# Minutes of the Control Systems Society Board of Governors Meeting December 14, 2015, Osaka, Japan

# Call to Order and Approval of Agenda

President E. Valcher called the meeting of the Control Systems Society (CSS) Board of Governors (BoG) to order at 1:00 PM on December 14, 2015. She reminded the BoG of the rules of the meeting including reminding individuals that an abstention is a no vote. After reviewing the meeting procedures, she asked the attendees to introduce themselves. The following members of the BoG were in attendance:

- Anu Annaswamy
- Robert Bitmead
- Linda Bushnell
- Daizhan Cheng
- Fabrizio Dabbene
- Mario di Bernardo
- Warren Dixon
- Frank Doyle
- Jay Farrell
- Li-Chen Fu
- Alessandro Giua
- Sandra Hirche

- Jun-ichi Imura
- Hideaki Ishii
- Kirsten Morris
- Dragan Nesic
- Thomas Parisini
- Yannis Paschalidis
- Ian Petersen
- Maria Prandini
- Ricardo Sanchez-Peña
- Jakob Stoustrup
- Dawn Tilbury
- Maria Elena Valcher

Additionally, the following visitors attended the meeting:

- Frank Allgöwer
- V. (Ragu) Balakrishnan
- Edwin Chong
- Amber Madison
- Rick Middleton

- Bozenna Pasik-Duncan
- L. Reddaway
- Tariq Samad
- Andrew Teel
- M. Vidyasagar

Quorum was established and the agenda was approved with unanimous consent. Following approval of the agenda, the minutes of the BoG meeting of June 2015, held in Chicago, Illinois were approved unanimously. E. Valcher proceeded to ask if anyone would like to remove items from the Consent Agenda (see Appendix A). No items were removed from the Consent Agenda and it was approved unanimously.

#### **Action Items**

F. Doyle presented the members that were appointed to the BoG for 2016, as an informational item.

### E. Valcher presented the following motions, both endorsed by the ExCom:

• Motion: To extend Alessandro Astolfi's term as CEB Chair until December 2017.

Valcher provided some background and motivation for the extension of the appointment. She opened the floor for discussion. There was no discussion, and the motion was passed unanimously.

• *Motion:* To approve the new contract with Alessandro Astolfi as CEB Chair for the years 2016 and 2017.

Valcher explained that the new contract clarifies the expenses covered, as well as the tasks charged to the CEB chair for the three conferences ACC/MSC/CDC. She also described the financial impact – none on the CSS, but passed on to the conferences. She opened the floor for discussion. There was no discussion, and the motion was passed unanimously.

## F. Dabbene presented the following motion, endorsed by the ExCom:

• *Motion:* Effective January 2017, to appoint Andrea Serrani as Editor in Chief of the IEEE Transactions on Control Systems Technology.

Dabbene explained that Thomas Parisini is stepping down as Editor-in-Chief of IEEE TCST at the end of 2016, and having the new appointment ratified now would help begin the transition, which is important in view of the upcoming five-year society review. He invited Parisini, who in his capacity as outgoing EiC was involved in the selection of Serrani, to present the rationale for the choice of Serrani.

Dabbene then opened the floor for discussion, following which he asked for a vote. The motion was passed unanimously.

# F. Doyle presented the following motion, endorsed by the ExCom:

• Motion: To change the IEEE CSS Constitution (Article V, Section 3) as proposed below.

#### Current language:

"The President-Elect and the Vice Presidents, at the time of their election to office, shall be serving a current term as Vice President, or shall be elected members of the Board of Governors, or shall have served as elected members of the board of Governors not more than six years prior to the date of their election."

### Proposed language:

"At the time of the election of the President-Elect, the nominee shall have served as a Vice President not more than 6 years prior to the date of election, and shall have been elected as a member of the Board of Governors at some stage.

Each Vice President, at the time of election to office, shall be serving a current term as Vice President, or shall have served as an elected member of the Board of Governors not more than six years prior to the date of election, with 2 inclusions as noted in the following. Eligibility for the Vice President for Publication Activities shall include, in addition to the previously noted candidates, the Editors-in-Chief of the Society publications who have served in that role not more than six years prior to the date of their election. Eligibility for the Vice President for Conference Activities shall include, in addition to the previously noted candidates, the General Chairs of the Society's primary conference (CDC) who have served in that role not more than six years prior to the date of their election."

The CSS Long Range Planning Committee had discussed concerns regarding the richness of the pool of candidates available for important society positions. The committee had noted that compared to other societies, CSS appeared to have more stringent requirements that severely reduced the pool of available candidates. The new language provides for broadening the pool, yet ensuring that society vote (through the requirement of having been an elected BoG member) is required for Presidency of the society.

There was a brief discussion, and the motion was passed unanimously.

#### E. Valcher presented the following motion, endorsed by the ExCom:

• Motion: To change "Article VII - Amendments, Section 1. Procedure" of the CSS Bylaws as indicated below to reflect current IEEE policy.

Old text: These Bylaws may be amended by a two-thirds vote of the Board of Governors in meeting assembled provided that notice of the proposed Bylaws has been sent to each member of the Board of Governors at least 30 days prior to such meeting, or a Bylaw may be changed by a two-thirds vote of all members of the Board of Governors by communication by the President to each member and vote received by such means. No Bylaw change shall take effect until 30 days after it has been published in a Society publication sent to all members, and copies have been mailed to the appropriate IEEE office.

New text: These Bylaws may be amended .... vote received by such means. No Bylaw change shall take effect until it has been approved by the IEEE Vice President, Technical Activities. After such approval, the amendment will take effect 30 days after it has been published in a Society publication sent to all members. The parts above, indicated in blue font, represent the change. The changes are required by IEEE.

The motion was passed unanimously, after a very brief clarification.

### F. Dabbene presented the following motions, both endorsed by the ExCom:

• Motion: To allow the length of Technical Note (TN) contributions to the IEEE Transactions on Automatic Control to move from the strict 6 page limit to a strict 8 page limit with an overlength fee of \$125 for each page beyond 6.

Dabbene presented the rationale for the motion: to mitigate the fairly large difference in the length between full-length papers and technical notes, as well as the opportunity for authors to sufficiently augment and hence differentiate their journal publications from previously presented conference publications. He then outlined the rationale for the overlength fee through a financial impact analysis. This change has been discussed also at TAC Editorial Board and at CSS Publication Activities Board meetings.

During the discussion, there was a question about other CSS-family journals. The issue is not relevant to TCNS, and the overlength page charge is consistent with that of TCST. There was a second question about whether the page-length change would be accompanied by name change from "Technical Note". The answer is no.

The motion was passed unanimously.

• Motion: Effective January 2016, a CSS member may not serve in a position they previously held until the lapse of a period of 3 years from the end of the earlier appointment.

This issue was considered by the Long Range Planning Committee, and the motion is intended to address in a uniform manner the implications of term limits that have been introduced for CSS positions. It must be clarified that when saying "in a position they previously held" it is meant, e.g., AE of the TAC (but one could be appointed AE of TCST with no need for a reset time), Chair of a specific TC (but one could be appointed as Chair of a different TC with no need for a reset time).

There was a question about whether this position also included positions of President, and other appointed positions. The answer is yes. There was further discussion about whether other wordings would better reflect the intent; however the original wording was retained.

The motion was passed with two abstentions.

### K. Morris presented the following motion, endorsed by the ExCom:

• *Motion:* To run the video clip contest every other year, starting in 2017.

Morris indicated that the number of entries did not support conducting the contest annually. So, it is advisable to not have the contest in 2016 and to run it every odd year starting in 2017. The financial impact was positive, up to \$5,000 per year of the contest (cost of the awards for the three best videos, as well as registration and travel grant for the winner).

The motion was passed unanimously.

## S. Hirche presented the following motion, endorsed by the ExCom:

• Motion: Starting in 2017, the prize for the George S. Axelby, IEEE Transactions on Control Systems Technology, IEEE Transactions on Control of Network Systems, and Control Systems Magazine Outstanding Paper awards shall be a galvanic (photo engraved) plaque for each recipient, and for one recipient of each award, travel expenses to the CDC (round trip restricted (minimal) coach air fare), conference registration and up to 4 conference-rate hotel-nights for a 3-day conference, and up to 5 conference-rate hotel-nights for a 4-day conference.

She presented that the motivation was to match the financial outlay with the prestige of these Paper Awards, at an annual estimated additional cost of \$10,000.

There were some requests for clarification, following which the motion was passed unanimously.

### R. Bitmead presented the following motion, endorsed by the ExCom:

- *Motion:* To approve the following page counts for CSS publications for 2017:
  - o 3900 pages Transactions on Automatic Control (increase by 380 w.r.t. 2016)
  - o 2300 pages Transactions on Control Systems Technology (same as in 2016)
  - 500 pages Transactions on Control of Network Systems (increase by 100 w.r.t. 2016)
  - 816 pages (752+64 for advertisements) Control Systems Magazine (same as in 2016)

The increase in page allocations is to clear the current backlog of TAC and TCNS, as well as to accommodate the just-approved increase in the length of TAC Technical Notes. The financial impact is unclear, but will be monitored and accommodated in downstream pricing decisions as necessary. This motion has been discussed with, and supported by, the Editors-in-Chief of these publications.

A. Annaswamy presented the following conference-related motions, all endorsed by the ExCom:

• *Motion:* To approve Rodolphe Sepulchre as Program Chair for CDC 2019.

The location (France), and the General Chair (C. Canudas de Wit) were approved by BoG in July 2015.

The motion was passed unanimously.

• *Motion*: To approve Jie Chen as General Chair for CCTA 2019.

The motion was passed unanimously.

• *Motion:* To approve Hong Kong as the venue for CCTA 2019.

The motion was passed unanimously.

• Motion: To modify the fee that CSS charges to a conference for Technical Cosponsorship (with or without Proceeding Acquisition) to \$1000/m, where m is the number of IEEE sponsoring Organizational Units.

This motion applies to non-IEEE conferences (that is, conferences in which IEEE has zero financial interest). For such conferences held after December 31, 2015, IEEE will charge organizational units (sponsoring societies) a fee of (\$1,000 + \$15 x no. of papers sent to Xplore)/m towards Technical Cosponsorship (TCS)/Proceeding Acquisition (PA) expenses. The current CSS policy is to charge, for TCS (with or without PA), all conferences a flat fee of \$1,000 (without regard to the number of papers). However, small conferences with multiple sponsoring societies would be unfairly affected by this rule. The proposed motion would ameliorate this defect, and will be consistent with IEEE's fee policy.

A friendly amendment was made to add the adjective "non-IEEE" as a qualifier, and modify the motion as follows:

• Motion: To modify the fee that CSS charges to a non-IEEE conference for Technical Co-sponsorship (with or without Proceeding Acquisition) to \$1000/m, where m is the number of IEEE sponsoring Organizational Units.

The motion was passed unanimously.

• *Motion:* To approve Miami, Florida, as the venue and December 17-19 as the dates for CDC 2018.

Andrew Teel presented the rationale for the motion. He explained the attraction of Miami Beach as the location and of Fontainebleau as the hotel. He then presented the rationale for the rather late set of dates for the conference: the hotel cost in the previous week would increase by at least \$100 per room per night.

There was a question about whether Fontainebleau has held other large conferences. The answer was that the AIChE (Chemical Engineering) has held (larger) meetings there in the past.

The motion was passed unanimously.

E. Valcher presented a motion endorsed by the ExCom and concerning a new online CSS journal – the IEEE Control Systems Letters:

• *Motion:* To approve the submission of a Phase 1 proposal for establishing the IEEE Control Systems Letters.

Valcher presented a brief recapitulation of past progress on the process towards exploring the establishment of a new online journal of the Control Systems Society:

- Establishment of a task force after consultation with BoG in June 2015
- Choice of journal name IEEE Control Systems Letters, in consultation with IEEE
- Submission of a Letter-of-Intent (LoI) to IEEE (September 16, 2015)
- Polling a random sampling of IEEE members (October 19 through November 19, 2015).

She presented a brief analysis of the poll results, which indicated that the new journal appeared to have support from the CSS audience.

Valcher then proceeded to discuss the motivation: (i) rapid dissemination and (ii) the opportunity for CSS membership to be able, at the same time, to have the same manuscript published in a journal (the CSS-Letters), and presented at a conference (the CDC). She presented the possible review process for implementing the online journal, including possible time-lines, review cycle, editorial board, and integration with CDC including a flow-chart of operations. The implication of a positive vote today is that there will be an IEEE Periodicals Committee (PerCom) evaluation of the Phase 1 proposal in February 2016. Assuming approval from the PerCom, a Phase 2 proposal will be presented for approval by the BoG vote in July 2016. Further steps (assuming continuing success) would be IEEE PerCom evaluation of a Phase 2 proposal in October 2016, further discussion of implementation details in the December 2016 BoG meeting, with a rollout of the journal in late 2017 or early 2018.

There was a request for clarification. One concern was that those authors with papers submitted to CDC but accepted in CSS letters may choose not to register at the conference, hence introducing uncertainty in the number of official registrants. There were some suggestions/discussions on how to mitigate this. Valcher also presented data from ICRA's RAS experience – the number of submission has been trending upward since the establishment of RAL (information about the ICRA registrations was not presented, because the decision letters for the conference had not been sent out yet, but it will be presented to the BoG as soon as it will become available).

There was a motion to end discussion, which was passed unanimously. The motion requesting Phase 1 approval was passed with 2 abstentions.

E. Valcher next presented the outgoing members of the BoG present with a certification of appreciation:

- Robert Bitmead
- Alessandro Giua
- Dragan Nesic

- Daizhan Cheng
- Mario Di Bernardo
- Ricardo Sanchez-Peña
- Anu Annaswamy
- Amber Madison
- Warren Dixon

T. Samad, Editor-in-Chief of IEEE Press, made a presentation, intended to reach out to CSS to create a formal arrangement to encourage high-quality book submissions. He began with an introduction to IEEE Press, and its mission. The Press currently partners with John Wiley & Sons, which provides core competency including marketing. The joint imprint is called Wiley-IEEE Press, with titles that may be IEEE-copyright works or Wiley-copyright books. Their most recent innovation is IEEE-Wiley eBooks, made available in multiple media including smartphones and tablets.

IEEE Press partners with societies via sponsorship of relevant IEEE Press books, via having an active society liaison to IEEE press, and via a society-specific IEEE Press book series.

- A society sponsoring a book will have its name and logo advertised, and its liaison and technical reviewers acknowledged. The society also earns a 2% royalty on the sale of the book.
- The liaison helps with finding technical reviewers, as well as serves as an advocate for the IEEE Press and Press products within the society.

Samad then offered ways for societies to collaborate with IEEE Press including appointing active liaisons, society sponsorship of books and book series, free or discounted booths at conferences, advertising, e-notes to members, and a link to the IEEE Press home page at the society website. He suggested "Systems and Control" as an excellent topic for a book series, and offered information on what a new book series proposal entails, and the benefits for a series editor. The next steps would be for CSS to identify a series editor, submit a proposal, and advertise and promote relevant books via an e-note to CSS members.

A straw vote indicated that there was support in the BoG to explore CSS collaboration with IEEE Press.

Valcher presented information on two MOUs with AACC. The first is regarding the online posting of videos of ACC presentations on the CSS Online Library, and the second concerns revenue sharing between CSS and AACC with regard to ACC papers on IEL and ACC revenues.

Since 2007, all plenary and semi-plenary lectures held during ACC, MSC and CDC have been video recorded and posted on the CSS Online Library (OLL). More recently, a video consent form has been created by CSS, approved by IEEE, and used for CDC and MSC. An analogous form has been used for ACC. Consent forms have been collected retroactively from the first 1989 Bode lecture until CDC 2015. A similar effort has been started for ACC. The first MOU between CSS and AACC formalizes the arrangement of posting ACC presentations in the CSS OLL. In addition, AACC has accepted responsibility for the costs incurred in video processing of the ACC presentations. (These costs are charged to CSS by Conference Catalyst, the external vendor that hosts the CSS websites.) The MOU was signed on October 15, 2015.

The second MOU, concerning revenue sharing with regard to ACC, was necessary because the earlier MOU on this topic was signed in 2012. Even if both AACC and CSS agreed that the MOU would have been in place until one of the two parties had decided to put an end to it, IEEE still requires periodic review and renewal of such MOUs (rather than allow a longer, even perpetual, validity). The new MOU proposed by the two parties to IEEE was essentially identical to the 2012 one. One item inserted by IEEE in the renewal document was the following sentence: "IEEE further reserves the right to assert a claim against AACC based on any liability arising from publication of the ACC Proceedings." AACC has agreed to sign this modified MOU.

E. Valcher next presented information on the 2016 contract for CSS website management. The contract for 2015 was for a maximum payment of \$27,700. Upon further negotiation (this included obtaining quotes from competitors), Valcher was able to reduce the costs down to an estimated \$15K-\$20K range.

R. Bitmead presented the report on Financial Activities. The end of the year forecast, from October 2015 projects a surplus of \$14K (from a deficit of \$169.6K), in an overall budget of about \$3.8M. Cost cutting and publication revenues account for the positive change.

Bitmead presented the highlights of the 2016 CSS budget. The 2016 budget projects a surplus of \$147.2K. The major changes from 2015 are a reduction of \$56K in conference grants and \$40K in student conference support. However, Bitmead is attempting to insert these items back into the budget; if this is disallowed by IEEE, new initiatives can provide an avenue to expend funds.

Bitmead closed with an item for the BoG to consider: Should TCNS be bundled with CSS membership? If so, the membership fees may need to be revisited, with any changes implemented perhaps in 2018; this will also require renegotiation of MOUs with cosponsoring societies.

S. Hirche presented the report on Member Activities. CSS membership declined in 2015 by 4%, tracking an overall IEEE membership decrease of 2%. One effort underway is to improve value to industry member in CSS, which account for at least 27% of all CSS members as a recent analysis shows. To this end, Hirche has created an industry task force (ITF). The task force recently surveyed industry members on how CSS membership has benefitted them and what improvements are desirable. The response indicates two main items of current benefits: professional networking and talent recruiting. Room for improvement is seen in the following areas: (i) exchange of perspectives between industry and academia in research and control education, (ii) providing a forum for standardization and benchmarking of control methods and technologies, and (iii) engaging in educational tools for control engineers in industry. Similar activities in other societies (IEEE RAS and IEEE CS) are: jobs board for employers and webinars/ebooks/technical leadership/online training programs with certifications. A parallel activity is also in IFAC where a Pilot Industrial Committee has been established. Synergies are pursued.

Hirche next presented information on the Distinguished Lecturer (DL) program, specifically the appointment of Murat Arcak, Francesco Bullo, Marco Campi, and Iven Mareels as 2016-18 Distinguished Lecturers. She also requested the BoG for nominations of qualified candidates for the DL program.

Hirche then reported on student activities, including CSS student travel support for MSC 2015 and CDC 2015. L. Bushnell indicated that \$10K were also provided to the ACC for student travel support. Hirche also presented data on the Women in Control program, history as well as chapter activities.

K. Morris presented the report on Technical Activities. IEEE has approved the award from the Technical Committee on Aerospace Activities. Nominations for this award are now open.

Over 2015, Morris has been reviewing technical committees. The response reveals that clarity is needed on expectations from the TCs and their chairs. While a formal hierarchy such as the one from IFAC appears unnecessary, Morris has created a one-page summary guide for TCs, which has been posted on the web.

The final item concerns the Internet of Things. Morris has set up an ad hoc committee with representation from some of the TCs (smart cities, smart grids, networks, discrete event, intelligent control, hybrid systems, and CACSD), charged with responding within a year

to gauge interest, formulate activities, etc. She also requested interested BoG members to contact her.

F. Dabbene presented the report on Publication Activities. He presented an informational item – an update on the status of the Phase 1 proposal on launching the Transactions on (Industrial) Cyber-Physical Systems. Following the June 2015 CSS BoG approval to offer technical and financial co-sponsorship for the T-(I)CPS, IES (the society that originated the T-(I)CPS proposal) had prepared a new Phase 1 proposal dropping the adjective "Industrial", and leaving it for online comments. Two societies, CSS and RAS, had posted comments asking for the reinstatement of the qualifier "industrial", as this clarifies better the scope of the proposed journal. The most recent development (subsequent to the involvement of CS and CEDA) is that IES has withdrawn the Phase 1 proposal on T-(I)CPS from the November IEEE PerCom agenda. The stated reason from IES is that "there are several unresolved issues that warrant the society's consideration."

A. Annaswamy presented a summary of upcoming MSC, CDC, CCTA, and ACC conferences. She stated that the conference databases for CDC and MSC are ready, with information including conference data, budget summary, hotel contracts, final reports, plenary lectures, meeting room needs and VIP lists.

Following a request for new business (there were none), Valcher took the floor with a request that the BoG members and visitors consider making nominations for the TC on Aerospace Activities award and TCNS best paper awards. She also requested nominations for the 2017 BoG (as the incoming chair of the Nominating Committee), and encouraged non-BoG members to continue to attend BoG meetings and share their wisdom and experience.

W. Dixon informed the BoG that the next meeting will be held on July 5, 2016 during the 2016 ACC, in Boston.

The meeting was declared closed at 5:25pm.