Minutes of the Control Systems Society Board of Governors Meeting June 26, 2018 Milwaukee, Wisconsin, USA

Call to Order and Approval of Agenda

President F. Bullo called the meeting of the Control Systems Society (CSS) Board of Governors (BoG) to order at 1:00 PM on June 26, 2018. He welcomed all attendees, reminded the BoG of the rules of the meeting. After reviewing the meeting procedures, he asked the attendees to introduce themselves. The following members of the BoG were in attendance:

- Alleyne, A.
- Annaswamy, A.
- Astolfi, A.
- Balakrishnan, V.
- Beck, C.
- Bitmead, R.
- Bullo, F.
- Chong, E.
- Dixon, W.
- Cortes, J.

- Egerstedt, M.
- Ferrara, A.
- Fu. L.-C.
- Hespanha, J.
- How, J.
- Jabbari, F.
- Krstic, M.
- Lamnabhi-Lagarrig ue, F.
- Marconi, L.

- Oishi, M.
- Parisini, T.
- Pasik-Duncan, B.
- Serrani, A.
- Sun, J.
- Surana, A.
- Zaccarian, L.

Additionally, the following visitors attended the meeting:

- Aghdam, A.
- Allgower, F.
- Bastianon, C.
- Bushnell, L.
- Cho, D.-I.

- Chung, C.-C.
- Demetriou, M.
- Kahne, S.
- Peters, J.
- Prandini M.

• Ren, J.

Quorum was established, and the meeting agenda approved with unanimous consent. Next, the minutes of the BoG meeting of December 2017, held in Melbourne, Australia, were approved unanimously. Bullo 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.

Action Items

As Vice President for Publication Activities, T. Parisini presented the following motion.

• Motion: To establish Senior Editors Panel for IEEE Trans. on Control Systems Technology.

Parisini presented the background for the motion. The increasing number of submissions is the biggest issue faced by the journal. Whereas a steady increase in the submission rate is a testimony to the healthy status of the journal it also exerts a larger and larger strain on the editorial resources of the journal, especially on the Associate Editors and the Editor in Chief. The IEEE Transactions on Control Systems Technology is the only journal of the CSS not to have a panel of Senior Editors to aid the Editor-in-Chief in assigning the manuscripts, communicating with the Associate Editors and, most importantly, performing preliminary assessments of the suitability of the submissions. The establishment of a panel of Senior Editors is of fundamental importance for maintaining and growing the status, the impact and the sustainability of the journal in terms of quality, responsiveness and fairness of the peer review process.

An inaugural panel of senior associate editors has already been identified and endorsed by the ExCom, and has been included in the consent agenda. Therefore, approval by the BoG is being sought before consideration of the consent agenda.

There was no discussion, and the motion passed unanimously.

F. Bullo then asked the BoG for approval of the consent agenda, and received unanimous approval.

As Chair of the Nominating Committee, E. Chong provided the background on the Nominating Committee and its duties and procedures. He then informed the BoG that a ballot consisting of nine candidates was sent by IEEE on 11 April 2018 to all IEEE Control Systems Society (CSS) members for the election of six members to the CSS Board of Governors. The voting results were communicated to Chong on May 24. The IEEE CSS BOG members elected for a three-year term from 1 January 2019 to 31 December 2021 are:

- Venkataramanan (Ragu) Balakrishnan
- Maria Domenica Di Benedetto
- Dennice F. Gayme
- Zongli Lin
- George J. Pappas
- Jacquelien M. A. Scherpen

1606 ballots were returned, representing 22.72% of the eligible membership, which is up 5.6% from 2017 (17.12% voting).

(A. Annaswamy, M. Egerstedt, J. Hespanha, and J. Sun were not present when the following motion was considered.)

Chong presented the following motion:

- *Motion:* To approve the following 2019 Executive Committee slate:
 - o President*: Robert Bitmead
 - o President-Elect: Anuradha Annaswamy
 - Past-President*: Francesco Bullo
 - o VP-Conference Activities: Faryar Jabbari
 - o VP-Finance Activities: Jing Sun
 - o VP-Member Activities: Magnus Egerstedt
 - o VP-Publication Activities: Thomas Parisini
 - o VP-Technical Activities: João Hespanha

(*Already approved)

Chong presented a brief background on the nomination process, and proceeded to present the 2019 CSS Executive Committee (ExCom) nominees as a slate, highlighting the credentials of each candidate

There was no discussion, and the slate was approved unanimously.

Chong reminded the BoG that the election of candidates for election to the 2019 Nominating Committee was currently open, and invited BoG members to submit their votes by the July 5 deadline.

(A. Annaswamy, M. Egerstedt, J. Hespanha, and J. Sun rejoined the meeting.)

F. Bullo presented the following motion.

• *Motion:* To reaffirm the CSS's commitment to the IEEE Code of Conduct, IEEE Code of Ethics, and IEEE Nondiscrimination Policy.

IEEE members are committed to the highest standards of integrity, responsible behavior, and ethical and professional conduct. The IEEE Control Systems Society reaffirms its commitment to an environment free of discrimination and harassment as stated in the IEEE Code of Conduct, IEEE Code of Ethics, and IEEE Nondiscrimination Policy. In particular, as stated in the IEEE Code of Ethics and Code of Conduct, members of the society will not engage in harassment of any kind, including sexual harassment, or bullying behavior, nor discriminate against any person because of characteristics protected by law. In addition, society members will not retaliate against any IEEE member, employee or other person who reports an act of misconduct, or who reports any violation of the IEEE Code of Ethics or Code of Conduct.

As background, Bullo informed the BoG that the 2017 CSS Long Range Planning Committee had recommended that CSS develop best practices for enhancing diversity. A Spring 2018 survey by IEEE of women's experiences in technology revealed significant discrimination and mistreatment faced by women in the workplace. A Spring 2018 report, "Sexual Harassment of Women", by the National Academies of Sciences, Engineering, and Medicine urges cultural change to curb multiple kinds of sexual harassment. In light of these reports, this motion reaffirms CSS's commitment to an environment free of discrimination and harassment. If motion passes BoG, it will be announced on the CSS website.

A spirited discussion followed, with the suggestion that such affirmations be accompanied with some accountability and enforcement. The motion passed unanimously.

Bullo continued with a second motion, intended to incorporate values such as inclusiveness in CSS awards.

• *Motion:* Add contributions to broader impacts, including inclusiveness, to the criteria for CSS awards for individuals, teams, and chapters.

Bullo mentioned that the motion was the product of discussions with L. Bushnell, J. Hespanha, U. Mitra, J. Peters, and E. Valcher. It is intended that all awards be revised to include various fields: description, prize, funding, eligibility, presentation, and basis for judging. Specifically, the "description" field should be brief and "basis for judging" field should be extended and include broader impacts when appropriate.

Bullo then listed all CSS awards, and indicated that the awards that would include broader impacts in the basis for judging would be:

- Control Systems Technology Award
- Hendrik W. Bode Lecture Prize
- Distinguished Member Award
- Outstanding Chapter Award
- Antonio Ruberti Young Researcher Prize (with agreement by the Ruberti Foundation)
- Control Systems Society Transition to Practice Award
- IEEE Control Systems Society Award for Technical Excellence in Aerospace Control

A discussion followed about the factors that might be used to define "broader impact", with the recommendation that there be clear indication that the listing of such factors was non-exhaustive. A second question was raised about the weight given to the broader impact criterion – the response was that this was up to the committee to decide. Another question was raised about the timeline for implementing this change – the response was that it will be effective in 2019 and beyond.

Bullo presented a third motion on the inclusiveness theme:

• *Motion:* To add to CSS manuals the following statement about inclusiveness:

Diversity of Committee members in terms of gender, geographical region, and professional sector (academia/industry/other) is strongly encouraged. The Committee membership should strive to reflect the diversity of the IEEE CSS membership eligible to serve on this Committee

As background, Bullo mentioned that this was essentially identical language (without "CSS") proposed by the IEEE TAB Committee on Diversity and Inclusion, and approved by IEEE TAB.

A discussion followed. There were opinions expressed that the motion was weak as stated, especially because the diversity of the IEEE CSS membership – the standard for the diversity of the committees – itself had considerable room for improvement. An amendment was proposed and seconded: Simply remove the second sentence: "The Committee membership should strive to reflect the diversity of the IEEE CSS membership eligible to serve on this Committee." The amendment failed to pass. A second amendment was proposed, to replace "strive to reflect" with "strive to reflect or improve upon." This amendment passed with one negative vote and one abstention.

• *Motion:* To add to CSS manuals the following statement about inclusiveness:

Diversity of Committee members in terms of gender, geographical region, and professional sector (academia/industry/other) is strongly encouraged. The Committee membership should strive to reflect or improve upon the diversity of the IEEE CSS membership eligible to serve on this Committee

The modified motion passed with one negative vote.

Bullo next presented the following motion.

• Motion: To remove the word "Magazine" from the formatting of IEEE CS magazine and consistently adopt the name "IEEE Control Systems" across our activities, including changing the name of the corresponding CSS award, changing the name in all CSS websites and documents, and asking IEEE to change all their documents.

As background, he mentioned that many (but not all) official IEEE documents refer to CSM as "IEEE Control Systems". This name change was implemented by IEEE in 1991; however, implementation is inconsistent. Indeed, "CSM" is used in many places, by both

IEEE central and CSS. Moreover, the word "Magazine" appears in the journal itself – on the cover, page footer, mission statement and scope, etc.

To address this inconsistency (rather than ignoring it), Bullo discussed two options:

- 1. Officially change the name back at IEEE into "IEEE Control Systems Magazine" everywhere.
- 2. Drop the word "Magazine" from all official documents, websites, and pagination.

The first option suffered from a number of drawbacks:

- It was a backward step.
- Archival copies of the magazine will have different names over three time periods: "IEEE Control Systems Magazine" prior to 1991, "IEEE Control Systems" from 1991-2018, and "IEEE Control Systems Magazine" from 2018 onwards.
- The word "Magazine" in the title, in some cases, does disservice in light of the fact that many of the scholarly articles are peer-reviewed, as with other CSS journals.

On the other hand, leaving out the word "magazine" completely might make the publication hard to locate online, as the name "IEEE Control Systems" may refer to a number of entities and not just the publication. The compromise was to leave out "Magazine" in official communications/documents, but to refer to the publication as the *IEEE Control Systems* magazine (as opposed to *IEEE Control Systems Magazine*). This approach has been endorsed by Editor-in-Chief Jonathan How, and by Dawn Melley, Senior Director, Publishing Operations, IEEE Publications.

The motion passed with one negative vote and one abstention.

Bullo next presented the following motion.

• *Motion:* To adopt the "Meet the Faculty Candidate Poster Session" at future CDCs.

Bullo stated that this new special session improves the value and inclusiveness of our conferences for our attendees. CDC General Chairs will be strongly encouraged to organize such a session; indeed, they may want to create an official volunteer position (perhaps as part of the Operating Committee) to facilitate the session. Bullo recommended that the BoG approve up to \$5K towards the effort.

The motion was greeted enthusiastically. There was unanimous support to raise the funding for the effort to \$10K per CDC. The motion passed unanimously.

Bullo next presented the following motion.

• Motion: To provide financial support to deploy a cloud-based mobile app for upcoming CDC and CCTA conferences whose budget has already been approved, for 2018, 2019, and 2020.

Bullo stated that there was considerable room for improvement with the mobile conference app that is currently used at CSS conferences. With these new apps, it is possible to envision dispensing with hard copies/CDs/USBs etc. Moreover, these apps allow for much greater interaction and networking, and integration with other utilities such as calendars. Bullo mentioned that from his extensive investigations, he has identified a commercially available app (Infovaya: https://events.infovaya.com/) that could work with Paperplaza.

While the cost for the app should be borne by the conferences, Bullo mentioned that CSS should provide financial support to CDC and CCTA for this purpose over 2018-20, as the budgeting for these years is well underway. The deployment of the new app could begin as early as CCTA 2018.

In the discussion that followed, there was a mention that there could be security concerns, as well whether there were funds available to invest in this effort. The motion passed unanimously.

Bullo next presented the following motion.

• Motion: To establish the IEEE Control Systems Letters Outstanding Paper Award, starting in 2019, and to modify accordingly the CSS Awards Manual.

Bullo mentioned that IEEE Control Systems Letters has now reached its second year. All CSS journals have an associated Outstanding Paper Award, recognizing (at most) one outstanding paper published in the journal during the two calendar years preceding the year of the award. The ExCom believes it is fair to offer also to the authors of papers published on L-CSS this same opportunity.

There was no discussion, and the motion passed unanimously.

Bullo next introduced the following motion concerning the revision of the CSS constitution and bylaws.

(Article X, Section 2, of the CSS Constitution requires a 30-day notice to the BoG regarding all motions that amend the Bylaws. Therefore, the purpose of this motion is informational. An electronic vote of the BoG will be taken 30 days hence.)

• *Motion:* To revise of IEEE CSS Constitution and Bylaws as follows:

- o Change #1: Constitution: Change the composition of BoG to have a majority of elected members by removing membership from 6 editors in chief (see extended rationale below).
- Change #2: Constitution: Remove duplicated paragraph (this appears to be a typo; the duplicated paragraph is at the document's end and is duplicated with Article V, Section 1).
- Change #3: Constitution: Add the Director of Operation to the list of individuals eligible for presidency (this change has the benefit of increasing the size of the pool and making the position more appealing. Directors of Operations are appointed to the role just like VPs).
- Change #4: Bylaws: Revise sentence on inclusiveness (consistent with new paragraph adopted by IEEE TAB).
- Change #5: Bylaws: Remove automatic BoG approval after 30-day notice for ExCom slate. (Therefore, the ExCom slate would be brought to the BoG meeting for approval, as is actually current practice.)
- o Change #6: Bylaws: Clarify that the BoG approval is required for several appointments (for which right now there is confusion). (President Elect continues to have the right to appoint 6 individuals to a 1-year BoG term without BoG approval.)
- Change #7: Bylaws: Clarification of the Bylaws revision procedure.

Bullo presented a detailed rationale for the most significant of the changes, i.e., change #1. Currently, the BoG has 18 elected members and 21 ex-officio/appointed members. The proposed change to the IEEE CSS Constitution, if approved would result in 18 elected and 15 appointed, thus having a clear majority of the BoG to be composed of elected members. The reason for removing the EiCs from the BoG membership is that they are represented by VP Publication Activities, just like Conference General Chairs are represented by VP Conference Activities. The EiCs would continue to be invited to BoG meetings.

A discussion followed. A question was raised as to why the alternate approach of simply increasing the elected membership could not be pursued to achieve the same objective. The response was that in order to have a nimble and engaged BoG, increasing its size was considered a less practical approach. Moreover, the BoG oversees the journals, and having the EiCs be on the BoG represents a possible conflict of interest.

- (J. Cortes recused himself when the following motion was considered.)
- R. Bitmead next presented the following motion.
- *Motion:* To approve a budget of \$150,000 for the three-year period January 1st, 2019 December 31st, 2021 to fund the salary and associated fringes, and travel to

BoG meetings of a part-time Administrative Assistant to support the Director of Operations.

Bitmead provided the background to this motion. On January 1, 2019, Jorge Cortés at UC San Diego will succeed Ragu Balakrishnan as CSS Direction of Operations (DO). As part of this transition, funding is requested to hire a 40-50%-time administrative assistant to the Director of Operations. The contract will cover the period January 1st, 2019 - December 31st, 2021. Bitmead provided additional details on the duties of the DO's assistant, and the two options he and Cortes were considering to implement the staffing. The first option was to hire an employee at UCSD, and the second was to contract the staffing to IEEE. He discussed the pros and cons of each option. One particular concern that was expressed by the BoG on the IEEE option was that the institutional memory would now primarily reside in IEEE headquarters rather than with CSS.

The motion passed unanimously.

(Cortes rejoined the meeting.)

- T. Parisini presented the following motion.
- Motion: To reappoint Yannis Paschalidis as the Editor-in-Chief of the IEEE Transactions on Control of Network Systems for an eighteen-month term ending December 31, 2019.

As background, Parisini mentioned that Paschalidis' term started in June 2013 and his 5-year term ends on June 30, 2018. A reappointment would allow the current EiC – the founding Editor – to conclude the launch of the *IEEE Trans. on Control of Network Systems* with the inclusion of the journal into the *Clarivate Journal Citation Report* including the first release of the journal's Impact Factor. This reappointment was recommended by an ad hoc committee convened at the direction of President Bullo.

There was no discussion, and the motion passed unanimously.

- F. Jabbari presented the following motion.
- *Motion:* To approve the preliminary budget for CCTA 2020.

Jabbari provided a brief background on the conference. As mandated by IEEE, the conference budget has a surplus of over 20%.

The motion passed unanimously.

Jabbari next presented the following motion.

• *Motion:* To appoint Reza Moheimani as General Chair for CCTA 2021.

He then presented the credentials of R. Moheimani. There was no discussion, and the motion passed unanimously.

Jabbari next presented the following motion.

• *Motion:* To appoint Maria Prandini as Program Chair for CDC 2021.

He then presented the credentials of M. Prandini. There was no discussion, and the motion passed unanimously.

M. Egerstedt presented the following motion.

• *Motion:* To establish the IEEE Control Systems Society Fund.

Egerstedt mentioned that the establishment of a IEEE Control Systems Society Fund, funded from the society's annual surplus as well as charitable donations from members, will allow for greater flexibility and society control of funds that will be used to support membership, educational, and humanitarian initiatives. IEEE approval is required and will be sought, initially for a fund amount of up to \$300,000. CSS leadership believes that this idea is valuable, even if it will be very difficult to get it approved by IEEE.

There were a number of questions raised, with answers in parentheses:

- Was there a deadline for the expiry of the fund? (No.)
- Was this an endowment, or could the principal amount be spent? (It was not an endowment.)
- What was the management cost? (About 0.5%, consistent with IEEE Foundation funds.)
- What are the constraints on the types of expenditures that could be supported? (This is likely to governed by 501(c)(3) of the Internal Revenue Code of the USA.)

The motion passed unanimously.

Egerstedt next presented the following motion:

• *Motion:* To approve the revised 2019 Budget

Egerstedt presented a simplified version of the 2019 budget, focusing on the major changes

from the 2018 budget:

• An increase of \$20K in expenditures towards CSS website development and Paperplaza.

- An increase of \$40K towards ExCom travel (this increase is required for medical reasons), and \$20K towards other committee members' travel.
- An increase of \$35K in expenditures towards CSS initiatives.

There was no discussion, and the motion passed unanimously.

L.-C. Fu presented the following motion:

• *Motion:* To increase the budget for Student Travel Support for CDC 2018 from \$20k to \$40k.

Fu mentioned that as CCTA 2018 was to be held in Copenhagen, Denmark, \$10K (out of the total of \$30K currently allocated for student travel support) will be expended on student travel to CCTA 2018, leaving \$20K (plus any additional NSF support, typically about \$10K) for student travel support to CDC 2018. It is estimated that about \$50K will be needed to support the travel of about 70-80 students to CDC 2018, and therefore an additional \$20K is being requested.

There was no discussion, and the motion passed unanimously.

Activity Reports

J. How, Editor-in-Chief of the IEEE Control Systems magazine, presented information on Code Ocean, a reproducibility platform which helps authors share their code and datasets and associate it with their article once it is published on Xplore. The code can be accessed via the "Code and Dataset" tab in IEEE Xplore; researchers can view, browse, and execute the code in real time. Code Ocean increases author visibility, supports reproducibility and leads to better and faster research progress. At present, the only CSS journal that offers authors Code Ocean is TCST. How recommended that all CSS journals and conferences offer Code Ocean to their authors.

J. Peters, introduced the BoG to IEEE Young Professionals (YP), an organization to which he serves as the CSS liaison. YP caters to the professional development of recent graduates and early career professionals by exposing members and prospective members to new and unique career opportunities through workshops, seminars, and other networking events. Peters then presented a summary of his activities, including a session at the 2018 ACC focusing on Young Professionals in industry.

Peters's presentation and his activities were well-received by the BoG. There was a specific recommendation that a standing committee be established within CSS with appropriate funding to support this very important activity. ExCom will review this recommendation during future meetings.

M. Egerstedt, Vice President for Financial Activities, presented his report. CSS finished 2017 with a surplus of \$557.3K, largely because IEEE had failed to account in a timely manner for income from its collaboration with AACC for 2015-17, and recorded it all as income in 2017. As this error was IEEE's, permission was granted to CSS to use in 2018, via the 50% rule, part of the surplus to address backlogs in CSS journals.

T. Parisini, Vice President for Publication Activities, presented a summary of the state of CSS publications. He then focused on a systematic approach towards determining page count allocations. Currently, the approach used is ad hoc and largely reactive. Typically, action is taken only when backlogs become unacceptable, in which case a one-time increase in page counts used to reduce the backlog. Using TAC as the example, Parisini proposed an alternative approach where estimates of the number of pages needed each year are determined using a predictive model, and the page count budget adjusted accordingly. He envisioned the use of such an approach for all CSS journals in the future.

L.-C. Fu, as the Vice-President for Member Activities, next made his presentation. He provided a summary of CSS membership numbers, noting that as of May 2018, a year-to-year comparison reveals a decline of 1.0% in CSS membership; however, IEEE membership grew by 1.6% over the same period. He then presented a summary of other member activities: social media progress, CSS awards, outreach, student activities, distinguished lecture program, fellows nomination and evaluation, and Women in Control.

F. Bullo asked if there was any additional new business or old business, and hearing no response adjourned the meeting.

The meeting was adjourned at 5:50pm.