



2022 Joint Leadership Meeting









Call to Order and Welcome







- Call to Order and Welcome (Secretary)
- President's Address (President)
- Administration Report (Operations Manager)
- Finance Report (Treasurer)
- IT Report (CIO)
- Technical Operations Report (Technical Director)
- Services Report (Services Director)
- PDP MVS Update (Associate Director, E&T)
- VS Events (Associate Director, Events)
- VS Certification (Associate Director, Certification)
- VS Membership Individual (Secretary)
- VS Membership Corporate Advisory Board (CAB Chair)

- Diversity, Equity & Inclusion (Associate Director, DEI)
- VS Products (Technical Director)
- Strategic Objectives (Director, Strategic Integration)
- Outreach & Alliances (Director, Outreach)
- Sectors Reports (Director, Sector I/II/III)
- Special Projects (President-Elect)
- Marketing & Communications (MarCom) Report (Director, MarCom)
- Nominations and Elections (N&E) Update (N&E) Chair)
- Acknowledgement to CAB Organizations (Secretary)
- Question & Answer (Q&A) (Board of Directors)





Marilee Wheaton, INCOSE Fellow, President

President's Address







Learn more at www.incose.org









- Events delivery diversity strategy
- Hybrid events: learn and improve
- Virtual Community Services expansion (e.g., Spotlight On Series)
- Digital transformation of INCOSE
- Deploy Professional Development Portal (PDP)
 - Strategic marketing campaigns and branding
 - Advertising opportunities with INCOSE
 - CAB Needs and Value-Added Focus
 - Foster SE Research Community

Notes -

- 1. Top 20 priorities are in addition to regular activities & responsibilities
- 2. Chart design format courtesy of Kerry Lunney



CAB (incl

Academic

Council)

www.incose.org

- Emerging or inactive chapter support
- Student divisions re-energised
- New and emerging chapters
 - Increased membership engagement
 - New focused global SySTEAM initiative
 - Diversity Equity
 Inclusion (DEI) plans
 - IT advancements
 - Increased capability across communities
 - IT Architecture & Roadmap
 - Online TPP application
 - WG data integration & websites revamped

6









01	New DEI Organization	• AscD DEI • DEI Advisory Committee
02	New Volunteer Focus	AstD VolunteerismNew Membership Engagement
03	Events Focus & Support	AstD Events PortfolioHybrid – Learn and Improve
04	Outreach Collaborations	 Tools for Relationship Managers New collaborations with existing alliances Re-invigorate industry & domain outreach
05	Certification	Certification Champion AwardExpand Academic Equivalency
06	Global inputs & reviews	• SE Vision 2035 • SE Handbook Edition 5





Christine Kowalski, INCOSE Operations Manager

Administration Report







Americas: 5,693 (28%)

➢ Increase ~ 130 since Jan 2022

> Chapters: 41

Total Individual Members and CAB Associates 20,211



Drop ~ 25 since Jan 2022

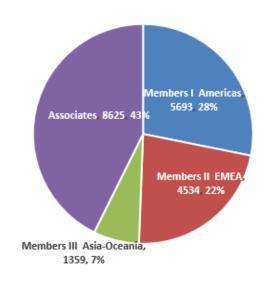
Chapters: 8

EMEA: 4,305 (21%)

Increase ~ 150 since Jan 2022

EMEA Associates (CAS): 229

Chapters: 17



Associates: 8,854 (44%)

Increase ~ 440 since Jan 2022

> Includes EMEA CAS

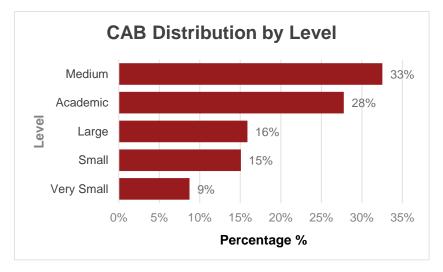
 CAB Associates & EMEA Chapter Affiliation Sponsors (CAS)



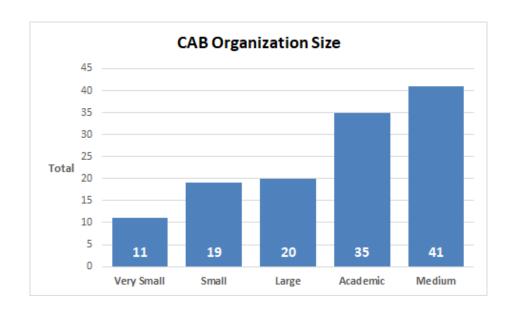


Corporate Memberships: 126

- □ Corporate Members: 91
 - □ as of 8 May
- New in last 5 months:
 - AVIAGE Systems (China)
 - The REUSE Company (Spain)
 - Toshiba Corporation (Japan)
- Pending
 - Saudi Railway (Saudi Arabia)
 - Lawrence Livermore National Laboratory (US)



- □ Academic Members: 35
 - □ as of 8 May
- Pending:
 - Mahindra University (India)





INCOSE



The INCOSE Diverse Admin Team



- Christine Kowalski Operations
- Carol Berardino Certification
- Danielle deRoche Chapters / Certification
- Carrie Lopez Bookkeeping / CAB
- John Hedrick Asst Bookkeeper
- Thomasine (Tomi) Okey Membership
- Alexandra Kowalski Operations Admin
- Samantha Bernal INFORMZ / Social Media
- Holly Witte Pubs Mgr / Consulting
- Betty Morimoto Database (Behind the Scenes)
- We practice diversity in our team!
 - ✓ <u>info@incose.net</u> / helpdesk@incose.net







Finance Report





2022 Budget (\$M USD)

	2022 Budget	2022 ETC	2021 Budget	2022 YTD	2021 YTD	2020 YTD
Income	4.2	4.0	\$3.7	1.60	1.55	1.72
Expense	4.9	4.5	4.2	0.91	0.81	1.05
Net	(0.7)	(0.5)	(0.5)	0.70	0.74	0.67

Budget includes reserve for future additional paid services

Numbers may be adjusted as further 2022 revenue and event impacts become evident







	2022 YTD	2021 YTD	2020 YTD
Membership (Net)	0.98M	1.15M	1.03M
Events (Net)	165K	47K	95K
Administration	(194K)	(202K)	(199K)

INCOSE is in good financial health and can continue to use its resources to invest in products, infrastructure, and membership value.







IT Report

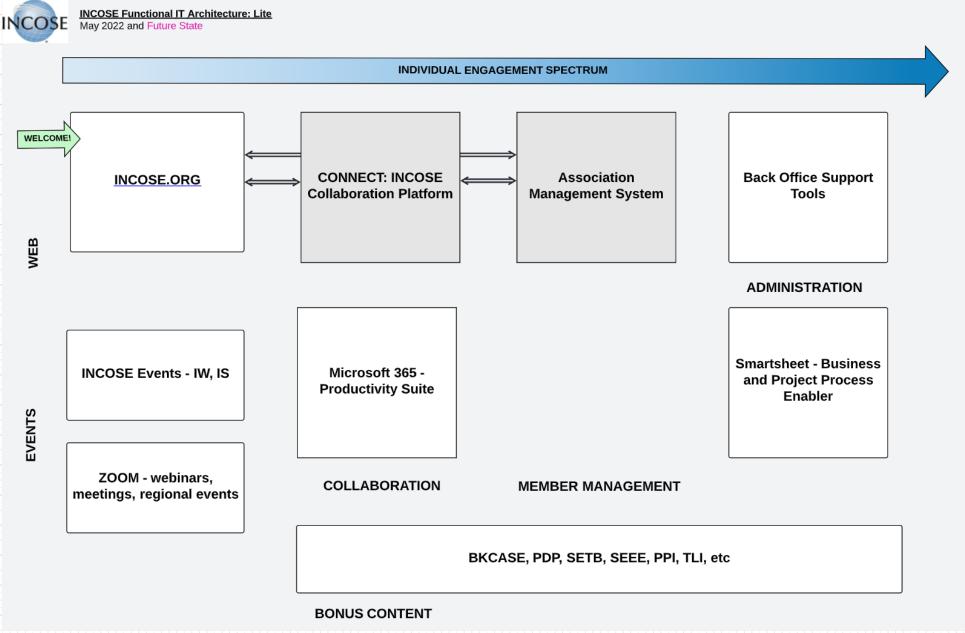




IT for YOU in 2022

- Expansion of many IT capabilities underway
 - What's Changing?
 - What's the Future State Vision?
 - How are We Going to Get There?
- Invitation: Lead the transformation process in YOUR INCOSE community









17

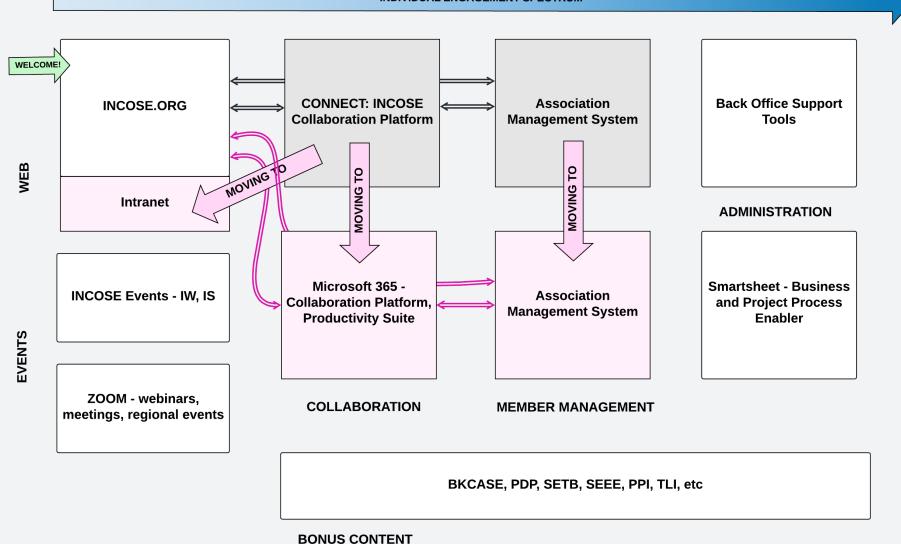
INCOSE IT Architecture Today: A Bird's Eye View



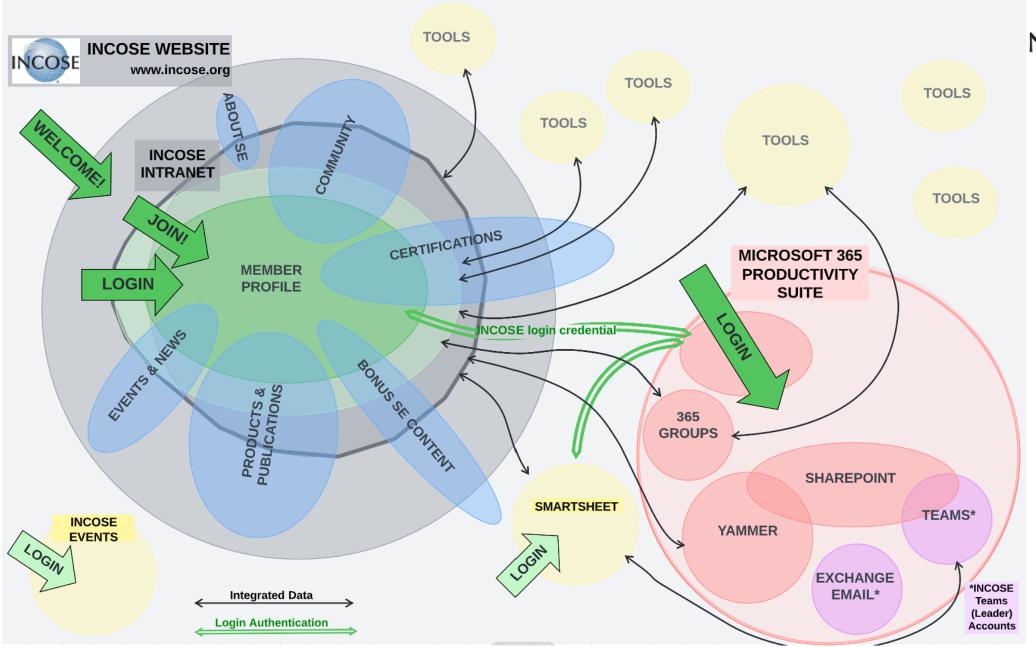




INDIVIDUAL ENGAGEMENT SPECTRUM



INCOSE IT Architecture: Changes in the Works







INCOSE IT Architecture: Future State 2023

Two Major Hubs for Community Activity: the INCOSE Website and M365 Suite





What's Changing for YOU?

IT System	Change	Audience	Impact	Timing	Benefit
Email	All members get an INCOSE email address	All INCOSE members	Action may be required to set up, access, or forward INCOSE email	NOW	Consistent member contact points Simplified access across systems
Group Emailing	Use dynamic email groups to contact community members instead of offline lists or the clunky Profile portal interface	INCOSE community members (Chapter, WG, etc) Interested INCOSE friends	Community membership lists will be dynamically generated and updated based on committee membership in our Association Management System	NOW – Q3 2022	No need for community leaders to manage member lists Enhanced member privacy Enhanced accuracy and effectiveness of email contacts

Take Action! Get your community set up today...



Email barclay.brown@incose.net to begin the process of setting up your community on the new collaboration platform





INCOSE Microsoft Accounts

Regular Accounts

- Most INCOSE members
- Your login and email will be either @incose.net or @incose.buzz, Clark.Kent@incose.net
- Email forwarding
- Use to access Yammer, shared services, email groups
- Created in groups by community (chapter, WG, committee, etc.)

Teams Accounts

- Leaders and those working on projects for INCOSE (about 5% of INCOSE members)
- Login and email will be @incose.net, e.g.
 Tony.Stark@incose.net
- Use to access exchange email, calendering, Teams
- Team leader requests Teams accounts for team members



What's Changing for YOU?



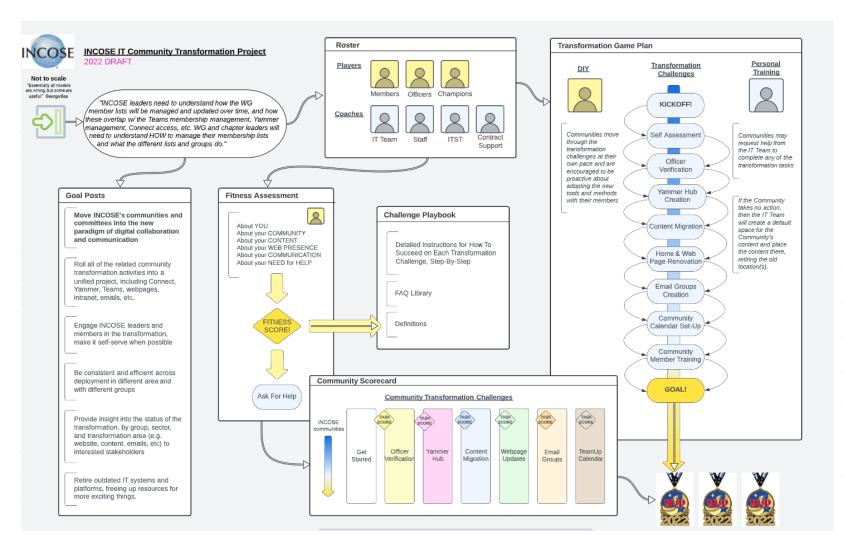


IT System	Change	Audience	Impact	Timing	Benefit
"Connect" Collaboration Space for the INCOSE Community	"Connect" hosting platform will be retired. Content and pages to be moved to a combination of intranet webpages and Yammer, and Teams platforms	Active INCOSE members and collaborators	Content owners will be tapped to assess content prior to migration. Community leaders will be tapped to facilitate migration and adoption by team members.	June 2022 and beyond Must be complete by Q3 2022	Enhanced community collaboration and content sharing. Enhanced look, feel, and features. Faster page load times.
INCOSE Website	Updated top-level navigation, updated design template, re- organized content, new intranet pages	All website visitors All INCOSE members	New visual appearance and site navigation More "Where do I find?" questions for a little while	July 2022 and beyond	Improved professional look for INCOSE. More intuitive site based on user input. Less junk and more value.
Member Profile Management	Member profiles will move to a new AMS platform, have slightly different features	All INCOSE members	A new login credential will need to be established	August 2022 and beyond	Enhanced member profile management. Enhanced backend management of member services and benefits.





How do we get to the Future?



Community Transformation Project

Step 1: Make a Plan

Step 2: Test the Plan

Step 3: Recruit Help

Step 4: Execute the Plan

Step 5: Listen and

Improve

Step 6: Cross the Finish

Line

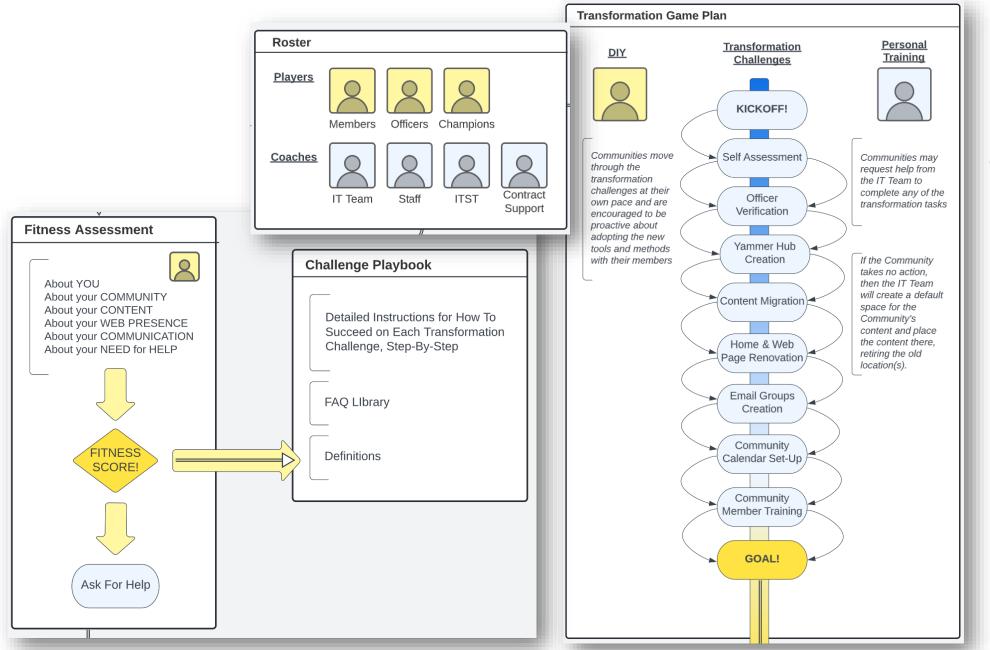




Community Transformation Project

Project Goalposts:

- 1. Move INCOSE's communities and committees into the new paradigm of digital collaboration and communication
- Roll all of the related community transformation activities into a unified project, including Connect, Yammer, Teams, webpages, intranet, emails, etc.
- 3. Engage INCOSE leaders and members in the transformation, make it **self-serve** when possible
- 4. Be **consistent and efficient** across deployment in different area and with different groups
- 5. Provide **insight into the status** of the transformation, by group, sector, and transformation area (e.g. website, content, emails, etc) to interested stakeholders
- **Retire outdated IT systems** and platforms, freeing up resources for more exciting things.







Community Transformation Project: Step-by-Step

Take Action!
Volunteer to be
a transformation
leader!



Email your Community Chair to Volunteer







- Expansion of many IT capabilities underway
 - What's Changing?
 - What's the Future State Vision?
 - How are We Going to Get There?
- Invitation: Lead the transformation process in YOUR INCOSE community
 - Volunteer to lead your community's transformation
 - Research your community content
 - Respond to project emails asking for action
 - Ask questions if things are not clear











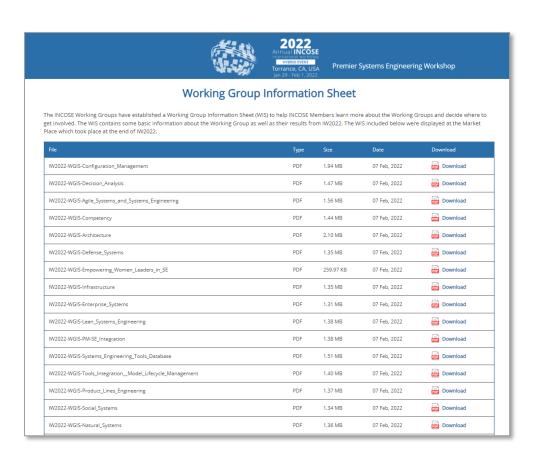
Technical Operations Report





Accomplishments

- Get Involved!
 - See IW2022 working group information sheets for this year's plans
 - https://www.incose.org/iw2022/working-groupinformation-sheet
- NEW Working Group!
 - Systems Engineering and Lawmaking
 - Purpose: To advance the theory, practices, and education of laws of government, for example, legislative statutes, by applying systems engineering principles and discipline.
 - Chair: Gregory Bulla
 - Co-Chairs: Kaleb Houck, Mitchell Seime
 - Senior Advisor David Schrunk





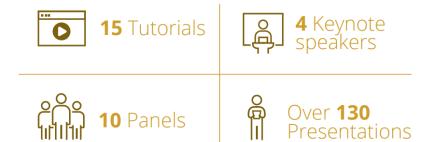
- Tech Program & Best Papers selection completed
- Event support as session chairs, networking
- Tech Ops Invited Content

I hope to see you there!





The program by numbers



Tue 28 10:00 12:10 EDT	Transforming Mobility: Automotive Executive Roundtable Moderator(s): Carla Bailo (Center for Automotive Research (CAR)); Anne O'Neil (Systems Catalyst & Strategist for Mobility and Infrastructure, AOC Systems Consortium); Session: 4.6 - Tech Ops Invited Content
Tue 28 13:30 14:55 EDT	Transdisciplinary Perspectives on Systems Engineering in and for Contested Cyber Environments Moderator(s): Jimmie McEver (INCOSE - Technical Operations); Panelist(s): Rick Dove; Tom McDermott; Stephen Sutton; Erika Palmer; Alan Hardling; Session: 5.6 - Tech Ops Invited Content
Tue 28 15:30 16:55 EDT	MBSE Lightning Round: MBSE Implementation progress reports from the field Moderator(s): Mark Sampson (INCOSE); Panelist(s): Robert Halligan (PPI); Elise Higgins (Medtronic); Emilee Bovre (NASA); Session: 6.6 - Tech Ops Invited Content

https://www.incose.org/symp2022/symposium/event-schedule





We Need You in TechOps Leadership!



- AstD Process Enablers (OPEN)
- Deputy Technical Director (IW2023)
- WG Chair / Co-Chair Rotations (~2 years)
- Standards Development Department (especially in review & comment cycles)

"Work yourself out of a job"

Interested to help lead?
Reach out to christopher.hoffman@incose.net
and apply to postings on Volunteer Opportunities Board!





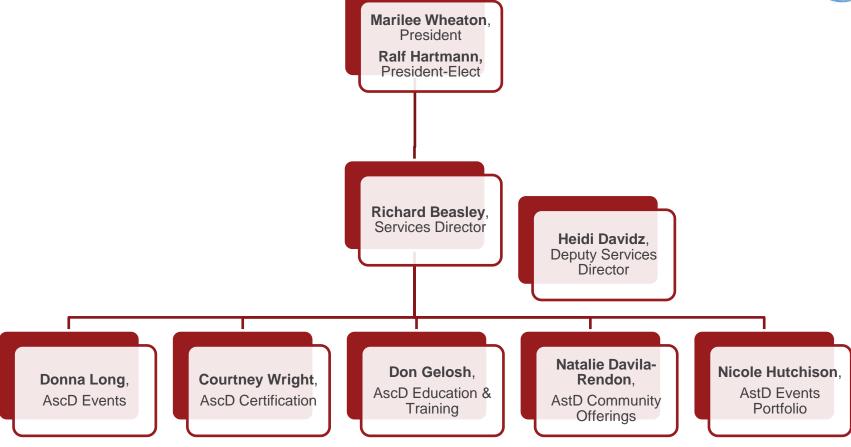


Services Report

Who are Services?







"Provide Value Through Impactful Services"







Main Associate Director's activity

- Certification
- Events
- Education and Training PDP coming soon

Community Offerings – smaller services

- Webinars
- Systems Exchange café
- Spotlight On extended conversation / deep dive – coming soon

Longer term ideas

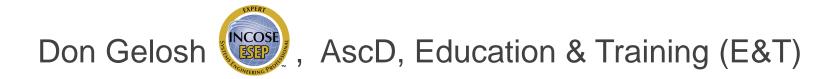
- More accessible publications (using the IT!)
- Mentoring as a service (linked to PDP)

Help from you:

- Use the services
- Volunteer to help
 - Review papers
 - Host cafés
 - Present webinars / papers etc.
 - Certification Application Reviewer
 - Material for PDP
 - Etc
- Feedback on the services and others you / other members might like
- Promote / make other members aware of the services so maximum use made







PDP MVS Update

What is the

Professional Development Portal?





The **Professional Development Portal (PDP)** is a comprehensive solution for Systems Engineers and other professionals who want to enhance their systems engineering knowledge and skills. The main initial PDP capabilities available at the launch are the ability to:

- **Conduct a competency self-assessment** based on INCOSE's System Engineering Competency Framework (SECF).
- Browse and search the PDP Catalog to find needed learning resources.
- Save browse/search results on their "bookshelf." Each user will have the opportunity to save to their own "bookshelf" to review later.
- Provide feedback.

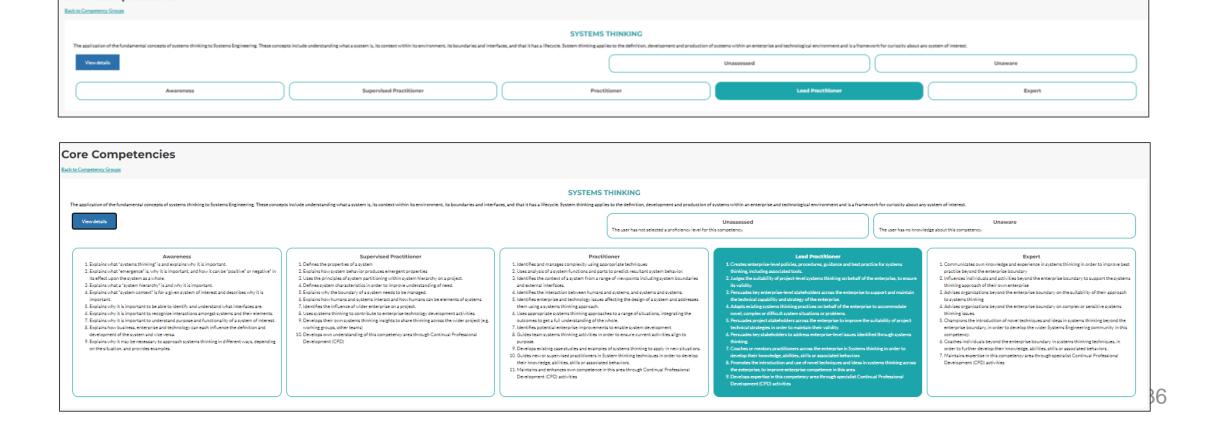
Initial **PDP** deployment (Minimum Viable Service) scheduled for IS 2022.



PDP: Competency Self-Assessments

Core Competencies

• The PDP user can self-assess their current professional development level per the Systems Engineering Competency Framework (SECF).

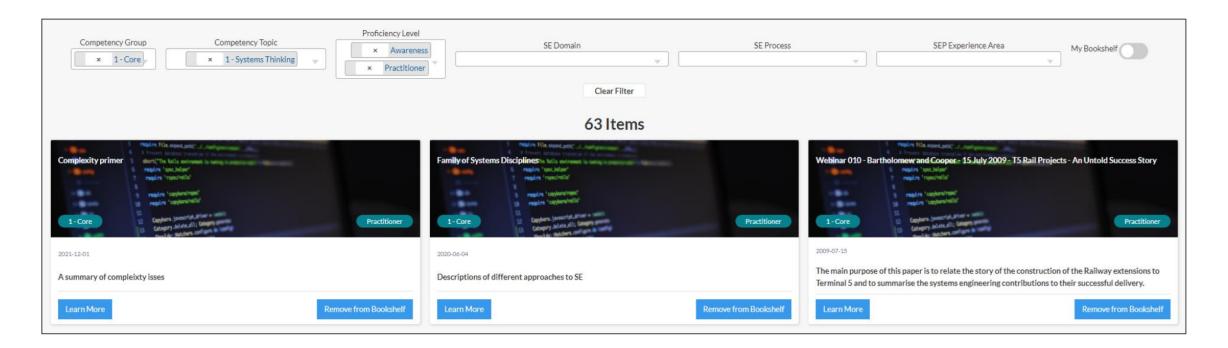






PDP Catalog Browsing

 For all content provided and classified, PDP users can browse the catalog by the PDP Taxonomy fields.









VS – Events

Join Us for the 32nd Annual IS!



Detroit, MI, USA - INCOSE'S FIRST HYBRID IS!

- Detroit Marriott at the Renaissance Center
- Hybrid Event in-person and online
- Virtual Attendance Includes:
 - 4 Exciting Keynotes
 - Invited Content from:
 - The President / President-Elect
 - Tech Ops Leadership
 - SE Fundamentals
 - Best Papers
 - Select additional sessions each day
- In person attendance includes access to the virtual platform
- Technical Program https://www.incose.org/symp2022/symposium/event-schedule#



32nd Annual INCOSE international symposium

hybrid event

Detroit, MI, USA June 25 - 30, 2022

The Power of Connection





IS 2022 Replays and Recordings

- Livestreamed sessions will also be available through the platform after the event closes ("on demand")
- All technical sessions will be recorded
 - Technical session recordings will be made available through INCOSE at a future date
 - Note: In the event that IP release are missing or unavailable, the recordings will not be shared
- Note: Virtual attendees will have access to some but not all presentation materials. (Roughly the equivalent of 3 of the tracks)

International Workshop (IW) 2023





Torrance, CA, USA

- Torrance Marriott near Los Angeles, CA, USA
- Hybrid Event Evolution from our 2022 approach
- IW is Focused on Collaborative Work
 - Encouragement of joint efforts between Working Groups
 - Push toward new Products









Events Portfolio

What is an Event?













The inaugural Integrated Project Engineering Congress (IPEC), is now over and delivered topics of Leadership and Management, whilst bringing together representatives from within the fields of Risk, Systems Engineering, Cost Engineering, Project Controls and Asset Management.





























Nordic Systems Engineering Tour

Empowering the North with Nordic Systems Engineering Experience

43 www.incose.org







- Chicagoland Spring Tutorial Virtual
 - Saturday May 7th, Thursday May 12th, & Saturday May 21st
 - Lifecycle Concepts and Needs Definition Group Project
 - Instructor Lou Wheatcraft
- SETE (SE Test & Evaluation) Conference In-person
 - 12-14 September
 - Canberra, ACT
- WSRC (Western States Regional Conference) Hybrid
 - 30 Sept 2 Oct
 - Golden, CO, USA
- INCOSE South Africa Annual Conference Virtual
 - 14-16 November
- HSI (Human Systems Integration) Conference Hybrid
 - 16-18 November
 - Torrance, CA, USA





More in 2022 . . .

- UK Systems Engineering Conference
 - 22-23 November
- GLNC (Great Lakes National Conference)
 - Date TBD, fall 2022
- Requirements WG (Monthly)
 - Exchange Café and Guest Speakers (alternating months)
- SE Fundamentals (fall 2022)
 - Americas
 - EMEA
 - Asia Oceania
- San Diego and LA Chapters
 - Regular presentations
 - Zoom (anyone can attend)
- Many chapters or WGs holding smaller regular "events"





Share Your Events

- Submit your events: <u>submit_event@incose.net</u>
 - Title
 - Date(s) and Time(s)
 - Sector
 - Language
 - Delivery (in person, online, or both)
 - Type (workshop, conference, webinar, etc.)
 - Summary/Keywords
- Current listing of events: https://www.incose.org/events-and-news







VS - Certification





Individual Certification

- Three certification levels for increasing independence and expertise throughout career
- Standard requirements for each certification level but multiple ways to meet them
- Most popular new path to certification is credit through schoolwork, called "Academic Equivalency"





Why Allow Academic Equivalencies?

- Recognize that universities assess similar topics as the INCOSE knowledge exam
- Allow assessment through a variety of methods
- Allow assessment in languages other than English
- Encourage university coursework in SE

How can a university get Academic Equivalency?





- Available to universities for degree-eligible coursework
- Available to universities who are members of INCOSE Corporate Advisory Board or chapter affiliates
- Requires university to document their assessment methods for each learning objective

How does a student get to use Academic NCOSE Equivalency?



- Attend a university with existing Academic Equivalency agreement.
- Score highly in required coursework.
- Be an INCOSE member.
- Submit ASEP application fee.
 - Fee waivers available for PPP2 and PPP3 AcEq applicants for ASEP through 2023.





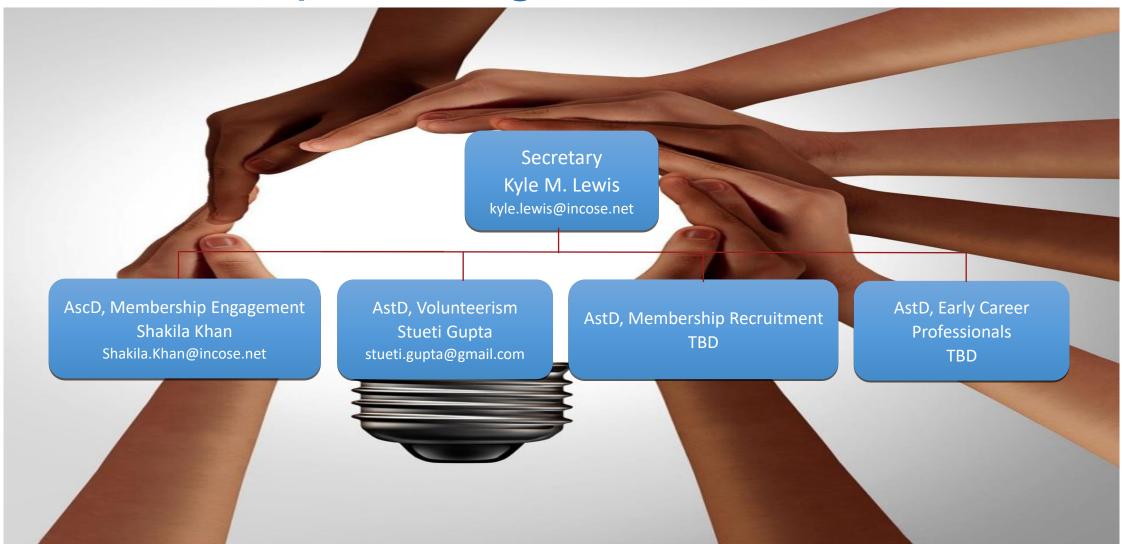
Kyle M. Lewis (SEP), Secretary

VS – Membership – Individual





Membership VS Organization



New Member Welcome Center Cafés



INCOSE SEP

NCOSE NCOSE

Speakers: Stueti Gupta and Dr.

Richard Beasley

Events: 2 ((Americas and

EMEA, Asia-Oceania)

Attendees: 87

Mar 2022

Vision 2035



Speakers: Dr. Nicole Hutchison,

Events

Events: 2 ((Americas and EMEA,

Asia-Oceania)
Attendees: TBD

May 2022

Feb 2022



Speakers: Tony Williams and

Events: 3 (Americas, EMEA,

Jan 2022

Chris Hoffman

Asia-Oceania)

Attendees: 120

Speakers: Dr. Barclay Brown

and Courtney Wright

Events: 3 (Americas, EMEA,

Asia-Oceania)
Attendees: 112

Apr 2022

Speakers: Dr. Barclay Brown,

Dr. Shakila Khan

Events: 2 (Americas, EMEA,

& Asia-Oceania)
Attendees: 91



International Workshop

INCOSE and
Career Development
www.incose.org

International Symposium & Events Team

Q2 2022 BOD: Remote

54







Volunteer Opportunities

- Visit INCOSE.org/about-incose/volunteers
- Help create more volunteering roles
- Open opportunities:
 - Outreach:
 - Assistant Director for Industry and Domain Outreach Rest of the World
 - Assistant Director for Operations (Training & Finance)
 - o DEI:
 - Diversity, Equity, and Inclusion Advisory Committee Member
 - Associate Director for Diversity, Equity and Inclusion
 - Technical Operations:
 - Deputy Assistant Director, Technical Events
 - Deputy Technical Director











Ron Giachetti, Corporate Advisory Board (CAB) Chair

VS – Membership – CAB





- There are currently 126 CAB organizations with an increasing international mix of organizations.
- The CAB nominated individuals for the 8th Cohort of INCOSE's Technical Leadership Institute.
- The CAB Needs, a central focus of the CAB's activities, continue to be worked by the INCOSE Working Groups and Initiatives. We are developing a new set of needs for 2022.
- Future goal is increasing the value proposition of being a CAB member organization.





Maria Romero, AscD, DEI

Diversity, Equity, & Inclusion





DEI-100: Diversity, Equity and Inclusion Policy

- Policy DEI-100 was established for the Diversity, Equity and Inclusion (DE&I) initiative as an imperative effort within INCOSE to ensure that structures and mechanisms are in place to ensure that INCOSE is an organization where everyone can comfortably be their authentic self, recognize themselves in other members, and have an equal voice and opportunity in their interactions within the organization
- Recruitment for a DEI Advisory Committee Member
 - Discuss and promote DEI within INCOSE, help the INCOSE Board of Directors to drive appropriate change relevant to the imperative, and to engage with members and the wider engineering community





Strategic Goals of DEI

- Goal #1: Affirming greater inclusion and diversity within INCOSE membership
 - Present a clear message about the importance and priority of this commitment.
 - Commit ourselves anew to creating an organizational environment where all members feel welcome, all voices are heard, and while in pursuit of furthering our knowledge and growth in the technical arena
- Goal #2: Recruitment of more members from diverse backgrounds
 - Based on factors such as race, ethnicity, gender, gender identity, sexual orientation, age, social class, physical or mental ability or attributes, religion, religious or ethical values systems, geographical area, national origin, political beliefs, and life experiences

Status: Goal #2: Recruitment of more members from diverse backgrounds





- Setting up a recurring meeting with all new DEI Committee members and Berber Vogt
- Developing panel topics for INCOSE IS 2022
- Wrote emails to inform all volunteers who applied that they have been accepted as part of the DEI Advisory Committee





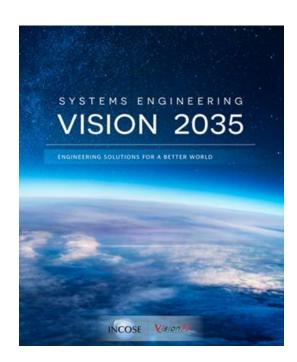
Christopher Hoffman (Christopher Hoffman Technical Director

VS - Products

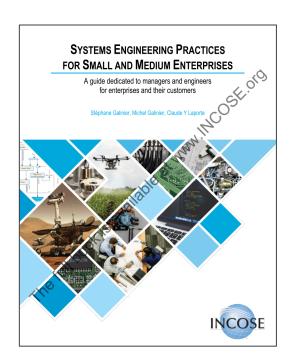




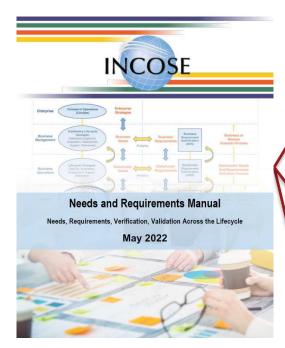
New & Updated Products!



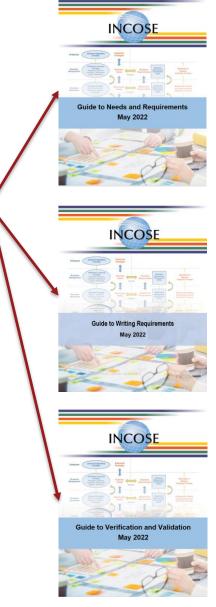
incose.org/sevision



Hardcopy and PDF versions



May 2022 revisions & complementary guides coming soon



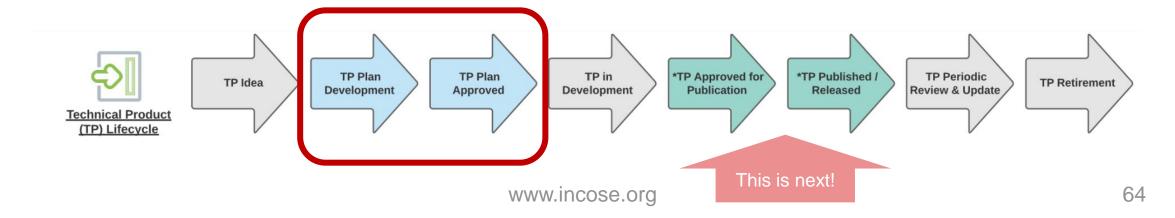
Technical Product Plan 2.0 launched!





HOW

- 1. Review existing process pros and cons to understand the need and use cases
- 2. Develop a project definition (charter) to outline the scope of effort and objectives
- 3. Build and test a mini system for proof of concept
- 4. Build and test the basic system, collecting input and suggestions
- We are here
- 5. Launch the new TPP process for use as soon as possible
- 6. Refine and enhance the process, tools, interface, and supporting resources asneeded and as resources allow



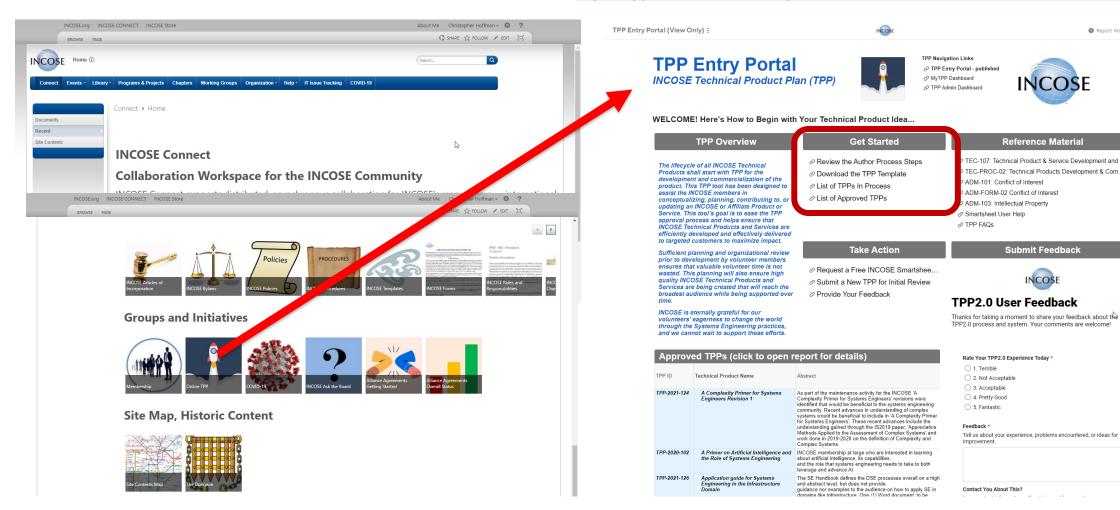


INCOS



Links Updated & Content Migrated

https://app.smartsheet.com/b/publish?EQBCT=fa19c1d90941410f8d7d589496b8a013



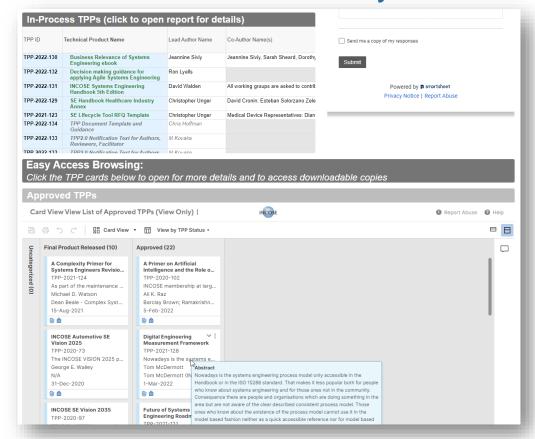
www.incose.org

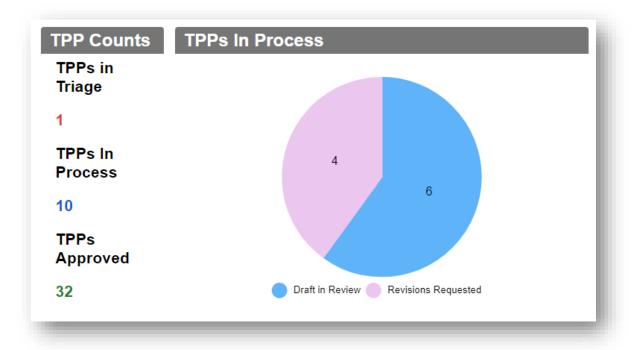




TPP Demo – Quick Overview

Scroll down on TPP Entry Portal!









Tom McDermott, Director, Strategic Integration

Strategic Objectives





Purpose of Strategy Sessions

Value Streams

All INCOSE Leadership (& guests)

Products

Events

Education & Training

Certification

Membership

- Topics of strategic importance to INCOSE (any of the value streams)
- The Director for Strategic Integration maintains a list of Strategy Session recommendations and dispositions
- Many recommendations generate nearterm Board actions
- Most drive longer term strategy





IW2022 Session Summaries

First Official Hybrid Event!
Best Practices in Model

Best Practices in Model Verification and Validation => TWGs



Systems Engineering Modernization

=> V2035 implementation team

Organizing Outreach to New Domains

=> Dir, Outreach & Pres-Elect





IS 2022 Strategy Sessions

-Session 1a: Tue, 12 Jul 1400 UTC

Session 1b: 12/13 Jul 2200 UTC

-Session 2a: Wed,13 Jul 1400 UTC

Session 2b: 13/14 Jul 2200 UTC

-Session 3a: Thu, 14 Jul 1400 UTC

Session 3b: 14/15 Jul 2200 UTC





"a" sessions: 7-11am LA, 10am-2pm NYC, 3-7pm London, 4-8pm Europe

"b" sessions: 4-8pm LA, 7-11pm NYC, 7-11am Singapore, 9am-1pm Sydney





Julia Taylor, Director, Outreach

Outreach & Alliances

www.incose.org





Outreach Objectives

- 1. Pioneering new activities with the goal of establishing more long-term relationships with INCOSE
- Building on our current "Informal Relationships" to strengthen them & increase their involvement in INCOSE
- Maintaining our current "Formal Relationships" by creating new activities & supporting more opportunities for collaboration





Celebrating Long-Term INCOSE Collaboration

June 2022 will mark the 10th year of INCOSE's collaboration with **NAFEMS** (International Association for the Engineering, Modelling, **Analysis & Simulation** Community)! This ongoing relationship is being supported by Ron Carson, PhD, ESEP, INCOSE Fellow

Collaborations in Progress:

- Al loT IEEE
- SAE
- Army Futures Command
- Environmental Division of the American Chemical Society







Serge Landry Director, Asia-Oceania



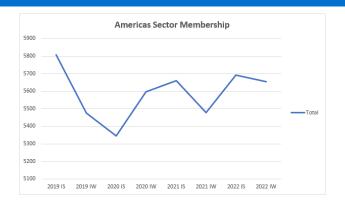
Sector Reports





Sector News & Membership Trends

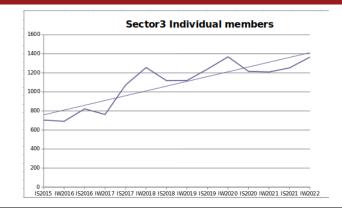
Americas (Sector I)



EMEA (Sector II)



Asia-Oceania (Sector III)



- Active chapter participation in sector, hybrid meetings
- Latin America (LatA) as Emerging Chapter
- Foster the Spanish network activities
- Follow Chapters for events on Linked in

- All 17 chapters are healthy or improve from the last 2 years
- 2 emerging chapter (PT & TUN)
- Motivate members to be active
- Find a way to integrate the associate members in EMEA

Follow "INCOSE EMEA" on Linked in

- Individual Member presence in 8 Chapters and 13 Countries
- Collaboration with Certification on the expansion of Academic Equivalency
- New Zealand became a fullfledged chapter





Sector – Announcements / Events

Sector I – Americas	Date/Location				
Western States Regional Conference (WSRC)	30 Sept – 2 Oct / Denver, CO, USA (Hybrid)				
Local events: Chicagoland, Chesapeake Chapter, Finger Lakes Chapter, San Diego, Los Angeles, + others	All are accessible via remote participation throughout the year Date/Location March / April 2023 – Date to be determined				
Sector II – EMEA	Date/Location				
EMEA Workshop & Conference 2023 (combined)	March / April 2023 – Date to be determined				
25 Years German Chapter (GfSE e.V) Conference	16-18 Nov 2022 / Paderborn, Germany				
For local chapter events visit the homepage	Held throughout the year				
Sector III – Asia-Oceania	Date/Location				
Australia SETE	12-14 Sep 2022 / Canberra, Australia				
India MBSE Summit	4-5 May 2022				
Japan Workshop	23 Apr 2022				
Japan SE Symposium	6 Sep 2022				
Korea SE symposium	2-4 Jun 2022				





Ralf Hartmann, INCOSE Fellow, President-Elect Bill Miller, FuSE Project Lead

Special Projects

Charter is about Realizing the SE Vision



Purpose: Evolve the practice, instruction and perception of SE to:

- Position SE to leverage new technologies in collaboration with allied fields
- 2) Enhance SE's ability to solve the emerging challenges
- 3) Promote SE as essential for achieving success and delivering value Goal: Create a road map that drives the evolution of SE to:
 - 1) be increasingly adaptable, evolvable and fit for purpose
 - 2) account for human abilities, needs as an integral system element and their interactions with a system
 - be more responsive in resolving increasingly challenging societal needs
 - 4) realize and enhance Systems Engineering Vision 2025 & 2035 and other visionary inputs

Scope: Identify the needs, priorities and means for transforming SE including:

- 1) underlying foundations, systems theory and principles
- 2) people, methods, tools, processes, education and training
- 3) the future social and ethical duties, contributions, and responsibilities of future systems engineers







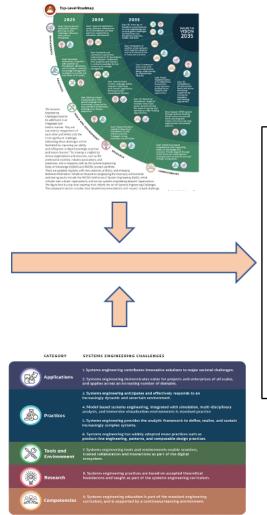












- Restructure in 4 streams:
 - SE Vision & Roadmap
 - SE Foundations
 - SE Methodology
 - SE Application Extension
- o **Refine**
- Complement
- o Identify Top 5

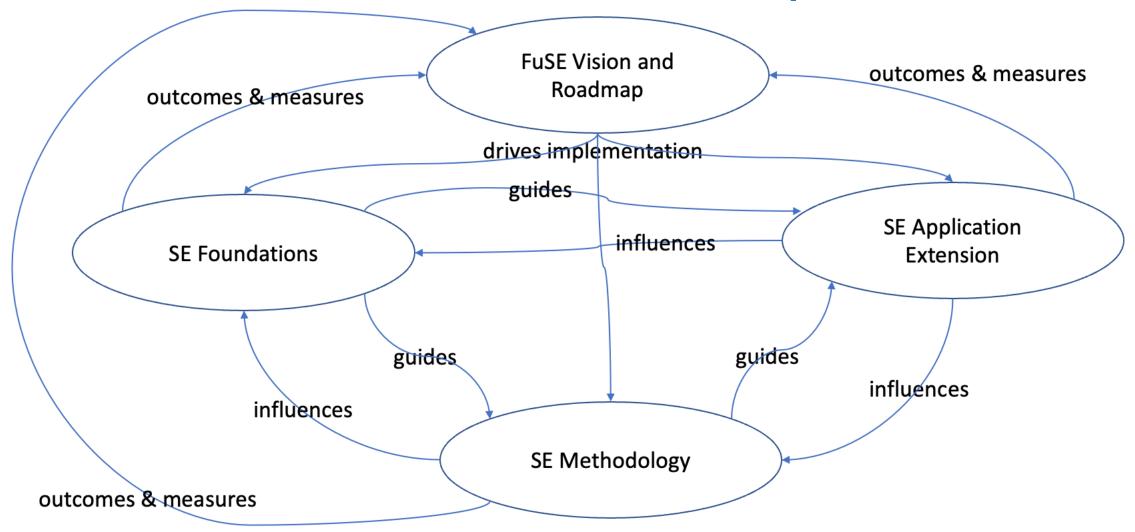


Drive Implementation





FuSE Streams Interrelationships







Communications and Outreach

INSIGHT Themed Issues

- Future of Systems Engineering (May 2019)
- Al and Systems Engineering (March 2020)
- Critical Infrastructure Protection and Recovery (June 2020)
- Cyber Secure and Resilient Approaches with Feature-Based Product Line Engineering (September 2020)
- Loss-Driven Systems Engineering (December 2020)
- Systems Security in the Future of Systems Engineering (June 2022)
- Systems Related Research Centers in the USA and Europe (December 2022)
- Model-Based Test & Evaluation (March 2023 with companion issue of *The ITEA Journal of Test and Evaluation*)
- Agility in the Future of Systems Engineering. (June 2023)
- Realizing the Systems Engineering Vision (June 2024)

Events

- IW2019 Town Hall, IW2021 SE Primer Workshop, and IW2022 Realizing the SE Vision
- IW and IS Strategy Sessions (2018 2020)
- FuSE Core Team Webinars and Community Webinars (Monthly 2018-2021)
- IEEE SMC Conferences 2018 (Miyazaki, Japan), 2019 (Bari, Italy), and 2020 (Virtual Event)
- EMEASEC 2018 (Berlin, Germany) and EMEA Workshop 2019 (Utrecht, The Netherlands)
- NAFEMS World Congress 2019 (Quebec City, Canada)
- Al Workshop 2019 (Madrd, Spain)
- AAAI 2020 and 2021
- US Army Armaments Center/SERC SE4AI and AI4SE Workshops 2020 and 2021
- INCOSE AI Mini-Event (2021)
- Transdisciplinary Engineering 2022 (MIT, Cambridge, MA)
- IEEE SMC 2022 (Prague, Czech Republic)





Honor Lind, Director, Marketing & Communications (MarCom)

MarCom Report

INCOSE as a BRANDED HOUSE





Story telling is the art of marketing

Branded House (monolithic)

Master Brand

Sub-brand 2

ebaqdesign

Sub-brand 3

Very dominant



Sub-brand 1

customer-journey-lifecycle.jpg (2070×1163)
(superoffice.com)

Social Media and digital marketing: organic and paid



Creating a Branded House













SYSTEMS ENGINEERING

AND REQUIREMENTS

JOIN NOW

INCOSE.ORG



WHY

INCOSE?

a systems approach.









NCOS



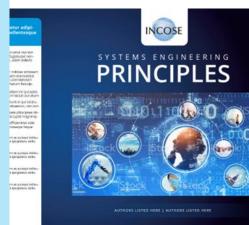








internationally recognized systems engineering

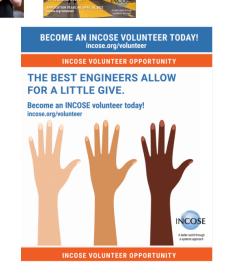


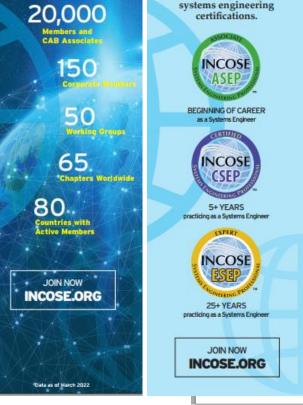


ADD A STRONG FOUNDATION

TO ANY RESUME.

Become an INCOSE volunteer today!







Social Media Highlights Q1 2022





- This quarter's engagement was boosted by IW and the launch of Systems Engineering Vision 2035, the NRVVLM Manual and special issues from SE Journal.
- The number of LinkedIn followers has increased by an average of 150 per week.
- LinkedIn was the best performing platform with an 83% increase in impressions (vs Q4 2021).



Best performing LinkedIn post with 22,511 impressions and 981 clicks and reactions



International Council On Systems Engineering

guide the strategic direction of systems engineering across diverse stakeholder communities: incose.org/sevision

#INCOSEVision2035 #SystemsEngineering



Best performing Twitter post with **945 impressions** and **78 engagements**

Leaders, We Want To Hear From You!



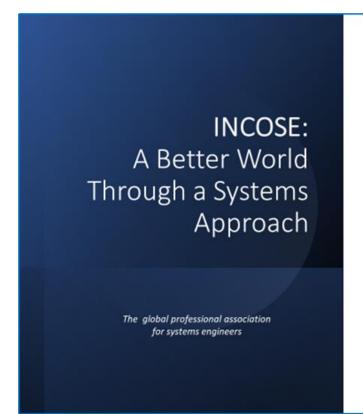


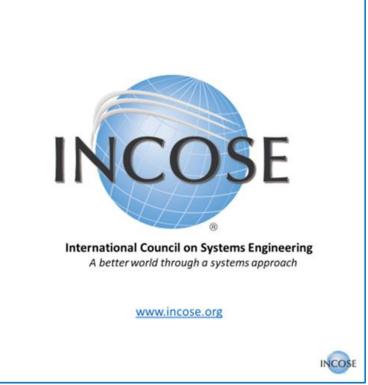
Share your story & the value of your INCOSE membership experience

- About special events
- Webinars
- Topic of the month
- Guest speaker programs
- Awards and recognition
- Career recognition of members
- Announcements
- Community updates

Need marketing help? Contact our Team at: marcom@incose.net

Why INCOSE Value Presentation slide deck











Paul Schreinemakers (Nominations & Elections (N&E) Chair

Kerry Lunney,



Nominations & Elections Co-Chair

N&E Update





Position	Term Ends
Secretary	2025
Director for Academic Matters	2026
Director, EMEA Sector (nominated and elected by EMEA Sector II Chapter Presidents)	2026
Director for Strategic Integration	2026

Position descriptions can be found at: https://www.incose.org/about-incose/Leadership-Organization/organization

Please provide nominations to:

- Nominations and Elections Chair, Paul Schreinemakers (<u>paul.schreinemakers@incose.net</u>)
- Nominations and Elections Co-Chair, Kerry Lunney (<u>kerry.lunney@incose.net</u>)





Position	Term Ends	Reports To
Deputy Technical Director*	2025 IW	Technical Director

^{*} The Deputy Technical Director is scheduled to be installed as Technical Director at the end of the term.

If interested, contact the following:

Technical Director, Christopher Hoffman(<u>christopher.hoffman@incose.net</u>)

Alternatively, send to the Nominations and Elections Chair and/or Co-chair.





Acknowledgement to CAB Organizations

Thank You to Our CAB Organizations



- Aerospace Corporation, The
- Airbus
- AM General LLC
- Analog Devices, Inc.
- ARAS Corp
- Australian National University
- AVIAGE SYSTEMS
- Aviation Industry Corporation of China
- BAE Systems
- Ball Aerospace
- Bechtel
- Becton Dickinson
- Belcan Engineering Group
- Blue Origin
- Boeing Company, The
- Booz Allen Hamilton Inc.
- C.S. Draper Laboratory, Inc.
- California State University Dominguez Hills
- Carnegie Mellon University Software Engineering Institute
- Change Vision, Inc.
- Colorado State University Systems Engineering Programs
- Cornell University

- Cranfield University
- Cubic Corporation
- Cummins Inc.
- Cybernet MBSE Co, Ltd
- Dassault Systems
- Defense Acquisition University
- Deloitte Consulting, LLC
- DENSO Create Inc
- Drexel University
- Eindhoven University of Technology
- EMBRAER S.A
- Federal Aviation Administration (U.S.)
- Ford Motor Company
- Fundação Ezute
- General Dynamics Mission Systems
- General Electric Aviation
- General Motors
- George Mason University
- Georgia Institute of Technology
- IBM
- Idaho National Laboratory

Thank You to Our CAB Organizations



- ISAE Supaero
- ISDEFE
- ITID, Ltd
- Jacobs Engineering
- Jama Software
- Jet Propulsion Laboratory
- John Deere
- Johns Hopkins University
- KBR
- KEIO University
- Knowledge Centric Solutions The REUSE Company
- L3Harris Technologies
- Lawrence Livermore National Labratory
- Leidos
- Lockheed Martin Corporation
- Los Alamos National Laboratory
- Mahindra University
- ManTech International Corporation
- Maplesoft
- Massachusetts Institute of Technology
- MBDA (UK) Ltd
- MetaTech Consulting Inc
- Missouri University of Science & Technology

- MITRE Corporation, The
- Mitsubishi Heavy Industries, Ltd
- National Aeronautics and Space Administration (NASA)
- National Reconnaissance Office
- National Security Agency Enterprise
- Naval Postgraduate School
- Nissan Motor Co, Ltd
- No Magic Inc.
- Northrop Grumman Corporation
- Pacific Northwest National Laboratory
- Pennsylvania State University
- Peraton
- Petronas Nasional Berhad
- Prime Solutions Group, Inc
- Project Performance International (PPI)
- Purdue University
- QRA Corp
- Raytheon Corporation
- Roche Diagnostics
- Rolls-Royce
- Saab AB
- SAIC





93

- Sandia National Laboratories
- Siemens
- Sierra Nevada Corporation
- Singapore Institute of Technology
- SPEC Innovations
- Stellar Solutions
- Stevens Institute of Technology
- Strategic Technical Services LLC
- Swedish Defence Materiel Administration (FMV)
- Systems Engineering Directorate
- Systems Planning and Analysis
- Tata Consulting Services
- Thales
- Torch Technologies
- Toshiba Corporation
- Trane Technologies
- Tsinghua University
- TUS Solution LLCUC San Diego
- UK MoD
- University of Alabama in Huntsville
- University of Arizona

- University of Arkansas
- University of California San Diego
- University of Connecticut
- University of Maryland
- University of Maryland, Baltimore County
- University of Michigan, Ann Arbor
- University of New South Wales, Canberra, The
- University of Southern California
- University of Texas at El Paso (UTEP), The
- University of Washington ISE
- US Department of Defense
- VG2PLAY
- Veoneer, Inc
- Virginia Tech
- Vitech
- Volvo Construction Equipment
- Wabtec
- Woodward Inc
- Worcester Polytechnic Institute- WPI
- Zuken Inc





Don't Forget to Register for IS 2022!

The Power of Connection

- 6 Days
- 5 Tracks
- 4 Keynotes
- 130+ Presentations
- 15 Tutorials
- 10 Panels

We can promise you; you do not want to miss this!













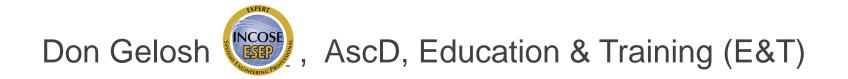




Back-Up Slides







PDP MVS Update Back-Up Slides

Content Taxonomy – For Browsing & Searching

- Joint Leadership Meeting
- PDP based on using consistent "taxonomy" to tag content for PDP Catalog browsing and searching
- The following taxonomies are used
 - PRIMARY:
 - Competency and proficiency (based on INCOSE SE Competency Framework)
 - SECONDARY:
 - Experience area (as used for SEP assessment)
 - Process (from ISO15288 / SE Handbook)
 - Domains used for International Symposia
 - System Attribute
 - Systems Engineering topics

Note – not all content necessarily fits all these taxonomies!







CORE COMPETENCIES		PROFESSIONAL COMPETENCIES		MANAGEMENT COMPETENCIES		TECHNICAL COMPETENCIES	
Core competencies underpin engineering as well as systems engineering.		Behavioral competencies well-established within the Human Resources (HR) domain. To facilitate alignment with existing HR frameworks, where practicable, competency definitions have been taken from well-established, internationally recognized definitions rather than partial or complete re-invention by INCOSE.		The ability to perform tasks associated with controlling and managing Systems Engineering activities. This includes tasks associated with the Management Processes identified in the INCOSE SE Handbook.		The ability to perform tasks associated primarily with the suite of Technical Processes identified in the INCOSE SE Handbook.	
Systems Thinking	The application of the fundamental concepts of systems thinking to systems engineering;	Communications	The dynamic process of transmitting or exchanging information;	Planning	Producing, coordinating and maintaining effective and workable plans across multiple disciplines;	Requirements Definition	To analyze the stakeholder needs and expectations to establish the requirements for a system;
Lifecycles	Selection of the appropriate lifecycles in the realization of a system;	Ethics and Professionalism	The personal, organizational, and corporate standards of behavior expected of systems engineers;	Monitoring and Control	Assessment of an ongoing project to see if the current plans are aligned and feasible;	System Architecting	The definition of the system structure, interfaces and associated derived requirements to produce a solution that can be implemented;
Capability Engineering	An appreciation of the role the system of interest plays in the system of which it is a part;	Technical Leadership	The application of technical knowledge and experience in systems engineering together with appropriate professional competencies;	Decision Management	The structured, analytical framework for objectively identifying, characterizing and evaluating a set of alternatives;	Design for	Ensuring that the requirements of all lifecycle stages are addressed at the correct point in the system design;
General Engineering	Foundational concepts in mathematics, science and engineering and their application;	Negotiation	Dialogue between two or more parties intended to reach a beneficial outcome where difference exist between them;	Concurrent Engineering	A work methodology based on the parallelization of tasks;	Integration	The logical process for assembling a set of system elements and aggregates into the realized system, product or service;
Critical Thinking	The objective analysis and evaluation of a topic in order to form a judgement;	Team Dynamics	The unconscious, psychological forces that influence the direction of a team's behavior and performance;	Business and Enterprise Integration	The consideration of needs and requirements of other internal stakeholders as part of the system development;	Interfaces	The identification, definition and control of interactions across system or system element boundaries;
Systems Modeling and Analysis	Provision of rigorous data and information including the use of modeling to support technical understanding and decision making.	Facilitation	The act of helping others to deal with a process, solve a problem, or reach a goal without getting directly getting involved;	Acquisition and Supply	Obtaining or providing a product or service in accordance with requirements;	Verification	A formal process of obtaining objective evidence that a system fulfils its specified requirements and characteristics;
		Emotional Intelligence	The ability to monitor one's own and others' feelings and use this information to guide thinking and action;	Information Management	Addresses activities associated with all aspects of information, to provide designated stakeholders with appropriate levels of timeliness, accuracy and security;	Validation	A formal process of obtaining objective evidence that the system achieves its intended use in its intended operational environment;
		Coaching and Mentoring	Development approaches based on the use of one-to-one conversations to enhance an individual's skills, knowledge orwork performance.	Configuration Management	Ensuring the overall coherence of system functional, performance and physical characteristics throughout its lifecycle;	Transition	Integration of a verified system into its operational environment including the wider system of which it forms a part;
				Risk and Opportunity Management	The identification and reduction in the probability of uncertain events, or maximizing the potential of opportunities provided by them,	Utilization and Support	When the system is used to deliver its capabilities and is sustained over its lifetime.
						Retirement	the final stage of a system lifecycle, where the existence of a system is ended for a specific use, through controlled activities.
This competency group recognizes INTEGRATING Systems Engineering as an integrating		Project Management	Identification, planning and coordinating activities to deliver a satisfactory system, product, service of appropriate quality;	Logistics	The support and sustainment of a product once it is transitioned to the end user;		
COMPETENCIES	discipline, joining activities and thinking from specialists in other disciplines to create a coherent whole.	Finance	Estimating and tracking costs associated with the project;	Quality	Achieving customer satisfaction through the control of key product characteristics.		

- Awareness –
 Displays knowledge of key ideas, issues, and their implications.
- Supervised
 Practitioner Tell
 me what to do
- Practitioner I can do
- Lead Practitioner I know how and can work with others
- Expert I can tell everyone what to do

PDP Secondary Taxonomies





SEP Experience Areas

- General Systems Engineering
- Requirements Engineering
- System and Decision Analysis
- Architecture/Design Development
- Systems Integration
- Verification and Validation
- · System Operation and Maintenance
- Technical Planning
- Technical Monitoring and Control
- Acquisition and Supply
- Information and Configuration Management
- Risk and Opportunity Management
- Lifecycle Process Definition and Management
- Specialty Engineering
- Organization Project Enabling Activities

Domain

- Generic
- Academia (curricula, course life cycle)
- Aerospace
- Automotive
- Autonomous Systems
- Biomed/Healthcare/Social Services
- City Planning (Smart Cities, Urban Planning, etc)
- Defense
- Emergency Management Systems
- Energy (Renewable, Nuclear, etc.)
- Enterprise SE (Organization, Policies,
 Knowledge, etc.)
- Environmental Systems
- Information
 Technology/Telecommunication
- Infrastructure (Construction, etc.)
- Maritime (Surface & Sub-Surface)
- Oil & Gas
- Other Domain
- Rail
- Service Systems
- Software
- Sustainment (Legacy Systems, Re-Engineering, etc.)
- Very Small Enterprises

SE Topics

- · Agile Systems Engineering
- Artificial Intelligence
- Case for SE
- Competencies
- Diversity
- Heuristics
- INCOSE Products
- Lean Systems Engineering
- MBSE
- Organizing to do SE
- Processes
- Product Line Engineering
- Professional Development guidance
- SE Education
- Software-Intensive Systems
- SysML
- Systems of Systems
- What is SE?
- Other

Systems Attributes

- · Human-Systems Integration
- Life Cycle cost
- Maintainability
- Reliability
- Resilience
- Risk
- Safety
- System Security (cyber-attack, antitamper, etc.)
- Other

Processes

As defined in ISO15288 / Described in the INCOSE Systems Engineering handbook



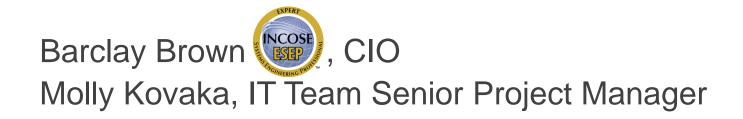


PDP Feedback Opportunity

- Feedback goes to PDPAdmin@incose.net
 - Report a broken link (editable form to include link name)
 - Report a bug (able to include a screenshot)
 - Report PDP Catalog material not classified correctly (pull-down menus to classify it properly per the PDP Taxonomy)
 - Recommend & upload new material (with pull-down menus to classify per the PDP Taxonomy)
 - General comments
 - -FUTURE: Rate the learning resource (1 to 5 stars, with free form text)







IT Report Back-Up Slides

INCOSE IT Architecture View





Association Mgt System

- Join/renew process
- Membership records
- Groups/Committees
- Lists and Reports



INCOSE.org

- Public web site
- Based on Sitefinity

INCOSE Store

Calendar

Org Chart

Business Applications

SEEE

)))

SETDB

SEBoK

- Knowledge Articles
- Edited by committee
- Based on MediaWiki

INCOSE Communities

- Cafes, WGs, Chapters, CAB
- Interactive, access varies

INCOSE Connect

- File Sharing
- Group "websites"
- Based on SharePoint 2013

Member Communication

- Informz Email System
 - Reachability
- Support of New Member Engagement Initiative

GRCSE

- Graduate Curriculum
- Edited by committee
- Based on WordPress

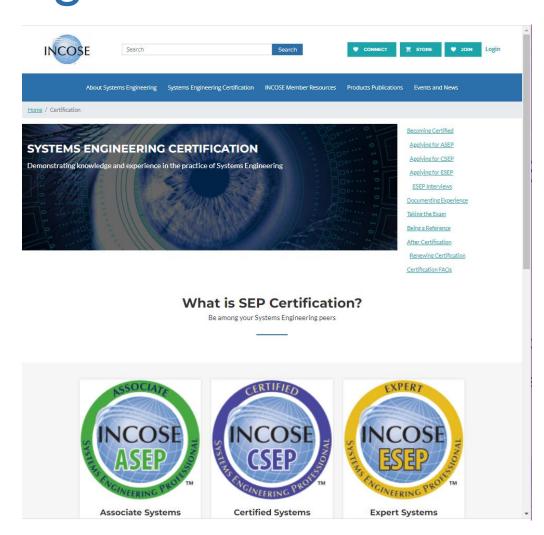
18-mai-22 www.incose.org/IW2021

INCOSE Web Site Redesign



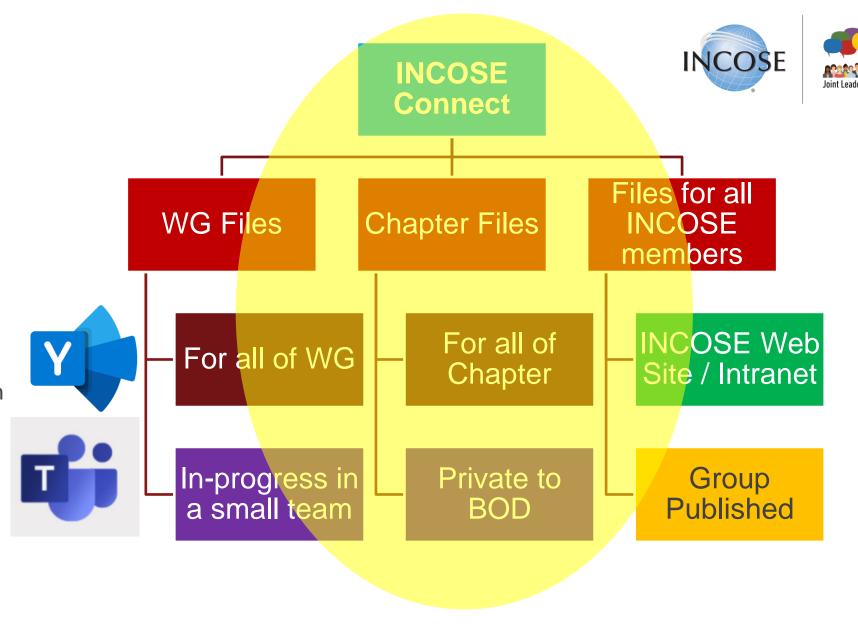


- In progress
- Multi-stage
 - Design concept
 - Sitefinity Controls
 - Apply designs
 - Granular access
- New Sitefinity controls implemented based on new design
- Certification: first complete web site section
- Others in progress
- Good chance to restructure as we did with Certification



Connect: The Big Move

- Connect is based on a 9-year-old version of Microsoft SharePoint, and a private, expensive server
- We can use capabilities we are already have through Microsoft 365 and Sitefinity to provide much better user experience
- Teams and Yammer both store files in newest SharePoint online
 - Default permissions can work well
 - Easy to set additional permissions by name
- IT happy to help groups determine how and where to store files

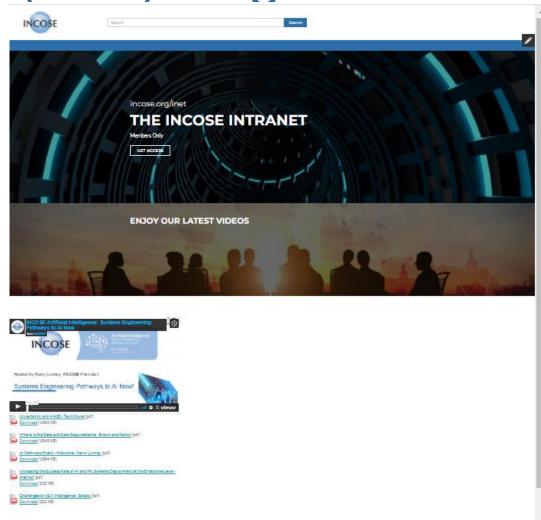






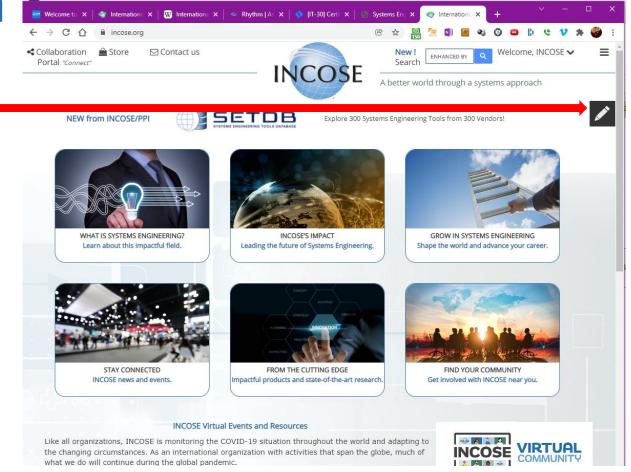
The INCOSE Intranet (iNet) Begins

- www.incose.org/inet
- Members-only content, resources, materials
- Currently prototype design
- Well become fully structured web site over time
- Some Connect content will migrate here
 - Newsletter archives
 - Other tbd
- Easily maintained by staff and others using Big Pen and CMS



Bring on the Big Pen

- Group-based permissions for web editing
- New roles for web sections
 - Cert-Admin
 - Café-Admin
- Regular user/member accounts assigned to roles
- Only allows editing of pages authorized in that group (even though big pen may appear on other pages)
- New groups will set up for all parts of web site
 - Send me requests for new groups / people to add
- We will be sunsetting anonymous web-editing accounts





Guidance for how to move your stuff: 1925





Files (/Folders) going to **Yammer** files within a community (read only or read/write)

- Things clearly from a community (chapter, WG, committee, BOD)
- Primarily shared with the community
- Accessible by active members (they are using our collaboration systems) – not CAB Associates
- Examples:
 - Chapter Strategic Plan
 - WG Research Paper,
 - **MBSE** Initiative Presentations
 - **BOD Minutes**

Files going to a team in Microsoft Teams (read only or read/write)

- Things being worked on by a small group of people
- Things not shared with other teams or communities (or not yet shared)
- Examples:
 - INCOSE Budget
 - WG Primer in progress,
 - Chapter BOD program/ speaker ideas



Guidance for how to move your stuff: 2/2

Files to be posted on **INCOSE Intranet** (www.incose.org/inet)

- Things to be presented to ALL of INCOSE including members and CAB **Associates**
- Examples:
 - INCOSE Newsletter Archive
 - Conference Presentations

Files going to incose.org (our **PUBLIC** web site)

- Things we are sharing with the world
- Examples:
 - Ads and Promotions
 - eNote



Honor Lind, Director, Marketing & Communications (MarCom)

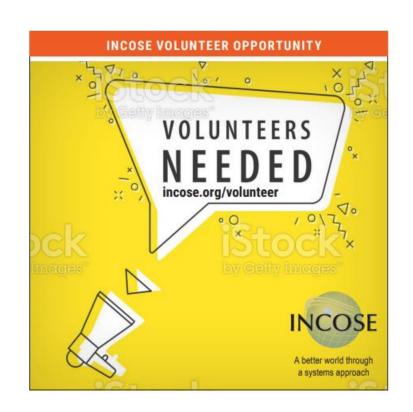
MarCom Report Back-Up Slides

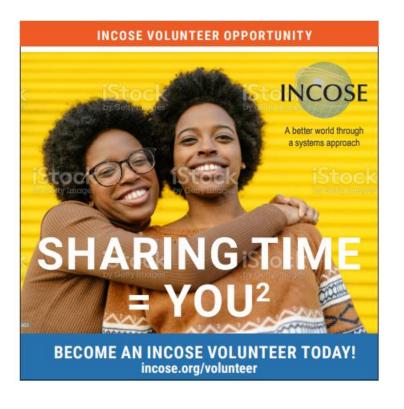












Expanding the target marketing Members Newsletter, Dot-The-Eye; Branding Ads, Jones Haus



External Target:

Systems Engineers (outside the organization = 305,000 -INCOSE)

Engineers (2m)

Universities

Global markets

Partners

Consultants / Contractors

Freelancers

Corporations



Member Types:

associate 8350 regular 5992 moa member 4160 student 399 senior member 278 moa student member 152 moa senior member 145 nonmember 34 lifetime 26



Internal Target:

Members

CAB Organizations

CAB Associates

Chapters

Working Groups

Sectors



Certification:

Regular members: 11152 (cab associates are not included)

Not certified 6496

CSEP 2418 ASEP 1858 ESEP 380

INCOSE Banners For IS2022

More to come:

- · INCOSE Branding Value
- Volunteerism
- New Members
- · Welcome Center Café
- Chapters
- Regional

Q2 2022 BOD: Remote

INCOSE Members Newsletter

Phase 1

INCOSE

in UNKEDN POSTS



- The Q1 Members Newsletter launched in March 15 with a refreshed and modernized look





Certification Kick Off April Fools











www.incose.org

113







Maria Romero, AscD, DEI

DEI Back-Up Slides





Definitions of DEI

The following definitions are taken from the <u>ABET (Accreditation Board for Engineering and Technology</u>) where they provide a reference point for conversations and materials about diversity, equity and inclusion.

- Diversity is the range of human differences, encompassing the characteristics that make one individual or group different from another.
- **Equity** is the fair treatment, access, opportunity and advancement for all people, achieved by intentional focus on their disparate needs, conditions and abilities.
- Inclusion is the intentional, proactive, and continuing efforts and practices in which all members respect, support, and value others.

INCOSE uses the compound term **Diversity**, **Equity and Inclusion** (abbreviated to **DEI**) when referring to the broad subject matter.

Advisory Committee Member Advertisement Poste

Diversity, Equity, and Inclusion Advisory Committee Member

Internal ID: DEI-001

Type: Volunteer Opportunity

Description: The purpose of the committee is to discuss and promote DEI within INCOSE, help the INCOSE Board

of Directors to drive appropriate change relevant to the imperative, and to engage with members and

the wider engineering community. Promotion of DEI includes making suitable guidance material available to INCOSE members. Work is performed in accordance with policy DEI-100, posted here:

https://www.incose.org/about-incose/policies-and-bylaws

Volunteering Benefits:

Classification: Working Group

Responsibilities:

Held:

Pre-requisites & Qualifications Membership of the committee shall be open to INCOSE members with an interest in DEI, a desire to

contribute to this theme within INCOSE, and experience of diversity, equity and inclusion matters.

Means of Engagement: Work will be performed remotely with one-hour phone calls every two weeks. Most communications

will be written, via email or Microsoft Teams.

Work location: remote

Number of volunteers needed: 6-10

Working with: Maria Romero and other volunteer members of the DEI Advisory Committee