INCOSE ANNUAL OPERATING PLAN 2022

Contents

1. Introduction 2
2. AOP Structure 2
3. Value Streams (VSs) 3
3.1. Certification 3
3.2. Events 3
3.3. Membership 3
3.3.1. Individual Membership 3
3.3.2. Corporate Advisory Board (CAB) Membership 4
3.4. Products 5
3.5. Education and Training (E&T) 5
3.6. Special Projects (SPs) 6
3.6.1. FuSE 6
3.6.2. SE Vision 2035 7
4. Shared Resources (SRs) 7
4.1. Business' Support 7
4.1.1. Organization Administration 7
4.1.2. Organizational Leadership 8
4.2. Operational Support 9
4.2.1. Academic Matters 9
4.2.2. Information Technology (IT) 9
4.2.3. Marketing and Communications (MarCom) 10
4.2.4. Outreach 11
4.2.5. Sectors 12
4.2.6. Technical Operations (TechOps) 13
4.2.7. Services Operations (ServOps) 14
4.2.8. Sponsorships and Endorsements 14
A. Appendix A: INCOSE Memorandums of Understanding and INCOSE Memorandums of Agreement 16
B. Appendix B: INCOSE Support Contracts 17

1. Introduction

This INCOSE Annual Operating Plan (AOP) describes the planned activities funded by the INCOSE Budget in 2022. The purpose of this narrative is to guide the activities through the year, and to ensure that INCOSE members understand the organization's priorities and how it intends to achieve them.

This 2022 AOP was created in the context of INCOSE's Vision, Mission, Goals, and Principles, as defined and promulgated on the INCOSE website. They are not repeated here but are reflected in this AOP.

To focus and guide our advancement as an organization are three Strategic Objectives (SOs), traversing five Value Streams (VSs). The three transversal SOs are –

- **Premier** – to be the premier choice everywhere for Systems Engineering professional development needs
- **Future** - to lead the community in shaping the future of Systems Engineering
- **Value** – to deliver ever greater value to a growing and increasingly diverse membership.

These INCOSE SOs guide policy and budgeting decisions. They are demanding and intended to allow us to make significant progress in evolving INCOSE. They are reviewed and refined on a regular basis as appropriate, in serving the execution of our mission and the achievement of our vision of "a better world through a systems approach."

Augmenting these objectives are the five VSs of Certification, Events, Membership, Products and Education and Training (E&T). These VSs are a series of activities required to design, produce, and provide a specific product or service for the overall benefit of INCOSE and its members. Both the SOs and VSs are further defined and communicated on the INCOSE website. They also are not repeated here but are reflected in this AOP.

As an annual plan, the AOP is executed by the Budget Owners from the Board of Directors. Any deviation from the approved budget is reviewed and assessed by the Budget and Planning Committee (BPC), following policy, prior to appropriate action being taken.

2. AOP Structure

The AOP is structured in two main sections as follows, detailing the INCOSE 2022 operating and budgetary considerations –

- **Value Streams (VSs)** – encompassing-
  - The products and services of Certification, Events, Membership (at two levels – individual and Corporate Advisory Board (CAB)), Products, and E&T;
  - Special Projects (SPs) which are specific, one-time projects known at the time of the writing of this AOP of which the output/outcome may result in supporting VSs or Shared Resources (SRs) activities in the future, guided by our SOs;
- **Shared Resources (SRs)** – detailing the Operational Support and Business' Support activities necessary for the running of INCOSE and the provision of shared support across the VSs.

3. Value Streams (VSs)

This section of the AOP focuses on the five VSs of Certification, Events, Membership, Products, and E&T, and any special projects in-work or planned for 2022.

3.1. Certification

The INCOSE Certification Program will continue to recognize individuals with knowledge, education, experience, and leadership in systems engineering through the three certification levels: Associate Systems Engineering Professional (ASEP), Certified Systems Engineering Professional (CSEP), and Expert Systems Engineering Professional (ESEP). More information about the program's history and current process are available at www.incose.org/certification.

The major new initiatives introduced 2021 and will continue in 2022 are online testing and expanded academic equivalencies. Academic Equivalencies are qualifying hundreds of students annually for the knowledge requirement toward INCOSE Certification. More information is at: https://www.incose.org/systems-engineering-certification/certification-agreements/equivalency-programs Online testing has been well-received, globally, and has resolved concerns both about COVID exposure at test sites and about limited volume and locations of test sites, as online testing is done remotely and privately. More information about online testing is posted here: https://www.incose.org/systems-engineering-certification/about-the-exam/computer-exams

3.2. Events

The Events Committee will continue to oversee the planning and execution of the International Workshop (IW) and International Symposium (IS) in 2022.

In line with our VS initiatives, in 2022 we will support additional events that we believe will be of great value to our members. In 2021, 5 INCOSE conferences took advantage of the virtual Events platform. We anticipate at least a dozen virtually supported conferences in 2022. Since we have increased number of conferences that use the platform and the capability (person-to-person interaction, detailed feedback, export Q&A, etc.) the licensing fee for the virtual platform has increased slightly from 2021.

IW2022 and IS2022 are planned as hybrid events (with costs for both in-person and virtual support). Because these are new models for INCOSE, the budget estimates are conservative. The events committee is planning on piloting a practitioners' challenge and stand-alone SE Fundamentals event in the fall. Assuming these are successful we will plan on holding them again in 2022. We are exploring Rhythm as an events registration option which, if implemented, will have additional cost associated with it. This decision should be made by Q4 2021. We will also endeavor to create an events committee web space; the budget for this should fall under the CIO.

In 2021 we continued to offer virtual "mini events" with the 3-hour Artificial Intelligence (AI) virtual event. These mini events are well attended and will continue in 2022.

3.3. Membership

3.3.1. Individual Membership

Membership engagement will continue to be a focus throughout the year as it is key in growing our membership base as well as retaining members. This will include, but is not

limited to, website updates such as the new member landing page, targeted communications to both new and experienced members, and a better understanding our membership's professional needs.

Focus areas for the Membership Value Stream for 2022 include:

- **New Member Engagement** – The New Member Engagement Team (NMET), a subset of Membership Engagement, will continue focusing on members in years 1-3, facilitating the matching of member interests to available INCOSE resources and leveraging opportunities to develop skills.
- **Technology and Infrastructure** – The Membership organization will continue to work with INCOSE IT in the following areas:
    - Establishing what member profile data will be collected
    - New member Yammer community support
    - INCOSE website support for Welcome Center and Volunteer Opportunity Board page redesigns
- **Volunteerism** – Volunteerism has a renewed focus as a subset of Membership Value Stream. This will aim to support members to find the right opportunities to engage with the society, INCOSE leaders to create opportunities, recognize the volunteers which is the basis how the society operates. The main objectives for 2022 are:
    - Refreshing the interface and look of the Volunteer Opportunity Board webpage offering Volunteer Spotlights which recognize the work being done by INCOSE chapters and volunteers around the globe
    - Development of a Volunteer Handbook
    - Increased communication with INCOSE leaders and members to build the volunteer pool
    - Maintain "How To" and "User's Guide" documents and identify any change in the processes, including automation where appropriate.

3.3.2. Corporate Advisory Board (CAB) Membership

With 122 corporate and academic members, at the time of authoring this document, INCOSE's Corporate Advisory Board continues to provide strategic direction to help shape the future of INCOSE and improve and advance the practice of Systems Engineering. Information about the CAB is available at https://www.incose.org/incose-member-resources/corporate-advisory-board.

A proposal for increasing the current CAB fees was approved by the BoD and will take effect January 2023 A new Policy, CAB-101, was created in 2021 which characterizes the review of CAB membership fees and the recommended practice for determining the frequency and value for an increase.

CAB organizations will continue to be instrumental in providing feedback and direction to both the 5th Edition of the INCOSE Systems Engineering Handbook and INCOSE's SE Vision 2035.

The CAB Needs will persist in being a central focus of the CAB's activities in 2022 conveying the systems engineering needs and priorities of the CAB organizations to be worked by INCOSE. We are approaching the two-year mark since the CAB Needs were

identified, approved, and allocated by the INCOSE BoD to the applicable Working Groups and teams for resolution At IW2022 we will review the current nine CAB needs, close those that are deemed satisfied delivering the accompany artifacts, decide whether to continue efforts on the Needs (or parts of the Need) that remain open, and then add new Needs as appropriate.

CAB members are allocated a number of CAB Associate accounts, depending on their level of membership., offering a number of benefits to CAB organizations. The difference between full members and CAB Associates will become increasingly apparent as INCOSE's new collaboration systems are implemented. In 2022 the CAB will pay extra attention to ensure clarity and consistency in maintaining "How To" and "User's Guide" documents. We will also investigate ways to ease the processes associated with CAB membership through automation.

3.4. Products

The Products Value Stream supports the creation of books, papers, videos, standards, tools, and other tangible high value outputs created and distributed by INCOSE and its allies. In many cases, these products are created by the INCOSE Working Groups and Initiatives or in cooperation with other societies. Within INCOSE, drafts of the INCOSE Systems Engineering Handbook Release 5 will be incorporating changes based on review comments.

Main investments under the Products Value Stream are to support INCOSE's involvement in international standards such as ISO, IEEE, OMG, SAE, and others. Direct participation in the next revision of ISO/IEC/IEEE 15288, Smart Cities, Cybersecurity, and many more will strengthen INCOSE's position as an impactful professional society.

Likewise, following on from the initiatives of 2021, we will continue to update and develop the Guide to the Systems Engineering Body of Knowledge (SEBoK) under its Editor-in-Chief.

Other investments under the Products Value Stream will be used to create impactful products (e.g., primers, reference models, guides) that will be made available to INCOSE members and non-members in the INCOSE store. We will invest in an upgrade to the tool for management of Technical Product Plans (TPPs).

The Publications Office will continue to work closely with Wiley to make INCOSE products available through Wiley and generate royalties and other revenue through their marketing avenues.

3.5. Education and Training (E&T)

The major effort in this Value Stream is the Professional Development Portal (PDP). The PDP is a comprehensive solution for Systems Engineers and other professionals who want to enhance their systems engineering knowledge and skills.

For 2022, we are looking to bring on two paid interns to assist in converting existing knowledge into education and training content, what we call Learning Resources. We are also looking to bring on a curator to start managing and operating the PDP after the initial deployment. This is a

different position from the Program Manager who is responsible for developing and deploying the PDP.

In addition, we are starting to develop a mentoring capability that will be integrated with the PDP in a future phase. The mentoring capability will include the ability to find and match up with both mentors and mentees and the ability to access learning resources on mentoring.

As briefed at the Q3 2021 BoD meeting, the SySTEM Initiative is a "Systems, Science, Technology, Engineering, and Math" initiative intended to promote INCOSE interactions with the global STEM and related education communities. This initiative works across several dimensions:

The following describes INCOSE's role in STEM education and how it should be promoted:

- Application of the INCOSE SE Competency Framework to all levels of life;
- Encouraging and promoting STEM volunteerism across regions and chapters;
- Identifying and building relationships with partners in the STEM strategy;
- Working with educators to enhance systems disciplines in STEM curricula.

Several expected outcomes in terms of products and services over the next year or two include:

- INCOSE's STEM strategy, investment goals, and outreach plans;
- Design of a STEM tailoring/framework for INCOSE's competency framework;
- An INCOSE program (curriculum, cases, examples, workshops, etc.) for outreach to educators at different levels;
- STEM "kits" available to members to support STEM outreach;
- Others, as subsequently defined.

We are considering a volunteer role (short term Assistant Director) to set this up and get it going. We are expecting to start work in Feb 2022.

3.6. Special Projects (SPs)

Detailed in the following subsections are the specific one-time projects either in-work or planned to commence in 2022. The outputs/outcomes of each special project may result in supporting VSs or SRs activities in the future.

3.6.1. FuSE

In order for INCOSE to influence and lead in Systems Engineering it is necessary for us to evolve the practice, instruction and perception of Systems Engineering (SE) to:

- Position SE to leverage new technologies,
- Enhance SE’s ability to solve the emerging challenges, and
- Promote SE as essential for achieving success and delivering value.

As such we have established an international team to identify the needs, priorities and means of transforming SE under the banner of FuSE, and recommend principles, heuristics, practices, and other guiding material for SE going forward.
In 2022, FuSE will focus on making progress on the sub-projects identified on the FuSE dashboard, analyzing information and recommending actions going forward for the advancement of SE, and providing deliverable products. Information gathering through

participation at events and interviewing domain and discipline experts will continue. A draft of the findings, developments and recommendation is expected at the end of the 2022.

3.6.2. SE Vision 2035

SE Vision 2025 is an excellent document and is serving our members well, identifying the trends and expected path of SE up to and around 2025. However, what has occurred over the last few years is continuing accelerating changes, influences and impacts. The result is the need to review and update this vision document out to 2035 for it to remain relevant in its role 'to inspire and guide the direction of systems engineering across diverse stakeholder communities'.

A senior team of INCOSE experts was established in 2020 to develop the SE Vision 2035 document. In 2021, each section of the SE Vision was updated including the Global Context, the Current State, the Future State, and Realizing the Vision. The team elicited inputs from many sources including FuSE, domain experts, senior executives, and other sources. The inputs have been synthesized and disseminated for review. A new web-based format for distributing the vision content is planned to complement the current SE Vision document format. For 2022 activities, the focus will be to deliver the SE Vision 2035 and to disseminate it broadly both internal and external to INCOSE.

4. Shared Resources (SRs)

This section of the AOP is divided into two sub-sections outlining the operational and budgetary considerations for –

- Business' Support – covering Administration and Organizational Leadership considerations; and
- Operational Support – encompassing the supporting activities of Academic Matters, Information Technology (IT), Marketing and Communications (MarCom), Outreach, Sectors, Technical Operations (TechOps), Services Operations (ServOps), and Sponsorship and Endorsements (SEs).

4.1. Business' Support

4.1.1. Organization Administration

INCOSE Administration Office (Admin) provides salaried staff to support the execution of day-to-day operations of the organization. This includes general administration and member services for individual and CAB members, as well as Sectors and Chapters.

Admin supports the Board of Directors, Technical Operations, Service Operations, Corporate Advisory Board, Academic Matters, Certification, MarCom, Outreach, Information Technology (IT),) Publications and various committees, including Events, Nominations & Elections, Budgeting and Planning, Policy Management, Honors and Awards, Fellows, Industry Outreach Board (IOB)), Technical Review, and Diversity Equity Inclusion (DEI). As needed Admin support is provided for INCOSE special projects, such as the Future of Systems Engineering (FuSE), INCOSE SE Vision 2035, and Grand Challenges.

In 2022, Admin will continue to play a critical role in the implementation process of the SOs and VSs. Likewise, Admin will assist in the administration, communication, coordination, and project support of, including but not limited to:

- Scheduled meetings and major events,
- Virtual meetings and conferencing capability,
- INCOSE Online Store,
- Financial accounting,
- Contracts management,
- Legal and commercial arrangements.

4.1.2. Organizational Leadership

Organizational Leadership reflects the strategic and operational expenses for the INCOSE leadership to be effective. It includes the resources needed to conduct meetings for the Board of Directors and strategic planning, as well as the support requirements for the meetings. Other strategic needs are included, such as the general requirements for strategic integration or new opportunities that the President and President-Elect decide to support for the advancement of INCOSE and/or SE. The latter is managed through a President's discretionary budget line. Finally, this area includes any fees for legal counsel review and interactions.

4.1.2.1. Strategic Integration

Looking across our three transversal SOs, we will continue to identify synergies as well as addressing the holistic view of the SOs providing guidance to the plans and activities of our VSs. Building on our activities in 2021, we will focus on identifying a product pipeline from INCOSE that supports digital transformation. This may in turn impact or refine the outputs of some of our technical working groups. Likewise, we will continue to hold regular strategy sessions with the leaders across INCOSE to identify, review and prioritize relevant topics that support the vision and mission of INCOSE.

4.1.2.2. Diversity Equity Inclusion (DEI)

In 2021, we established a new role reporting directly to the President, that is the Associate Director Diversity, Equity, Inclusion (AscD DEI). Similarly, we established a DEI Advisory Committee, and a new policy DEI-100. Together, a plan of action is being formulated to serve INCOSE's DEI objective, and that is, "to be a diverse, equitable and inclusive professional society where everyone who practices or aspires to practice systems engineering can comfortably be their authentic self, recognizes themselves in other members, and has an equal voice and opportunity in all aspects of the organization" For 2022, the focus will be on refining the plan, implementing the prioritized items in the plan, establishing a simple communication platform on the INCOSE website, and seeking feedback and inputs from our members.

4.2. Operational Support

4.2.1. Academic Matters

The ABET SE Program Criteria are expected be approved at the end of October 2021. We will focus on its Implementation in the 2022-2023 academic year. International accreditation data are being gathered for UK, AU, FR, and DE for future INCOSE involvement.

SEEE is a web portal, *seee.org*, which will be used by students/practitioners, universities, and employers. Central to SEEE is a web portal, seee.org

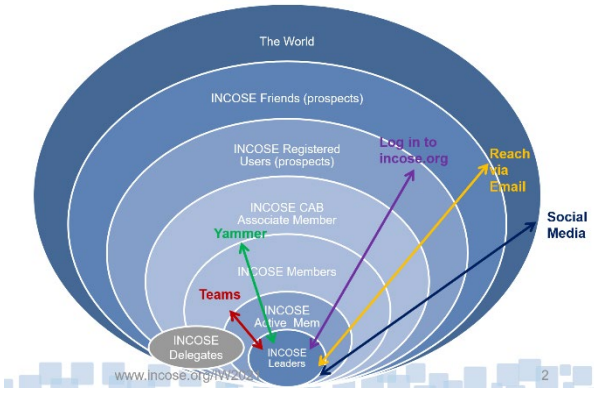
A small core group is conducting bi-weekly meetings advancing STEM. Attendance is below critical mass for significant progress. We are planning a workshop for early November 2021 with a larger workshop at IW.

A policy on the establishment and sustainment of student divisions is in review. Also, a Teams site is being established to increase the focus on student divisions in 2022.

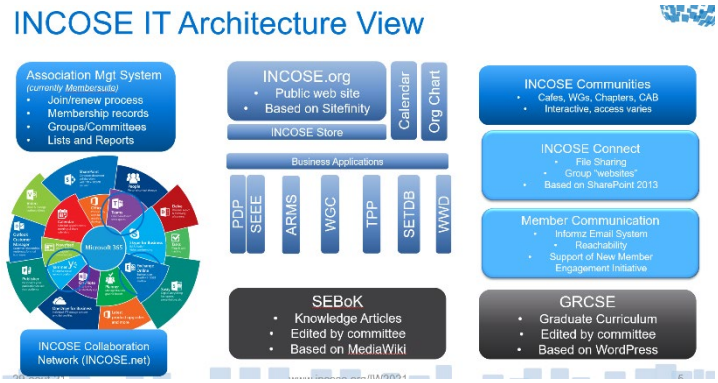
4.2.2. Information Technology (IT)

In addition to the ongoing maintenance of the existing IT infrastructure, INCOSE IT will aim at the following goals for completion by the end of 2022:

- Continued expansion of current INCOSE Collaboration Network, based on Microsoft 365 including Teams to include the following capabilities:
    - Teams for collaborating teams within leadership, chapters and WGs
    - Yammer Communities for all chapters and WGs
- Refreshed incose.org website with updated look-and-feel, User eXperience (UX) navigation and content structure
- Migration of stored file content from Connect to:
    - Teams for in-process work files for collaborating teams
    - Yammer for files released within a WG and the rest of INCOSE
- Retirement of existing Connect system
- Evolution of email communication in INCOSE:



- Full Microsoft 365 accounts (@incose.net) email accounts with Exchange based mail and calendaring for INCOSE leaders
- Collaboration accounts (@incose.buzz) with email forwarding for all members active in a chapter or WG



- Special-case collaboration accounts for selected non-members (@incose.online)
- Microsoft 365 groups for email communication outside of Teams/Yammer, e.g., newsletter@incose.net
- Email aliases for generic position-based email addresses, e.g., cio@incose.net
- Retirement of IceWarp email system

- PDP, including Super Search capabilities across INCOSE web sites (incose.org, bkcase, SEBoK OMG MBSE, etc.) and for INCOSE Insight and Systems Engineering journal
- Enterprise video platform for the distribution of diverse recorded content based on ROM implementation planning
- Expansion of custom applications using high level tools, especially Smartsheet, to enable easy, fast creation of custom apps, easily modifiable by super users or IT.

4.2.3. Marketing and Communications (MarCom)

Revenue from INCOSE Marketing and Communications has continued to grow (doubling or more) each year over the last three years. Marketing and Communication activities now require daily support through paid contractors. This includes general advertising of INCOSE on all Digital Media platforms, and at selected events, and for all VSs, Strategic Initiatives, Alliances, Working Groups, as well as Sectors and Chapters. For Q4 of 2021 and 2022 INCOSE will be engaging a full-time support (35+ hours/week) MarCom contractor, Dot-the-Eye known to INCOSE, and proven successful in MarCom for INCOSE through work with the INCOSE UK.

MarCom supports the Admin, Board of Directors, Technical Operations, Service Operations, Corporate Advisory Board, Academic Matters, Certification, Outreach, Information Technology (IT), Publications and various committees, including Events, Nominations & Elections, Budgeting and Planning, Policy Management, Honors and Awards, Fellows, Industry Outreach Board (IOB)), Technical Review, and Diversity Equity Inclusion (DEI). As needed MarCom support is provided for INCOSE special projects, such as the Future of Systems Engineering (FuSE), INCOSE SE Vision 2035, Working Group publications, and Grand Challenges.

In 2022, MarCom will play an expanded role in INCOSE awareness, branding, influence and reach through advertising, with a single, consolidated contractor brought in to sell advertising, and increase advertising in and across INCOSE impactful products. MarCom is critical to the advertising, awareness, and communication implementation processes of the SOs and VSs. Likewise, MarCom will continue to lead the following, but not limited to:

- Building internal and external marketing campaigns for interested advertisers across digital media assets
- Consistently promoting INCOSE branding across the global brand
- Evolving the INCOSE eNote, Newsletter, and Press Releases for greater INCOSE awareness and reach.
- Selling strategic advertising first targeted to CAB organizations and then to other interested parties
- Support INCOSE Outreach

4.2.4. Outreach

INCOSE Outreach forms the conduit and interface to all external organizations, including work with industry, academic institutions, government organizations, non-profits, and other professional societies and organizations as well as work directly with INCOSE membership. In order to establish work with these organizations, Outreach employs Ambassadors (for industry and professional societies) and Relationship Managers (to manage specific alliance agreements with other organizations).

Outreach works to identify collaboration opportunities and/or establish alliances through formalized agreements, with external entities. This includes, but not limited to, other professional societies, industry partners, academic institutions, government organizations, non-profits, and humanitarian organizations. In 2022, Outreach intends to complete more alliance agreements and to work to expand the reach of INCOSE throughout the globe.

Our goal in 2022 is to secure and/or renew alliance agreements with several organizations including, but not limited to

- AIAA -American Institute of Aeronautics and Astronautics
- PSM- Practical Software & Systems Measurement
- FEAPO- Federation of Enterprise Architecture
- IFSR- International Federation for Systems for Research
- ISSE- Indian Society for Science and Engineering
- ITEA V&V WG- International Test & Evaluation Association
- IEEE SC- IEEE Systems Council
- ASNE- American Society of Naval Engineers
- SPE- Society of Petroleum Engineers
- ASEM- American Society for Engineering Management

Outreach along with Marcom provides both external and internal support for external conferences, activities, and events. In 2022, Outreach will continue to support a number of conferences and events globally that present worthwhile opportunities for advancing INCOSE and our discipline in Systems Engineering, Systems Research and Education and Training.

Outreach will continue to work with INCOSE leadership, Fellows, Sector Directors, Chapter leaders, Marketing and Communications, our technical communities, and CAB organizations to increase INCOSE membership and the awareness of Systems Engineering, especially in the area of student members and early career professionals. In addition, 2022 will have a renewed

focus on outreach of industry domains such as transportation, health care, and other industry domains not served by INCOSE.

The organization structure and hierarchy for Outreach efforts, including positions for Assistant Directors (AstDs) for Outreach will be reviewed and refined in 2022 to best serve our goals.

4.2.5. Sectors

4.2.5.1. Sector I - The Americas

Sector I focus will continue to foster development and sustainment of healthy, robust chapters. Key activities intended to help achieve that goal include:

- Finding opportunities for partnership, collaboration, and potentially consolidation between chapters
- Supporting and encouraging chapter leaders through networking opportunities, awards, workshops, and recognition
- Using Sector Leadership to work with struggling chapters to help them succeed
- Strong engagement to help inactive chapters to re-organize or move toward retirement
- Supporting regional conferences and events to enhance benefits of INCOSE membership

4.2.5.2. Sector II – Europe, Middle East and Africa (EMEA)

Sector II is widely spread over Europe, Middle East and Africa with local responsibilities and activities on one hand, but collaborating on international and EMEA level to foster and deploy Systems Engineering based on a common INCOSE vision and mission. The focus of the EMEA chapters and the sector representatives are mainly focused on digitization, robust chapters, and emerging chapter support to increase the influence in the sector. To support the goal the activities are focused on:

- **Locally -**
  - Finding opportunities for partnership, collaboration, and potentially consolidation between other organizations and local government activities
  - Chapters, with support from the Sector level, will focus on bringing value to members and potential members, through regular activities and events.
  - Support to participation in international and EMEA Working Groups activities towards ensuring a local applicability to Products.
- **Across the sector -**
  - Finding opportunities for collaboration, and potentially consolidation between chapters
  - EMEA events support through direct sponsorship or travel support, with a special focus on encouraging regional Leaders and members to contribute across the Sector, including reaching out to countries where a potential exists for emerging chapters.
  - Using Sector Leadership to work with struggling chapters to help them succeed
  - Support of the Good Neighbor Award.
  - Increase and mature the usage of social media for EMEA sector

- **Internationally -**
    - Support regional leaders' and members participation and contribution to IS and IW, to ensure a strong link between Chapters and INCOSE Central ensuring that the Value of central benefits streams back to the chapters.
    - Encouraging student participation at INCOSE international events.
    - Support of chapters to enable the offered services from INCOSE to foster the relationship and usage of knowledge and information for the members.
    - Certification support and translation of English products into native language (eg. French, Russian, German, etc)

4.2.5.3. Sector III – Asia-Oceania (AO)

Geographically wide-spread and multi-cultural, the vast Asia-Oceania sector remains under-served relative to its population size, despite a sustained membership growth in the past five years. To increase INCOSE's influence in the sector, support will be allocated as follows:

- **Locally -**
    - Chapters, with support from the Sector level, will focus on bringing value to members and potential members, through regular activities and events.
    - Support to participation in Working Groups activities towards ensuring a local applicability to Products.
    - Provide registration sponsorship to deserving volunteer though ('scholarship' program).
- **Across the sector -**
    - Regional (Sector) events support through direct sponsorship or travel support, with a special focus on encouraging regional Leaders and Members to contribute across the Sector, including reaching out to countries where a potential exists for emerging chapters.
    - Support of the Good Neighbor Award.
- **Internationally -**
    - Support regional leaders' and members participation and contribution to IS and IW, to ensure a strong link between Chapters and INCOSE Central ensuring that the Value of central benefits streams back to the chapters.
    - Encouraging student participation at INCOSE international events.

Finally, Asia-Oceania will continue to promote and support the INCOSE Certification Program and exams, Leadership Program and Training opportunities. These programs are deemed essential for the advancement of INCOSE in the Sector, for the professional development of our members, and for the benefit of Systems Engineering in our communities.

4.2.6. Technical Operations (TechOps)

The Technical Operations group comprises a full complement of leaders, shown in the Working Groups and Technical Operations Initiatives (incose.org) page. TechOps leadership manages the entire TechOps products portfolio, nurtures existing and emerging Working Groups, leads the International Workshop with the Events team, and encourages the integration of Chapter and International Working Groups. Our investments allow Working Group members to attend virtual and in-person events organized by partner organizations, sponsor other experts to join

our activities, and allows for other opportunities through the year to be an impactful professional society.

The TechOps Working Groups and Initiative teams contribute to satisfying expressed CAB needs, with a specific focus on contributing to SE Handbook v5 section authorship and complementary products (e.g., primers, guides, domain specific handbook appendices) that are enabled, reviewed, and released through completed Technical Project Plans (TPPs) and the Impactful Products Committee per TEC-107 policy.

TechOps continues to work with CIO and INCOSE IT on improving the online experience of our members. We continue to improve the working group charter and complementary systems such that the charter data is seamlessly shared with the Events team for population of Working Group Information Sheets (created during IW) as well as to the public WG webpages, reducing duplication of effort and improving communication effectiveness.

4.2.7. Services Operations (ServOps)

The Services Operations (ServOps) area is headed by a Services Director and a Deputy Services Director. Services includes the Value Streams of Events, Certification and Education & Training. This subsection identifies the operational considerations related to facilitating the synergetic success of these three value streams for 2022. Each value stream has their own budget line, reflected in their individual sections in this AOP.

ServOps believes the key to advancement of INCOSE as a Professional Society is knowledge – knowledge creation, discovery, and transfer – all contributing to the state-of-the-art for Systems Engineering and Systems Thinking. While each Value Stream deals with certain perspectives of knowledge, all three work together in a synergistic fashion to enhance all the facets of knowledge. Tremendous opportunities arise when all three Value Streams coordinate and collaborate their perspectives on knowledge to enhance the overall Value of INCOSE to its members and the Systems Engineering community. For 2022, ServOps will continue to seek this knowledge collaboration among the three value streams to advance INCOSE as a Professional Society.

ServOps will continue to support Certification in their efforts on academic equivalencies, expanding their knowledge exam item bank, strengthening the processes used to generate new exam content and managing the new online exam capability. ServOps will continue to support the expansion of the Events value stream with new events – in-person, virtual and hybrid – that facilitate the discovery and transfer of new knowledge, including risk mitigation as necessary to ensure event success. ServOps will continue to support Education & Training efforts, especially in the development and deployment of the Professional Development Portal, a major resource in knowledge discovery and transfer. ServOps will continue to support TechOps to enhance the Products Value Stream. Each of the three values streams supported by ServOps depends on high-quality products to provide value to INCOSE members and others.

4.2.8. Sponsorships and Endorsements

As part of INCOSE's strategic and operational focus, INCOSE provides sponsorship and endorsements to external organizations, products, and events. This subsection identifies the operational and budgetary considerations related to –

- Sponsorship – for event related sponsorship only, at the international and regional levels and at the local level where appropriate;
- Engaged Sponsorship Support – for the provision of resources (funding or otherwise) to engage in the conduct of the event, meeting or activity in a manner that helps to meet the established goals. Examples include but are not limited to, taking an active role in the technical program through in-kind labor, providing mentoring or coaching, being a judge, offering the prize or award;
- Endorsements – for product, services or event related endorsements provided by INCOSE.

4.2.8.1. Sponsorships

4.2.8.2. Engaged Sponsorship Support

4.2.8.3. Endorsements

At this point in time INCOSE does not provide endorsements of third-party products, services, or events.

A. Appendix A: INCOSE Memorandums of Understanding and INCOSE Memorandums of Agreement

The list of current INCOSE's Memorandums of Understanding (MOUs) and Memorandums of Agreements (MOAs) are provided below. These are managed by the Director for Outreach and are held on file in Connect at the following link:

https://connect.incose.org/Organization/BOD/Memoranda%20of%20Understanding%20and%20Memoranda%20of%20Agreem/Forms/By%20Category%20and%20SubCategory.aspx

Each MOU or MOA can be made available to non-members on request to ops_mgr@incose.net

Acronym	Agreement Type	Agreement Execution Date	Agreement Expiration Date	Months Remaining	INCOSE Sponsor
APTA	MOU	07/23/20	07/22/23	20	Christopher Hoffman
ASEE	MOU	03/05/20	03/04/23	16	Don Gelosh
ASME	Standards Development Agreement	10/06/20	10/05/23	23	Christopher Hoffman
CESAMES	MOU	01/01/20	12/31/22	14	Kerry Lunney
IEA	MOU	10/20/20	10/19/23	23	Kerry Lunney
IEC SyC Smart Cities	Other			-	Christopher Hoffman
IEEE SMCS	MOU	02/23/19	02/22/22	3	Christopher Hoffman
ISSS	MOU	09/23/20	09/22/23	23	Christopher Hoffman
IWCE	MOU	10/07/19	10/06/22	11	Don Gelosh
MORS	MOU	04/24/19	04/23/22	5	Don Gelosh
NAFEMS	MOU	06/19/19	06/18/22	7	Kerry Lunney
NDIA SED	Other			-	Kerry Lunney
PMI	MOU	02/03/21	02/02/24	27	Kerry Lunney
PPI	MOU	06/15/21	06/14/24	31	Christopher Hoffman
SAE	MOU	04/01/21	03/31/24	29	Kerry Lunney

B. Appendix B: INCOSE Support Contracts

The list of current INCOSE related contracts are provided below. These are maintained by the INCOSE Administration Office and are held on file in Connect at the following link:

https://connect.incose.org/Organization/BOD/INCOSE%20Contracts/Forms/By%20Contract%20Area%20and%20Organization.aspx

Each contract can be made available to non-members on request to ops_mgr@incose.net

Contract Area:	Organization or Individual Contract is with:	Contract Type	Contract Effective Date:	Contract Expiration Date:
Events	KMD	Contract	01/01/21	12/31/25
Certification	Raytheon Company (Raytheon)	MoA	01/23/15	01/22/25
Publications	Rob Vingerhoeds	Contract	01/01/21	12/31/24
Publications	Mary Vizzino	Contract	01/01/21	12/31/24
Publications	Clifford Whitcomb	Contract	01/01/21	12/31/24
Chapters	Associazione Italia di Systems Engineering (AISE)	MoA	11/18/19	11/17/24
Chapters	Asociacion Espana Ingenieria de Sistemas (AEIS)	MoA	11/18/19	11/17/24
Certification	Airbus	MoA	10/11/21	10/10/24
Certification	ManTech Advanced Systems International Incorporated	MoA	09/28/21	09/27/24
Certification	Ball Aerospace & Technologies Corp.	MoA	08/24/21	08/23/24
Events	Donna Long	Delegation Letter	08/01/21	07/31/24
Certification	University of Maryland,	MOA	06/21/21	06/20/24

	Baltimore County			
Other	PMI (Project Management Institute)		10/12/21	02/02/24
Delegation Letters	CIO - Barclay Brown	Delegation Letter	02/01/21	01/31/24
Certification	European Aeronautic Defense and Space Company (EADS)	MoA	05/27/10	01/31/24
Certification	The University of Alabama in Huntsville (UAH)	MOA	01/28/21	01/28/24
Certification	University of Alabama Huntsville (UAH)	MoA	01/28/21	01/28/24
Publications	William D. Miller dba WDM Systems	Contract	01/01/21	12/31/23
Certification	University of Michigan, College of Engineering (UM)	MoA	11/20/20	11/20/23
Certification	Worcester Polytechnic Institute (WPI)	MoA	11/13/20	11/13/23
Certification	Booz Allen Hamilton (BAH)	MoA	10/25/13	10/24/23
Certification	Cornell University	MoA	10/21/20	10/21/23
Administration	Tovella Downing, PC		10/13/21	10/13/23
Events	KMD	Purchase Order	06/30/19	09/30/23
Certification	University of Detroit - Mercy (UDM)	MoA	09/24/20	09/24/23
Certification	University of New South Wales Canberra	MoA	08/31/20	08/31/23
Certification	The Curators of the University of Missouri on behalf of Missouri University of Science &	MoA	08/26/20	08/26/23

	Technology (Missouri S&T)			
Certification	Drexel University	MoA	08/24/20	08/24/23
Certification	Colorado State University (CSU)	MoA	08/12/20	08/12/23
Certification	GfSE Certification	MoA	07/20/13	07/19/23
Certification	INCOSE Certification MOA with Thales	MOA	07/07/20	07/07/23
Certification	Institut Superier de l'Aeronautique et de l'Espace (ISAE)	MoA	04/09/13	04/08/23
Certification	Cummins Systems Engineering - Global Technical Functional Excellence Discipline (Cummins)	MoA	02/28/20	02/28/23
Publications	Wiley		02/04/13	02/04/23
Website/IT	PGI (GlobalMeet & WebEx)	Contract Addendum	08/14/15	12/31/22
Publications	Nicole Hutchinson	Contract	01/01/20	12/31/22
Publications	Lisa Hoverman	Contract	03/07/15	12/31/22
MarCom	Higher Logic - INFORMZ	Contract	03/18/18	12/31/22
Website/IT	MemberSuite	Contract Addendum	05/28/18	12/31/22
Publications	URKUND	Contract	05/18/18	12/31/22
Chapters	The Netherlands Chapter (INCOSE-NL)	MOA	07/20/19	12/31/22
Chapters	INCOSE UK Ltd.	MOA	07/23/19	12/31/22
Chapters	Korean Chapters	MoA	12/15/19	12/14/22

	(KOSSE & KCOSE)			
Certification	Lockheed Martin Corporation (LMCO) Certification MoA	MoA	12/02/10	12/01/22
Certification	L-3 National Security Solutions Inc.	MoA	11/25/12	11/24/22
Chapters	France - AFIS	MoA	09/28/19	09/27/22
MarCom	Dot the Eye		09/01/21	09/01/22
Website/IT	eBallot		08/04/21	08/03/22
Certification	INCOSE UK Chapter	Internal Agreement	07/11/12	07/10/22
Certification	Worcester Polytechnic Institute (WPI)	MoA	07/11/12	07/10/22
Publications	Robert Cloutier	Contract	07/01/20	07/02/22
Certification	University of New South Wales (UNSW)	MoA	07/02/12	07/01/22
Chapters	Israel-IL	Memorandum of Agreement MOA	06/01/19	06/01/22
Website/IT	MemberSuite	Contract Addendum	05/28/21	05/27/22
Certification	Booz Allen Hamiltion (BAH)	MOA	05/01/19	05/01/22
Certification	LinQuest Corporation	MoA	04/30/12	04/29/22
Website/IT	KOVAX, LLC (Molly Kovaka)	Contract	03/15/21	03/14/22
Website/IT	Jama Software Inc.	Non-disclosure Agreemnt	03/10/21	03/10/22
Certification	The MITRE Corporation (MITRE)	MoA	02/28/12	02/27/22
Administration	John Buttine Insurance	Insurance Policy	02/14/21	02/14/22
Publications	Taylor Riehle Graphic Designer	Contract	01/01/20	02/01/22
Administration	John Buttine Insurance	Insurance Policy	02/01/21	02/01/22
Delegation Letters	MarCom	Delegation Letter	03/02/20	01/31/22

Website/IT	JonesHaus		11/15/21	01/31/22
Certification	ASTER Technology and Engineering (ASTER)	MoA	01/21/12	01/20/22
Administration	UMS	Contract	01/01/20	12/31/21
Certification	Courtney Wright	Contract	01/01/20	12/31/21
Certification	Aviation Industry Corporation of China Digital Corporation, LTD. (AVIC Digital Corporation)	Certification MOA	12/11/18	12/31/21
Membership	Honor Lind	Contract	09/30/21	12/30/21
Certification	Ecole Polytechnique Universite	MoA	12/09/11	12/08/21
MarCom	Universal Management Services (UMS)	Contract	12/01/20	11/30/21