



International Council on Systems Engineering
A better world through a systems approach

Introduction to the INCOSE Corporate Advisory Board (CAB)

Agenda

- INCOSE Overview
- INCOSE Corporate Advisory Board (CAB)
- CAB Membership Opportunities and Products
- Conclusion

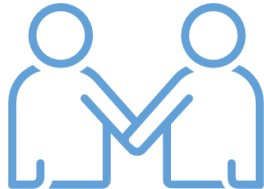


Impact of INCOSE

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



21,000+
Members and
CAB Associates



130+
Corporate
Members



50+
Working
Groups



65
Chapters
Worldwide



75
Countries
Worldwide

Stats correct on April 3, 2023

Vision and Mission



Vision

A better world through a systems approach.



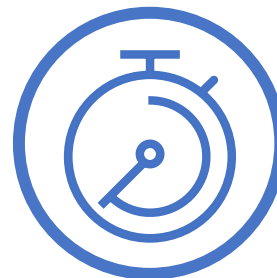
Mission

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



Objective

Global leader for systems engineering professionals for career development.



Future

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





Why Join INCOSE

- INCOSE is the global Systems Engineering professional society – providing the **opportunity for life-long learning** in systems approaches.
- A community of peers, **resources** for your **career**, and a place to be a **leader**.
- INCOSE members stand out and are often sought after as **experts**. INCOSE members share practices and learn from each other.
- INCOSE members create **products**, produce **events** and represent the organization in international forums.
- INCOSE members increase the body of knowledge and **advance the practice** of systems engineering.
- **Network** with over 21,000+ members in 75 countries.
- Increase your professional stature with the INCOSE Systems Engineering Professional **Certification**.



Membership Benefits



A global network of colleagues who understand systems engineering



Certification Opportunities



Access to quarterly e-Publications, *INSIGHT* and *Journal of Systems Engineering*



Electronic version of the Systems Engineering Handbook



Collaborate with experts and practitioners **worldwide**



Exclusive access to INCOSE Connect, the collaborative space for **INCOSE** Members Only



Member discounted registration to the International Workshop and International Symposium.

Corporate Advisory Board (CAB) Introduction

Corporate Advisory Board membership allows organizations to guide the direction of the SE discipline.

- Members and Associates gain access to state-of-the-art products.
- Align with peers and fellow industry leaders, grow your global footprint, and learn about how other industry leaders are applying systems engineering to solve business problems.
- Gain better access to talent - find and hire competent, certified Systems Engineers through your INCOSE connection

INCOSE Corporate Advisory Board (CAB) is the Voice of the Customer to INCOSE leadership.

- Shape INCOSE Strategic Direction
- Report SE challenges facing industry and academia



The CAB provides strategic guidance to technical leadership, leading to the development of systems engineering products and input to standards

- Identify CAB Needs
- Support and mentor working groups with recommendations for product priorities

Academic Council Introduction

- Academic Council members form the branch of the Corporate Advisory Board facilitating discussion and exploration of issues relevant to academia and setting a path for achievement with strategic collaborations within INCOSE.
- The CAB has 38 Academic Members in 9 countries
- Council member organizations offer bachelors, masters and doctorate degrees in systems engineering and related programs
- Advance state-of-the-art systems engineering through academic programs
- Some of the benefits of Academic CAB Membership include:



Opportunity to apply for certification Academic Equivalency for appropriate courses.



Opportunity to network and collaborate with other academic institutions globally, related to systems engineering.



Opportunity for internships, externships, and employment offers.



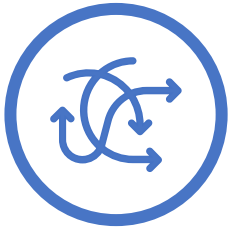
Research collaborations with other Academic Council member organizations.

What is a CAB Member?



CAB Members are the customer's voice to INCOSE Leadership' highlighting the Systems Engineering needs.

The CAB helps INCOSE to



- Investigate important Systems Engineering (SE) challenges facing the industry and government
- Shape INCOSE's strategic direction
 - Identifying and prioritizing the best ways to advance the discipline of SE in industry, science, and academia

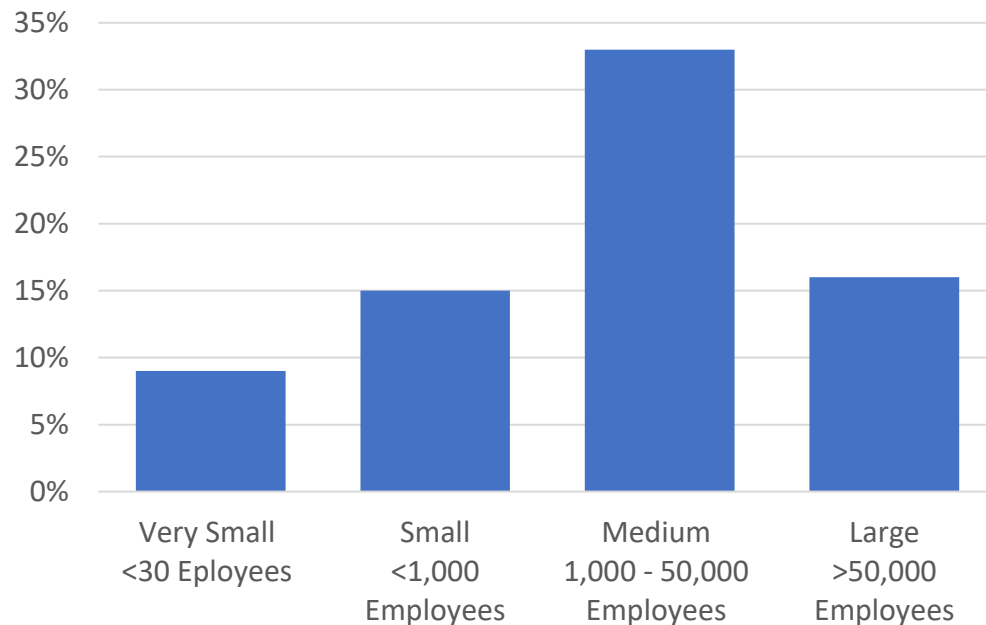


Support and mentor INCOSE's more than 50 Working Groups with recommendations for products determining priorities

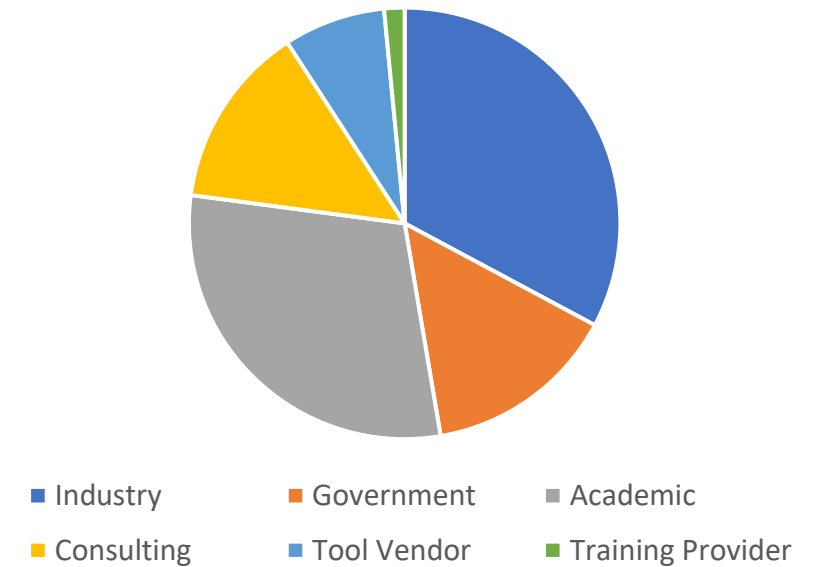
CAB Metrics

- There are currently 132 CAB Members
- Every organization has equal input

Organizations by Size



Organizations by Category



Current CAB Members (By Type)

Industry

- Aerospace Corporation (The)
- Airbus Group
- AM General LLC
- Analog Devices, Inc.
- Aras Corp
- Arc Field
- Aviage Systems
- Aviation Industry Corporation of China, Ltd.
- BAE Systems
- Ball Aerospace
- Bechtel
- Becton Dickinson
- Belcan Engineering Group
- The Boeing Company
- Booz Allen Hamilton Inc.
- Bombardier Transportation
- CACI International
- Change Vision, Inc.
- C.S. Draper Laboratory, Inc.
- Cubic Corporation
- Cummins, Inc.
- Cybernet MBSE
- Dassault Systemes
- Deloitte Consulting
- DENSO Create, Inc.
- Embraer S.A.
- Ford Motor Company
- Fundacao Ezute
- General Electric Aviation
- General Dynamics Mission Systems
- General Motors
- IBM
- ISDEFE
- iTid Consulting, Ltd
- IVECO SPA
- Jama Software
- Jet Propulsion Laboratory
- John Deere & Company
- KBR, Inc.
- L3 Harris
- Leidos
- Lockheed Martin Corporation
- ManTech International Corporation
- MBDA (UK) Ltd.
- MetaTech Consulting, Inc.
- The MITRE Corporation
- Mitsubishi Heavy Industries
- Modern Technology Solutions, Inc.
- National Solutions Group, Inc.
- Nissan Motor Co, Ltd
- Northrop Grumman Corporation
- Peraton
- Petronas Nasional Berhad
- Prime Solutions Group, Inc.
- Project Performance International
- QRA Corporation
- Raytheon Technologies
- Rolls-Royce
- SAAB AB
- SAIC
- Sandia National Laboratories
- Saudi Railway Company
- Shell
- Sierra Nevada Corporation
- Siemens
- SPEC Innovations
- Strategic Technical Services
- Systems Planning and Analysis
- TATA Consultancy Services
- Thales
- Toch Technologies
- Trane Technologies
- Toshiba Corporation
- Veoneer, Inc
- VG2PLAY
- Vitech
- Volvo Cars Corporation
- Volvo Construction Equipment
- Wabtec
- Woodward Inc
- Zuken

Government

- Federal Aviation Administration (U.S.)
- Idaho National Laboratory
- Lawrence Livermore National Laboratory
- Los Alamos National Laboratory
- National Reconnaissance Office

- National Aeronautics and Space Administration (NASA)
- National Reconnaissance Office (NRO)
- National Security Agency – Enterprise
- Pacific Northwest National Laboratories
- Swedish Defence Materiel Administration
- Taiwan Space Agency
- UK MoD
- US Department of Defense

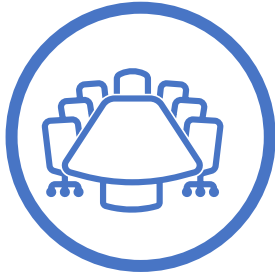
Academic

- Australian National University
- California State University Dominguez Hills
- Carnegie Mellon University Software Engineering Institute
- Colorado State University
- Cornell University
- Cranfield University
- Defense Acquisition University
- Drexel University
- Eindhoven university of Technology
- George Mason University
- Georgia Institute of Technology
- ISAE SUPAERO
- John Hopkins University
- KEIO university
- Loyola Marymount University
- Mahindra University

- Marquette University
- Massachusetts Institute of Technology
- Missouri University of Science & Technology
- Naval Postgraduate School
- Penn State University
- Purdue University
- Singapore Institute of Technology
- Stevens Institute of Technology
- University of Arizona
- Tsinghua University
- Virginia Tech
- Worcester Polytechnic Institute University of:

- Alabama in Huntsville
- Arkansas
- California San Diego
- Connecticut
- Maryland
- Maryland, Baltimore County
- Maryland Global Campus
- Michigan, Ann Arbor
- New South Wales, Canberra
- Southern California
- Texas El Paso

CAB Leadership & Meetings



The CAB has a Chair and a Co-Chair. The Chair is a two-year position and is a voting member of the INCOSE BoD. The Co-Chair is elected by the CAB at the International Workshop from those candidates nominated from CAB organizations. The Co-Chair-Elect is installed as the Chair after two years.



The CAB holds meetings twice a year in conjunction with the International Workshop (IW) and International Symposium (IS). On the months apart from the IW and IS, the CAB holds a regular monthly meeting.



The CAB makes notes and presentation material of all meetings available to the INCOSE Board of Directors. CAB members have access to a dedicated INCOSE website and Viva Engage (previously Yammer) Community.

Lifecycle of the CAB Impact

CAB organizations influence INCOSE work and benefit from INCOSE products

CAB Member Organizations



CAB member organizations, CAB Reps, and CAB Associates identify and document CAB needs annually based on challenges facing industry and academia

CAB needs are briefed annually to the INCOSE Board of Directors and the Technical Director; Needs are flowed to the appropriate workgroups for action

CAB Members help to Lead, Support, and Mentor Working Groups

INCOSE Vision and Strategic Plan



Working Groups and Technical Services deliver product solutions that further the systems engineering discipline consistent with the INCOSE Vision, Strategic Plan while addressing CAB Needs

Value Streams / Working Groups



External Organizations

External relationships foster standardization



INCOSE Products and Services

Products



Events



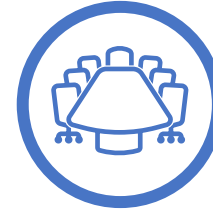
Certification



Key CAB Member Benefits



Recognition on the INCOSE CAB home page with a link to the organization.



Complimentary Registration at the International Symposium.



The designated representative of each CAB member is granted full INCOSE membership for the years they serve as their organization's CAB representative.



Opportunity to submit candidates for one of 10 allocated CAB slots for INCOSE's Institute for Technical Leadership.



Complimentary functions for CAB member representatives who attend the business meetings hosted by INCOSE with the INCOSE Board of Directors in attendance to promote networking and goodwill (e.g. CAB Dinner at IS, INCOSE Foundation Event at IW).



Reduced rates on selected advertising within INCOSE, recognition in selected INCOSE publications and ability to participate in virtual job fairs for SEs.

CAB Organization Membership Costs

- CAB Membership Fees are Annual based on Organization Size
 - Multi-year membership - 3yrs., 5% discount
 - Multi-year membership - 5 yrs., 10% discount
- CAB Membership requires a first year non-recurring initiation fee
- CAB Memberships include CAB Associate Accounts included at no additional costs
 - CAB associate accounts allow organization members access to many of the INCOSE Products with the goal that they transition to full members and further consider SE certifications

Membership fee depends on the size of the CAB organization. Also discounts for international CAB members in certain countries with low incomes.

3. INITIATION FEE (first year only) / ANNUAL MEMBERSHIP FEE*			
Organization Type ¹	Annual Fee*	First Year Initiation Fee (1X Only)	Number of CAB Associate Accounts Included
Academic Organization	\$5,225	\$0	300
Very Small Organization	\$2,750	\$0	20
Small Organization	\$5,225	\$5,500	150
Medium Organization	\$6,600	\$6,500	200
Large Organization	\$8,000	\$7,500	300
Additional CAB Associate Accounts			\$35/person/year
*Multi-year memberships are available at a 5% discount for three (3) years, or 10% for five (5) years			
BENEFITS SUMMARY (subject to change **) <ul style="list-style-type: none"> • Member Services • Product Previews, Technical Positions (public) • eNote, eNewsletter • INSIGHT Magazine (available at a discount directly through Wiley) • Systems Engineering Journal • Past Symposia Papers and Proceedings • Selected INCOSE Technical Products and Services • SE Handbook Fourth Edition (softcopy) • Selected On-line INCOSE Produced Tutorials • Opportunity to submit candidate(s) for one of the ten allocated CAB slots for INCOSE's Institute for Technical Leadership (TLI) each year • Informational Webinars • Notification of INCOSE Meetings • Representative Role on the Corporate Advisory Board (CAB chair has a voting seat on INCOSE BoD) • Complimentary CAB Rep INCOSE Membership <i>only</i> while serving as the CAB Representative. • One Complimentary Executive Registration at the International Symposium (<i>excludes Very Small Organization due to the low membership fee</i>) (CAB representative is responsible for own travel & accommodations) 			
** Note: The official benefits list is maintained in the LST-100 INCOSE Membership Benefits Table available on the INCOSE website or from the CAB Chair.			

CAB Associate Membership Benefits

- CAB Associates have access to Member Services
- Participation in Webinars and SE Community Offerings
- Access to the Professional Development Portal
- Access to many current and archived softcopy products
- Video recordings of INCOSE Tutorials and keynote IS Presentations (Delayed)

29-Jan-23

INCOSE Membership Benefits Table (V11)						
Legend -	Included	Not Included	60-Day Delay	Full Price	Discounted Price	Deeply Discounted Price
	✓	X	⌚	\$\$\$	\$	\$
Item	Members (Regular / Life / Senior / Student)	CAB Associates	Non-Members	Event Attendees		
Membership						
Member Voting Rights	Reg/Life/Sr - ✓ Student - X	X	X			
Working Group Membership	✓	X	X			
Chapter Membership	✓	X	X			
Member Services	✓	✓	X			
Participation						
Certification	\$\$\$	X	X			
INCOSE Events	\$	\$\$\$ ¹	\$\$\$			
Webinars, Community Offerings, Cafes ³	✓	✓	✓			
Access to the Professional Development Portal (PDP)						
Viewing the Webpages	✓	✓	✓			
Viewing the Learning Resource Results Cards	✓	✓	✓			
Viewing Learning Resources Via Learn More Page	✓	✓	X			
Saving Competency Self-Assessments	✓	✓	X			
My Bookshelf Capability	✓	✓	X			
Access to Hardcopy Products						
Hardcopy of Internally Developed INCOSE Products (i.e. SE Handbook, Vision, Journal)	\$	\$\$\$	\$\$\$			
Externally Produced Hardcopy Technical Products	\$	\$\$\$	\$\$\$			
Access to Softcopy Products						
eNewsletter	✓	✓	✓			
eNote	✓	✓	✓			
SE Tools Database (SETDB)	✓	✓	X			
Internally Developed Technical Products ⁴	✓	✓	\$\$\$			
Past Symposia Papers & Proceedings	✓	✓	\$\$\$			
SE Handbook	✓	✓	\$\$\$			
Systems Engineering Journal	✓	✓	\$\$\$			
Technical Products ⁴	✓	✓	\$\$\$			
Webinar Material	✓	✓	X			
INSIGHT	✓	\$\$\$ ¹	\$\$\$			
Post-Event Video Recordings						
• IS Keynote Presentations	⌚ ✓	⌚ ✓	⌚ ✓			✓
• Webinars ⁵	✓	✓	\$			✓
• INCOSE Tutorials (WG)	✓	✓	\$			✓
• Other Presentation Videos (IM, WG, Mini-Event, Chapter, Other)	⌚ ✓	⌚ \$	⌚ \$\$			✓
• INCOSE Tutorials (\$)	⌚ \$	⌚ \$\$	⌚ \$\$			✓
• Symposia Event Presentation (IS & Joint)	⌚ \$	⌚ \$	⌚ \$\$			✓

Footnote 1: CAB Organizations can purchase INSIGHT at a discounted price for their CAB Associates for a fee (negotiated with INCOSE and Wiley). In the absence of negotiated access, CAB Associates can purchase this item at list price via Wiley.

Footnote 2: CAB Organizations receive one free individual registration to the INCOSE International Symposium.

Footnote 3: Selected webinars approved by the Services Director will be available publicly to all.

Footnote 4: Per TEC-107 & TEC-PRCC-03, selected technical products approved by the Impactful Products Committee & Technical Director will be provided at no charge to all.

Footnote 5: Use of Youmber in virtual community offerings is members & CAB Associates only.

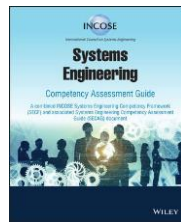
CAB Membership Opportunities

Products

Systems Engineering Vision 2035



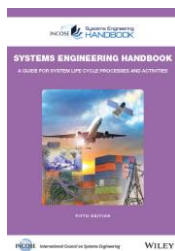
Guides



INSIGHT Magazine*



INCOSE SE Handbook



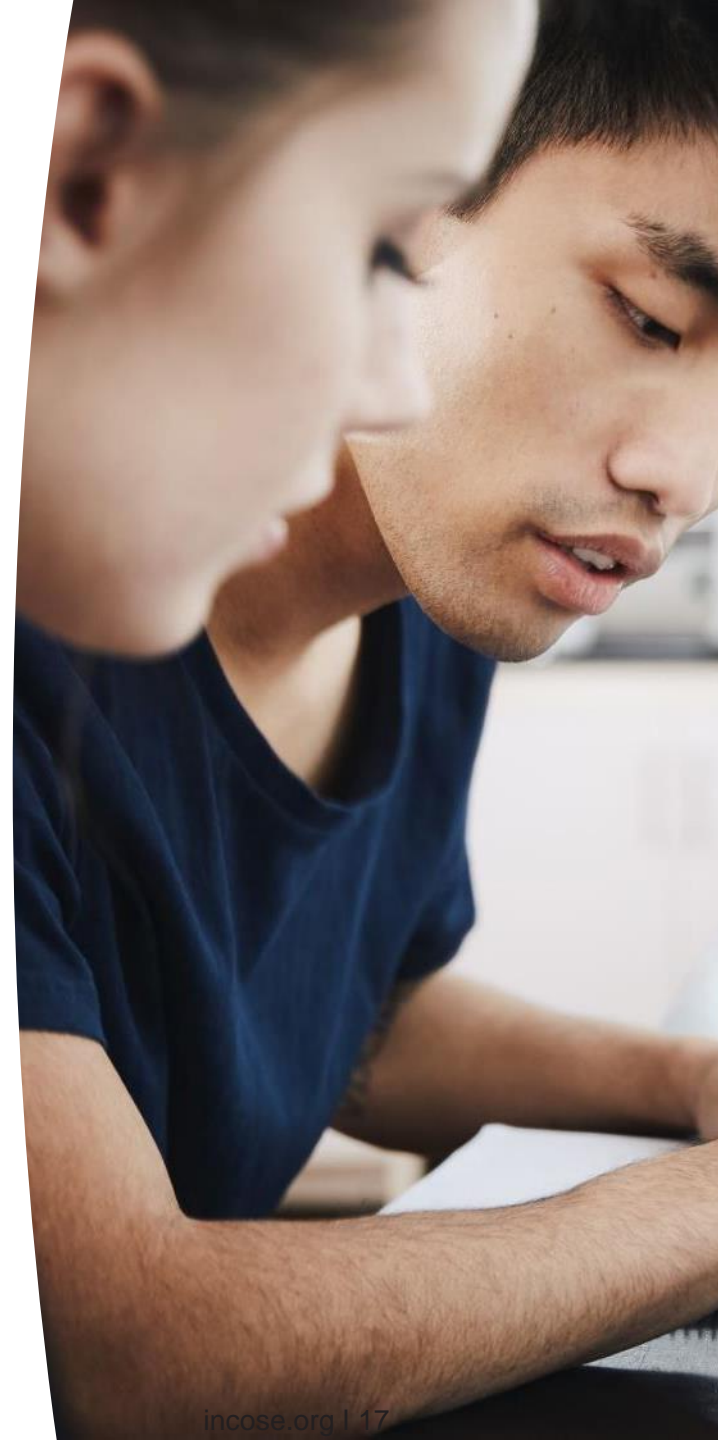
Members Newsletter



Systems Engineering Journal



* Available for an extra fee



CAB Membership Opportunities

Professional Development (*Full Membership Required)

Professional
Development Portal
(PDP)



Technical
Leadership
Institute *



Certification *



Mentoring



Systems
Engineering Body
of Knowledge



Systems
Engineering Tools
Database



CAB Membership Opportunities

Conferences and Events

Annual International Symposium



Annual International Workshop



Regional Events



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



Virtual Community Events & Webinars



Working Groups & Initiative Events and Meetings



CAB Membership Opportunities

Working Group Membership (Full Membership Required)

INCOSE's over 50 active working groups include:

- Agile Systems and Systems Engineering
- Architecture
- Artificial Intelligence Systems
- Automotive
- Competency
- Complex Systems
- Configuration Management
- Critical Infrastructure and Recovery
- Decision Analysis
- Defense Systems
- Digital Engineering Information Exchange
- Empowering Women
- Enterprise Systems
- Healthcare
- Human Systems Integration
- Information Communications Technology
- Infrastructure
- Integration, Verification & Validation
- MBSE Initiative
- Natural Systems
- PM-SE Integration
- Product Line Engineering
- Requirements
- Smart Cities Initiative
- Social Systems
- Space Systems
- Systems Safety
- Systems Engineering and Lawmaking
- Systems Engineering Quality Management

The value of working groups:



Working groups are the resource practitioners need.



Discuss, collaborate, share in person, and online with a wide diversity of interests.



Help develop and review international standards



Create products to advance the state, art and practice of systems engineering.



WGs run events, workshops, panels and much more



Conclusion

As a CAB Member Organization you:

- Help INCOSE to shape the Systems Engineering landscape
- Network with worldwide SE industry leaders and CAB colleagues
- Influence INCOSE Working Groups which develop future SE processes, procedures, and products
- Have access to extensive INCOSE resources through your CAB Associates and full members
- Demonstrate your organization's commitment to systems engineering

www.incose.org/cab





Get it Touch



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Current CAB Members (By Size)

Very Small

- Cybernet MBSE
- Change Vision, Inc.
- MetaTech Consulting, Inc.
- National Solutions Group, Inc.
- Prime Solutions Group, Inc.
- Project Performance International
- SPEC Innovations
- Strategic Technical Services
- VG2PLAY
- Zuken Vitech

Small

- AM General LLC
- Aras Corp
- Aviage Systems
- Dassault Systemes
- Defense Acquisition University
- DENSO Create, Inc.
- Federal Aviation Administration (U.S.)
- Fundacao Ezute
- IBM
- iTiD Consulting, Ltd
- Jama Software
- Jet Propulsion Laboratory
- National Reconnaissance Office (NRO)
- QRA Corporation
- Toshiba Corporation

- Zuken, Inc

Medium

- Analog Devices, Inc.
- The Aerospace Corporation
- Arc Field
- Ball Aerospace
- Belcan Engineering Group
- Booz Allen Hamilton Inc.
- C.S. Draper Laboratory, Inc.
- CACI International
- Cubic Corporation
- Cummins, Inc.
- Deloitte Consulting
- Embraer S.A.
- General Electric Aviation
- Idaho National Laboratory
- ISDEFE
- IVECO SPA
- John Deere & Company
- KBR, Inc.
- Lawrence Livermore National Laboratory
- Leidos
- Los Alamos National Laboratory
- ManTech International Corporation
- MBDA (UK) Ltd.
- The MITRE Corporation
- Modern Technology Solutions, Inc.

- National Aeronautics and Space Administration
- Nissan Motor Co, Ltd
- Pacific Northwest National Laboratories
- Peraton
- Petronas Nasional Berhad
- SAAB AB
- SAIC
- Sandia National Laboratories
- Saudi Railway Company
- Sierra Nevada Corporation
- Swedish Defence Materiel Administration
- Systems Planning and Analysis
- TATA Consultancy Services
- Toch Technologies
- Trane Technologies
- UK MoD
- Veoneer, Inc
- Volvo Cars Corporation
- Volvo Construction Equipment
- Wabtec
- Woodward Inc

Large

- Airbus
- Aviation Industry Corporation of China, Ltd.
- BAE Systems
- Bechtel

- Beckton Dickinson
- The Boeing Company
- Ford Motor Company
- General Dynamics Mission Systems
- General Motors
- L3 Harris
- Lockheed Martin Corporation
- Mitsubishi Heavy Industries
- National Security Agency – Enterprise
- Northrop Grumman Corporation
- Raytheon Technologies
- Rolls-Royce
- Siemens
- Thales
- US Department of Defense

Academic

- Australian National University
- California State University Dominguez Hills
- Carnegie Mellon University Software Engineering Institute
- Colorado State University
- Cornell University
- Cranfield University
- Drexel University
- Eindhoven University of Technology
- George Mason University
- Georgia Institute of Technology
- ISAE SUPAERO

- John Hopkins University
- KEIO University
- Loyola Marymount University
- Mahindra University
- Marquette University
- Massachusetts Institute of Technology
- Missouri University of Science & Technology
- Naval Postgraduate School
- Penn State University
- Purdue University
- Singapore Institute of Technology
- Stevens Institute of Technology
- University of Arizona
- Tsinghua University
- Virginia Tech
- Worcester Polytechnic Institute

University of:

- Alabama in Huntsville
- Arkansas
- California San Diego
- Connecticut
- Maryland
- Maryland, Baltimore County
- Maryland Global Campus
- Michigan, Ann Arbor
- New South Wales, Canberra
- Southern California
- Texas El Paso

CAB Needs



The CAB provides the Board of Directors a list of CAB Needs.



This list is reviewed annually and updated as necessary at an INCOSE business meeting, and the Board of Directors (BoD) or delegated representative(s) provide the CAB a current status of INCOSE efforts in fulfilling these needs.



The Needs list provides the CAB an opportunity to identify specific goals and objectives for priority emphasis consistent with the INCOSE Vision, Mission and Strategic Objectives.