# Minutes of the Control Systems Society Board of Governors Meeting December 12, 2021 Zoom in lieu of Austin, Texas, USA

#### 1. Call to Order and Approval of Agenda

President T. Parisini called the meeting of the Control Systems Society (CSS) Board of Governors (BoG) to order at 1:05 PM (UTC time) on December 12, 2021. He welcomed all attendees and reminded BoG about the objectives of the meeting, and reviewed the meeting procedures, including the mechanism for voting on motions using Zoom. The following members of the BoG were in attendance:

- Abramovitch, D.
- Alleyne, A.
- Annaswamy, A.
- Balakrishnan, V.
- Bazanella, A.
- Beck, C.
- Cassandras, C.
- Chesi, G.
- Cortés, J.
- Di Benedetto, M. D.

- Franco, E.
- Gayme, D. F.
- Giua, A.
- Glavaski-Radovano vic, S.
- Hespanha, J.
- How, J.
- Ito, H.
- Krstic, M.
- Leonard, N. •

- Lin, Z. •
  - Mostofi, Y.
  - Pappas, G.
  - Parisini, T.
  - Prieur, C.
  - Seatzu, C.
  - Scherpen, J. M. • A.
  - Speranzon, A. •
  - Spurgeon, S. •
  - Sun, J. •

Additionally, the following visitors attended the meeting:

- Antsaklis, P.
- Baillieul, J.
- Basilio, J.C.
- Bullo, F.
- Castañon, D.
- Damle, V.
- Egerstedt, M.

- Ferrara, A.
- Fleisher, A.
- Fujita, M.
- Horch, A.
- Hossain, E.
- Ishii, H.
- Paschalidis, I.

- Pasik-Duncan, B.
- Pettersen, K.
- Prandini, M.
- Tarbouriech, S.
- Valcher, E.
- Van den Hof, P.

- - Jia, S.

2. Approval of Minutes

Quorum was established, and the meeting agenda approved with unanimous consent. Next, the minutes of the BoG meeting of May 2021, held on zoom in lieu of New Orleans, LA USA were approved unanimously.

- 3. Approval of Record of Electronic Motions of August and October 2021 Next, the record of approval by BoG of electronic motions was approved unanimously.
- 4. Consent Agenda

Parisini asked the BoG for approval of the consent agenda, which was approved unanimously.

# Action Items

Past President, Anuradha Annaswamy, presented the following motion.

• *Motion:* To appoint Hideaki Ishii as Vice President for Diversity, Outreach, and Development.

Hideaki Ishii recused himself from the discussion. Annaswamy provided background on the position, which was approved by BOG at last year's CDC. This new vice presidency was created to manage the CSS Fund for diversity and inclusion initiatives. With the recent changes to the CSS constitution and bylaws effective as of November 2021, now is the time to fill the position. The Nominating Committee proposes H. Ishii for the position. His biography was presented to BOG. The floor was open for discussion and there were no questions or comments. The motion passed with one abstention. Ishii rejoined the meeting.

Annaswamy then presented the following motion.

• Motion: To appoint Antonella Ferrara as Director of Operations starting in January 2023.

Antonella Ferrara recused herself from the discussion. Annaswamy provided background the position term for Director of Operations is usually just 3 years, but J. Cortés has agreed to stay on for an additional year to facilitate the transition, so that Ferrara can shadow the role before she takes on the role in 2023. R. Balakrishnan (the previous DO) complimented the ExCom for the plan to have an overlap year. There were no further questions or comments. The motion passed unanimously. Ferrara rejoined the meeting.

Vice-President, Conference Activities, Alessandro Giua, presented the following motion

• Motion: To appoint Sophie Tarbouriech as the Program Chair for CDC 2024.

Sophie Tarbouriech recused herself from the discussion. Giua presented the background for this motion. The General Co-Chairs of CDC 2024 are Maria Prandini and Luca Zaccarian, appointed by BoG at the CDC 2020 meeting. Giua presented Tarbouriech's biography, emphasizing her previous conference experience. There was no discussion and the motion passed unanimously. Tarbouriech rejoined the meeting.

Giua then presented the following motion.

• Motion: To appoint Yannis Paschalidis and João Carlos Basilio as General co-Chairs for CDC 2025.

Giua structured the presentation of the background in two parts. He first asked Yannis Paschalidis and João Carlos Basilio to present their plan for CDC 2025 in Rio de Janeiro and answer any questions. Yannis discussed the venue in Barra da Tijuca, describing meeting capacities, room prices, tourist attractions, safety considerations, and highlighting the fact this would be the first CDC in South America. Giua invited comments and questions, and President Parisini expressed his support for the venue, noting that this is aligned with current efforts to make CSS more inclusive and include underrepresented areas of the world. With no other questions, Giua then asked Paschalidis and Basilio to leave the meeting. With no additional comments, the motion passed unanimously. Paschalidis and Basilio rejoined the meeting.

Giua then presented the following motion.

• *Motion:* To increase the support for technically co-sponsored conferences whose proceedings are acquired by CSS covering: a) the full fee of \$1,450/m for events sponsored through a multi-year agreement; b) \$950/m for all other events, where m is the number of IEEE Organizational Units co-sponsoring the event.

Giua presented the background on this proposal. Technical co-sponsorship (TCS) of selected conferences is a valuable service CSS offers to its members, allowing it to reach underserved technical or regional communities. In previous years, IEEE Xplore distribution revenue from TCS conferences with proceedings acquisition (PA) was significantly higher than the cost they generated. This is expected to be the case also in future. Since 2021, IEEE charges to CSS a fee of \$1,450/m for a technically co-sponsored (TCS) conference, where m is the number of sponsoring IEEE Organizational Units (OUs). At the ACC 2020 meeting, the CSS BoG decided to transfer only \$1000/m of the fee to the conference and absorb the remaining \$450/m. The current motion seeks to further increase the support to TCS conferences whose proceedings are acquired by CSS. Starting from 2023, this will be structured as follows:

- a) To cover the full fee of \$1,450/m for events to which CSS has awarded technical co-sponsorship with PA via a multi-year agreement.
- b) To cover \$950/m of the total fee and transfer the remaining \$500/m to the conference, for all other events to which we have awarded a technical co-sponsorship with PA.
- c) The support to TCS conferences whose proceedings are not acquired by CSS will not change, i.e., CSS will continue to transfer \$1000/m of the fee to the conference and absorb the remaining \$450/m.

E. Valcher asked for a clarification regarding the Xplore price per paper, and Giua confirmed that it is \$22 per paper and that CSS covers it. Valcher also sought clarification in the text of the motion regarding the start date of the new support structure. The motion wording was changed to include "for all events held in 2023 or later". Annaswamy noted parliamentary procedures for amendments to motions so a vote on the amendment text was conducted in the Zoom chat, with the amendment passing. The vote of the amended motion passed with one abstention.

Vice-President, Publication Activities, Andrew Alleyne, presented the following motion

• *Motion:* To extend the L-CSS Editor in Chief appointment of Maria Elena Valcher for a term of up to 3 years.

Valcher was recused from the meeting. Alleyne presented the motion background. Each CSS Editor in Chief (EiC) initially serves for a 5-year term. At the end of 5 years, the EiC can be renewed for a term of up to 3 years. The term of Prof. Valcher, the current/founding EiC, finishes in December 2021. The startup phase of L-CSS can be considered a success, as measured by the number of submissions and name recognition within the community. Having no questions or comments, the motion passed with one abstain and Valcher was admitted back into the meeting.

Alleyne then presented the following motion.

• *Motion:* To extend the TCST Editor in Chief appointment of Andrea Serrani for a term of up to 3 years.

Alleyne presented a similar background for this motion, emphasizing that TCST is a well-run, successful journal. Prof. Serrani, the current EiC, has agreed to remain if approved and complete the transition of the submission system to PaperPlaza. The motion passed unanimously.

Alleyne then presented the following motion.

• *Motion:* Approve the new Editorial Services Agreement Budget for TCST for the term 2022-2024.

Alleyne presented the background on this proposal, for a financial impact of \$186,786 for the 3-year period, mainly to support an editorial assistant. The prior 3-year Editorial Services Agreement (ESA) between OSU and IEEE was for \$144,000. The current proposal represents some cost increase, owing to normal increases of cost of living and additional support for the transition to PaperPlaza.

Glavaski-Radovanovic asked to see a budget breakout, seeking to understand whether the roughly \$60K per year was adequate for the level of effort. Alleyne shared a detailed breakdown of the budget. Parisini noted that the cost was normal, given the US location and the fact that the editorial assistant has to manage two submission systems at the same time. Glavaski-Radovanovic was satisfied with the additional details provided. The motion passed unanimously.

Alleyne then presented the following motion.

• *Motion:* Approve the new Editorial Services Agreement budget for CSm for the term 2022-2024.

Alleyne presented the background on this proposal, for a financial impact of \$114,300 for the 3-year period. The CSm editorial budget provides support for two independent contractors that assist the magazine with layout, graphics, etc. The ESA approval also lines up with the remaining term of the EiC, which is 3 more years. The motion passed unanimously.

Alleyne then presented the following motion.

• *Motion:* Approve the new Editorial Services Agreement budget for TCNS for the term 2022-2024.

Alleyne presented the background on this proposal, for a financial impact of \$144,000 for the 3-year period. For TCNS, the budget supports an editorial assistant operating as an independent contractor, and the requested amount is the same as in the previous ESA. The motion passed unanimously.

Parisini invited Magnus Egerstedt and Maria Prandini, the General Chair and Program Chair, respectively, to welcome BoG to CDC 2021. Egerstedt provided details on the organizational efforts of the Operating Committee, pointing out that the original plans for an in-person conference followed by the transition to the virtual format meant in practice organizing two, rather than one, conferences. Additional details include 1735 papers submitted, 1097 accepted, lowered conference rates for the virtual format, all students who applied received free conference registration, and lower-than-normal engagement from corporate sponsors, which are not enthusiastic about virtual conferences. Prandini noted that, with CDC opening the next day, they had enjoyed a great deal of student volunteer support – in fact, the conference success is due in large part to them. Parisini thanked Egerstedt and Prandini for their hard work.

# **Diversity in CSS**

Parisini invited Egerstedt to provide data on diversity efforts at CSS. Egerstedt explained that they had initiated several activities to promote increased diversity, equity, and inclusion. These include the position of a Diversity and Inclusion (D&I) Chair in the Operating Committee, a practice now standard for both CCTA and CDC; D&I criteria for the evaluation of invited sessions, tutorial sessions, and workshops; the selection of plenary speakers and committee members; a workshop on diversity; and a first-ever author conference survey. Egerstedt provided data on the survey, which was self-reported. Highlights include that 23% of the authors responded, 30% identified as an underrepresented minority (URM), and student authors and 1<sup>st</sup> time authors are more likely to be women and URM.

Egerstedt concluded with an overall assessment of diversity in CSS, using the metaphor of a glass half full to make the point that it is not where we would like it to be but that there are reasons to be optimistic. Some relevant facts: CSS is predominantly a male, US/European/Asian, academic society (but that is changing); women are (reasonably) well represented in society leadership (BoG, ExCom, Conference Chairs, Plenaries); awards are particularly non-diverse along pretty much all dimensions; geographic diversity is spotty, with improvements needed particularly in South America; industry, government engagement is lacking.

Several BoG members, including Valcher, Glavaski-Radovanovic, and Gayme praised the selection of Richard Murray as the first D&I Chair as a person who has helped raised the profile of the position, making it easy to recruit people for future conferences, and somebody who has a long-standing history of involvement and daily engagement with diversity and inclusion. Gayme emphasized the importance of D&I being a society-wide effort, rather than a collection of individual efforts by underrepresented members, who then could be seen as advocating for their own self-interest. Annaswamy commented that this is a marathon, not a sprint, and that we hope to move this momentum forward. Alleyne said that convincing organizations is tough, and that we need to present it as enlightened self-interest, i.e., not only as a result of fairness, but also because it will be beneficial. Parisini thanked Egerstedt and everyone for their comments, and pointed out that having CDC 2025 in Brazil, as discussed earlier in the BoG meeting, was a positive step forward.

Di Benedetto introduced Ekram Hossain, IEEE Press chair since 2018. Hossain presented information on Wiley-IEEE press activities, and the involvement of CSS with Wiley-IEEE press. He described the steps of the review cycle, how the partnership with Wiley works, the book series dedicated to Control Theory and Applications, and the various author benefits. V. Damle noted that the IEEE Press liaison is Prof. Alleyne. Di Benedetto commented that Hossain, Alleyne, Di Benedetto and Damle should meet offline to discuss further, and that Di Benedetto will count on the support of the BoG to publish books with IEEE press. Hossain noted that CSS has a history of collaboration. Parisini thanked everyone.

### **2021 Elected BoG Members**

Annaswamy provided background on the BoG election process. Early in the year, BoG was asked to nominate colleagues for BoG. A ballot consisting of nine candidates was sent by IEEE on April 15, 2021 to all IEEE Control Systems Society members for the election of six members. The voting results have now been tabulated and the BOG members elected for a three-year term from 1 January 2022 to 31 December 2024 are Belinda Batten, Yoshio Ebihara, Alexander Horch, Kristin Y. Pettersen, Sophie Tarbouriech, and Paul M. J. Van den Hof. CSS leadership continues to pay attention to diversity as measured by gender, geography, and occupation.

### **Appointed BoG Members**

Annaswamy explained that with the recent changes to the constitution and bylaws, it now falls under the purview of the Nominating Committee to appoint 3 members to BoG for a two-year term. The CSS BOG members appointed for a two-year term from 1 January 2022 to 31 December 2023 are Eric Kerrigan, Yan Wan, and Melanie Zeilinger.

Parisini noted that he was pleased to see a lot of diversity in all these new BoG members.

# **CSS Fund: Update on Initiatives**

Parisini explained that he wanted to present the "big picture" of development and vision of what to do with the CSS Fund. With the latest changes to the Constitution&Bylaws, we have now created the position of Vice President for Diversity, Outreach, and Development, and appointed Hideaki Ishii to fill it. He will help oversee the management of the CSS Fund. Now, there is pressure to spend the money and raise new funds, and show the initiatives that we can do. It is the time to identify ambitious projects that promote systems and control at a large scale and benefit society as a whole. The first big initiative is the Empower a Billion Lives (EBL-II) competition. He invited Annaswamy to describe this project.

Annaswamy explained that this is a biannual competition on enabling technologies for energy access. The first one took place in 2018. EBL-I attracted 450 teams from 70 countries, with multiple field demonstrations in Asia and Africa. This is the second edition. The main sponsor is the IEEE Power Electronics Society, and CSS is participating as a diamond

sponsor, with a support of \$100K. 700 million people in the world live with no access to electricity, and 3 billion live with energy poverty. The competition is focused on providing low-cost solutions to improve energy access, with the equivalent of Tier 2 access (minimum 50W, 200 Wh, 4 hrs/day, 2 hrs/evening, covering lighting, air-circulation, phone charging, and television). Solutions should be scalable, affordable, and demonstrate business viability. There are two online rounds, then a regional field-testing round, and a global final round. Annaswamy encouraged BoG to reach out to their networks to form a team and participate. Details for participation can be found on the website <u>www.empowerabillionlives.org</u>. CSS has instituted a new track prize on automation, where solutions should display the advantage of autonomous operations via increased scale, resilience, or simplicity.

Parisini emphasized the importance of forming teams with colleagues from countries which would benefit from this competition to make a real impact and encouraged everyone to participate in the initiative.

# CSS Day

Parisini then explained that another initiative under the CSS Fund is the CSS Day, and invited the VPTA, Jing Sun, who is chairing the taskforce, to update BoG.

Sun described the CSS Day as an initiative to promote CSS, inspired by the Power and Energy Society's PES Day. CSS Day consists of a day dedicated to activities that celebrate CSS impact, improve CSS visibility, engage a broader engineering community, and expand diversity, especially people who may not publish or attend conferences, but who are part of our community. The taskforce, co-chaired with the VPMA, Maria Di Benedetto, consists also of Martha Grover (Women in Engineering), Joao Hespanha (VPFA), Thomas Parisini (President), Rush Patel (YP), and Romain Postoyan (Video Contests). Monthly brainstorming and planning meetings have led to the following list of planned events: a Presidents forum, a round table on control history, a video contest, control technology showcases, chapter/membership activities, and a young professional forum (academia and industry panels for job search and career planning). Publicity is planned across CSm/web/social media platforms. There is a budget in place, currently for \$9K, that Hespanha presented to BoG.

Abramovitch asked about the intended target audience. Sun responded that the taskforce has cast a wide net, targeting undergraduate and graduate students, women members, young professionals and in general, people who may not come to our conferences, but who are part of our community – she expects that membership and chapter activities will play a big role. She mentioned that PES Day has been very successful – they have reported over 50K participants and 100 different activities. Annaswamy also emphasized the public relations aspect of the initiative, saying it is a way of speaking to the general public saying this is us and we want you to join. C. Cassandras noted that CSS should expand the reach with a publicity plan to avoid attracting the usual suspects and have a broader footprint. Parisini commented that the idea is to make this a standing activity for the society. He sees the launch as an initial experiment from which we will learn. There is an opportunity to engage the chapters more actively through this initiative. With PES Day, the chapters were heavily involved, and we would like to promote this. Abramovitch emphasized the importance of attracting people beyond the regular crowd and asked whether the demographics of the participation in the PES Day revealed interesting data in this regard. Annaswamy said that

PES engaged a professional marketing team to do the analytics, and this is a good idea to consider for CSS Day. J. Cortes suggested showcasing the successes from the EBL-II competition at CSS Day.

Parisini explained that there are other ideas in development for activities under the CSS Fund. One of them is the establishment of a CSS graduate student fellowship program -- this will be further discussed in the Long Range Planning Committee before bringing it to BoG.

### **CSS Finances Status**

Hespanha provided a general update on the status of CSS finances. The 2022 budget has been approved recently. The projected revenue is \$8,109K with expenses of \$7,142K (excluding CSS initiatives). This gives an operational surplus of \$968K (excluding CSS initiatives). Main budget inputs for 2022 are publication page accounts (TAC 6500, TCST 2800, TCNS 2000, CMS 841, L-CSS 2800, OJCS 300), meeting/conference operation expenses (based on the BoG approved budget for CCTA'22 and CDC'22), and volunteer travel (\$256K, with estimates based on normal travel). We currently have CSS initiatives that amount to \$235K, yielding a final surplus (including CSS initiatives) of \$736K. The current reserves (integral of surplus + investments) amount to \$16,236K. The 3% rule specifies that 3% of reserves can be used for 2022 initiatives, which gives \$487K. The 50% rule specifies that 50% of the 2020 Operating surplus (\$2,458K) can be used for 2022 initiatives, which gives \$1,229K. There is a cap that takes the minimum of both amounts, yielding \$487K. This is subject to an additional 1% cap for aggregated requests at IEEE, which for us meant that the society projects were reduced to \$232K (from the requested \$235K). Hespanha explained that CSS revenues come mostly from journals and conferences. We lose money with CSM, but this is acceptable given its outreach mission and the fact that we make enough revenue from our other journals. After its launch 5 years ago, CSL has recently become profitable, and he expects OJCS will have a similar trajectory. Significant revenues in conferences come from download clicks of publications that go into IEEE Xplore.

Given the significant funds we receive from our conference activities, Gayme asked about the idea of reducing conference registration fees. Hespanha explained that the fees CSS is reducing are the fee we charge to TCS conferences with PA. Regarding conference registration, IEEE mandates a 20% surplus on the conference budget, and this directly limits our ability to reduce them. Egerstedt expressed his desire for reducing registration fees for students -- he thinks that the society should explore ways to provide additional funds to the conferences to help students. Annaswamy and Hespanha pointed out that the CSS Fund gives us extra flexibility to do this. Parisini explained that a recent initiative under the CSS Outreach Fund to reimburse registration fees for in-person or virtual participation to CDC and CCTA aimed at CSS members coming from a country that qualifies for IEEE Electronic Membership was not approved by IEEE. The reasoning was that "awards" to reimburse registration fees must be funded in society operational budgets instead. Hespanha also brought up the possibility of increasing further the CSS Student Travel awards. Giua commented that, in a normal in-person conference, we cannot use the travel award to pay for registration, but during the pandemic, IEEE has allowed us to do this because there was no travel due to the covid pandemic. Giua suggested expanding the reach of travel awards beyond students to also include members from underrepresented countries. On that note, Gayme suggested that we could extend it to non-R1 minority-serving institutions. Y. Mostofi

was surprised to see TCNS making a profit and wondered why it was much smaller than TAC. Hespanha explained that this is based on the total amount of articles published by the journals across the years: the more articles on IEEE Xplore, the more download clicks the journals gets, leading to revenue. G. Pappas pointed out that IEEE seeks to make profit on paper costs at conferences and Xplore revenue for journals, and that this is bound to change soon. Valcher pointed out that the rule on 20% surplus for conference budgets is something that must be met at the planning stage, but actual costs after the conference might be different, allowing for some flexibility with the registration fees. Giua advocated for a graceful accommodation of the reduction of conference fees, since IEEE does a pre- and post-check and evaluation of our conference activities -- we just saw this in the recent society review. Both Pappas and F. Bullo suggested the elimination of extra page charges at conferences as a measure. Bullo also raised the possibility of eliminating overlength page charges in journals -- APC charges are not within our purview, as they are set by IEEE.

# **Collecting CSS membership fees at conferences**

VPMA M. Di Benedetto presented a joint initiative with the VPCA A. Giua to collect CSS membership fees at conferences. With the CSS member differential conference registration in place, it makes sense to make it easy for IEEE members to become CSS members when registering for a conference. Currently, there is a suggested \$30 difference (\$15 for students) in registration cost between IEEE member and CSS member at our conferences. This is more than the \$25 cost (\$5 for students) of joining CSS for an IEEE regular member. Facilitating becoming a CSS member at conferences may appeal to people from institutions that do not allow paying for CSS membership unless there is an economic advantage. Di Benedetto explained that this can be easily implemented by having the conference Finance Chair simply collecting CSS fees to pass them later to IEEE (along with names and IEEE numbers). This plan will not collect fees for becoming IEEE member (because they are different from country to country, and the implementation and bookkeeping would be too onerous).

H. Ito sought clarification as to whether this would replace or be in addition to the current way of becoming a CSS member when renewing the IEEE membership, and Di Benedetto clarified that this is one more way of doing so.

### **Journal Scope Revision**

Alleyne explained that one outcome of the recent PRAC review was the need to change the scope of TAC. In parallel, he had already contacted the EICs to discuss the pertinence of revising the journal scopes to delineate the individual areas of influence and their intersection more clearly. The EICs are now actively engaged in the exercise of updating the journal scopes to keep them better aligned with the latest developments in our field. Alleyne emphasized the long-term benefits of this exercise. Parisini reinforced the idea, giving as an example the recent launch at IEEE of a new open access journal on systems engineering whose scope significantly overlapped with our footprint.

Alleyne updated BoG on the launch of the new Open Journal of Control Systems. The Paperplaza site is now open and accepting submissions for regular and overview papers in all areas of control, with a special section on the interplay of machine learning and control. Papers will be published as soon as they are accepted. There are about a dozen submissions, with a third considered viable. Half of them have been submitted to the special section. There is also an open call for Associate Editors, which has led to some good candidates. Alleyne emphasized that Sonia Martinez, the EIC, has done an excellent job in the composition of the editorial board in terms of gender diversity. He also mentioned that the acronym OJCS is taken at IEEE, so the EIC is now using OJ-SYS. Valcher noted that the acronym can be changed, as long as nobody else is using it, and this led to a number of suggestions submitted via chat that Alleyne collected. Alleyne continued to highlight the types of OJCS publications, including perspective position (provides a personal viewpoint on problems related to an emerging research area in dynamic systems and controls) and technical position (identifies technical bottlenecks in current research, its open problems, and describes new techniques/tools to solve them) papers. Submissions can include video as supplemental material. Marketing activities are being pushed forward (new twitter account) to gain visibility. Alleyne concluded by inviting everybody to submit papers.

### **Report from the President**

Parisini started by reminding BoG about the latest changes to the Constitution&Bylaws (the main change being the creation of the position of Vice-President for Diversity, Outreach, and Development) becoming firm in November 2021, 30 days after publication in the Control Systems magazine, having received no written objection during this period.

Next, Parisini covered the recent Periodicals Review and Advisory Committee (PRAC) review of 4 out of 5 of our journals, TAC, TCST, TCNS, and CSm. L-CSS was reviewed in 2020 as a recently launched publication. Under the coordination of VP-PA and the CSS President, EiCs submitted their reports on May 17, 2021. Reports were discussed at virtual meetings in June 2021. Final reports and reviews received late November 2021. Overall outcome was very positive, with special emphasis on the high-quality process for selecting AEs and the fact that our journals are in the tier one position. Constructive comments on specific items for improvement included having an open call for editorial board membership and the TAC scope revision mentioned by Alleyne earlier in the meeting. The committee did not make much emphasis on the D&I theme, but we continue to pay attention to it.

CSS has also undergone during 2021 the 5-year society review by the Society and Council Review Committee (SCRC) of IEEE TAB. Under the coordination of the President, all VPs prepared their respective sections of the main report, which eventually became 120 pages long. The President, in collaboration with the Past President, wrote several other parts of the report addressing other key aspects such as the long-term vision, education and standards activities, and highlights of the major achievements during the 5 years under review. Also, extensive illustration has been provided as to how comments from the previous review have been addressed. The report was discussed at a virtual meeting in November 2021, with positive feedback, and SCRC comments are expected in February 2022.

In the context of the CSS 5-years Review, the CSS Strategic Plan (CSS-SP) has been

significantly updated, and an Operations Plan (CSS-OP) has been created. The CSS-SP lays down the CSS Strategy, Vision, and Future Directions and is a crucial document that summarizes the main issues and the proposed solutions grouped into short-term and medium-/long-term actions. The inspiration for the CSS-SP comes from the Long-Range Planning Committee (LRPC, set up to meet twice a year since 2014). The CSS-OP is a companion document to the CSS-SP and lays down the CSS operational procedures toward the effective and timely implementation of the action items identified in the CSS-SP. These are living documents that we will revise regularly now.

Given the current pandemic circumstances, the CSS awards ceremony is going virtual again this year. This is an important event held annually at every CDC to acknowledge and celebrate singular accomplishments of our colleagues. To provide an appropriate recognition of these accomplishments, ieee.tv has been engaged to put together a video production of the entire ceremony. Except for a couple of awards which we will reveal live during the awards ceremony on December 17, 2021 all other awards will be televised at the CDC 2021, and displayed on the CSS website post-event.

# **Report from the Past President**

Annaswamy provided brief updates on some key initiatives as CSS Past President. She discussed ongoing plans by a team of experts working on a scientific roadmap for the future of our discipline, Control for Societal-Scale Challenges: Roadmap 2030. The objectives of the roadmap are to lay out new societal areas where our discipline can have impact over the next decade, propose novel scientific challenges that the community should pursue, and investigate workforce education and training curricula to address these challenges. The plan is also to ensure that the roadmap has a broad scope including new technological drivers, new infrastructures for control systems, and legal, organizational and regulatory factors that are prevalent in societal-scale systems. The target for publication is December 2022.

She also discussed the new Young Professionals Virtual Control Conference, originally targeted for March 2022, now postponed to March 2023 because of the saturation of virtual conferences. The main goal of this series is to lower barriers for participation of industrial colleagues. The conference has four different tracks: tutorial, implementation/code applications, and theory.

Finally, she emphasized the importance of planning ambitious initiatives for the CSS Fund. We need bold ideas to spend the available money in ways that have lasting impact.

### **Other Business**

BoG members were referred to the material contained in the main agenda and reports document for full details on all other activity reports. Parisini asked if there was any additional new business or old business, and hearing no response, adjourned the meeting.

The next BoG meeting will take place in association with ACC2022, pandemic-permitting, on Tuesday, June 7, 2022 in Atlanta, GA, USA.

The meeting was adjourned at 5:32pm (UTC time).