

IEEE AP-S 2016 Fall AdCom Meeting

9:00-17:00, Sunday, November 20, 2016

Newark Liberty International Airport Marriot Hotel, New Jersey, USA

Room: Essex/Liberty Conference Room

Voting AdCom Members in Attendance: Michael Jensen, Ahmed Kishk, Roberto Graglia, Tapan Sarkar, Trevor Bird, Silvio Barbin, Don McPherson, Christophe Caloz, Karu Esselle, Mahta Moghaddam, Jamesina Simpson, Guido Lombardi, Eric Mokole, Parveen Wahid, Kin-Lu Wong

Honorary Life AdCom Member in Attendance: Ross Stone

AdCom Ex-Officio Members in Attendance: Danilo Erricolo, Ajay Poddar, Zhongxiang Shen

Elected Adcom Member (2017-2019) in Attendance: Agostino Monorchio

Voting AdCom Members Excused Absent: Steve Best, Gianluca Lazzi, Scott Tyo

1. Introduction

The meeting was called to order at 9:00 am by Prof. Michael Jensen, 2016 President of the IEEE AP Society.

All members in attendance introduced themselves.

2. Approval of Prior Minutes (Zhongxiang Shen)

The minutes of the Summer AdCom Meeting held in Fajardo, Puerto Rico, were emailed to all members beforehand. Hardcopies of the minutes were also distributed to all attendees.

Motion (Stone, Graglia): Approve the Minutes of the 2016 Summer AdCom Meeting as Circulated by Both Email and Hardcopy Handouts. Motion Carries Unanimously.

3. Discussion of the Meeting Agenda and Overriding Issues (Michael Jensen)

The meeting agenda was circulated to all AdCom members by email several weeks before the meeting. Hardcopies of the meeting agenda were also distributed to all in presence.

Motion (Stone, Kishk): Approve the Circulated Agenda. Motion Carries Unanimously.

4.1 Past President's Report (Roberto Graglia)

Prof. Graglia first reported the recent AdCom election results. With the new practice implemented in Feb. 2015, AdCom General Elections guarantee the following composition in the AP-S AdCom from 2017 onwards:

1 AdCom elected member from Region 9

3 AdCom elected member from Region 10.

This practice is due for review during the 2018 winter AdCom meeting in early 2018. **[Notes after the meeting:** According to the minutes of the 2015 Winter AdCom meeting in Hong Kong, this practice is due for review during the 2017 Winter AdCom meeting.]

The 2016 AdCom election results are as follows.

President-Elect (Jan. 2017 to Dec. 2017): Weng Cho Chew

Elected AdCom Members (Jan. 2017 to Dec. 2019): Don McPherson, Agostino Monorchio, Silvio Barbin and Zhongxiang Shen.

For 2016, a total of 1766 ballots were returned to the IEEE for the election of the President-Elect and four members to the AdCom. (2017-2019), which represents 21.6% of the membership and is very similar to the rate from previous years.

Prof. Graglia also informed the meeting that Joseph Keller, the originator of Geometrical Theory of Diffraction (GTD), died in Stanford, CA, on September 7, 2016 at the age of 93. He recommended IEEE AP-S to recognize Keller's contributions to our field in the Magazine and on our webpage.

Concerning the new journals (JMMCT and JERM), a number of administrative improvements and a clear policy may be required since they are jointly operated with other sister societies. There are a few administrative issues that should be resolved (such as updating the composition of the Publication Committee and AP-S Bylaws) for the healthy development of these new journals. Prof. Graglia briefly mentioned that the working group established in 2015 between AP-S and MTT-S did not make much progress this year due to several reasons. More should be done on the Future Directions Initiative in 2017.

Finally, Prof. Graglia reported that the 18th edition of ICEAA and the 6th edition of the IEEE-AP-S Topical Conference on Antennas and Propagation in Wireless Communications (APWC) held in Cairns, Australia, attracted some 530 submissions with 272 papers accepted. Altogether, the two conferences featured 38 sessions including 19 special sessions organized by renowned experts. The next edition of ICEAA/APWC 2017 will be held in Verona, Italy, from September 11 to 15, 2017.

After the presentation, Prof. Jensen suggested that AdCom may want to discuss the Bylaws and Committee changes required after the launch of two journals jointly owned with sister societies. Prof. Graglia added that the operation of these joint journals is a bit complicated because different societies have different priorities and allocated budgets for the EiC. Dr. Ross Stone commented that both new journals are currently on the watch list because they actually publish substantially less papers than budgeted. Dr. Trevor Bird mentioned that the EiCs of these joint journals should be part of the AP-S Publications Committee and may also be invited to attend AP-S AdCom meetings at least once in a year. They can become Ex-Officio members of the Publications Committee with no voting rights. Dr. Stone expressed his support of this suggestion and added that they may not be Ex-Officio members of the AP-S AdCom, unlike other EiCs of AP-S publications. Members also discussed how the EiCs of these joint

journals should be selected and the required budgets be approved. Finally, the following motion was proposed.

Motion (Stone, Graglia): AdCom to task the Constitution and Bylaws Committee to bring forward the required amendments to AP-S Bylaws concerning the EiCs of joint journals with other societies. Motion Carries Unanimously.

Prof. Graglia mentioned that the Chair of AP-S Publications Committee is a member of the Steering Committees of these joint journals. Prof. Tapan Sarkar added that these Steering Committees should work out the required budget and oversee the operation of these joint journals.

Prof. Graglia informed that 2018 ICEAA/APWC will be held in Columbia and requires an advance of \$25,000 from the Society.

Motion (Graglia, Moghaddam): AdCom to approve an advance of \$25,000 for IEEE APWC 2018. Motion Carries Unanimously.

Finally, Prof. Graglia suggested to have a good pool of candidates who can stand in the future elections for President-Elect and AdCom members. For example, a list of previous AdCom members should be maintained because they are eligible to be considered as the candidates for President-Elect.

4.2 President's Report (Michael Jensen)

President Jensen first shared the following society appointments with the meeting.

- Chair of Distinguished Lecturer Program: Peter de Maagt
- EIC – Journal of Electromagnetics, RF, and Microwaves in Medicine and Biology (JERM): J. C. Chiao

He also informed the meeting that 2017 AP-S Symposium in San Diego is in need of \$23,000 in additional advance.

Motion (Graglia, Moghaddam): AdCom to approve a loan of \$23,000 for 2017 AP-S Symposium. Motion Carries Unanimously.

In order to streamline the process and to avoid such circumstances in the future, the following motion was proposed.

Motion (Jensen, Bird): When AdCom approves a conference venue for future AP-S symposium, it approves the following advances:

- 24 months: \$15,000
- 12 months: \$20,000

In addition, AdCom authorizes additional advances of up to \$25,000 based on approval by AP-S President, AP-S Meetings Committee Chair and AP-S Meetings Coordinator.

Discussions: Mr. Don McPherson commented that for joint symposium with URSI, URSI must match the advance on the 1:1 basis. Dr. Ross Stone said that URSI would certainly match such advance if needed.

Motion Carries Unanimously.

Prof. Jensen then shared a few slides about IEEE Open Access revenue, which has been steadily growing over the years though the percentage is still small compared to the conventional mode. He also shared with the meeting the recent IEEE and AP-S membership statistics, IEEE's priority of engaging members through IEEE Collabrectec, and TechIgnite to be held in March 2017.

Finally, Prof. Jensen said that entrepreneurship is important to IEEE's future and suggested that AP-S should participate in the next edition of N3XT. He also proposed a small budget of \$10,000 to explore young professionals and entrepreneurship. Most members expressed their support to the proposed idea and suggested that a good candidate should be identified to represent the Society at the 2017 N3XT.

The Meeting Adjourned for a Short Break at 10:50 and Reconvened at 11:00.

4.3 President-Elect's Report (Ahmed Kishk)

Prof. Ahmed Kishk made the following suggestions about AP-S conferences:

- (i) Increasing the number of invited and special sessions
- (ii) Re-installing the Plenary Session again
- (iii) More publicity and aggressive advertisements of the flagship conference
- (iv) Attracting high quality workshops and short courses
- (v) Planning new sessions highlighting research activities in certain areas and fields.
- (vi) Conducting more student competitions with industrial sponsorship
- (vii) Organizing more joint sessions with sister societies
- (viii) Increasing industry participation
- (ix) Rescheduling the Reviewers Lunch invitation if possible.

Concerning the AP-S journals, Prof. Kishk said that both TAP and AWPL are over-loaded and we may want to decrease their sizes and enhance their impact factors. The speedy publication of AWPL papers should be maintained. The two new journals (JMMCT and JERM) are for special topics. The Society may need a new journal covering a wider scope. One proposal made to the Publications Committee is:

IEEE Journal on Utilizing Special topics of Today's Research on Antennas and Propagation (JUST-TRAP).

Prof. Kishk also proposed a few suggestions to enhance the current Distinguished Lecturer (DL) Program.

- (i) DL may offer a 3-4 hour short course during his/her visit to encourage participation from non-members and students. A small fee may be charged to the participants and some financial compensation may be provided to the DL for conducting the short course.
- (ii) DLs may be allowed to participate in conferences sponsored by the AP-S.

Finally, Prof. Kishk strongly encouraged AdCom member to be involved in AP-S Committees.

Discussions: Regarding more publicity and aggressive advertisement of our annual symposium, Prof. Parveen Wahid suggested that multiple reminders can be sent to members with links to the conference webpage. She also said that workshop speakers can be different from session contributors. Prof. Roberto Graglia suggested that the Education Committee may consider offering free short courses to students at our annual symposium. Dr. Ajay Poddar commented that conference participants may like talks/papers addressing system issues. Concerning the proposal of a new journal (JUST-TRAP), Dr. Trevor Bird said that there was another new journal, IEEE Journal of Selected Topics on Antennas and Propagation (JSTAP) in the pipeline. President Jensen suggested that Dr. Bird may take the lead to study the feasibility of these new journals.

4.4 Treasurer's Report (Don McPherson)

Mr. McPherson first reported his recent activities and they include

- processing advances and assisting with related financial documents for numerous conferences
- processing editorial assistants for TAP and JMMCT
- coordinating SDC update to Awards manual
- preparing and submitting budgets and reforecasts.

Mr. McPherson then updated the meeting about the Society's 2016 Financial Status. The actual income and expenses for 2016 Periodicals are in good alignment with their budgets, and the same applies to 2016 conferences. Others expenses such as TAB Administration charges and Committee Expenses are also closely correlated with their budget. The expenses for 2016 Initiatives projects are slightly low compared to their budgets, though they may pick up near the year end. In summary, the Society's 2016 net finances are healthy with \$120K ahead of net budget through October and the forecast net to be \$60K short of budget for the full 2016.

As for the 2017 budget status, Mr. McPherson reported that the IEEE target budgets were distributed on June 2, 2016 and the first AP-S pass was submitted on June 29 and the second round inputs were provided on Sept. 6, 2016. The final budget has been approved at the November IEEE Board meeting. It was mentioned that TAB has now restricted 2017 initiative proposals to 2.25% of reserves, instead of the earlier approved 3%. AP-S has submitted initiatives together with brief description and plans. It is expected that the 2017 total income will be \$4,694.9K and the total expenses are \$4,023K. Mr. McPherson said that the budgets for Education and Chapter Activities Committees have been approved at the summer AdCom meeting this June.

Motion (Stone, Bird): AdCom to approve the 2017 budgets of all committee expenses except those approved earlier. Motion Carries Unanimously.

Mr. McPherson then presented the 2017 Editorial Budgets (\$80K for Transactions, \$60K for AWPL, \$80K for Magazine, and \$34K for JMMCT).

Motion (Stone, Bird): AdCom to approve the 2017 Editorial Budgets as presented above. Motion Carries Unanimously.

Finally, Mr. McPherson provided the 2017 budget for AP-S Initiatives (\$40K for SIGHT and Project Support, \$40K for Future Directions, \$75K for Membership Development, \$20K for Special Travel Grants, and \$20K for Education Initiatives).

Motion (Stone, Kishk): AdCom to approve the budget of \$195K for 2017 AP-S Initiatives. Motion Carries Unanimously.

The Meeting Adjourned for Lunch Break at 12:10.

The Meeting Reconvened after Lunch Break at 13:00.

5.1 AWPL Backlog Issues (Michael Jensen for Yang Hao)

Based on the backlog of 250 papers (1000 pages), the following page budgets were proposed:

- 2017: 2,100 pages
- 2018: 2,700 pages

In the meanwhile, it was proposed to eliminate print copy and year-end index for AWPL.

Concerning the proposed suggestions, many members present expressed their opinions about the AWPL backlog and suggested to eliminate the backlog problem as soon as possible.

Motion (Stone, Bird): AdCom to ask the EiC of AWPL to find out the actual backlog number and then get rid of the backlog in 2017. Motion Carries Unanimously.

After having approved the above motion, Prof. Mahta Moghaddam asked about the normal page budget once the backlog is cleared. Dr. Ross Stone said that 2018 page budget can be approved in the next AdCom meeting to be held in March 2017. Concerning the printed copies of AWPL, Dr. Stone said that some members may prefer the printed copy. After some discussions, the following motion was proposed.

Motion (Stone, Graglia): If allowed by the IEEE, AdCom approves to remove the printed copy of AWPL as soon as possible.

Discussions: Prof. Danilo Erricolo asked if there is any drawback behind this removal. Prof. Jensen replied that the current printed AWPL may not serve its original purpose. Prof. Guido Lombardi said that it may be difficult to justify the page charge of \$600 per paper after this removal, compared to the Communications published in the TAP. Prof. Roberto Graglia asked

Prof. Erricolo whether it is possible to remove the Communications Section in the TAP. Prof. Erricolo answered that the Communications published in the TAP are different from AWPL papers though some degree of over-lapping may exist. Dr. Trevor Bird added that there are good reasons to keep the TAP Communications. Dr. Stone said that removing the printed copy of AWPL can definitely save the printing and postage costs.

Motion Approved (13 Yes and 2 Abstain).

5.2 Impact Factor and Citation of Journal Papers (Karu Esselle and Danilo Erricolo)

Prof. Karu Esselle made a short presentation about the citation issue in engineering. It is noted that when competing for national and institutional fellowships, awards, and prizes that are open to all disciplines, engineering researchers are significantly disadvantaged primarily due to low citations in engineering. It is then suggested that leading professional engineering organizations like the IEEE should take leadership and explore ways of increasing citation in engineering and thus reducing this disadvantage to engineering profession. Prof. Esselle then showed a number of charts to demonstrate that those journals that have a high impact factor generally have a large number of references per article on the average. Hence, encouraging “more comprehensive” referencing, which seems to be common in many other disciplines, is a step in the right direction. Finally, Prof. Esselle also suggested a number of incentives to increase the number of references significantly, such as, advice provided by the Editorial Board, comments made by reviewers, and offering the 8th free page in the TAP if the paper has 40 or more references.

After the presentation, Dr. Ross Stone first made two comments: (i) Some journals, such as IEEE Transactions on Fuzzy Systems, have been closely monitored in recent years due to their unusually high impact factors; (ii) IEEE Periodicals Committee is very seriously looking at cases involving manipulation of citations. He then said that rewarding more references may not be allowed. Prof. Danilo Erricolo suggested to have one page free of charge dedicated to references. Prof. Christopher Caloz noted that many metamaterial papers have been published in physics journals that have higher impact factor than IEEE Transactions. Dr. Trevor Bird shared his experience in astronomy with the meeting and said that researchers in astronomy are more generous in citing other researchers’ work. Prof. Mahta Moghaddam said that she is not in favor of citation manipulation. However, reviewers may be asked to comment on the referencing section. Prof. Danilo Erricolo informed the meeting that 90% of papers rejected by the TAP are due to their lack of novelty. In order to address this, a new policy will be introduced to ask authors to justify their case, if appropriate, by making a benchmark comparison with recent published papers. In the same time, reviewers will also have to provide at least one similar reference to justify their rejection.

Regarding this citation issue and its relevance to AP-S publications, Prof. Danilo Erricolo showed one slide summarizing the importance of increasing the number of citations of our journals and suggesting a few actions required, for example, a change of culture through editorials and talks at conferences, taking more aggressive actions to market our important articles, and developing presence in hot areas of interest.

Dr. Ross Stone recalled his comments on the issue published in AP Magazine in Sept. 2013. He fully understands the motivation, but said that we are in an area with certain culture and even educating a new generation may not change the impact factor of our journals dramatically. Dr. Trevor Bird said that it is very important to educate our young students and

engineers on how to write a good article. Dr. Stone agreed and added that highly cited papers were beautifully written and yet easy to understand. Regarding the issue of providing a free page for references, Dr. Stone asked whether the Society can afford it or not and Mr. Don McPherson replied that it is not clear now and it may need to analyze the financial implications. Prof. Mike Jensen suggested that AdCom may want to look at this issue in March 2017 again with some analysis and estimates of the cost of free page for references. He also suggested that all EiCs of AP-S publications may take the initiative working with the San Diego Symposium Organizer to plan a talk on how to write good papers.

6.1 Society Review (Trevor Bird)

Concerning the next Society Review that is due in November 2018, Dr. Trevor Bird said that the whole process may take more than 1 year and it is extremely important to plan the reports well ahead. Prof. Jensen suggested that all the four past presidents should work together to formulate the long-term plan. Dr. Ross Stone said that it should be very beneficial to look at the reports from the previous review.

6.2 Constitution and Bylaws Committee (Jamesina Simpson)

As circulated to all AdCom members three weeks before this AdCom meeting, there is a need to amend the AP-S Bylaws following the AdCom's approval of establishing SIGHT as a standing committee.

Motion (Seconded by the Constitution and Bylaws Committee): AdCom to approve the circulated amendments to the AP-S Bylaws. Motion Carried Unanimously.

Similarly, the AP-S Operating Manual should also be updated to reflect this change. The suggested addition is as follows.

3.23 Special Interest Group on Humanitarian Technology (SIGHT)

3.23.1 Committee Functions

Under the IEEE-wide Special Interest Group on Humanitarian Technology (SIGHT), the Society formed a SIGHT Committee to partner with underserved communities and local organizations to leverage technology for sustainable development.

Motion (Seconded by the Constitution and Bylaws Committee): AdCom to approve the above suggested addition to the AP-S Operating Manual. Motion Carried Unanimously.

Finally, Prof. Jamesina Simpson suggested that AP-S should set up an Ad-hoc Committee to develop social media to reach out our members more effectively. She will formally make a proposal in the next AdCom meeting.

6.3 Request for IEEE Milestone Budget (Ross Stone)

Dr. Stone informed the meeting that the proposed IEEE milestone is concerned with the Principle of Self-Complementarity in Antennas and the Mushiake Relationship discovered in 1948. It is known that self-complementary antennas exhibit constant impedance independent of frequency, while the Mushiake Relationship gives the value of that impedance.

The proposed IEEE Milestone was approved by the AP-S History Committee in Puerto Rico and it consists of a plaque mounted at the site of discovery (Tohoku University, Japan). Dr. Stone mentioned that Prof. Mushiake is still alive at age 95 with failing health. It is therefore hoped to have it approved at 2017 February or June Board Series Meeting.

The request budget is \$2000 include a plaque, miniature plaque, shipping and possible translation costs.

Motion (Seconded by History Committee): Adcom to approve that AP-S supports the proposed IEEE Milestone, “The Discovery of the Principle of Self-Complementarity in Antennas and the Mushiake Relationship, 1948’ with a budget of \$2000 to include payment for and shipping of the plaque. Motion Carries Unanimously.

After the approval of the above motion, Mr. Don McPherson said that the President can authorize such a payment. Dr. Stone replied that it is good to have a formal approval from the AdCom. Dr. Trevor Bird commented that it is fantastic thing to see this Milestone and President Jensen suggested that more such milestones may be identified.

6.4 Membership Initiatives (Tapan Sarkar)

Prof. Sarkar reported the following activities under 2016 AP-S Initiatives.

- Australia-New Zealand Initiative (Karu Esselle): visit made to the University of Western Australia, Perth, in Jan. 2016 and SIGHT visits to New Zealand universities.
- China and Region 10 Initiatives (Zhongxiang Shen): successful organization of ICCEM 2016 in Guangzhou, visits to Nanchang, Changsha, Chongqing and Chengdu in June, planned visits to Suzhou, Ningbo, Taiyuan and Kunming in December.
- ASEAN Initiative (Monai Krairiksh): A meeting was organized at King Mongkut’s Institute of Technology Ladkrabang in May for researchers from Cambodia, Malaysia, Vietnam and Thailand to network and discuss for collaboration. The AP-S SIGHT project “Low-cost high-efficiency base-station antenna: deployment in any environment” was demonstrated so that it can be conducted in each member country. Potential chapters in Vietnam and Myanmar will be established in the near future.
- India and Sri Lanka Initiatives (Parveen Wahid): For the Globalization of EM Education Initiative, a workshop on EM Education and Membership Development will be organized in Bangalore, India, this December.
- Region 9 Initiative (Silvio Barbin): visits to Mexico City, Queretaro, Monterrey, Guadalajara, and Puerto Rico. During the visits, promotional materials were distributed and meetings among local volunteer groups were organized.

After that, Prof. Sarkar also briefly discussed various proposed activities for 2017 AP-S initiatives including those existing initiatives and additions in West Asia and North Africa (Yahia Antar), Central and South Africa (Vikass Monnebhurum). In view of the proposed activities under various initiatives, the following motions were proposed.

Motion 1 (Seconded by the MGA Committee): AdCom to approve the requested budget of \$108K for 2017 AP-S initiatives.

Discussions: Many members present expressed their support to continue the various initiatives ongoing and suggested that such activities may be better publicized in the Society webpage.

Motion Carries Unanimously.

Motion 2 (Seconded by the MGA Committee): AdCom to approve the discussions to obtain matching funds from interested donors for AP-S related humanitarian and membership activities for approximately \$100K or more.

Discussions: Prof. Tapan Sarkar clarified that the donated funds can be used for both membership drive and SIGHT projects. This second motion is required for the IEEE Foundation to officially start the talk with potential donors.

Motion Carries Unanimously.

Motion (Bird, Mokole): To Adjourn This AdCom Meeting. Motion Carries Unanimously.

The Meeting Adjourned at 15:35 pm for the Executive Session.