

Annual Operating Plan

Fiscal Year 2013

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INTRODUCTION

The 2013 Annual Operating Plan (AOP) spans the period January – December 2013. The INCOSE AOP describes the significant planned activities and associated monetary resources for the forthcoming fiscal year, including recurring annual expenses. It also sets out the planned non-recurring investments in special projects. In Appendix A, a list of active contracts is provided.

1 ANNUAL OPERATING PLAN 2013

1.1 INCOSE Member & Administrative Operations

INCOSE Operations covers those areas which are part of the on-going delivery of member benefits within the organization. In most cases these are underpinned by support contracts, as detailed in Appendix A. INCOSE Operations covers the following categories: Major Events, Regular Publications, Certification, and General Support for Chapters, Marketing and New Operations.

1.1.1 Sectors, Chapters, and Membership Services

Responsible Director: Sector Directors

1.1.1.1 Chapter Support

Sector Directors provide periodic support to individual chapters to promote excellence in chapter operations or intervene for struggling chapters. Chapter Marketing and Promotion provides brochures, publications, and give-aways (pens, "toys", etc) that can be used by chapters for INCOSE promotional activities. Chapter Support Travel by the Sector Directors or their designated representatives to visit chapters may be required to encourage and promote chapter activities: Americas – 5 domestic (North America), 1 international travel; EMEA – 4 domestic (continental Europe), 1 international travel; Asia/Oceania – 2 international travel.

- Funding INCOSE Sectors to visit chapters, start-ups to help them organize, work through chapter problems, promote INCOSE membership and the value of SE. This is a crucial part of maintaining chapter health and in growing global membership.
- Funding INCOSE Sectors presenting at external events (e.g. IEEE conferences) [case-by-case]. This is a key part of outreach to perspective INCOSE members and communicating value of INCOSE in partnership with other organizations.
- In case of hardship, funding chapter representatives to attend IS to accept special awards (e.g. president's award, most improved award, etc.). This is a crucial cushion in hardship cases, particularly with our global presence.

1.1.1.2 Awards

The Sector Director sponsors various awards to promote excellence in chapter and membership activities. Budget is used to provide chapter awards for the chapter awards program, past-president recognition pins, and new for 2013 membership service anniversary recognition for continuous membership in INCOSE for 5, 10, 15, and 20-yr members.

1.1.1.3 Sectors, Chapter and Member Shared Services (CAMSS) Meetings

To support meetings typically held at the International Workshop (IW) and the International Symposium (IS), funds are allocated for specific meeting activities: direct or allocated costs incurred for Sector and CAMSS use of facilities at the IW/IS venues (facility rental); meal costs incurred at IW/IS for CAMSS dinner events; and special projects that the CAMSS undertakes to increase value to chapters and members, such as the Keys to Effective Chapters, Speaker's Bureau, Sector configuration of IT services, Membership Retention Initiative, Chapter Calendars, Promotion Items.

Required Sector budget for 2013: \$37,500

1.1.2 Virtual Meeting / Conference Capability

Responsible Director: Director for IT

- **1.1.2.1** To encourage and enable geographically large Chapters and Working Groups to include members who are not able to travel to a centralized meeting/event site, and to facilitate collaboration between members and between chapters on various activities.
- **1.1.2.2** One hundred licenses are distributed amongst the leadership. FY13 Deliverables: Funding for a full-year to continue making this capability available (Premier Global Services); licenses for 2013, with the remainder of the budget allocated to voice conferencing; large seminars, coordinated by the CAB, will continue to be provided.

Required budget for 2013: \$43,500

1.1.3 Webinar Series

Responsible Director: Technical Director

- 1.1.3.1 INCOSE will continue its internal webinar series in 2013. First offered in October 2008, the webinar series brings internationally recognized speakers to our members' desktops in synchronous and recorded format. Each month, a different speaker will deliver a 60 minute presentation. Each presentation will also be recorded for later viewing.
- **1.1.3.2** FY13 Deliverables: It is assumed that the costs for the access to Live Meeting (\$5,000) are covered in item 1.1.2.2 above (Virtual Meeting / Conference Capability) and that only an additional \$5,000 will be required to support any incidental expenses

incurred in providing the twelve webinars planned for 2013.

Required budget for 2013: \$5,000

1.1.4 INCOSE Marketing

Responsible Director: Director for Communications

The goal of the Marketing Professional will be to focus on branding of INCOSE, increasing awareness through Social Media, press releases and work with Certification, Chapters and Working Groups.

Promotional materials are developed under this budget.

Required budget for 2013: \$6,400/promotional materials & annual report; (funding in CAB & MbrAdm for promotion items) \$30,000/professional public relations (PR) support

1.1.5 Member Publications

1.1.5.1 INSIGHT

Responsible – Director for Communications

INSIGHT is one of INCOSE's most popular and valued products and is now offered in electronic format. Members are still able to subscribe to a paper copy at an additional cost that covers production and mailing expenses. The electronic version is formatted horizontally, and the print version is bound in calendar-style.

The newsletter is edited by a paid editor. Although the contract expires in March, it is renewable one issue by issue at the same rate as the current contract. The newsletter still sells advertising, which helps to offset some of the total expense.

Issue	Submission	Theme
	Date	
1st Qtr 2013	15 Feb 2013	Certification
2nd Qtr 2013	15 May 2013	The Buck Stops Here: Systems Engineering's Responsibility
	-	for Systems Security
3rd Qtr 2013	26 July 2013	2013 International Symposium Coverage:
		Philadelphia, PA
4th Qtr 2013	15 Oct 2013	AFIS Doctoral Symposium: Systems Engineering Research
		Challenges in French Universities

The four theme issues for 2013 are listed below.

FY2013 Deliverables: \$80,000 is budgeted for the production of four editions of the INSIGHT newsletter.

FY2013 Travel: an additional \$4,000 is budgeted for travel expenses (plane, hotel room) for a technical writer (primary reporter and editor for the symposium issue) and PR.

Other communications -

To date, handling of communications on social media has been supported by UMS or volunteers. Surveys of members have been executed with survey monkey and Constant Contact. \$1,500 has been budgeted for 2013 for surveys and eNote.

1.1.5.2 Journal of Systems Engineering

Responsible – Director for Academic Matters

Wiley-Blackwell produces the Journal of INCOSE entitled, *Systems Engineering*. The Journal is offered in electronic format, but members can subscribe to a hardcopy for a charge of \$45 per year / regular or student member or \$95 per year / senior or developing country member.

FY2013 Budget: \$50,000 has been provided for publication of the INCOSE Journal with new contract in place for 2013.

1.1.5.3 Journal of Enterprise Transformation

Responsible – Director for Academic Matters

INCOSE launched a new peer-reviewed publication called the Journal of Enterprise Transformation (JET) as part of a partnership with the Institute of Industrial Engineers. (www.iienet.org) Published quarterly beginning in 2011, JET is designed to provide a forum for original articles on trends, new findings, and on-going research related to enterprise transformation. JET's focus is on interdisciplinary research addressing enterprise transformation challenges within and across different domains such as aerospace, health care, financial services, government and public-private partnerships. JET promotes a holistic approach to advancing the understanding of enterprise transformation by addressing challenges from technical, behavioural, and social perspectives.

An agreement has been entered with IIE and Taylor & Francis wherein the latter absorbs all expenses of the publication of the journal. A nominal expense line has been entered to account for unanticipated minor expenses throughout the year.

\$5,000 has been budgeted to support publication of the Journal of Enterprise Transformation

1.1.6 Scheduled Meetings/Major Events

Responsible Director: Director for Strategy

1.1.6.1 Currently planned events include:

- International Workshop (IW) 2013 in Jacksonville, US-FL
- Spring Board Meeting, 2Q 2013
- International Symposium (IS), Philadelphia, US-PA
- Autumn Board Meeting, 4Q 2013

1.1.6.2 To support our geographic and domain diversification goals and better serve our member base, INCOSE intends to evolve to four annual conferences at the regional / international level to increase interaction and engagement opportunities: Americas SE Conference (ASEC), Asia-Pacific Conference on Systems Engineering (APCOSE), EMEA (Europe, Middle East, and Africa) Conference on Systems Engineering (former European SE Conference - EuSEC), and Conference on Systems Engineering Research (CSER). By commencing the planning effort now, INCOSE can begin to deploy an expanded event series in 2013.

This effort requires an expansion to the scope of the Events Committee to coordinate venue and theme identification across events to support the INCOSE strategy. Support contracts will also be expanded, taking on more logistical responsibilities and enabling volunteer teams to focus on the intellectual content of events. This has been initiated and will be worked further. As a result, the intention will be to select the location of events to meet the strategic objectives rather than the availability of local volunteers. This has already been the basis for IW12 and IS12.

Required investment budget for IW 2013: \$50,000 Estimated Profit for IS 2013: \$90,000

1.1.7 IT Support and New Website Development

Responsible Director: Director for IT

The INCOSE website is the central hub for many activities. These resources are vital to communicating with the membership, providing information about news and events, and accessing products and publications. INCOSE will continue to support the legacy physical servers in our IT infrastructure in 2013 in parallel to the support and new development on our new website. Support for the legacy website will continue through August 2013 during the planned transition and rollout.

In 2012, INCOSE invested in a solution that supports the growing needs of the organization. This solution utilizes proven and mature technology to support organizational growth, increase revenue, and realize our goals. The new development in 2013 will provide expanded further capabilities for the organization to grow and increase opportunities for revenue.

INCOSE selected Appnovation to develop and deploy the new website in 2012. The new website replaces both the public incose.org site and the access-controlled connect.incose.org. The goal of this new site is to increase the value of INCOSE membership by continuing to support and expand core functions of the current site while providing a common platform for members, Chapters, Working Groups, and other sites. A common platform will streamline training and support issues. The new tools provided by the IT infrastructure will empower members to establish connections and foster improved collaboration across geographical boundaries. The new website is built on a platform that

facilitates expansion. Additionally, this new website will increase the ability for INCOSE to bring in revenue through the deployment of a mature storefront that will offer the sale of electronic products such as the SE Handbook and individual papers now located within the iPub database. After implementation is complete, the site will leverage integrated analytics to measure effectiveness and continuously improve based on these metrics.

New IT development in 2013 will focus on the following:

- Improved Certification Management for members and non-members
- Increased Administrative efficiencies and membership reports
- A focus on member communications and new ways for members and nonmembers to collaborate
- Initial implementation of Learning Management capabilities
- Feedback received during the initial rollout of the new site

Required budget for 2013: \$146,500 (\$60,000 Development/\$86,500 Hosting/Support)

1.2 Strategic Initiative Programs

The INCOSE Board of Directors (BoD) has launched a number of strategic initiatives aimed at developing the breadth of membership and the influence of the organization as a whole. Voting director positions have been established to focus on both international and commercial outreach, and specific initiatives in these areas are included in sections below. Outreach to Young People is included in Academic Matters. The strategic initiatives are underpinned by the SE Vision, BKCASE, and Certification and PMI (spell out).

Whilst they contain specific actions, these strategic initiatives are not projects in their own right. They act as a framework for the development of INCOSE's operations, its infrastructure and the new member benefits addressed in section 2.2 and 2.3.

1.2.1 International Outreach

Responsible Director: Director for International Growth

1.1.1.1 Asia and the Far East represent an area of the world where systems engineering is practiced extensively but where INCOSE has yet to develop a significant presence. There are many challenges to be faced in this effort, amongst which is developing a better understanding of the cultural differences among our nations.

1.1.1.2 Close collaborations have been established, especially with the Taiwan, Japan, and Korea Chapters. Japan hosted the Asia-Pacific Conference on Systems Engineering 2008, and Singapore hosted it in 2009, Taiwan hosted APCOSE in 2010 and Korea hosted in 2011. Australia hosted APCOSE in 2012 and Japan will host in 2013. An agreement with KCOSE was signed in September 2008, effective 2009. A similar agreement with KOSOSE was signed in July 2012, with immediate effect.

Outreach work in China is increasing with the possibility of a second chapter. India is doing very well so far.

1.1.1.3 INCOSE is targeting growth in two other areas of the world. A group focused on expansion into Latin America and the Caribbean has been active for some time. Their efforts are bearing fruit; membership and SE activity are gradually increasing. There are many new activities in Latin America such as the appointment of an Associate Director for International Growth. International Growth is sponsoring events and conferences in that region. The latest hot spot is in North Arica and Middle East (MENA) where many activities are expected in the coming year.

FY13 Budget request: \$2,000 each for the three regions (Asia, Latin America, and MENA) for event sponsorships. \$4,000 expected for travel. Total \$10,000.

1.2.2 Commercial Outreach

Responsible Director: Director for Commercial Outreach

- **1.2.2.1** The Commercial Steering Board (CSB) is supporting the Board to define the new INCOSE industry outreach strategy, and will collaborate with Technical Operations, Corporate Advisory Board and Events Committee to advance the CSB strategy:
 - Engage existing non-traditional SE industry WG leaders, and their respective ADs
 - Provide forum for best practices exchange between these WG leaders
 - Understand obstacles to help support resolution
 - Broaden non-traditional community presence within INCOSE
 - Create strategic alliances among the industries (target key leaders, organizations, professional associations)
 - Leverage INCOSE's growing international chapters & members
 - Promote SE value within non-traditional SE industries
 - Position INCOSE as SE resource to non-traditional SE industries

Required budget for 2013: \$5,000

1.2.3 Systems Engineering Vision

Responsible Director– Director for Strategy

- **1.2.3.1** The Systems Engineering Vision (SEV) 2025 is a collaborative forecast of the expected trends and implications of systems engineering theory and practice. Having produced the document, a major effort is foreseen to further develop it and to engage with other organizations and institutions having an interest in SE to develop a broad consensus on the future of our discipline, and to agree and implement collective actions to bring this about.
- **1.2.3.2** The development of the SE Vision 2025 begun in 2012 and will continue in 2013 with a major communication activity in 2014. It will provide a key document of consensus for the future orientation of INCOSE, to provide guidance to SE stakeholders in the world and to position the organization as the thought leader. After a limited initial budget for starting the activity in 2012, the main part of the effort and investment will be performed in 2013 followed by another investment in 2014 for documentation, outreach and communications to leverage the intended strategic impact.

Required budget for 2013: \$60,000. (*Traces to Strategic Action(s): V4*)

1.2.4 INCOSE Strategy Evolution

Responsible Director– Director for Strategy

- **1.2.4.1** The overall strategy for INCOSE needs regular maintenance and adaptation. The organization of one day strategy workshops in conjunction with IW and IS has become common practice, and has proven effective by involving key stakeholders of the organization in strategy development.
- **1.2.4.2** Two strategy workshops are planned in 2013, which typically occur on the Friday before the start of these events. These one day workshops assume a participation of up to 50 members, including 4 meeting rooms with appropriate audio/video equipment.

Required budget for 2013: \$10,000. (*Traces to Strategic Action(s): S2*)

1.2.4.3 In order to perform educated strategic decisions, e.g. for international growth and outreach priorities, an adequate basis of statistical data is necessary. Some years ago a first draft of such a database was sponsored by Booz Allen Hamilton (BAH). In 2013 it is intended to establish a more comprehensive update of this strategic database originally called G20+ analysis. The funding will be a mix of volunteer and sponsored contributions; however access to some high quality data may incur some cost.

Required budget for 2013: \$0. (*Traces to Strategic Action(s): S1*)

1.2.5 Strategic Collaborations Preparation

Responsible Director– Director for Strategy

- **1.2.5.1** The objective of being a broker for SE related information has emerged during the past years. To implement this objective, it is essential to continuously approach and discuss this with other relevant professional organizations.
- **1.2.5.2** After a formal collaboration agreement with other organizations the related exchanges and activities are performed and budgeted within INCOSE Technical Operations. The early exploitation of potential collaborations requires joint meetings and participation in specific events. This is partly covered by board members but also needs to be supported by other INCOSE members. To enable this, a dedicated budget is earmarked.

Required budget for 2013: \$0.

(Traces to Strategic Action(s): 16)

1.2.6 Strategic Liaisons

Responsible Director – Technical Operations

- 1.2.6.1 IEEE Systems Council MOU
 - Intention is to understand the value and form of engagement with IEEE Systems Council, and then to move forward
 - We collaborate with other IEEE organizations (Systems, Man, and Cybernetics Society, Computer Society, etc.)
- **1.2.6.2** Federation of Enterprise Architecture Professional Organizations (FEAPO) Application
 - One POC (Richard Martin) has been representing INCOSE interests at FEAPO meetings

- Director for Strategy Supports Application
- Tech Ops working to engage Architecture WG
- 1.2.6.3 Collaboration with Operations Research Community
 - Requested by US Army CAB Rep who sees value potential, e.g.,
 - Institute for Operations Research and the Management Sciences (INFORMS)
 - Military Operations Research Society (MORS)

WARNING: There are cultural issues between these communities

- 1.2.6.4 Collaboration with PMI
 - Tech Ops contribution for collaboration with PMI for activities having a strong interface with Project Management
 - Creation of a new WG dedicated to the link between Systems Engineering and Project Management (INCOSE PMI Alliance WG)

FY 2013 fiscal commitment is managed as part of the Technical Operations Projects

1.3 Enhancing Member Programs

This major area of expenditure within the 2013 AOP is aimed at the development of new member benefits, either through the provision of new infrastructure or the development of new technical assets.

1.3.1 Certification

Responsible Director – President Elect

- **1.3.1.1** INCOSE has made a significant long-term investment in this initiative over the past 8 years. The expectation is that the certification effort will transition from an investment project into a source of additional revenue within the next two years.
- 1.3.1.2 In 2008 the INCOSE Certification Office updated the core Certified Systems Engineering Professional (CSEP) to the INCOSE Systems Engineering Handbook Version 3.1, added a new Associate Systems Engineering Professional (ASEP) for junior/emerging systems engineers, and added the first extension for the US Department of Defense (DoD) acquisition environment (Acq). In 2010, the INCOSE Certification Office introduced the Expert Systems Engineering Professional (ESEP) for senior systems engineers, updated the Core certification exam to the INCOSE Systems Engineering Handbook Version 3.2. In 2011, the Certification Office updated the Acq extension exam to the latest version of the Defense Acquisition Guidebook Chapter 4. In 2012, the Certification Office updated the Core certification exam to the INCOSE Systems Engineering Handbook Version 3.2.2, created new unscored

items, and provided additional exam failure feedback. In 2013, the certification program will be enhanced as follows:

- Continue to work with the International Systems Safety Society to create a new Systems Safety extension.
- Work with INCOSE Chapters to make INCOSE certification attractive to their membership and to be better aligned with the many national/regional frameworks.
- Update the Acquisition extension exam to refresh the item bank to reflect an updated DAG (spell out) Chapter 4, create new unscored items, and provide additional exam failure feedback.
- Investigate transitioning to the INCOSE Competencies Framework for INCOSE certification.
- Create a strategy that determines the future basis for the core ASEP/CSEP certification exam as it relates to the INCOSE SE Handbook and the SEBoK.

(Traces to Strategic Action(s): V3.1, V3.2)

1.3.1.3 The Certification Office will seek to establish several new agreements (agreements allow corporations or agencies to commit to a specific number of certifications for their members at a reduced cost) across industry, academia, government, countries/regions, and with other professional societies. In 2008, the INCOSE Certification Office established its first strategic agreement, and then went on to create several more. Building upon this success, several additional strategic agreements will be established in 2013. None of these agreements will diminish the quality and reputation of the certification program. In fact, they will help increase the quality of the certification program and increase adoption among employers of systems engineers worldwide.

(Traces to Strategic Action(s): V3.1, V3.15, V3.2)

1.3.1.4 In anticipation of certification program growth, the Certification Office will continue to improve the certification application and renewal processes. Administrative and volunteer staffing considerations will be used to shape decisions for automation of the certificate application process. In 2013, a goal of certification is to automate the certification application, review, renewal, and administration processes to the extent practicable.

(Traces to Strategic Action(s): V3.7)

1.3.1.5 The Certification Office and INCOSE Marketing team will continue to refine the framework for marketing the certification program. One of the key responsibilities of the Program Manager includes oversight of marketing, including reaching out to other market segments. In 2013, certification will work with marketing and communications to create and communicate certification strategic messaging through at least one new channel.

(Traces to Strategic Action(s): V3.4)

1.3.1.6 Efforts were initiated in 2008 through 2012 to better engage the current certified professionals. The goal is to build a better sense of community among the professionals to ensure that the value of certification is recognized, and to proactively take actions that should increase the chances of certification renewal. Engaged professionals should be encouraged to enhance the external reputation of the certification programs thus enabling further growth. The previous initiatives will be expanded in 2013 to better engage our community of certified professionals. Efforts will also be made to increase the size and diversity of the pool of CSEP and ESEP Certification Application Reviewers (CARs) to meet the needs of the certification program.

(Traces to Strategic Action(s): V3.6, V3.7)

1.3.1.7 The certification program has been operating consistent with ISO 17024 since 2011. In 2013, INCOSE will perform an "internal" ISO "informal assessment." No additional budget is required in 2013.

(Traces to Strategic Action(s): V3.2)

1.3.1.8 The certification program will effectively transition to a new Certification Program Manager in 2013.

(Traces to Strategic Action(s): TBD)

- **1.3.1.9** Significant FY12 deliverables:
 - Updated Acquisition Extension Exam Available Fall BoD Meeting
 - New Systems Safety Extension Available 31 December 2013
 - New Strategic Agreements In Place Goal of at least two (2) new MOAs at each of the Spring and Fall Board Meetings
 - Exam Basis Strategic Plan Draft by IS13
 - Transition to New Program Manager Not later than 1 July 2013.

Required budget for 2013: \$257,200 estimated revenue and \$432,084 of expenses (implies a budget investment of \$174,884).

Of this budget, \$30,700 will be used for PM/DPM travel and \$2,500 for Certification Admin travel. \$8,800 will be used for fees associated with conferences with a certification booth presence.

1.3.2 Technical Infrastructure

Responsible Director: Technical Director

1.3.2.1 The Internal Technical Operations activities are broken into special initiatives for Internal Technical Operations overall, support of Technical Events, performance of Technical Reviews, conduct of Technical Information Management and Control, support of Technical Communications and development and maintenance of Technical Policies, Procedures and Plans. The Internal Technical Operations

initiatives include development of sales mechanisms for INCOSE papers in conjunction with the Communications Committee. Support of Technical Events is supporting the International Symposia, and monitoring INCOSE Chapter and Regional Conferences to ensure consistency and release ability of their products. The Associate Director for Technical Reviews oversees the reviews of documents produced by each Working Group (WG) to create Technical Data and INCOSE Products, IS papers, and other publications as needed. Internal Operations oversees the technical management and control by improving and maintaining the flow of INCOSE Technical Products and Data to members and ensuring that all INCOSE Technical Intellectual Property is properly released and controlled. Technical Communications is focusing on improving the flow of information internal to the Technical Infrastructure and between the Technical Infrastructure and the rest of INCOSE to enable members to gain improved insight into technical capabilities that INCOSE can offer to them. The Technical Policies, Procedures and Plans is focusing on standardizing and improving the INCOSE Organizational Standard Processes so that they are clearer, more complete and more useful to members.

1.3.2.2 Several internal structures operate cooperatively. The Technical Policies, Procedures and Plans area is responsible for maintaining consistency of procedures governing operation of Technical Events, Technical Reviews, Information Management and Control and Technical Communications. However, each of these areas is responsible for implementing the standard procedures and providing feedback to the Technical Policies, Procedures and Plans. Technical Communications works closely with the Communications Committee and INCOSE Admin to ensure consistency, support to booths at INCOSE IS and conferences, and to improve communications with members. While Technical Reviews oversees reviews of IS papers, the reviews and paper database are implemented by Technical Events. Technical Reviews oversees reviews of standards and compiles and releases the results, however, the Standards Initiative implements the standards reviews.

Required budget for 2013: \$3,000

1.3.3 Standards Liaison

Responsible Director: Technical Operations

- **1.3.3.1** Standards development will continue, but under a defined schema for planning longer range efforts aligned with the Systems Engineering Vision, interoperating with Working Groups and other parts of INCOSE, and ensuring maximum visibility of plans and results to INCOSE stakeholders. This is in support of standards for ISO (spell out) and OMG (spell out) mainly with the majority being ISO standards. In 2013 we intend to align participation in standards with working group activities and set up a more strategic approach to participation in standards activities as we continue to liaise with standards development bodies.
 - ISO/IEC JTC1 SC7 WG7 24748 (Guide for Life Cycle Management) Editor for Systems Engineering Management, which is key for the INCOSE SE Handbook

- ISO/IEC JTC1 SC7 WG7 24748 (Guide for Life Cycle Management) Editors for Systems Integration.
- ISO/IEC JTC1 SC7 WG 7 24748-6 (Guide for Life Cycle Management) Editor for V&V, which needs to be consistent with SE Handbook
- ISO/IEC JTC1 SC7 WG7 Continue as Editor of Requirements Tools..
- ISO/IEC JTC1 SC7 WG04 SE Tools and tool environment editor.
- ISO/IEC JTC1 SC7 WG20 Certification. This includes developing initial SE criteria. Preparation for preparing standard for SE Certification. Also preparing the INCOSE SE Handbook for ISO Tech Report.
- ISO/IEC JTC1 SC7 WG24 Life Cycles for Very Small Enterprises. Provides INCOSE exposure to smaller international companies and inserting SE processes into SW development. Serve as project editor and Working Group Secretary.
- Object Management Group (OMG) Support for modeling standards including SysML, UPDM, SysML/AP233 mapping and other model-based systems engineering. Provide inputs to INCOSE MBSE Initiative. Also, chair of the OMG systems engineering domain special interest group (SE DSIG).
- ISO/IEC JTC1 SC27 IT Security Techniques {This would be a new liaison.}
- ISO TC184 SC5 Object Process Methodology (OPM).

Required budget for 2013: \$70,000 (majority is travel with small portion allocated to meeting costs)

1.3.4 Technical Projects

Responsible Director: Technical Director

1.3.4.1 There are a number of projects including the new oversight of BKCASE and projects assigned to the Assistant Directors of the related domains which include:

Government Domain:

- Technical participation in GEOSS Architecture & Data Committee meetings. INCOSE now has the leadership responsibility for architecture definition in this area, led by GEOSS Working Group Chair Participation in the annual GEOSS Plenary session by the INCOSE GEOSS representative
- Transportation Systems Working Group continues to outreach to companies in the ground transportation industry. Anti-terrorism WG Defense WG Required budget for this domain in 2013: \$18,000

Industry Domain:

- Net-centric Operations as an initiative to support another area of Vision 2020 is being planned. The Technical Operations is working on developing a viable concept. Initially led out of the Net-centric Operations Working Group could follow a path similar to that of the MBSE initiative.
- The Biomedical Working Group continues to outreach to companies in the medical industry. They are planning to attend events and represent INCOSE.
- Very Small and Micro-sized Enterprises (VSME) continues to support Systems Engineering and Management guides for very small entities, as well as the definition of deployment packages..
- Infrastructure to deploy the Guide for the Application of Systems Engineering in Large Infrastructure Projects and continue relationships with other communities
- Initiative to create and launch two new WGs in 2013 during IW : Products Lines Management WG (starting from AFIS WG) and Automotive WG

Required budget for this domain in 2013: \$13,634

Processes Enablers:

- The Lean SE working group developed a product for use in organizations that use Lean processes. They will continue their work in developing products for the use in these organizations.
- The Risk Management is working on PMI and/or RiskSIG event support for affiliation work.
- New working group on Model Based Concept Engineering formed

Required budget for this domain in 2013: \$7,000

Technology Enablers:

No budget required for this domain in 2013

Knowledge Enablers:

- The New Agile Working Group is planning on one workshop meeting between IW and IS (probably) with DoD/DASD (probably) personnel in DC for Agile SE relating to DoD issues (\$900).
- The Intelligent Enterprises Working Group is planning on organizing two workshops at the Naval Postgraduate School with the Department of Systems Engineering to begin development of an Intelligent Enterprise Maturity Model that will factor in the quantitative value of front-end modeling for better results in Systems Engineering initiatives (\$2600).
- The Systems Science Working Group (SSWG) will continue collaboration with the International Society for the Systems Sciences (ISSS), conducting joint workshops and participation in each organization's annual events (\$5000)
- The INCOSE PMI Alliance Working Group continued collaboration. (\$20,000)

Required budget for this domain in 2013: \$28,500

MBSE Initiative:

MBSE Initiative continues to develop and implement the roadmap for MBSE in direct support of the SE Vision. Initiative now has an organizational structure based on increasing the knowledge base using activity leads for key areas related to MBSE and challenge teams that apply the knowledge. The MBSE Initiative continues to conduct workshops and LiveMeeting webinars.

Required budget for this initiative in 2013: \$2,000

Academia Liaison::

Steward of the Systems Engineering Body of Knowledge (SEBoK) and Graduate Reference Curriculum for Systems Engineering (GRCSE).

Total Required budget for Tech Ops Projects in 2013: \$69,134 and \$50,000 for BKCASE project to be offset by \$20,000 Educational Grant from INCOSE Foundation.

1.3.5 Academic Program

Responsible Director: Director for Academic Matters

The following initiatives, which are aimed at outreach to young people, are focused in two areas, ages 5-18 (K-12) and at the university level from Bachelors – PhD. The first category is intended to foster and grow an interest in systems awareness and all engineering disciplines at a much earlier age. The second is intended to promote systems engineering by enabling the affiliation of young/new engineers with INCOSE. (second two sentences should be removed, they are repeated below)

1.3.5.1 Age 5-18 (K-12) Outreach

The following initiatives, which are aimed at outreach to young people, are focused in two areas, ages 5-18 (K-12) and at the university level from Bachelors – PhD. The first category is intended to foster and grow an interest in systems awareness and all engineering disciplines at a much earlier age. The second is intended to promote systems engineering by enabling the affiliation of young/new engineers with INCOSE.

Activities: Sponsor participation in events such as First Robotics and ISEF, to pay for student participation in the IS (including shipping items such as First Robotics entry) and curriculum development

Required Budget: \$10,000 + \$5,000 for travel (including travel for non-members)

1.3.5.2 University level (Bachelors – PhD) Outreach

Activities: Support for expanding and maturing Student Divisions, student awards and best student poster at IS, as well as for SEANET (spell out).

Required Budget: \$7,000 + \$7,000 for travel (including travel for non-members) ort for Student Divisions for research, student awards and best student poster at IS.

SEANET - funds will come from two sources: registration fees collected through the CSER registration process and INCOSE Central through its contribution to SEANET.

Required budget for 2012: \$8,000

1.3.5.3 Research & Education

Activities: Continue to support ABET, including fees and training, support INCOSE journal publications.

Required Budget: \$20,000 + \$5,000 for travel for ABET

1.3.5.4 Academic Matters Initiatives

Activities: Academic Council and Academic Forum initiatives, such as establishing INCOSE as key source for academic information

Required Budget: \$12,000 + \$5,000 for travel

1.3.6 Store / New Operations

Planning will be undertaken during 2013 for two new areas of INCOSE Operations: Webbased Product Sales, Registered Training Providers.

1.3.6.1 Web-based Product Sales

Responsible Director: IT Director

1.3.6.2 The IT Director will work with the IT Developer to establish a mechanism to offer the sale of web-based product sales.

1.3.6.3 Balloting

Responsible Director – Board liaison to Nominations & Elections Committee

In 2013, INCOSE will continue to use a hybrid balloting system where members have the choice between paper and electronic ballots. INCOSE will also continue the services of a support contractor to ensure the professionalism and credibility of the balloting system. New bids will be requested in 2013.

Required budget for 2013: \$4,000

Appendix A – INCOSE Support Contracts

Responsible Director: President Elect

Administrative Support

Contractor: Universal Management Services Contract Value: \$378,000 in INCOSE budget for FY2013 Contract Dates: Indefinite duration. Funding is distributed across multiple functions in the budget (Certification, IT, Member Board, events, etc.) Contract Manager: Treasurer The contract with UMS provides administrative support, member services and a part-time

Marketing Professional for INCOSE. The services to be delivered by UMS. This contract also allows for additional tasks to be performed at agreed rates. 2013 will reflect costs for implement of Certification affiliate organization certifications and OMG discount certification.

International Workshop 2013

Contractor: ASK International Conference Contract Value: \$28,800 in IW13 budget (16,150 + 6,000 euros w/travel) Contract Dates: 7 July 2012 until finalisation of IW finances: approx April 2013 Contract Manager: Associate Director for Events INCOSE contracts annually for administrative support for the annual International Workshop.

International Symposium 2013

Contractor 1: ASK International Conference Contract Value: \$126,500 in IS13 budget (76,750 + 20,490 euros w/travel) Contract Dates: 23 Jan 2012 until finalisation of IS finances: approx October 2013 Contract Manager: Associate Director for Events Each year, INCOSE awards contracts for the support of the annual International Symposium. The support tasks have been carefully identified and allocated.

International Symposium 2013

Contractor: ASK International Conference Contract Value: \$0 in IS12 budget (site inspection) Contract Dates: 2013 until finalisation of contract Contract Manager: Associate Director for Events In preparation for IS13 in Philadelphia, a contract was let with ASK International Conference.

INSIGHT Chief Editor

Contractor: Kenley Consulting LLC Contract Value: \$53,600 in INCOSE budget for 2013 Current contract ends 10 February 2012 (paid quarterly issues) New contract will end February 2013 (four quarterly issues) Contract Manager: Director for Communications INCOSE has a contract with Kenley Consulting LLC for editorial support for INSIGHT

Certification Program Manager

Contractor: Sysnovation LLC Contract Value: \$67,200 in INCOSE budget for 2013 Contract Dates: July 2011 through June 2013 Contract Manager: President Elect A contract has been put in place with Sysnovation, LLC to provide a Certification Program Manager to support the INCOSE Certification program.

Contractor: Courtney Wright

Contract Value: \$134,254 in INCOSE budget for 2013 Contract Dates: TBD through TBD Contract Manager: President Elect

A contract has been put in place with TBD to provide a Certification Deputy Program Manager, who will transition to Program Manager in July 2013, to support the INCOSE Certification program.

Certification Testing Services

Contractor: Prometric

Contract Value: N/A (applicants pay testing fee directly to Prometric) – However, Special Accommodation Fees anticipated of approximately \$1,200 for 2013. \$3,300 for Acq exam publish and international disctribution.

Contract Dates: Master Services Agreement dated 1 April 2010, for three years with automatic one year renewals thereafter. Statement of Work (SOW) dated 1 April 2010. Contract Manager: Certification Program Manager

Certification Psychometric Services

Contractor: Certification Management Services Contract Value: \$7,500 per year for DataWise exam results management. \$24,000 for Acq Contract Dates: N/A. Contract Manager: Certification Program Manager

IT Support

Contractor: CGTS (server support) Contract Value: \$130 - \$160 Hourly rates Contract Dates: Began 11/1/2009 and continues Contract Manager: Director for Communications / INCOSE Admin Estimated Use of Support: \$8,000 (based on 2012 support)

Contractor: Appnovation (Support) Contract Value: \$36,000 Contract Dates: January 2013 – December 2013 Contract Manager: Director for IT / Admin

Live Meeting Service

Contractor: Premier Global Services Contract Value: \$8,400 (Licenses: 5 professional @ \$20 and 100 standard @ \$5 x 12) - Does not include toll-free phone usage (currently \$3,500/mo.) Contract Dates: July 7, 2008 to July 2009 – Renews automatically in July Contract Manager: Director for IT / Admin The Prof'l Edition allows up to one thousand, two hundred fifty (1,250) meeting participants per meeting and Standard Edition allows up to fifteen (15) meeting participants per meeting.

Web Hosting Services

Contractor: CGTS/Adhost Contract Value: \$29,300 Contract Dates: 9/1/2012 – 8/31/2013 Contractor: Appnovation Contract Value: \$13,200 Contract Dates: January 2013 – December 2013 Contract Manager: Director for IT / Admin

Web Site Development

Contractor: Appnovation (New Development) Contract Value: \$60,000 Contract Dates: January 2013 – December 2013 Contract Manager: Director for IT / Admin

Journal of Systems Engineering

Contractor: Wiley & Sons Inc Contract Value: \$35,000 in INCOSE budget for 2012 Contract Dates: 14 January 1998. Amended 1 July 2002 – ends 2012 Contract Manager: A contract was let on 1998 for the publication of the SE Journal. This was most recently amended 2002 to include a revised cost structure and renegotiated in 2012.

Journal of Enterprise Transformation

Contractor: Taylor & Francis Contract Value: \$0 in INCOSE budget for 2013 Contract Dates: October 2009 – September 2017 Contract Manager: Bill Miller A contract was let in 2009 with Taylor & Francis for the publication of the Journal of Enterprise Transformation. This is a joint publication with the Institute of Industrial Engineers.

Election Support Contract

Contractor: Votenet Contract Value: \$4,000 plus email Contract Dates: 24 Sept 2012 to 24 Sept 2013 Contract Manager: Chair, Nominations & Elections INCOSE had a two year contract with Votenet for complete election support for the 2010 (completed) and 2011 international elections. Contract renegotiated for 2012 -2014 elections.

Insurance

Contractor: Tyrisco: Directors & Officers Liability Insurance - Arch Contract Value: \$3,000 Contractor: Tyrisco: Professional Liability Policy – Evanston Insurance Co. Contract Value: \$6,800 in 2013 (covers Certification) Contractor: Tyrisco: Foreign Liability Policy - AIG Contract Value: \$2,750 in 2013 Contractor: Tyrisco: Precision Policy – Zurich (covers symposium) Contract Value: \$2,750 Contract Dates: February 2013 to February 2014

Note: all contracts referred to in this AOP are maintained in the INCOSE Admin office. Please contact Christine Kowalski: <u>christine.kowalski@incose.org</u> for information.