

IEEE Aerospace and Electronic Systems Society Strategic Plan, 2015

V4

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I. Executive Summary

This document represents the latest Version of the Strategic Plan for the IEEE Aerospace and Electronic Systems Society. It is intended be a living document that allows AESS officers to help guide the Society as we move forward in our quest to serve our members, those of IEEE and the overall community addressed in the AESS Field of Interest.

In addition to the specific actions and goals in the following sections of this plan, AESS has an overall objective to promote and participate in multi-society/council and multi-association activities in support of mutual activities and objectives, by the following:

- Look for potential opportunities to co-sponsor conferences
- Establish a joint Distinguished Lecturer Program
- Jointly develop Standards
- Look for areas of common interest and opportunities therein
- Engage in a joint Technical Community approach
- Establish a joint dues package with select Societies (this would qualify as an initiative)

II. Conferences

Mission: The mission of AESS Conferences is:

- Enable the conduct of high-quality conferences, symposia and workshops
- Produce high-quality technical content to serve AESS members and our technical community
- Facilitate the generation of reasonable surplus while maintaining high overall quality
- Refine and promote Best Practices in planning and managing AESS conferences
- Explore new conference delivery mechanisms

Objective: The AESS Strategic Plan for Conferences should focus on refining and promoting best practices in planning, management, publications and financing our existing conferences, and determine whether any new conferences could be initiated to support the AESS membership and our overall technical community.

AESS has identified the following elements as critical to our continued conference performance:

- Strengthen the areas of setting up Conferences to insure that we preserve the IEEE Name Brand, conduct a quality conference, produce quality proceedings, and provide a financial benefit to both the Institute and Society. Key elements of these practices include:
 - Make sure that a competent Memorandum of Understanding exists where we have co-sponsors that clearly delineates the responsibilities of each party
 - o Generate a budget that is realistic, and produces a minimum of 20% surplus
 - Produce Conference Publications that are of high quality and maintain the reputation of the conference, AESS and IEEE

 Create and maintain a conference operations guide as a supplement to the IEEE Conference Organizer's Manual, and ascertain that our conferences follow the IEEE and AESS conference guides

Short Term Actions:

- Publish the AESS conference guidelines to all AESS conference organizers
- Review all conference budgets for opportunities to reduce expenses
- Strengthen the AES Conference Liaison for Financial Sponsorship encourage new AESS Board of Governors members to participate in conference committees within their area of interest.

Three-Year Goals:

- Selectively examine and rewrite the "Perpetual" MOUs to bring up to IEEE policy standards – examine each and suggest rewrites on those that do not conform to IEEE Best Practices.
- Increase the Conference Surplus returned to AES by working with and monitoring AESS conference committee planning with regard to costs and expenses
- Assure that all conference chairs follow the AESS conference guidelines
- Ascertain that all AESS conferences are of the highest technical quality and standards

III. Education

The mission of the AESS education committee is to:

- Coordinate the educational activities of the Society to provide timely, relevant and interesting educational topics and delivery methodologies to our members and other members of the aerospace/defense community
- Provide the means to deliver high quality Distinguished Lectures and Tutorials to our audience
- Address the needs of emerging engineers

Three-Year Goals:

- Grow the Distinguished Lecturer Program
 - Make the budget go further by perfecting the 50% share plan and by making effective use of virtual DLs, using modern video conference techniques.
 - o Where practical, tie in talks at local universities with DL commitments.
 - Select new DLs to improve the global distribution of our lecturers.
 - Have Chapter Chairs submit contact information, bios, and abstracts of select candidate lecturers within respective Chapters so that the DL Program may review them and thereby expand the DL offering.

- Review DL participants at least every year and drop those who are inactive or whose material is too out-of-date
- Maintain an AES Overview that each DL will use as an introduction for his lecture.
- Assure that the host distributes AES material to meeting attendees
- Continue to maintain the Video tutorial program and expand as feasible
 - Ask the Technical Panels and Conferences to broaden the tutorial topics, which are now predominantly radar-related.
 - Approach people providing tutorials at IEEE AESS sponsored conferences and at similar conferences sponsored by IET, AIAA, and SPIE as potential tutorial lecturers for AESS
 - o Consider authors of IEEE AES Magazine tutorial articles for video tutorials
 - Publicize the tutorial program to students –undergraduate as well as graduate.
 - Create "initial preview" method so people can see the first few slides prior to purchase
 - Add feedback page to allow for users to provide useful information for improvement
- Develop a compendium that provides useful links to existing open source education information such as links to appropriate courses on Connexions (http://cnx.org/),
 http://www.radartutorial.eu and others
- Work with the AESS Young Professional (formerly GOLD) members to develop programs that are aimed at our younger members. These could include:
 - A program modeled after the DL program but developed by our younger members for younger members
 - Financial support and mentoring for projects such as the UAV program.
 - Making tutorials at our conferences available to Young Professional members by recorded webinars.
 - Put together a package of material that anyone can use, including test cases of successful and unsuccessful engineering.
 - Continue to support the Region IEEE Student Conferences
 - Expand the Junior Conference model to attract more young engineers.

IV. Finance

The Mission of the Finance Committee is to develop and manage a budget that will:

- Allow AESS to deliver the types of services and benefits to our members and members of our professional community that are in keeping with the overall goals and objectives of the Society and IEEE
- Generate a reasonable surplus to keep the Society solvent and vibrant and allow for expansion of our activities as needed
- Provide adequate funds for new initiatives to better serve the members
- Provide timely financial assessment to assist officers in managing their area.
- Provide feedback to the AESS Board of Governors regarding IEEE financial operations and information.

Short Term Actions:

Strengthen Budgeting Process for establishing the annual budget.

- Strengthening the AESS liaison to Conferences and Publications to understand financial risk and upside investment funds potential for AES Initiatives
- Develop a feedback mechanism regarding AESS investments

Three-Year Goals

- Understand publication moves (Magazine and Xplore -- Open Source) and their impact on future financial flows.
- Work with Conferences to Increase the surplus returned to AESS
- Put checks and balances in the process to improve the AESS Initiative planning, and protect our surplus
- Seek additional sources of revenue such as corporate partnerships

V. Industry Relations

The mission of industry relations is:

- Help assure that the Society services the needs of our industry/practitioner members, while maintaining a balance with our academic/researcher and government members
- Develop products/services that support the needs of the industry members
- Develop and maintain relationships with our industry companies for the mutual benefit of AESS,
 IEEE and individual members

Three year goals

- Generate and maintain industry-focused content on the AESS website
- Establish strategic partnerships with relevant industry and industrial organizations worldwide
- Maintain a specific Industry-focused feature in the AES Systems Magazine
- Increase industry advertisements in the AES Systems Magazine
- Be a leader in IEEE's overall global strategy for industry
- Participate in engineering-focused tradeshows and events

VI. Member Services

The mission of AESS Member Services activity is to provide member services and benefits that attract and retain members.

Near Term Actions:

- Invite all new AESS members to participate in AESS events and activities via the new member "Welcome Letter" from the AESS President
- Stem the tide of member drops via a reminder email, which would also ask for feedback on the reasons for the drop if they still do not renew
- Continue Sending congratulatory letters to all newly elected Senior Members.
- Using the SAMIEEE database, seek new members that have AESS-related TIP Codes
- Provide AESS Membership Brochure to attendees at all technically and financially sponsored conferences worldwide

3-year Goals:

 Maintain close liaison with Chapters and engage chapter members in AESS events and activities

- Promote formation of AES-Joint Society Chapters to serve members where no chapter exists
- If financially feasible, hold a Chapter Summit every three years in conjunction with the Sections Congress meeting to get Chapter officer feedback upon the technical direction of the society and improvements in chapter operations
- Promote the concept of AES chapter participation in organizing conferences by providing conference planning resources to chapter officers.
- Grow AESS membership by 1% per year
- Increase member participation in our activities and events
- Reduce the number of member drops each year
- Recruit student members to full membership upon their graduation
- Offer assistance to members for elevating to the next grade

VII. Publications

The Mission of AESS Publications is to provide AESS members with scholarly, highly-regarded publications that support their professional growth and advancement. Publications will provide venues for publication of scholarly achievements, knowledge for the specialist, education for the nonspecialist, and information for our professional community.

AESS Publications will pursue the following strategic vision for its publications:

- Transactions are relevant, timely, technically advanced, and highly regarded among professionals in our field.
- Magazine is attractive and desirable and addresses timely topics in our field of interest so as to draw members to AESS.
- Tutorials are a useful, informative, and timely resource for the professional growth of our members.
- QEB (Quarterly Email Blast) provides new and timely information to support our members' involvement in our professional community.
- AESS Web Site is a one stop shop for AESS information.

3-Year Goals

- Reduce the average submission to-publication delay for the AES transactions to 12 months.
- Achieve an average submission rate of 12 articles per month for the AES Magazine.
- Increase the contributions to AES publications from industry by 50%
- Increase Impact Factor of transactions to 2.0
- Increase Impact Factor of magazine to 1.0
- Increase readership (opens) of QEB by 25%
- Increase visits to IEEE AESS Web Site by 25%

Publications Initiatives

- XML Tagging of submissions to the transactions at submission for early posting on IEEE Xplore;
 EJ Press to deliver beta product in July 2015
- Establish and Implement Term Limits for Editors of the Transactions

Complete for TEs by end of 2015

Complete for AEs by end of 2016

• Implement advertising plan in the magazine

Soliciting advertisers

Coordinate content with advertisers

• Increase the presence of student activities in the magazine.

Student editors

Student highlights

• Improve the Operations of Editorial Board for the Magazine.

Develop Operations Manual for the magazine

Improve training of the editors for the magazine

• Increase industrial participation in AES publications

New magazine column: "Industry Tips and Insights"

Plan special issues around industrial needs

VIII. Technical Operations

The mission of Technical Operations is to form and maintain technical panels in the Society's fields of interest to stimulate technological advances and member engagement in technical networking, standards development, publications, conferences, chapter meetings, and other professional development activities.

3-year goals:

- Review all TCs for relevance, activity and leadership
- Seek revitalization of those TCs that may be dormant or lagging, and Drop those TCs whose relevance or currency have expired
- Identify topics and potential leaders for new areas within our Field of Interest where technical collaboration would be beneficial
- Promote collaboration among Technical Panels and local IEEE chapters
- Develop a formal peer review process of each TP to ensure activities are performed, and they
 are aligned with the TP's established purpose and objectives and aligned with the TP's strategic
 goals
- Develop guidance in the specific areas of the TP expertise in the form of best practices, methods and tools
- Promote synergy and collaboration among the education activities to develop continuing professional development modules for each of the TP area of expertise.
- Nominate members for various Society and Field awards

IX. Governance

The mission of Society governance is to:

- Provide the operating framework for all Society activities
- Assist officers in managing the Society's business areas in a professional and consistent manner

3-year goals

- Review governing documents to ensure continued compliance with all IEEE policies and "musthaves"
- Review governing documents with analysis to improve AESS operation, as needed
- Ascertain that all officers understand their responsibilities per the governing documents and abide by all provisions therein
- Improve the awareness of the governing documents to our membership
- Maintain the "Introduction to AESS" document, focused on young engineers.