adoption (ref AIA, ICE and McKinsey Reports). Most of the working groups cited above have common cause and standing to approach the problem collaboratively. C. Multiple viewpoints from active volunteers in these working groups is very valuable – more variety of topics and speakers keeps discussion threads fresh and interesting. D. Leverage precious volunteer time across several working groups (e.g., common, or shared social media moderator, common Webmaster, common U-Tube channel admin, better collaboration on papers, webinars, coordinated IS tracks, monthly workshops, shared outreach burdens to external organizations) E. Explore new areas where INCOSE / TechOps could provide centralized support or services to minimize the use of engineering volunteers to perform tedious administrative functions	Automotive; Critical Infrastructure Protection and Recovery; Infrastructure; Information Technology; Power & Energy Systems; Smart Cities Initiative; Transportation ;;	Business Meeting
Introduction to Ecosystem Mimicry & Eco-Design & Modelling Applied to SE process	Dennis Tuckowski, Kai Costantini	Sat, 27 Jan	11:00	12:00	Hybrid session	Pier 10	Introduction of how to apply Natural System Ecosystem mimicry and Eco-Design and how to implement this using MBSE and digital Engineering. We will cover an overview of the latest research of ecosystem mimicry for System Engineering and show you where to apply it in the SE Life cycle. Presenters: Allison Lyle: Ecosystem mimicry and implementation using MBSE and Digital Engineering Paul McGoey: Overview and guide for where you would apply in SE life cycle Allison Lyle is a practicing engineering consultant and instructor focused on applying and elevating systems thinking to domains where physical, ecological and social systems intersect. She works with teams to pragmatically apply systems thinking principles and Model-Based Systems Engineering (MBSE) processes and tools to advance product and system development. In her work she draws on experience and expertise from the medical device, agriculture and sustainability domains. She has led the development of multiple medical device systems (surgical and diagnostic) through the full product development cycle, from stakeholder analyses to technical feasibility assessments, design, regulatory approval, manufacturing and commercialization. She is currently focused on analyzing natural systems to understand how we can apply ecological design principles to human engineered systems for improved efficacy, integration and long-term resilience. Mr. McGoey is a Classic Jurassic Systems Engineer, having obtained an MS Eng SE in the previous century followed by a multi-decade career in National Lab, A&E, and Aerospace. He is a CSEP and active NSWG member.	Natural Systems;;	Working Group
Introduction to Systems of Systems	Alan Harding, Judith Dahmann	Sat, 27 Jan	11:00	12:00	Hybrid session	Pier 4	Purpose: To provide an introduction to Systems of Systems Engineering and the SOSWG Objective: To give those unfamiliar with SOSE a basic understanding and the opportunity to participate in the working group Structure: Short presentation on SOSE basics and opportunities with plenty of time for discussion Timing: 1 hour	System of Systems;;	Working Group
IS 2024 Project Team	Donna Long	Mon, 29 Jan	11:00	12:00	In person session	Pier 2	Purpose: To gather the team that is managing IS 2024. Objective: To ensure that the team is all on the same page for the run up to IS 2024 Structure: Presentation and open discussion Timing: 60 minutes	Business Meeting;;	Business Meeting

IS2024 Technical Program Committee meeting	Anabel Fraga, Javier Calvo-Amodio	Sat, 27 Jan	11:00	17:00	Closed session	Pier 6	IS2024 Technical Program Committee meeting. CLOSED.	IS2024 Technical Program Committee meeting;	Business Meeting
	Anabel Fraga, Javier Calvo-Amodio	Sun, 28 Jan	11:00	17:00	Closed session	Pier 6	IS2024 Technical Program Committee meeting. CLOSED.	IS2024 Technical Program Committee meeting;	Business Meeting
	Anabel Fraga, Javier Calvo-Amodio	Mon, 29 Jan	11:00	17:00	closed	Pier 6	IS2024 Technical Program Committee meeting. CLOSED.	IS2024 Technical Program Committee meeting;	Business Meeting
	Anabel Fraga, Javier Calvo-Amodio	Tue, 30 Jan	08:00	11:00	Closed session	Pier 6	IS2024 Technical Program Committee meeting. CLOSED.	IS2024 Technical Program Committee meeting;	Business Meeting
IVV WG - Systems Integration Guide/Verification guidance	Jim Armstrong	Mon, 29 Jan	13:00	15:00	Hybrid session	Pier 3	Purpose: To define content for a proposed Systems Integration Guidebook and identify examples of information not included in the V&V Guide that should be provided to systems engineers.Objective: To gather information necessary to develop the project proposals and plans.Structure: Group discussion on what needs to be included in both products and allow for discussion of typical systems integration of V&V issues.Timing: The first hour will address Systems Integration and the second V&V.	Integration, Verification & Validation;;	Working Group
KMWG re-set and define	Robert Nilsson, Bill Hubbard	Sat, 27 Jan	11:00	12:00	Hybrid session	Pier 8	Purpose: Organize work 2024Objective: Decide how to proceed and which roles we have and how we want to work and what to develop. What to do with primer.Structure:1. Presentation of participants2. Introduction to WG history3. Presentation of 2023 work4. Decision of how to proceed with "Primer"5. Decisions of future work in general and focus areas - how do we want to work.	Knowledge Management;;	Working Group
Knowledge Management	Robert Nilsson, Bill Hubbard	Mon, 29 Jan	15:30	17:00	Hybrid session	Pier 10	The work group decide on:1. Thoughts/ideas/feedback on primer (documented on files in Viva Engage, read before)2. Next step primer? When release3. Content for 2024 besides primer	Knowledge Management;;	Working Group
MarCom and certification	Honor Lind, Courtney Wright	Mon, 29 Jan	11:00	14:00	In person session	Pier 1		MarCom Certification;	Business Meeting
MBSE Interoperability Forum	John Nallon, Kyle Hall	Sun, 28 Jan	13:00	17:00	Hybrid session	Salon FG	The MBSE Interoperability Forum will present for discussion several published and in-work standards and use cases that enable collaborative Model Based Systems Engineering practices across Extended Enterprise environments. The topics identified include: MoSSEC - (ISO 10303-AP243 Introduction and planned activities); LOTAR for MBSE - model archival and retrieval.	Tools Integration & Model Lifecycle Management;PDES Inc. / LOTAR;	Working Group
	John Nallon, Kyle Hall	Mon, 29 Jan	11:00	17:00	Hybrid session	Salon FG	This session will introduce collaborative Model Based Systems Engineering practices across Extended Enterprise environments. Presentations and discussions will include: eFMI (Linking Design Requirements to FMU's for LOTAR compliance), Federated PLM through OSLC (briefing and demonstration); Web Based traceability (using TraceLynx); next steps discussions.	Tools Integration & Model Lifecycle Management;PDES Inc. / LOTAR;	Working Group

MBSE Keynote: "A Decade of Digital Engineering Research, Insights Past and Future from the Systems Engineering Research Center"	Tom McDermott	Sat, 27 Jan	11:00	12:00	Hybrid session and Available for Replay	Salon DE	Highlights for this year’s MBSE Workshop: Day 1: During our last INCOSE Symposium MBSE Lightning Round, Dr. Tom McDermott provided insights Systems Engineering Research Center (SERC) progress in Digital Engineering (DE) with some interesting insights that his 18 min time limit didn’t provide time to share the details. We’ve asked Dr. McDermott to come back and keynote/kickoff the MBSE Workshop with those details in hopes it will set the mood to address a variety of issues impeding our progress in implementing MBSE in our organizations. After a break we will have our Working Group Round Robin where various working groups sharing their MBSE related progress, followed by an update on the INCOSE Systems Engineering Tools Lab, and wrap up with an MBSE Open Forum. This forum will allow open Q&A exchange on MBSE concerns, lessons learned, and advice from experts on various MBSE topics to share their knowledge and experience. Day 2: will include an all-day SysML v2 Transition workshop intended to assist organizations and practitioners in their transition from SysML v1 to SysML v2. With the imminent release of the SysML v2 standard the timing of this workshop is perfect to provide information on implementing the new system modeling standard.Sunday evening is our MBSE Social with includes the coveted Propeller Hat Awards for this year.On Monday & Tuesday are many MBSE related working groups (NAFEMS, SE Tools Database, MoSSEC, OOSEM, and many others) you may want to participate in. Inside the workshop app or online web agenda, select “MBSE Workshop” under the "Filter by topic" to see MBSE related content in the IW program. Given so many things going on in parallel during the MBSE Workshop, we apologize in advance that you can’t attend them all. Some of the sessions will be recorded for future playback.--MBSE Initiative Team		MBSE Workshop
MBSE Open Forum	Troy Peterson, Mark Sampson	Sat, 27 Jan	16:30	18:00	Hybrid session and Available for Replay	Salon DE		MBSE Workshop	
MBSE Patterns Working Group Meetings	Bill Schindel	Sun, 28 Jan	13:30	16:30	Hybrid session	Salon H	Meeting agenda and time line to be posted.	MBSE Patterns;;	Working Group
		Sun, 28 Jan	18:00	19:00	In person session	The Strand			Social Event
Mentoring Service Open House	Regina Griego, Dorothy McKinney	Mon, 29 Jan	12:00	13:00	In person session	Salon E		Mentoring Service;	Business Meeting
Model Based Capability Matrix (MBCM) Update	Ryan Noguchi	Tue, 30 Jan	10:00	11:00	Hybrid session	Salon B	Purpose: Discuss plans and objectives for an update to the INCOSE Model Based Capability Matrix (MBCM) productObjective: Identify inputs, suggestions, and interested collaborators for an effort to update the MBCMStructure: Group discussion and brainstorming sessionTiming: 1 hour	Object-Oriented Systems Engineering Method (OOSEM);;	Working Group

Model Metadata - Curation and Cataloging - Discoverability and Reuse	James Ciarcia	Mon, 29 Jan	16:00	17:00	In person session	Pier 3	<p>Model Curator is a new role as part the future digital engineering ecosystem, responsible for managing the lifecycle of a digital asset. Come join us on the journey of refining this role and developing a model curation business processes, competency framework, ecosystem curation service requirements and model metadata requirements.</p> <p>The curator puts the “authority” into “Authoritative Source of Truth”, which includes cataloging and categorizing digital assets by intended use and accessibility, managing processes for identifying and socializing best digital assets, and providing portfolio planning and monitoring services to ensure best value at program and enterprise levels.&nbsp; Model Curators ensure best of breed models and associated software and simulations are broadly understood and discoverable through an open curated catalog. By ensuring the accessibility of authoritative assets, and by tracking digital asset application and dependencies, the end-users—managers, engineers, operators, and maintainers—will provide higher quality products in less time due to the openly discoverable and available digital knowledge available for use and re-use.</p>	Agile Systems and Systems Engineering;Digital Engineering Information Exchange;Enterprise Systems;Knowledge Management;MBSE Initiative;NAFEMS-INCOSE Systems Modeling & Simulation;;	Working Group
Modularity of Natural Systems and Systems Engineering/ What can Designing Systems within the constraints of Nature positive Designs look like?	Dennis Tuckowski, Kai Costantini, Curt McNamara	Sun, 28 Jan	10:00	11:30	Hybrid session	Pier 5	<p>This session will include 2 parts.Part 1: Modularity of Natural Systems and Systems Engineering</p> <p>Modularity in Nature is the archetype for agile adaptive, iterative and resilience patterns in materials and processes. It teaches us and forms a basis for Agile, Resilience Thinking and MBSE in SE.</p> <p>Presented by: Curt McNamara</p> <p>Part 2: What can Designing Systems within the constraints of Nature positive Designs look like?</p> <p>A tentative formulation of a stage gated approach for "Nature Integration Readiness Levels of Systems"</p> <p>What could bioinspired design as a regenerative pathway towards nature positive SE look like? A brief introduction will set the stage for collective exploration using a sample industry and two intractable sustainability problems to illustrate the problem space. Join us for an exploration of what this could look like."</p> <p>Presented by: Kai Costantini</p>	Natural Systems;;	Working Group
NAFEMS-INCOSE Systems Modeling & Simulation WG community	Peter Coleman, Frank Popielas, Phyllis Marbach	Sun, 28 Jan	10:00	12:00	Hybrid session	Esplanade	This session intended for SMS WG members and other interested parties to come together and interactively work on developing the WG products and roadmap for 2024.The selected products will be decided closer to the event.	NAFEMS-INCOSE Systems Modeling & Simulation;;	Working Group
	Peter Coleman, Frank Popielas, Phyllis Marbach	Mon, 29 Jan	11:00	12:00	Hybrid session	Pier 10	This session intended for SMS WG to present, discuss and get feedback on the working group organization and plans for 2024, including how to get involved in various focus teams activities.The detailed agenda will be decided closer to the event.	NAFEMS-INCOSE Systems Modeling & Simulation;;	Working Group
Networking Lunch - WG Market Place		Tue, 30 Jan	12:00	14:00	In person session	Lighthouse Ballroom			Social Event
Object Oriented Systems Engineering Method (OOSEM) WG Scoping and Planning Meeting	Ryan Noguchi	Tue, 30 Jan	08:00	09:00	Hybrid session	Pier 7	Purpose: Reboot the OOSEM WG with new purposes, goals, and planned deliverables.Objective: Achieve some consensus on a new charter for the OOSEM WG and identify interested participants. Structure: Brief proposed new charter, group discussion and brainstorming of suggested updates. Timing: One hour for the initial discussion and collect contact info for follow-up discussions.	Object-Oriented Systems Engineering Method (OOSEM);;	Working Group

On Guard En Garde: Beyond Reliability Toward Trust in Human Robot Interaction (HRI)	Hortense Gerardo	Mon, 29 Jan	08:00	09:00	Hybrid session and Available for Replay	Salon DE	On Guard En Garde: Beyond Reliability Toward Trust in Human Robot Interaction (HRI) explores our tenuous relationship with artificial intelligence as generative pretrained platforms confront us with the ontological implications of emergent, algorithmically-derived sensibilities once believed to be the unique domain of being human. The role of physically embodied interaction serves in this work as a methodology grounded in praxis toward refining distinctions between reliability and trustworthiness in assessing levels of safety and learning in various forms of human robot interaction (HRI). The performance lecture (KEYNOTE) describes the theoretical basis for studying the issues of trust indirectly by exploring the element of surprise in strategic game play in human-robot interaction (HRI). An original short play written with a generative pretrained transformer and performed by live actors will serve as a Turing Test. Discussion will encourage contemplation of who (and what) might properly be considered an embodied intelligence.		Safer Complex System
openCAESAR: Enabling Rigor and Agility in MBSE Practice	Christian Sprague	Sat, 27 Jan	15:30	16:30	Hybrid session	Salon A	Maged Elaasar will introduce the openCAESAR project and its approach to MBSE. It will highlight how the approach increases the rigor of systems description using the Ontological Modeling Language (OML) and other semantic technologies, and increases the agility of systems engineering workflows by using DevOps practices. It will also reflect on experience using this approach for several years on large space projects (Like Psyche, Europa Clipper, and Mars Sample Return) at the Jet Propulsion Laboratory (JPL). Towards the end, the talk will also introduce onto:Nexus 2024, a one-day hybrid workshop planned on Wed 1/31 (the day after IW) at JPL. The workshop on Ontological Modeling and Analysis will be an opportunity to learn more about openCAESAR and the work of other members of its community.Objectives and desired outcomesAttendees will learn about the openCAESAR project and its approach for MBSE.Attendees will get introduced to the Ontological Modeling Language and its analysis tools.Attendees will get introduced to the main MBSE workflows and the tools that support them.Attendees will learn how JPL is leveraging openCAESAR on its space missions.Attendees will learn about the onto:Nexus 2024 workshop and how they can attend it.Timing and schedule60 mins split into 45 mins presentation and 15 mins Q/A.	FUSE;	Business Meeting
Opening Plenary	Steve Records, Marilee Wheaton, Ralf Hartmann, Olivier Dessoude	Sat, 27 Jan	08:00	09:30	Hybrid session and Available for Replay	Salon DE	Kick off the 2024 International Workshop by celebrating the accomplishments of 2023 and hearing a vision for our path forward.		Plenary
OpenMBEE Workshop	Lucas Aviles	Tue, 30 Jan	08:00	11:00	Hybrid session	Salon A	Purpose: Discuss the current state of OpenMBEE tools and plan future community objectivesObjective: INCOSE community and MBSE Initiative is up to date on OpenMBEEstructure: Digital Ecosystems Update - Russell PeakMMS Flexo overview and updateIncorporated OpenMBEE features in Dassault MBSE toolsTiming: Tuesday morning session	MBSE Initiative;;	Working Group
Outreach Strategy	Erika Palmer	Tue, 30 Jan	10:00	11:00	Closed session	Pier 3	This meeting is for Outreach strategy and FuSE strategy to sync up. We will be developing outreach plans for 2024 during this meeting.	Business Meeting;FuSE;	Business Meeting

PDP-Competency WG Workshop - Conducting a Competency Self-Assessment in the PDP	Kirk Michealson	Sat, 27 Jan	15:30	17:30	Hybrid session	Esplanade	<p>The Professional Development Portal (PDP) is a service to INCOSE members and CAB associates. Starting as a Corporate Advisory Board priority, the PDP was created to provide value to new engineers, experienced systems engineers, contributors, and corporate officials. With coordination across INCOSE, the PDP was developed to provide an ability for users to conduct a competency self-assessment, browse and search a content catalog, save discovered learning resources to a private bookshelf, and report completed professional development to their managers. Initially, INCOSE's Systems Engineering Competency Framework (ISECF) was incorporated into the PDP to support basic competency self-assessments. Now, with the recent publication of the Systems Engineering Competency Assessment Guide (SECAG), PDP users can now do a more detailed competency self-assessment and send their results with evidence to their managers. Starting with a brief overview of the PDP updates since IW 23, this workshop will provide an overview of both the INCOSE Systems Engineering Competency Framework and Systems Engineering Competency Assessment Guide, and finish with hands-on training on conducting both a basic and a detailed competency self-assessment that you can use to determine what to do next for your professional development while creating your learning journey. Join the PDP Leadership Team in a PDP overview, discussion, and hands-on demonstration – bring your laptop!</p> <p>Purpose: The PDP Leadership Team and Competency WG will explain how to conduct a competency self-assessment in the PDP. Objective: The objective is to show PDP users how to conduct basic competency self-assessments using the ISECF and detailed competency self-assessments using the SECAG. Structure: A classroom session with attendees using their laptops to follow along with the instructors. Timing: 2 hours (120 minutes)</p>	Competency;;	Working Group
Planning Impactful Products Committee Activities for 2024	Christian Sprague	Tue, 30 Jan	08:00	10:00	Hybrid session	Pier 8	<p>Evaluate and discuss the evolving role of the Impactful Products Committee (IPC). This session aims to strategically redefine the technical product plan process, ensuring it aligns seamlessly with our overarching goals for the upcoming year. A significant focus will be on the integration and effective utilization of INCOSE professional staff, highlighting how their expertise and resources can be leveraged to enhance the committee's output. Participants will engage in an interactive discussion, breaking down current processes and brainstorm innovative approaches to maximize the committee's effectiveness in 2024. This session is pivotal for members who are keen on shaping the IPC's direction and role within INCOSE.</p>	Business Meeting;;	Business Meeting
PLE and CM standards working session for ISO26581	Rowland Darbin, Marco Forlingieri	Sun, 28 Jan	09:30	12:00	Hybrid session	Salon A	<p>Product Line Engineering and Configuration Management standards working session for ISO26581</p> <p>Purpose: Review status and recommendations for ISO 26851 CM for PLE Objective: Collaboration between PLE and CM WG for ISO26581 feedback Structure: Present the current ISO25681 standard, collect feedback and discussion of open topics Timing: This is a full morning meeting, with individual follow up as needed</p>	Configuration Management;Product Line Engineering;;	Working Group

PM-SE Integration WG Big Ideas Showcase	Molly Kovaka, Steven Dam, Tina Srivastava	Sun, 28 Jan	15:30	17:30	Hybrid session	Pier 4	Join the PM-SE Integration WG for our Big Ideas Showcase! It's a collection of short presentations highlighting the ways that some of our members are integrating PM and SE disciplines in their own practice. The session goal is to generate discussion at IW, and also to gauge enthusiasm for more in-depth presentations at future PM-SE members' meetings in the coming year. Individual presentations: Big Ideas and Hot Topics in PM-SE integrationBad News, Good News, and Team Tools: A secret formula to project success - Molly Kovaka (10 min) "As a PM, how do you convince a project owner to include Systems Engineering and a Systems Engineer in the team from the start? This is my client-facing pitch for why PM and SE collaboration is vitally important to project success - and how to harness it by combining a secret formula with existing tools." Integrating PM and SE and suiting standard processes at the program and system life cycle data - John Metcalf (20 min) "Using Design Structure Matrix (DSM) Techniques in a Major Defense Acquisition Program (MDAP) to Define the Product Development (PD) Work Products" PM-SE Integration with LML and Innoslate - Steven Dam (20 min) "The Lifecycle Modeling Language (LML) was designed from its inception in 2013 as a means to provide an effective ontology for systems engineering and program management. More recently it was updated to expand the program management capabilities of the language. This open standard has been incorporated in SPEC Innovations' Innoslate tool."	PM-SE Integration;;	Working Group
PM-SE Integration Working Group Leadership Meeting	Molly Kovaka, Steven Dam, Tina Srivastava	Mon, 29 Jan	11:00	12:00	Hybrid session	Salon H	AGENDAPurpose: PM-SE WG business meeting to align leadership and plan for 2024 activitiesObjectives: Confirm any leadership or role changes, approve charter updates, brief updates on initiatives, call for volunteersStructure: Business meeting. To include introductions, agenda review, brief topic discussions, record decisions, identify follow up actions.Timing: One hour. 10 minutes for intro and agenda review, 40 minutes for updates and discussion, 10 minutes for wrap up	PM-SE Integration;;	Working Group
President-Elect Academic Involvement Discussion	Michael Watson	Sat, 27 Jan	11:00	12:00	Closed session	Hideaway	We strongly encourage proactive planning of the meeting agenda to maximize effectiveness and impact. The POST method is a simple way to give clarity before attendees join a meeting, and serves as a starting agenda outline.Purpose: What is the purpose of the meeting? To discuss improvement in academic involvement.Objective: What are you trying to achieve in the meeting, and what does success look like? Formulate 2024 planning. Structure: What is the structure of the meeting we are having? DiscussionTiming: How much time is allocated to the meeting? 1 hour	Business Meeting;;	Business Meeting
Product Line Engineering: Education and Outreach	Rowland Darbin, Marco Forlingieri	Mon, 29 Jan	13:00	14:30	Hybrid session	Pier 4	PLE Outreach Education and AwarenessAttendance: Open to all people interested in PLE Purpose: Share the latest PLE information and make contacts with fellow PLE practitionersObjective: This meeting will increase your knowledge of PLE in industryStructure: Open discussion facilitated by PLE WG leadership Timing: 90minutesTopics: PLE Introduction ISO 26580 Feature Based Product Line Engineering Update SysMI V2 variability introduction and example Recruit for working group roles	Product Line Engineering;;	Working Group
Proposed Sustainability WG	Javier Calvo-Amodio, Erika Palmer	Mon, 29 Jan	14:00	16:00	Closed session	Pier 2	This is a closed meeting. Attendees will review results from two events where INCOSE members provided input about what the WG should focus on. In addition, a position paper will be reviewed during this meeting.	Sustainability WG;	Business Meeting

Requirements Working Group Meeting (Open to All)	Tami Katz, Lou Wheatcraft	Sat, 27 Jan	15:30	18:00	Hybrid session	Pier 8	Requirements Working Group Agenda: Purpose: Working Group Meeting and Coordination Objective: Debrief WG for activities and status, share new concepts for discussion, obtain inputs on new products, recruit new support Meetings will span two days to enable all objectives to be met (Sat, Sun)	Requirements;;	Working Group
	Tami Katz, Lou Wheatcraft	Sun, 28 Jan	09:30	12:00	Hybrid session	Pier 8	Requirements Working Group Agenda: Purpose: Working Group Meeting and Coordination Objective: Debrief WG for activities and status, share new concepts for discussion, obtain inputs on new products, recruit new support Meetings will span two days to enable all objectives to be met (Sat, Sun)	Requirements;;	Working Group
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Resilient Systems Working Group	John Brtis, Ken Cureton	Sun, 28 Jan	15:30	16:30	Hybrid session	Pier 1	General Meeting- the Mission of the RSWG- location and types of RSWG work products- planned RSWG products	Resilient Systems;;	Working Group
	John Brtis, Ken Cureton	Mon, 29 Jan	11:00	15:00	Hybrid session	Salon A	RSWG Working Session (4 hour session with 1 hour lunch)- Review/Update The Resilience Elevator Speech and How to Justify Resilience- Review/Update Things that frustrate resilience- Review/Update Techniques for achieving resilience (i.e., Taxonomy Layer 3)- Review/Update plan for SEBoK Cycle 10 (May 2024) update- Review/Update outline & plan for Resilience Primer- Review/Update plan for April 2024 Resilience Mini-Conference	Resilient Systems;;	Working Group
Right-size, Real-time Risk Management Workshop	Carrie Cabak, Craig Leger	Mon, 29 Jan	13:00	15:00	Hybrid session	Pier 5	Draft Abstract for this workshop: Managing risk in practical ways so that information can be passed easily and quickly among all interested stakeholders is an obvious goal for most all organizations with large investments at stake. Often, the size of these investments suggests that complicated and complex, highly- sophisticated systems, processes or tools are needed to capture the plethora of information and data associated with risk that attempt to quantify risks in a manner similar to gambling and fortune-telling. As a result, project teams attempting to work within a defined scope struggle to find meaningful ways to both identify and manage risks as these evolve during the course of the project. The increased need to work collaboratively within a digital collaborative environment elevates the need for faster and more easily accessed solutions in nearly all areas and risk management is not excluded. This tutorial breaks down the risk management process into five main steps and provides tools for working through each of these steps: · Risk Competencies (drawing from ISO 9001:2018, ISO 31000:2015 and CMMI standards and guidance) · Risk Identification and Analysis · Risk Impact and Prioritization · Action Planning to Address Risk · Action Planning Effectiveness and Risk Closure Participants will then gain real-time experience capturing the results of these steps in a common data management solution that any company can develop and implement. Participants will then see how risk analytics are made readily available to answer a number of different questions that leadership may pose.	Agile Systems and Engineering;Architecture;Automotive;Competency;Configuration Management;Critical Infrastructure Protection and Recovery;Decision Analysis;Defense Systems;Enterprise Systems;Healthcare;Human Systems Integration;Infrastructure;Information Communications Technology;Power & Energy Systems;Process Improvement;Requirements;Risk Management;Small Business Systems Engineering;Smart Cities Initiative;System Safety;Systems and Software	Working Group
RSWG Working Session Continuation	Kenneth Cureton, John Brtis	Tue, 30 Jan	09:00	11:00	Hybrid session	Pier 9	RSWG Working Session Continuation (2 hour session)- Review/Update The Resilience Elevator Speech and How to Justify Resilience- Review/Update Things that frustrate resilience- Review/Update Techniques for achieving resilience (i.e., Taxonomy Layer 3)- Review/Update plan for SEBoK Cycle 10 (May 2024) update- Review/Update outline & plan for Resilience Primer- Review/Update plan for April 2024 Resilience Mini-Conference	Resilient Systems;;	Working Group

<p>Safer Complex Systems Keynote: An introduction to Complex System Safety</p>	Duncan Kemp	Sat, 27 Jan	10:00	11:00	Hybrid session and Available for Replay	Salon DE			Safer Complex System
<p>Safer Complex Systems Working Session: Engineering the Social System for Safer Complex systems</p>	Jon Wade	Sat, 27 Jan	13:00	15:00	In person session	Salon FG			Safer Complex System
	Jon Wade	Mon, 29 Jan	09:30	11:00	In person session	Esplanade			Safer Complex System
<p>Safer Complex Systems Working Session: Integration of Diverse Models for Safer Complex Systems</p>	Tom McDermott	Sat, 27 Jan	13:00	15:00	In person session	Salon E			Safer Complex System
	Tom McDermott	Mon, 29 Jan	09:30	11:00	In person session	Salon E			Safer Complex System
<p>Safer Complex Systems Working Session: Safety Paradigm for Complex Systems</p>	Dean Beale	Sat, 27 Jan	13:00	15:00	In person session	Salon D			Safer Complex System
	Dean Beale	Mon, 29 Jan	09:30	11:00	In person session	Salon D			Safer Complex System
<p>SBSE WG</p>	Angela Robinson	Sun, 28 Jan	13:30	15:00	Hybrid session	Pier 1	Introduce competed drafts for submission of Deployment Packages (DP) and the SE Profile SBSE Guide. We will review the Project Management, Configuration Management, and Needs and Requirements Engineering DPs. Plan for next work product phase for the Functional and Physical Architecture, Integration, and Interface DPs.	Small Business Systems Engineering;;	Working Group
	Angela Robinson	Mon, 29 Jan	13:30	15:00	Hybrid session	Pier 10	We will work to continue to Identify funding sources for small businesses to develop technical innovations that need systems engineering.Network to identify small businesses that are working on innovation programs, including both small business set asides (such as SBIR and STTR) and technology transfer as targets for applying systems engineering for small businesses and eventually role models.Consult with CAB Members to provide a means for small businesses to connect to small businesses teaming partners, Small Business Liaison Officers of large firms, universities associated, with INCOSE, and mentors among SBSE WG and INCOSE members.	Small Business Systems Engineering;;	Working Group
<p>SE for Industrial (Manufacturing) Systems</p>	Emmanuelle Garcia	Mon, 29 Jan	15:30	17:00	Hybrid session	Hideaway	oday, SE is largely applied to the development of “product” viewed as the system of interest while the industrial system, which allows the production of them, is considered as an enabler.From a manufacturer perspective, his system of interest is the industrial system which is also quite complex (network, interfaces, technology, connectivity...) with a growing complexity with Industry 4.0. Thus, SE application could bring benefits in the development of the industrial system itself. Nevertheless, an industrial system has its own specificities and historical development frameworks (lean, APQP, six-sigma...). Application of SE standard(s) to the development of an industrial system needs then to be customized and be an integrated framework of all known and practices of development. A better understanding and description on how the development of the Industrial system and the product/system he will produce in co-design is also required to improve our production capability and efficiency.This is an initial meeting to cover the application of SE to industrial system development to ensure it's lifecycle continuity. The objective is to establish an interest group including & leadership team to prepare the basis for chartering the WG. This is consistent with the "Application Extension" ambition of FuSE stream to different domains and lifecycle phases.	New Interest Group;	Working Group

SE Handbook Editors Discussion Sessions	Thomas Shortell	Sat, 27 Jan	15:30	17:00	Hybrid session	Pier 4	This is an open discussion meeting for INCOSE members to come and discuss the SE Handbook 5th Edition with the Editorial team. Member wishing to engage with editors can discuss topics face to face and to provide comments via in flipcharts in the room. The two and a half hour session is intended to give members the opportunity to attend as needed to discuss topics with Editors.	SE Handbook;	Business Meeting
	Thomas Shortell	Sun, 28 Jan	09:30	12:00	In person session	Pier 4	The SE Handbook editors will be meeting in a closed session for special topics with specific attendees and Tech Ops leadership. 2.5 hours have been allocated for 30 minute discussions with editors. Special topics will be identified in advance and invitees will be asked to attend specific times.	SE Handbook;	Business Meeting
SE in Early Stage R&D Collaboration	Michael DiMario, Ann Hodges	Sat, 27 Jan	15:30	17:30	Hybrid session	Salon C	Purpose: Identify potential working group collaboration Objective: Identify common objectives Structure: Provide overview of SE in Early Stage R&D on the mission & objectives, potential collaborative working groups provide their overview, brainstorm common areas of interestTiming: Meeting with multiple working groups, 30-45 minutes each	SE in Early Stage Research & Development;;	Working Group
	Michael DiMario, Ann Hodges	Sun, 28 Jan	09:30	10:30	Hybrid session	Pier 2	Purpose: Identify potential working group collaboration Objective: Identify common objectives Structure: Provide overview of SE in Early Stage R&D on the mission & objectives, potential collaborative working groups provide their overview, brainstorm common areas of interestTiming: Meeting with multiple working groups, 30-45 minutes each	SE in Early Stage Research & Development;;	Working Group
	Michael DiMario, Ann Hodges	Mon, 29 Jan	11:00	12:00	Hybrid session	Pier 3	Purpose: Identify potential working group collaboration Objective: Identify common objectives Structure: Provide overview of SE in Early Stage R&D on the mission & objectives, potential collaborative working groups provide their overview, brainstorm common areas of interestTiming: Meeting with multiple working groups, 30-45 minutes each	SE in Early Stage Research & Development;;	Working Group
SE Lab Vendor Spotlight and Training	Heidi Davidz, Alexandra Kowalski	Mon, 29 Jan	13:00	17:00	Hybrid session	Pier 9	During the meeting, vendors donating to the SE Lab will have an opportunity to present their tool to members, review the access request process, and provide basics on usage.Purpose: Provide SE Lab vendors an opportunity to highlight their tool(s)Objective: Member and working group awareness of available SE Lab tools and process for accessStructure: Targeting one-hour sessions for tool vendors who would like to participateTiming: 4 hours	MBSE Initiative;Services;	Business Meeting
SE Tools Lab Update/Demo	Barclay Brown, Heidi Davidz	Sat, 27 Jan	16:10	16:30	Hybrid session and Available for Replay	Salon DE			MBSE Workshop
SEANET	Paul Wach, Alejandro Salado	Mon, 29 Jan	15:30	17:30	Hybrid session	Pier 8	The Systems Engineering & Architecting Research Network (SEANET) is an INCOSE sponsored organizational network of graduate students working in the field of systems engineering and architecture. SEANET is aimed at fostering doctoral level research in systems engineering and contributing to the evolving intellectual agenda for systems engineering research. SEANET will be held three times per year, with SEANET @ IW focused on helping graduate students develop a research question.		Business Meeting
SEBoK Governing Board Meeting	Nicole Hutchison, Art Pyster	Mon, 29 Jan	11:30	14:00	Hybrid session	Pier 8	Overview of SEBoK (Analytics, Performance, 2024 Plans)Governing Board Strategy for 2024	SEBoK;	Business Meeting
Sector III—Asia Oceania Sector meeting	Quoc Do	Mon, 29 Jan	15:30	17:00	Hybrid session	Pier 4	Purpose: Exchange of news on Sector level with chapter leaders and membersObjective: Update and on Board of Director news and planning of 2024Agenda:-Welcome and short introduction -Meet the board and news-Planning 2024 -Any other businessOpen to Asia-Oceania Sector Leaders, and members are welcome as visitors.		Business Meeting
SEQM Information Review	William Scheible	Sun, 28 Jan	10:00	10:30	Hybrid session	Pier 9	This is our annual Systems Engineering Quality Management (SEQM) working group meeting. The agenda is introductions, a review of our on-going education efforts, present information for new members and discuss work on this years primer. A hybrid session with international attendees. Session may only need 30-45 Minutes, so a 30 min slot can be used.	Systems Engineering Quality Management (SEQM);;	Working Group

SETDB Working Session	John Nallon, Rene King	Sat, 27 Jan	11:00	12:00	Closed session	Pier 2	Purpose: To review status of the JIRA assignments for SETDB Operational Procedures and System V&V and assign work tasks and priorities for the following sessions at the IW.	SE Tools Database;;	Working Group
	John Nallon, Rene King	Sat, 27 Jan	15:30	18:00	Closed session	Pier 2	Finalize Operational Procedures currently in draft status and submit for release. Close out as many V&V assignments for the SETDBIS assigned in JIRA as possible in preparation for a January release of the SETDB. Reprioritize tasking for the following IW session.	SE Tools Database;;	Working Group
Showcasing a specialized AI agent for bioinspired design to solve large challenges	Dennis Tuckowski, Kai Costantini	Sun, 28 Jan	15:30	17:00	Hybrid session	Pier 2	The Natural Systems working group is testing a specialized AI for Bio Inspired Design in conjunction with NASA to solve large Bioinspired design challenges. We will share an overview of the work using BIDARA AI Agent. Bidara is designed to structure the bio-inspiration design process following the Biomimicry 3.8 bio inspired design methodology. We will present an overview of our learning journey with Bidara. Presenters: Randy Anway Brandon Ruffridge Brandon Ruffridge is a software engineering lead at NASA. He is currently leading a cross-functional team of students, faculty, commercial partners, engineers, biologists, and computer scientists in the development of PeTaL, a novel, innovative, open-source, machine-learning-based system to help researchers and engineers discover solutions in nature.	Natural Systems;;	Working Group
Smart Cities Annual planning	Jennifer Russell	Tue, 30 Jan	10:00	11:00	Hybrid session	Pier 8	Purpose: Plan annual schedule, work product priority and key leaders for each Objective: make a plan for meetings and effort for the year Structure: Working session: schedule, budget, effort priority Timing: 1 hours	Smart Cities Initiative;;	Working Group
So you think you are good with Complex Systems!- CSWG Workshop	Dean Beale, Mike Watson	Tue, 30 Jan	08:00	10:00	Hybrid session	Pier 5	Purpose: Describe and discuss a leading edge methodology and tools for investigating, evaluating and solving complex problems in both complicated and complex system. Objective: Enable participants to more effectively identify and deal with sources of difficulty in their systems engineering efforts, using the latest tools and approaches. Structure: 1) Introduction to the new techniques and processes 2) Share case studies and working example 3) Participant hands on usage of tools to evaluate their own tasks and challenges (Example case studies will be available if participants do not have their own) 4) Discussion of results and next steps Timing: 2hrs	Complex Systems; Human Systems Integration; Natural Systems; Resilient Systems; Social Systems; System of Systems;;	Working Group
Social Systems Engagement Session	Dana Polojärvi, Charlotte Dunford, Shamsnaz Bhada	Sun, 28 Jan	10:30	12:00	Hybrid session	Pier 2	Overview of current work in progress Including the following: Published Paper by Dana, Charlotte and Erika Follow up in-progress paper by Shams, Dana and Erika Primer update by Charlotte (introduction to the Templates New Items to discuss include the following: Request for help on Primer with Templates (do any of our members have social science expertise Open call for desired outputs or activities for the Working Group to consider.	Social Systems;;	Working Group
SOS Engineering Business Meeting	Alan Harding, Judith Dahmann	Mon, 29 Jan	09:30	12:00	Hybrid session	Pier 9	Purpose: Review current and planned activities of the SOSWG Objective: To review our 2023 objectives, what we achieved, and any new opportunities for 2024 Structure: Standard structure based on 2023 objectives Timing: 2.5 hours	System of Systems;;	Business Meeting
SOS Engineering Roundtable on Implementation Approaches	Alan Harding, Judith Dahmann	Sun, 28 Jan	13:00	17:00	Hybrid session	Pier 9	Purpose: Share information on approaches to implement SOS Engineering Objective: To identify a range of current approaches to offer the community Structure: Participants will provide short presentations on approaches Timing: 4 hours	System of Systems;;	Working Group
Space Systems Working Group Tagup	Jim Adams, Alex Levi	Sun, 28 Jan	14:00	15:00	Hybrid session	Salon A	Purpose: Set direction for SSWG for 2024 Objective: Select activities and Technical Products for SSWG to pursue in 2024 Structure: Hybrid guided group discussion Timing: 1hr mtg: 5 min - warmup; 15 min - propose and review activity and product list; 20 min - discussion on activities and product list; 10 min - prioritize activities and product list; 5 min - initial assignments; 5 min - wrapup	Space Systems;;	Working Group

Standards Development Department Briefing	Richard Martin, Daniel Siegl	Mon, 29 Jan	13:00	14:00	Hybrid session	Pier 2		Standards Development Department;	Working Group
	Richard Martin, Daniel Siegl	Tue, 30 Jan	08:00	09:00	Hybrid session	Pier 2		Standards Development Department;	Working Group
SysML v1 to SysML v2 Transition Information Session	Daniel Hetteema, Franck Salvatore, Sanford Friedenthal, Chris Schreiber	Sun, 28 Jan	09:30	12:00	Hybrid session and Available for Replay	Salon DE	Agenda:09:30 – 12:00 PST•Introduction – Daniel Hetteema (.25 hr)•SysML v2 basics – Sanford Friedenthal (1.25 - 1.5 hr)•SysML v2 tool vendor roadmap highlights (12-15 vendors) (.75 - 1 hr)		MBSE Workshop
	Daniel Hetteema, Franck Salvatore, Sanford Friedenthal, Chris Schreiber	Sun, 28 Jan	13:00	15:00	Hybrid session and Available for Replay	Salon DE	Agenda:13:00 – 15:00 PST•SysML v1 to v2 transition planning a.BoD Transition Guidance Project overview – Frank Salvatore (.75 hr)b.BoD transition planning panel (1.25 hr)		MBSE Workshop
	Daniel Hetteema, Franck Salvatore, Sanford Friedenthal, Chris Schreiber	Sun, 28 Jan	15:30	17:30	Hybrid session and Available for Replay	Salon DE	Agenda:15:30 – 17:30 PST•SysML v1 to v2 transition planning (continued)c.Organizational transition planning approach – An industry perspective – Chris Schreiber (35 min)d.Tool vendor panel – 12 vendors (1 hr 10 min)e.Wrap-up – Daniel Hetteema/Q&A (15 min)		MBSE Workshop
SysML v1 to SysML v2 Transition Working Session	Frank Salvatore	Tue, 30 Jan	08:00	11:00	Hybrid session	Salon F	Introduction – Frank Salvatore (10 min)Starter Model Overview and Walkthrough – Sanford Friedenthal (45 min)SysML v1 to SysML v2 Model Conversion Approach – S. Friedenthal (45 min)SysML v1.x to SysML v2 Model Conversion – Gene Shreve (30 min)Open Discussion – All (45 min)Wrap-up – Frank Salvatore (5 min)	Architecture;Configuration Management;Defense Systems;Digital Engineering Information Exchange;MBSE Initiative;MBSE Patterns;NAFEMS-INCOSE Systems Modeling & Simulation;Object-Oriented Systems Engineering Method (OOSEM);Process Improvement;Product Line Engineering;Requirements;SE Tools Database;Tools Integration & Model Lifecycle Management;;	Working Group
System Adaptability Workgroup Meeting	Haifeng Zhu, James Martin	Mon, 29 Jan	15:30	17:00	Hybrid session	Esplanade	Purpose: Discuss 2024 planning for INCOSE Systems Adaptability WGOObjective: Refresh attendees with system adaptability existing accomplishments and produce a further development planStructure: We will discuss the following items: 1.Refresh existing results on system adaptability 2.Determine relevance and differences with other related disciplines: PM-SE, Resilience, Agile, etc. (will try to invite their core members to join too) 3.Determine a list of priorities to work on in 2024Timing: 3 hours (First part 1.5 hour)	System Adaptability;	Working Group
	Haifeng Zhu, James Martin	Tue, 30 Jan	09:30	11:00	Hybrid session	Hideaway	Purpose: Discuss 2024 planning for INCOSE Systems Adaptability WGOObjective: Refresh attendees with system adaptability existing accomplishments and produce a further development planStructure: We will discuss the following items: 1.Refresh existing results on system adaptability 2.Determine relevance and differences with other related disciplines: PM-SE, Resilience, Agile, etc. (will try to invite their core members to join too) 3.Determine a list of priorities to work on in 2024Timing: 3 hours (second part 1.5 hours)	System Adaptability;	Working Group

Systems and Software Interfaces Working Group Open House	jeannine sivy	Mon, 29 Jan	15:00	16:00	Hybrid session	Pier 1	We strongly encourage proactive planning of the meeting agenda to maximize effectiveness and impact. The POST method is a simple way to give clarity before attendees join a meeting, and serves as a starting agenda outline.Purpose: What is the purpose of the meeting?Objective: What are you trying to achieve in the meeting, and what does success look like?Structure: What is the structure of the meeting we are having?Timing: How much time is allocated to the meeting?	Systems and Software Interface;;	Working Group
Systems Engineering & Lawmaking (SELAW)	Greg Bulla, David Schrunk	Sat, 27 Jan	11:00	12:00	Hybrid session	Salon B	The purpose of this WG meeting is to discuss our progress on efforts to apply systems engineering practices to lawmaking. We would also like to welcome the many new members to our WG since our last IW in 2023. Our objective is the creation of lawmaking process that follows international standards (ISO), such as the IEEE 15288. There are many facets of this process; therefore, our short term objective is the creation of models that will approximate the cost, effective sanctions, and risks associated with a law. This meeting is estimated to cover the material in 45 minutes.	Systems Engineering and Lawmaking;;	Working Group
	Greg Bulla, David Schrunk	Sun, 28 Jan	15:30	16:30	Hybrid session	Salon B	This meeting will be a continuation of our Saturday WG meeting, and will focus on actual work products that the team created since Jan 2023, to include SysML modeling, a concept of operations (CONOPS), and initial work on the cost and sanction models. All members and those interested in joining SELAW are welcome and encouraged to attend.	Systems Engineering and Lawmaking;;	Working Group
Systems Engineering Body of Knowledge (SEBoK) Editorial Board	Nicole Hutchison, Christopher Hoffman, Art Pyster	Mon, 29 Jan	09:30	11:00	Hybrid session	Hideaway	This meeting slot is the SEBoK Governing Board meeting.Special Guests include: INCOSE President Ralf Hartmann and President-Elect Michael WatsonDetailed Planning for SEBoK Releases in 2024Spring 2024Fall 2024Incorporation of MultimediaCoordination with WGsPossible Restructuring	SEBoK;	Business Meeting
	Nicole Hutchison, Christopher Hoffman, Art Pyster	Tue, 30 Jan	09:00	11:00	Hybrid session	Pier 7	This meeting slot is the SEBoK Editorial Board meeting.Detailed Planning for SEBoK Releases in 2024Spring 2024Fall 2024Incorporation of MultimediaCoordination with WGsPossible Restructuring	SEBoK;	Business Meeting
Systems Engineering journal Editorial Board meeting	Clifford Whitcomb	Mon, 29 Jan	13:00	14:00	Closed session	Salon H			Business Meeting
Systems Science Working Group Strategy Planning	Javier Calvo-Amodio, James Martin	Sat, 27 Jan	15:30	18:00	Hybrid session	Salon B	This will be an update and strategy session for the Systems Science community at INCOSEPurpose: Align SSWG with INCOSE's current and future needsObjective: Provide an overview of activities and roles SSWG has conducted and identify areas in which the SSWG should focus on the next 5 yearsStructure: Updates on current projects followed by an interactive strategy sessionTiming: 1 hr for update and 1 hr for strategy with 30 min break	Systems Science;;	Working Group
Systems Security WG General Meeting	Rick Dove	Sun, 28 Jan	13:00	15:00	Hybrid session	Pier 2	General meeting to review activities, projects in process, new project proposals, and information of relevance.	Systems Security Engineering;;	Working Group
Systems Thinking RoundTable (STRT)	Cecilia Haskins	Sat, 27 Jan	07:00	08:00	In person session	Salon C			Working Group
	Cecilia Haskins	Sun, 28 Jan	07:00	08:00	In person session	Salon C			Working Group
	Cecilia Haskins	Mon, 29 Jan	07:00	08:00	In person session	Salon C			Working Group
	Cecilia Haskins	Tue, 30 Jan	07:00	08:00	In person session	Salon C			Working Group

Tech Stewardship - Bending the Arc of Technology Towards Good	Dennis Tuckowski, Kai Costantini, Mark Abbott	Sat, 27 Jan	15:30	17:00	Hybrid session	Pier 10	An introduction to Tech Stewardship and related programming with Mark Abbott from the Engineering Change Lab Canada. The power and pace of technological change is creating incredible opportunities and challenges. More is required of us if we are to realize the associated promise and avoid the perils. Tech stewardship is a professional identity, orientation, and practice. Tech stewards continuously discuss, refine and imagine new ways to shape technology for the benefit of all. The Tech Stewardship Practice Program (TSPP) is a 12h online mini credential program that is offered by MaRS Discovery District in Toronto, Canada. The program supports a diverse range of individuals and organizations to strengthen their tech stewardship practices. It is particularly relevant for engineers, as we are the ones who are actually creating the physical, digital, and biological technologies that are transforming our world. Over the past two years, thousands of engineers have completed the TSPP and there are over 30 post-secondary institutions who are offering it to their students. In this session, Mark Abbott will introduce the core principles of tech stewardship, provide an overview of the practice program, and discuss how you can leverage it at your own school or organization.Mark Abbott, P.Eng., MBA, is an Ashoka Fellow who currently serves as the Director of Tech Stewardship at MaRS Discovery District. He is also the Director of the Engineering Change Lab, which is a multi-organization collaborative effort that seeks to make tech stewardship the new normal in the engineering community. Previously, Mark served as a member of the Executive Team at Engineers Without Borders Canada for several years. And before that, Mark spent fourteen years working for a heavy industrial consulting engineering firm based in Vancouver.	Natural Systems;;	Working Group
TechOps Leadership Session		Sat, 27 Jan	11:00	12:00	Closed session	Esplanade			Business Meeting
The Robot Cabaret: An Installation on Embodied Interaction in Humans and Machines	Hortense Gerardo	Mon, 29 Jan	17:00	19:30	In person session	Salon DE	The Robot Cabaret: An Installation on Embodied Interaction in Humans and Machines will explore various forms of embodied interactions between humans and machines. Three human and five robot interactants unpack the ways that intelligence and creativity require a body through a mix of spoken text, collaborative movement, and embodied interaction. Our presenters in The Robot Cabaret, a creative applied research installation are Hortense Gerardo (movement), CRANE + ROBO DOG (co-robotic arm and a robotic dog with Twomey as operator), PEPPER, NAO, and AIBO (two humanoid robots and one canine robot, with Eguchi as operator) invite attendees to engage with the robots in a variety of embodied games and tasks. Collectively, this group has deep prior experience in performance and movement (Gerardo), creative robotics (Twomey) and human-robot interaction (Eguchi and Twomey). One large group interactive demonstration (Group Rock, Paper, Scissors Game onstage) and five (5) HRI installations will enable attendees to engage in creative play that will contribute to ongoing comparative studies on cognitive learning strategies in preprogrammed versus cognitive learning AI.		Safer Complex System
TIMLM - SMS WG Alignment	John Nallon, Mark Williams, Kyle Hall	Tue, 30 Jan	08:00	09:30	Hybrid session	Pier 3	Schedule alignment for shared or joint sessions in 2024.	NAFEMS-INCOSE Systems Modeling & Simulation;Tools Integration & Model Lifecycle Management;;	Working Group

<p>TLI Topical Engagement: Intercultural Communication</p>	<p>David Long</p>	<p>Mon, 29 Jan 15:30</p>	<p>17:00</p>	<p>Closed session</p>	<p>Salon B</p>	<p>In modern engineering, projects are becoming more and more complicated/complex, distributed, collaborative, and of course, international. The latest trends within smart systems engineering propose advanced processes to share models between peers, customers, peers etc. In most cases, we tend to forget that sharing models, collaborating in requirements specs, etc. also imply collaboration of engineers. We humans are diverse, externally (physically), internally (psychologically), and socially (culturally).</p>	<p>Technical Leadership Institute;</p>	<p>Business Meeting</p>
						<p>A person is not born with a certain culture, it is learned or acquired. Culture affects the way we think, feel, behave, and forms our perception and judgement of others. It is the thought patterns, feelings, and interactions which we are familiar with and which we share with others in our community.</p>		
						<p>This talk for TLI members by Juan Llorens (Cohort 1) will get a bit deeper in the cultural differences between countries (homogenizing them, of course) with the intention for the systems engineers and technical leaders to gain insights into how engineers of other cultures behave. The intention: to improve our skills to better cope with the intercultural challenges in multinational projects.</p>		
<p>Towards a Vision for Ensuring SE's Enduring Value</p>	<p>Javier Calvo-Amodio, David Rousseau, Peter Brook, Mike Pennotti</p>	<p>Sun, 28 Jan 09:30</p>	<p>10:30</p>	<p>Hybrid session</p>	<p>Salon F</p>	<p>Workshop Background:The world is facing an increasing number of complex problems that are interconnected and vary in their technical, social, and ecological nature. Furthermore, society is witnessing a rapid transformation due to the emergence of powerful new technologies that can potentially cause disruptive changes. In light of these challenges, it is imperative to reconsider how SE can continue to address complex problems and provide enduring value in the future. Similarly, INCOSE must also rethink its approach to deliver on its vision of "A better world through a systems approach." The FuSE project by INCOSE was established to address concerns about the future relevance of Systems Engineering (SE) in light of the changes mentioned above. The FuSE project created the "Bridge Team," consisting of three INCOSE Fellows: Peter Brook, Mike Pennotti, and David Rousseau, and it has recently added Javier Calvo-Amodio. The Bridge Team's purpose is to investigate 1) how SE principles and heuristics could be improved, 2) how SE could evolve to make better use of its "guiding propositions," and 3) how that might support FuSE's vision of ensuring the enduring value of SE. To fulfill its purpose, the Bridge Team seeks to encourage and facilitate a conversation within INCOSE and the wider SE community to deepen our collective understanding of the essential nature of SE, how to describe and quantify its value, how it can help solve increasingly complex problems in the future, and how its evolution can be guided towards that end.Workshop Scope:During the workshop, we will delve into various questions and issues related to systems engineering (SE) evolution. An introduction to the joint initiative between FuSE, the Bridge Team, the Systems Science Working Group, the Systems Engineering Journal, and INSIGHT magazine will kick off the Join us to learn about INCOSE's new strategic plan, the evolution of our professional staff, and how you can share your insights to help shape the future of INCOSE.</p>	<p>Systems Science;Bridge Team FuSE;</p>	<p>Working Group</p>
<p>Town Hall: The Future of INCOSE</p>	<p>David Long, Steve Records</p>	<p>Sun, 28 Jan 08:00</p>	<p>09:00</p>	<p>Hybrid session and Available for Replay</p>	<p>Salon DE</p>			<p>Plenary</p>

TWG Annual Planning Meeting + Infrastructure Annual planning Meeting	Dale Brown	Sat, 27 Jan	11:00	12:00	Hybrid session	Pier 9	IWG Segment Introductions (time permitting) & Intro to the IWGIWG Organization & Call for volunteers Member Impressions (open feedback from the last year) Overview of activities at and since IW2023 Co-chairs Products: Standards, Newsletter, Case Studies Events: IW, IS, Monthly Joint Webinars Services: Website Update, LinkedIn, survey/census Membership: Outreach, Contacts Working Group Communications Plans for 2024 (see each item above) Presentation - Marcel	Infrastructure;Transport	Working Group
	Dale Brown	Sun, 28 Jan	10:30	12:00	Hybrid session	Pier 9	TWG Segment Introductions (time permitting) & Intro to the TWGTWG Organization & Call for volunteers APTA & INCOSE: MOU and collaboration Member Impressions (open feedback from the last year) Overview of activities at and since IW2023 Co-chairs Products: Standards, Newsletter, Case Studies Events: IW, IS, Monthly Joint Webinars Services: Website Update, LinkedIn, survey/census Membership: Outreach, Contacts Working Group Communications Plans for 2024 (see each item above) Presentation - APTA SLE Standard Project Update – Dale	Infrastructure;Transport	Working Group
Vision & Roadmaps Workstream meeting	Paul Schreinemakers	Tue, 30 Jan	09:00	11:00	Closed session	Pier 10	Purpose: The purpose of the meeting is to plan and kick-of the 2023 activities of this FuSE workstream. Objective: Clarify everybody's activities and contribution for the upcoming period. Structure: The precise agenda will be defined on short notice. Timing: 2 hours	FuSE;	Working Group
WG collaboration opportunities when dealing with complexity	Dean Beale	Sun, 28 Jan	13:00	15:00	Hybrid session	Esplanade	Purpose: To provide an opportunity for WG's handling complex problems to share a summary of their activities and needs, to help identify synergistic collaboration and coordination activities. Objective: Improve coordination between working groups and launch new collaborations Structure: 1) Introduction and purpose 2) Each Working Group Summary of activities and needs (this can be informal or formal) 3) Apply WS techniques to enable collaboration e.g. affinization and N-squared matrices. 4) Discussion of ways to leverage synergies and enable collaboration in future activities Timing: 2hrs	Agile Systems and Systems Engineering;Complex Systems;Decision Analysis;Enterprise Systems;Human Systems Integration;Lean Systems Engineering;Natural Systems;Professional Competencies & Soft Skills;Resilient Systems;Social Systems;System of Systems;System Safety;Systems and Software Interface;Systems Security Engineering;;	Working Group
Working Group Leadership	Olivier Dessoude	Mon, 29 Jan	16:00	17:00	Hybrid session	Pier 7	We strongly encourage proactive planning of the meeting agenda to maximize effectiveness and impact. The POST method is a simple way to give clarity before attendees join a meeting, and serves as a starting agenda outline. Purpose: Understand WG needs and improve the efficiency of WG leadership Objective: Agree on focus areas (types of WGs, WG chair training, leadership renewal...) and build an action plan Structure: Closed meeting involving TechOps leaders Timing: 1 hour	Business Meeting;;	Business Meeting
Working Group Round Robin...		Sat, 27 Jan	15:30	16:10	Hybrid session and Available for Replay	Salon DE			MBSE Workshop

Working Group Speed Dating Event	Susan Ronning	Sat, 27 Jan	15:30	17:30	In person session	Pier 5	<p>The ICT Working Group would like to invite all other working groups to join us in a 1.5-2 hour speed dating event so we can all get to know each other better. I know there is usually a poster session event at the end of IW but may folks have left by then and it isn't really structured. This event would be allow for 10 minutes to "get to know each other" as groups move around the room. The goal is to be able to talk about commonalities to see if/ how/ where we can combine resources so that we better align ourselves when working on different perspectives of the same problem.</p>	<p>Agile Systems and Systems Engineering;Architecture; Artificial Intelligence Systems;Automotive;Co mpetency;Complex Systems;Configuration Management;Critical Infrastructure Protection and Recovery;Decision Analysis;Defense Systems;Digital Engineering Information Exchange;Enterprise Systems;Healthcare;Hu man Systems Integration;Infrastructur e;Information Communications Technology;Integration, Verification & Validation;Knowledge Management;Lean Systems Engineering;MBSE</p>	Working Group
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