

# AESS 2024 Officer Strategic Planning Meeting 12-13 February - 8:00 – 5:00 pm ET Cocoa Beach, FL, USA

Attendees: Michael Braasch, Stefano Coraluppi, Dale Blair, Mark Davis, Walt Downing, Sabrina Greco, Luke Rosenberg, Peter Willett

Virtual: Alex Charlish, Braham Himed, Michael Noble, Roberto Sabatini

Not in Attendance: Lorenzo Lo Monte

Staff: Amanda Osborn

## Call to Order, Roll Call, and Agenda Approval – Michael Braasch

Sabrina welcomed everyone and Michael reviewed the agenda of the meeting. The meeting was called to order at 9:00 AM ET.

MOTION: Mark Davis moved to approve the minutes of the 2023 Officer Strategic Planning Meeting as written. Michael Braasch seconded. Motion passed.

### President's Message – Sabrina Greco

Following this meeting, Sabrina will provide updates from the February TAB meeting. In 2024, AESS will sign an MOU with both GRSS and SPS. The MOU with GRSS will not have any financial implications, while the MOU with SPS will include the ISAC initiative.

### President-Elect Message – Michael Braasch

The strategic meeting will focus on objectives and brainstorming sessions on how to utilize the available funding. It was noted that conferences and publications don't always align with the needs of industry members. A framework needs to be established for the proposal, evaluation, approval, and execution of projects. One major blocker is the IEEE funding rules. Additionally, Michael has retired from Ohio University and will now join Northrop Grumman.

Mark noted that Regions 8 and 10 will be restructured in 2025.

## **Technical Operations – Roberto Sabatini**

The Technical Operations objectives include developing roadmaps for panel activities and resources to support and accomplish this goal. More structure is needed to clarify the expectations for panel activities and reporting, as there is currently a large variety in what they report. Rob would like to develop a template for this purpose. The roadmaps should include key achievements, evolution of the Supertopic, affiliation diversity, impact narratives, maximization of regional representation, expansion of conference contributions, and synergy between education and publication activities.

Blockers include the limited time of volunteers, varied perceptions of panel expectations, inconsistency in panel structure and objectives, limited recognition of volunteers, challenges with co-sponsored conferences, lack of institutional support, loose leads in R&I, and minimal involvement from education activities outside of the DLs.

Changes will be implemented for the Spring BoG meeting, and Rob will be attending the panel meetings. At the Fall BoG meeting, there was a discussion about eliminating the Cyber Security Panel, but the BoG did not support this idea. PLANS will not merge with IEEE conferences and will continue to provide a surplus under the current arrangement. Alex noted that panels might not be aware they can request funding for educational workshops, summer schools, YP events, etc.



Action Item: Dale Blair to help identify support for the Cyber Security Panel. AI-1171

Action Item: Braham Himed and Alex Charlish to collaborate with Roberto Sabatini to create roadmaps for the panels to contribute and participate in the AESS educational activities and conferences. AI-1172

### **Conferences – Braham Himed**

The majority of the work often falls onto the Vice President. To address this, Braham proposes developing subcommittees for conferences to distribute responsibilities more effectively. These subcommittees would focus on planning, outreach, finance, and reporting, ensuring a more balanced workload.

The most important goal for 2024 is to establish a more structured conference committee, complete with active sub-committees in planning, outreach, finance, and reporting. To accomplish this, the conferences require support from the society in terms of financial backing and logistical assistance. Looking ahead to the next 2-5 years, the goals include: strengthen well-established, financially supported conferences by increasing booth participation; financing student awards; supporting YIP events; and providing travel grants through the Mike Wicks foundation. Also looking to enhance participation in technically-sponsored events by boosting AESS participation, effectively advertising events, and creating joint events. Braham proposes joint conferences and co-host events to enhance collaboration. The grant and sponsorship process for activities at conferences and conference budget tracking and reporting are complicated. It was noted not all sponsored conferences has a dedicated panel (i.e. FUSION).

AESS seeks to increase support for under-developed countries and regions through grant awards, enhanced AESS participation, and invitations to participate in other events for training purposes. Braham encourage steps such as streamlining the approval process, empowering sub-committees, establishing a conference "aid" budget, and organizing repository data, including applications, budgets, and reports (final, technical, and budget). The blockers can be mitigated by streamlining the approval process, empowering subcommittees, establishing a budget for conference activities, and providing a repository for conference applications, budgets, and reports.

## **Education – Alexander Charlish**

The primary goal is to maintain, streamline, and grow existing committee activities including the Distinguished Lecturers (DL) events, the Virtual Distinguished Lecturer (VDL) program, International Lecture Network (ILN) and Vimeo resources, Young Professional (YP) travel grants, AESS scholarships, the Michael Wicks and Robert T. Hill Awards, and support for summer schools and YP events. Streamlining efforts aim to improve processes and distribute responsibilities more effectively within the committee. Growth efforts focus on raising awareness of these activities and expanding them beyond the Radar Systems Panel (RSP) to other panels. Essential resources include an active committee, support from conference catalysts for process improvements, and financial backing from AESS. In 2024, changed the YP travel grants from having separate deadlines to a single, consolidated deadline.

The long-term objectives for the next 2-5 years include the AESS Challenge, an international competition where teams solve a common technical task, encouraging chapter-level participation, with past examples like the Radar Conference Radar Challenge and the Lone Star Drone Event. Additionally, the AESS plans to offer a Massive Open Online Course (MOOC), structured with quizzes and exams, to allow members to independently train in AESS fields. Lastly, the AESS Summer School will provide in-person educational courses covering various AESS topics.

Key blockers include defining the challenge topic for the AESS Challenge, organizing and motivating participants, providing financial support, and determining the optimal structure and incentives. For MOOCs, the preparation effort is significant, and there's substantial competition from existing online courses. The AESS Summer School faces challenges related to high costs and the effort required for volunteers, as well as competition from other educational institutions and summer programs. Creating a MOOC is time-consuming and there are already many MOOCs available. Alex doesn't recommend in the current environment.



AESS has the potential to develop a lecturer series similar to the NATO lecturer series. Walt suggested that AESS participate in STEM activities through TryEngineering, potentially sponsoring Summer Schools or scholarships. These Summer Schools should be held regionally to maximize accessibility and impact.

# Member Services – Luke Rosenberg

Membership statistics show significant growth, especially in India, Colombia, and Peru, with the largest membership in Bangalore, Italy, Germany, and the UK. Student membership is also rapidly increasing, specifically in India. The growth in R9 and R10 are due to the efforts of Giovanna Ruiz and Puneet Mishra, respectively. Luke emphasized the importance of community in student chapters, noting cultural differences that impact engagement. Student branches need engaged faculty members to be successful. Sections where new chapters could be opened have been identified.

Key strategies include launching the Global Merchandise Program, increasing funding for chapters, and planning more chapter summits. The program aims to make merchandise accessible globally, with minimal shipping costs, enhancing member satisfaction and engagement. IEEE has blocked the pre-purchase of credits with SwagMagic. Amanda and Lorenzo are exploring alternative payment methods.

AESS aims to boost awareness and utilization of existing funding mechanisms for chapters and SBCs. Chapter Summits have proven successful, and AESS plans to organize more within budgetary constraints. Local contacts are crucial for the success of these summits. To distribute the responsibilities of travel and chapter summits beyond the VP of Member Services, Sabrina suggests leveraging the International Director position. Additionally, a travel budget needs to be established for these activities.

# Finance – Peter Willett

The 2024 budget stands at a net \$488K, with conference proceedings remaining a significant source of income. The current IEEE budgeting process is opaque, as it consolidates most expenses into the 21015 "Society Operations" Cost Center, making it difficult to track specific expenditures. To improve transparency and control, the proposal suggests assigning distinct cost centers to various Vice Presidents (VPs). This would allow the Vice President of Finance (VPF) to provide accurate budget tracking and reporting for each VP. Currently, these cost centers are minimally used and not controlled by the VPF, hindering effective financial management. Peter discussed this idea with Sandra Duran and received tentative approval to create these additional cost centers. Additionally, it is proposed to establish conference-specific grants and budgets instead of managing them on an ad hoc request basis.

Additionally, a goal is to achieve a more stable budget that aligns with biannual meetings and incorporates permanent annual allocations, reducing the need for frequent adjustments. Long-term objectives include developing initiatives to utilize surplus funds effectively, promoting membership growth, and addressing conference challenges. However, the process is hindered by the opaque nature of the IEEE budgeting process, which is closely managed by IEEE staff, making it difficult for society volunteers to access and manage accounts independently.

Peter reviewed the Sensors Council initiatives, emphasizing the importance of Feathr and promoting synergy between Sensors Council publications and conferences.

## Brainstorming Session #1 – Increasing Member Engagement – ALL

Lorenzo is emailing individual chapters to address chapter funding and make it more visible on the website. Sections should be informed about annual and major initiatives funding opportunities from AESS, with open calls scheduled four times a year. There is a consideration to rename the "Major Initiatives" form to "Major Projects." Chapter highlights should be included in the magazine, and social media posts should tag volunteers. Chapters will



be asked how they advertise their activities. Walt reviewed the Lone Star Section's membership engagement, noting recognition in R5. Local sections should be involved early in conference planning, leveraging this involvement for better collaboration, though not mandatory. There is a need for different strategies for chapters in developed versus less developed countries, and the absence of a local chapter may hinder involvement. The AESS value proposition should be clearly articulated to chapters, faculty, and industry, emphasizing the benefits of IEEE involvement. Efforts to elevate members to Senior Membership include contacting Faculty Advisors and engaging sections, emphasizing the importance of standards to industry. Walt has reached out to Life Members for assistance with references, with campaigns targeting long-term members. Sections and chapter chairs should help identify references, with letters sent to employers and encouragement for members to engage with students. If a conference has a local chapter, faculty should be invited to organize technical sessions or review papers.

Action Item: Michael Braasch to contact the chapter chairs to identify those who can serve as references for Senior Member elevation. AI-1173

### **Discussion #1: BoG Participation – All**

#### Hybrid Meetings

Hybrid meetings face several challenges, including unpredictable technical issues with internet and AV, and complications with venues and restaurants due to last-minute cancellations. According to the Bylaws, members missing three consecutive meetings may be removed from the BoG. Rob noted travel difficulties for academics, and it was discussed that members should attend at least one in-person meeting annually. Online attendance will not count towards meeting attendance, though virtual participation is still allowed. It was also discussed that BoG members should attend at least one chapter meeting during their term. The Nominations and Appointments Committee should be informed of candidates' previous lack of participation in committees and meetings.

Action Item: Amanda Osborn to update the nomination form with the AESS BoG Job Description and distribute it to the current BoG members. AI-1174

#### Discussion #2: Roles and Responsibilities – All

The need to define the Secretary position, which currently has minimal responsibilities, was highlighted. There is a consideration to merge the Mentoring and Short Course Committees with their parent committees, Member Services and Education, respectively. It was decided this would be implemented. The International Director role has been inactive for several years, and it is suggested that directors attend conferences and chapter meetings in their regions to promote AESS. Reviewed BoG description includes specific details about committee participation. Each BoG member is expected to actively engage in various committees to enhance their contributions and ensure the effective functioning of the organization.

#### Nominations and Appointments Committee - Mark Davis

For the 2024 N&A Committee, Mark focused on cultivating a balanced and diverse committee. He noted the need for a larger candidate pool for the selection of the BoG and Officers. Mark reviewed the 2024 committee and schedule.

The long-term objectives are to attract new leaders with the potential to increase diversity and improve succession planning. Current challenges include the limitation on diversity due to the high number of returning BoG members, several BoG members not participating in at least two meetings per year, and difficulties in establishing effective succession plans for Vice President positions.

To address current challenges, alternative policies should be considered. These include increasing the number of BoG members over the next three years and establishing clear attendance guidelines to ensure consistent inperson participation. Additionally, introducing an emeritus status for non-active members, potentially as nonvoting participants, could help maintain engagement while opening opportunities for new leadership.



Action Item: Michael Braasch and Sabrina Greco to communicate the expectations of in-person meeting attendance. AI-1175

Action Item: Mark Davis to develop a Nominations and Appointments Committee Operations Manual by the June Board of Governors elections. AI-1176

There was a discussion held on the role and duties of the Secretary. It was noted the majority of the duties listed in the governing documents and job description are managed by the Operations Manager.

The Mentoring and Networking and Short Course Committees will be merged into the Member Services and Education Committees, respectively.

## **International Director**

The intent behind the International Director is that there are volunteers representing Regions 1-6, 7, 8, 9, and 10. They should attend at least one conference or event in their respective region. When there are requests for AESS participation, the responsibility is that of the International Director for that region.

Action Item: Sabrina Greco to review the Bylaws and prepare a proposal to make changes to the International Directors section and job descriptions. "AESS members in good standing" Remove the requirement to be current BoG members for the regional international directors. AI-1177

Action Item: Mark Davis to reach out to Jill Gostin to identify potential candidates for the International Director Chair and regional directors. AI-1178

Recess until Tuesday, February 13 at 8:00 AM

#### Awards – Dale Blair

The short-term objectives include revising and updating the AESS Awards documentation to align with recent changes made by the Awards Committee. This includes restricting nominations and endorsements to one candidate for key awards, such as the Nathanson, White, Pioneer, and Early Career Awards. Additionally, scoring criteria will be introduced for most awards, and the IEEE AESS Student Branch Chapter of the Year Award will be finalized. The appointment of award selection committees will be formalized, and an Operations Manual for the Awards process will be developed.

The long-term objectives are to establish transparency and fairness in the AESS Awards process, raise the visibility and prestige of all AESS Awards, and increase the average number of nominations by encouraging greater participation.

The issue of rollover nominations involves removing the option to carry over nominations from previous years, and limiting each candidate to one letter of recommendation (LOR). For the Technical Panel of the Year Award, panels should not be eligible to win in consecutive years. The nomination process for this award needs to be formalized, with panels required to submit slides at BoG meetings. Additionally, a budget should be developed to support technical panels in organizing meetings and events.

The main blockers include limited availability of time of the Operations Manager and the AESS Awards Committee, lack of full cooperation from committee chairpersons, and challenges in effectively communicating the message to AESS members.

Action Item: Amanda Osborn and Dale Blair to develop a poster board template and contact the winners to display at the RadarConf. AI-1179

#### Industry Relations – Stefano Coraluppi

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The primary objective is to organize a second AESS Virtual Panel, "How to Succeed in Your Engineering Career," for Regions 1-9 and Region 10, with industry BoG members encouraged to invite students. The goal is to promote IEEE as a professional home through virtual and in-person panels on career topics and industry collaborations.

Discussions focused on increasing industry involvement at AESS conferences in Europe and clarifying the roles of the VP of Industry Relations and VP of Conferences. Additionally, efforts to engage non-AESS members were proposed, including surveying companies to understand low involvement and gathering feedback on AESS activities.

# **Publications – Luke Rosenberg**

Luke hel meetings with Gokhan and Daniel. While the TAES backlog is being reduced, there is still a significant increase in submissions. Currently, 75% of papers are being returned during the first round of review, putting a strain on the Associate Editors (AEs). It's likely that TAES will be dropped from the transformative Open Access (OA) agreement, but AESS is not concerned, as most authors show little interest in OA for TAES. Additionally, there is a focus on improving the diversity of the editorial team.

The MAES impact factor has been rising (3.6), and there is an open call for nominations for a new Editor-in-Chief (EiC). The need for term limits and role redefinition for AEs was discussed, and the operations manual for TAES is being finalized with similar efforts planned for MAES. Increasing promotion of student highlights, book reviews, and interviews was emphasized, as well as the need for more frequent publicity emails. There is also interest in engaging with student and Young Professional (YP) communities, with the possibility of creating a newsletter and assigning a student or YP as an Associate Editor.

The Quarterly Email Blast (QEB) is performing well, though there have been few clicks on the hyperlinked stories. It was suggested to include more reports on student activities to increase engagement. A student from Nigeria has expressed interest, and we plan to ask him to contribute a short story to help launch this initiative.

## **Co-Sponsored Publications**

*Transactions on Radar:* AESS holds a 24% share in this journal, which is performing well but faces challenges in coordinating special sections. Between October 2021 and 2023, 254 papers were submitted, with a 35% acceptance rate. The average decision time is 37 days. Luke approached Shannon about creating a special section for T-RS, but a key obstacle is securing agreement from all the sponsors. Additionally, there is a shortage of Chinese authors, likely due to the journal's lower impact factor.

*Journal of Lightwave Technology:* AESS has a 2.5% share, and the journal's impact factor is 4.7. The current Memorandum of Understanding (MoU) expires in April 2024.

*Journal of Miniaturization for Air and Space Systems (J-MASS):* The MoU was renewed in August 2023, with AESS holding a 20% share. The impact factor is 1.5, and publications increased from 50 in 2022 to 57 in 2023.

*Open Journal of Systems Engineering (OJSE):* AESS has a 20% share in this journal. While the first year saw 18 publications, special issues have not generated significant submissions, likely due to the specialized focus of the journal.

The main goal for 2024 is to ensure the sustainability of TAES and Systems Magazine. This requires funding for a workshop to bring together EICs and SEs. Over the next 2-5 years, TAES needs restructuring to handle increased submissions, and Systems Magazine must recruit a new EIC and committed AEs. Challenges include waiting for board approval for the workshop and finding suitable AEs for Systems Magazine.

A discussion was held regarding the rotation schedule for the IEEE International Radar Conference.



### DSTEI – Mark Davis

They have been holding quarterly meetings and collaboration with IEEE TAB finance staff. A recommendation for Phase 2 projects will be presented at the next BoG meeting. Four short courses will be held in Peru in March.

DSTEI has contributed to the growth of AESS Student Branch Chapters (SBCs), with \$172K granted for Phase 1, and monthly reports and quarterly reviews being submitted. IEEE TAB provided \$170K in 2024 to support new technologies, small business incubation, and career development for Young Professionals. The BoG will review the SBC proposal and PDR before the funding transfer in May 2024.

#### Brainstorming Session #2: Innovative ideas and projects regarding the surplus

Technical panels will have standing budgets to support their attendance or the organization of panel meetings at conferences. Grants for students and Young Professionals will be increased, with plans to raise scholarship amounts and expand the number of winners for the Bob Hill Award. A new AESS competition was proposed, where AESS would select a field of interest, such as Navigation, and award a single team, open to all members, regardless of region or affiliation.

Dale highlighted the Tennessee Tech Capstone project as an example of partnering with universities and industry sponsors, with the university requesting approximately \$4K for support. This model could be a way for AESS to engage with members and sponsor university projects. Additionally, up to \$5K in major initiative chapter funding is available for one-off, student-defined projects in areas of interest, similar to a small-scale version of the Distributed Sensing Technology & Education Initiative (DSTEI).

OJSE is also considering offering travel grants, following the Sensors Council model, to support conference attendance, though these grants would not cover registration fees.

The travel stipends for award recipients should be updated to provide better support.

Action Item: Dale Blair to provide Amanda a write-up for the Magazine to advertise the fee schedule. AI-1180

Action Item: Dale Blair to email Braham Himed about the journal papers being presented at conferences, particularly Aerospace Conference. AI-1181

Action Item: Dale Blair and Walt Downing to discuss OJSE papers being presented at ISSE. AI-1182

# Parking Lot – All

Amanda mentioned that she had not yet received a response from the organizers of the International Radar Conference regarding the Fall Meeting. Sabrina will assist by reaching out to the conference chair.

Action Item: Stefano Coraluppi to provide an update to the BoG on the status of the virtual industry panel. AI-1183

Action Item: Peter Willett to include (see brainstorming sessions) items into the 2025 first pass budget. AI-1184

Action Item: Amanda to send out the call for financial motions. Will use consent agenda. AI-1185

Action Item: Mark Davis to send final DSTEI reports Braasch, Coraluppi, Lo Monte, and Blair. AI-1186



MOTION: Michael Braasch moved to adjourn the meeting. Luke Rosenberg seconded.