

Minutes of the Control Systems Society Board of Governors Meeting December 14, 2010 Atlanta, Georgia

Call to Order and Approval of Agenda

R. Tempo called the meeting of the Control Systems Society (CSS) Board of Governors (BoG) to order at 1:00 PM on December 14, 2010, and asked the attendees to introduce themselves. The following members of the BoG were in attendance: Anuradha Annaswamy, Panos Antsaklis, Gary Balas, Dennis Bernstein, Richard Braatz, Eduardo Camacho, Christos Cassandras, Edwin Chong, Frank Doyle, Magnus Egerstedt, Masayuki Fujita, Shuzhi Sam Ge, Oscar Gonzalez, Shinji Hara, Joao Hespanha, Jun-ichi Imura, Alberto Isidori, Faryar Jabbari, Bruce Krogh, Zongli Lin, Richard Middleton, Pradeep Misra, Kirsten Morris, Yoshito Ohta, Thomas Parisini, Marios Polycarpou, Zhihua Qu, Tariq Samad, Mario Sznaier, Roberto Tempo and Elena Valcher.

Tempo introduced distinguished visitor Vincenzo Piuri, IEEE Division X Director, and thanked him for attending the CSS Board of Governors' meeting. During the meeting V. Piuri made a short presentation to BoG.

Additionally, the following visitors attended the meeting: Graziano Chesi and Joan Pratt.

Quorum was established and the agenda was approved with unanimous consent. Next R. Tempo asked 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.

Next, the minutes of the BoG meeting of June 29, 2010, held in Baltimore, Maryland were approved unanimously.

Action Items

Appointments

Richard Middleton reminded BoG that in addition to the six new BoG members elected by the CSS membership for three-year terms, he as CSS President is responsible for selecting six "appointed" members for one year terms. He informed BoG that he was appointing the following members to the Board for 2011: Carlos Canudas-de-Wit, Naomi Ehrich Leonard, Dragan Netic, Yannis Paschalidis, Greg Stewart and Lihua Xie. Since these are appointed positions, BoG approval was not required. The BoG supported the appointments and welcomed the slate of newly appointed BoG members.

T. Samad, Chair of the Nominating Committee, presented the slate of CSS Executive Committee Officers for 2011: R. Middleton (President); C. Cassandras (President Elect); R. Tempo (Past President); P. Misra (VP Financial Activities, continuing); Shuzhi Sam Ge (VP Membership Activities); Frank Doyle (VP Publication Activities); Francesco Bullo (VP Technical Activities); Mario Sznaier (Executive Director, continuing). Samad reminded BoG that the 2011 CSS Executive Committee positions were approved at ACC 2010. M. Polycarpou was also approved as VP Conference Activities at the ACC 2010 but after accepting he learned that he had been elected to the position of "President Elect" of the IEEE Computational Intelligence society, so he decided to decline the CSS VPCA appointment. T. Samad moved for approval for Masayuki Fujita (VPCA) and the motion carried unanimously.

Conference Activities Motions:

The CSS President Elect Richard Middleton presented the following motions:

Establishment of a Support Program for CSS Conferences in Developing Nations

Motion to establish a Support Program for CSS Conferences in Developing Nations with a budget of \$ 40K per annum, for the four year period, 2011-2014. This program will fund reduced registration costs for any attendee from a developing nation who attends an MSC or CDC held in a developing nation. Where selection is necessary, preference will be given to attendees who are presenting a paper at the conference.

Financial Impact: \$40,000 p.a. (2011 – 2014)

R Middleton provided some background for the motion, noting that the reach and impact of existing programs is rather limited, with relatively few people being able to take advantage of them. Maria Elena Valcher remarked that last year these programs served only 10

people at MSC and 10 at CDC and that they only covered registration and partial accommodation costs, but not travel expenses. In her opinion, the CSS should concentrate its resources where it can have the largest impact. Oscar Gonzalez indicated that he had strong reservations about terminating the existing programs. He indicated that these programs allowed many people to attend the 2008 MSC conference, held in US. He also noted that if support is limited to conferences held in developing nations, only 2 conferences in the entire 2011-2014 time frame will benefit from it. Gary Balas noted that he had the same concerns and that he found the motion too focused on developing nations. In his opinion, this support should not come at the expense of the old program. Rick Middleton answered that the old program had expired but it could perhaps be reinstated, if so desired by BoG. Pradeep Misra noted that it was not clear how widespread the benefits of the old program are. Rick Middleton added that in his opinion, the old program favored a small number of people taking expensive travel versus the new proposal that favors many people taking inexpensive travel. Roberto Tempo indicated that the present motion does not preclude other proposals (maybe outreach) in the future. Gary Balas inquired whether any metrics are in place to track benefits to the society from these programs. He suggested to track award recipients to see if they become CSS members. After this discussion a vote was taken and the motion approved with 22 votes in favor, 3 against (Gary Balas, Oscar Gonzalez and Joao Hespanha), and 2 abstentions (Faryar Jabbari and Eduardo Camacho).

PaperCept usage rates for CDC/ECC 2011

Motion to approve that for CDC/ECC 2011 only, payment for use of Papercept's services be calculated as the sum of the following three items:

- (i) \$8 per initial paper submission above the first 2062 submissions;
- (ii) \$8 per final paper submission above the first 1280 submissions; and
- (iii) \$8 per registration above the first 1180 registrations.

Payments will be made on invoice from Papercept to the conference, with costs billed to CSS.

Financial Impact: \$9,000

After presenting the motion, Rick Middleton provided BoG with background information. PaperCept was created by P.Misra and H. Kwakernaak in 2002 to provide software and services for functions such as conference editorial support and registration. This support was extended later to include support for the IEEE Transactions on Automatic Control. PaperCept clients include CSS and other IEEE and non-IEEE entities (e.g. ECC). Normal PaperCept charges include 'Direct Costs': (Web server, backup server, SSL certificate, software license (PDFlib) that are billed directly to the conference or CSS, and a 'Usage Costs': (Maintenance, support....) of \$8 per transaction (initial submissions, final submissions, registration). The existing informal agreement with CSS, dating back to 2004 is that CSS sponsored conferences (CDC, MSC, ACC) do not pay for usage. However, this agreement directly states that joint conferences (e.g. CDC/ECC 2011) need to be separately negotiated). R. Middleton noted that ECC regularly makes use of PaperCept services, and pays usage fee. Thus, an agreement needs to be drafted to cover these joint conferences. A task force integrated by Middleton, Antsaklis, Cassandras, Castanon, Farrell, Tempo and Yurkovich has been formed to look into this issue. However, an issue that needs to be urgently resolved is the model to be used for the 2011 joint CDC/ECC. In particular, how to decide the appropriate amount to pay and who should be billed. Hence the present proposal, that covers only the 2011 CDC/ECC. In this proposal, CSS will pay according to the model stated in the motion, obtained based on the submission figures for the most recent US based CDC (2010). Middleton noted that at this point the only viable alternative would be to bill the conference, but this will entail drafting a new MOU with EUCA, having a higher registration fee, revising the budget and obtaining approval from IEEE. Middleton estimated that having CSS pay the usage fee will cost about \$9K. After Middleton's presentation, G. Balas inquired about what will happen in the future and Middleton responded that in his opinion, at some point CSS may be treated as any other PaperCept customer and be subject to usage fees.

After the discussion a vote was taken and the motion approved with 26 votes in favour and 1 abstention (E. Camacho). Pradeep Misra did not participate in the discussion and vote due to a conflict of interest.

The CSS Vice President for Conference Activities Elena Valcher presented the following motions:

2012 CCA Program Chair

Motion to approve Ji-Feng Zhang as Program Chair of the CCA 2012 conference, within MSC 2012.

M. E. Valcher presented a bio of the candidate. A brief discussion ensued and the motion was unanimously approved.

2013 Joint Symposium on CACSD and SU, within MSC 2012, Program Chair

Motion to approve Constantino Lagoa as Program Chair of the Joint Symposium on Computer-Aided Control System Design (CACSD) and Systems with Uncertainty (SU), within MSC 2013

M. E. Valcher gave a brief background on the candidate and on the joint CACSD-SU symposium. The first official symposium will be held in 2011, following a special SU track held within the 2010 CACSD, and every two years thereafter. After a short discussion the motion was approved unanimously.

2013 CDC Venue

Motion to approve Florence (Italy) as new venue for the CDC 2013

Thomas Parisini presented BoG background information on the motion. He reminded BoG that in June 2009, the CSS Executive Committee and BoG approved Venice as the venue for CDC 2013. However, after approval, awareness of some important new issues came up. In particular, flooding events in December have been increasing substantially, with 16 such events in December 2009. Thus, to avoid potential problems, the conference co-chairs have decided to propose moving the conference to the Palazzo dei Congressi in Florence. Next, Parisini presented a brief overview of the proposed venue and hotels nearby. Following his presentation, Gary Balas asked about the impact of the move on the conference costs. Parisini indicated that the costs at the new venue will be lower than at the original one. A vote was taken and the motion approved with 28 votes in favor and 2 abstentions (R. Tempo and T. Parisini).

2014 CDC Venue and Dates

Motion to approve Los Angeles, California, as venue of the CDC 2014

Motion to approve December 15-17, 2014 (Mon-Wed), as dates of the CDC 2014

M. E. Valcher reminded BoG that F. Jabbari had been approved as CDC 2014 General Chair at the June 2010 BoG meeting. After researching several locations in Southern California, including Los Angeles and San Francisco, Jabbari proposed to hold the conference in Los Angeles, during the period Dec. 15-17, 2014 (Monday through Wednesday). These choices were motivated by both capacity and cost considerations. After a brief discussion the motion was approved with 28 votes in favor and 2 abstentions (F. Jabbari and T. Parisini).

2015 CDC General Chair

Motion to approve Yoshito Ohta as General Chair of the CDC 2015

M. E. Valcher presented a brief vita of the candidate, and after a short discussion a vote was taken and the motion was approved with 26 votes in favor and two abstentions (S. Hara and Y. Ohta)

2015 CDC Venue

Motion to approve Japan as venue of the CDC 2015

Next, M. E. Valcher presented a motion to approve Japan as a venue for the 2015 CDC. Shinji Hara (VPMA) presented some background information, including venues being considered (Osaka, Kyoto, Yokohama). At this point cost estimates have been obtained from several hotels, but no decision has been made. After the presentation, several BoG members inquired about whether there is a rule on how frequently the CDC can be held outside the US. R. Middleton indicated that there is no such rule, and that at a discussion held at the June 2010 meeting, BoG was in favor of holding CDCs outside the US more frequently. He also indicated that in the period 2010-2015, CDC will be held outside the US only twice, which seems consistent with past practices. After this discussion a vote was taken and the motion was approved with 26 votes in favor and one abstention (S. Hara)

Financial Activities Motions:

Next, the CSS Vice President Finance Activities, Pradeep Misra, presented the following budget related motions:

Motion to provide the TCST subscriber an option to receive either CD or a hard copy, at the same subscription rate in 2012 and with the hard copy at a higher subscription rate than the CD, starting in 2013.
Financial Impact: -\$17,000 to -\$40,000

P. Misra provided some background on the motion, including a cost analysis. The present cost for printing and distributing 6 issues of TCST to hard copy subscribers is more than \$47,400. For comparison, the estimated cost for producing and shipping 6 CDs with the same content is less than \$28,380 (conservative estimate). In June 2010, BoG approved a motion to offer in 2011 six complimentary CDs (one every two months) to all hardcopy subscribers of TCST (6th CD should contain the material of all 6 issues). The present motion is a follow-up on this action. The plan is, for 2012, to provide the option to receive either CD or hard copy of TCST at the same subscription rate. In 2013 and subsequent years, subscribers will be given the option to receive hard copy of TCST at higher subscription rate (to be approved during the next year's budget cycle). "Print-on-demand" will be always available at the production cost for subscribers who desire to receive hard copy. After P. Misra presentation, G. Balas inquired whether it is feasible to have an "all-electronic" subscription, rather than CDs. P. Misra indicated that in past discussions on the subject, BoG strongly opposed the idea, since electronic subscriptions are valid only as long as one is a CSS member, and IEEE will not implement an option that gives access in perpetuity for the time period that the subscription was paid. Bruce Krogh suggested that the price differential between CD and print copies be implemented immediately. G. Balas offered a friendly amendment to the motion, making the print cost higher starting immediately. The amendment was accepted by P. Misra and the following motion was voted on:

Motion to provide in 2012 the TCST subscriber an option to receive either CD or a hard copy, with the hard copy at a higher subscription rate than the CD.
Financial Impact: -\$17,000 to -\$40,000

A vote was taken and the amended motion unanimously approved. It was then proposed to raise the print subscription fee by 50%, setting the price differential between print and CD versions at 50%. A vote was taken and the motion was approved with 28 votes in favor and 2 abstentions (J. Hespanha and M. Egerstedt.)

Motion to Approve Membership and Subscription Rates for 2012

P. Misra moved approval of the following journal page budgets and membership and subscription rates for 2012. These rates already reflect the 50% price differential between print and CD approved by BoG at this meeting:

<i>CSS Member Fee</i>	\$20.00
<i>CSS Student/reduced</i>	\$10.00
<i>Control Systems Magazine Page Budget : unchanged from 2011</i>	
<i>IEEE Member/Affiliate Print rate</i>	\$47.00
<i>Student General Interest Print rate</i>	\$24.00
<i>Non-Member List Price</i>	\$425.00
<i>Conference Digital Library</i>	
<i>IEEE Member/Affiliate electronic</i>	\$40.00
<i>IEEE Student Member electronic</i>	\$20.00
<i>Trans. on Control Sys Tech Page Budget:</i>	1600
<i>CSS Member/Affiliate Combo</i>	\$25.00
<i>CSS Student/reduced Combo</i>	\$13.00
<i>Non-IEEE Member Print Price</i>	\$495.00
<i>IEEE Member/Affiliate electronic</i>	\$40.00
<i>IEEE Student Member electronic</i>	\$20.00
<i>IEEE Member/Affiliate Combo</i>	\$55.00
<i>IEEE Student/reduced Combo</i>	\$28.00
<i>Trans. on Automatic Control Page Budget:</i>	3000
<i>CSS Member/Affiliate Combo (CD)</i>	\$40.00
<i>CSS Member/Affiliate Combo (Paper)</i>	\$60.00
<i>CSS Student/red Combo (CD)</i>	\$20.00
<i>CSS Student/red Combo (Paper)</i>	\$30.00
<i>Non-IEEE Member (CD)</i>	\$1,500.00

<i>Non-IEEE Member (Paper)</i>	<i>\$1,500.00</i>
<i>IEEE Member/Affiliate Xplore</i>	<i>\$55.00</i>
<i>IEEE Student/red Member Xplore</i>	<i>\$28.00</i>
<i>IEEE Member/Affiliate Combo (CD)</i>	<i>\$80.00</i>
<i>IEEE Member/Affiliate Combo (Print)</i>	<i>\$120.00</i>
<i>IEEE Student/red Combo (CD)</i>	<i>\$40.00</i>
<i>IEEE Student/red Combo (Print)</i>	<i>\$60.00</i>

After a brief discussion these rates were approved unanimously

Technical Activities Motion:

Next, the CSS Vice President for Technical Activities, Sam Ge, presented the following motion related to Technical Committee funding.

Motion to Revise Current Funding Mechanism for TCs as follows: (i) basic proposals, up to \$2K per annum per TC for various TC activities, subject to the approval by the VPTA; and (ii) high profile proposals, up to \$5K per annum per TC, to support higher visibility efforts, subject to approval by a committee consisting of the VPTA, VPFA, and representative nominated by the President.

Financial Impact: \$60K per year

S. Ge explained to the BoG the rationale for the motion: The current budget for each TC is around \$800-1000, an amount that is usually insufficient to support technical activities. For example, supporting the Southern California Non Linear Control Workshop (a workshop run by and for the benefit of students) will typically exhaust this budget. This motion seeks to revise the current funding mechanism, providing more financial support to TCs willing to organize high impact activities that benefits the CSS. Under the proposed mechanism, each TC Chair will submit at the beginning of the year a proposal for funding to support the relevant activities of his/her TC in that calendar year. Two types of proposals are envisioned: basic and high profile. Basic proposals, up to \$2K, are meant to support various TC activities, and need only approval from the VPTA. High profile proposals, up to \$5K, are meant to support higher visibility efforts, and will be approved by a committee composed by the VPTA, VPFA and a representative nominated by the President. Funds will be capped at a maximum of \$60K/year, but the actual financial impact could be less, depending on the submitted proposals.

After S. Ge's presentation, a vote was taken and the motion was unanimously approved by BoG.

Other Motions

Following S. Ge's presentation, Tariq Samad, CSS Past President presented the following motion related to the Task Force on Outreach.

Motion to Approve \$150K for the CSS Outreach Fund for 2012

Financial Impact: \$150K (same as 2011)

T. Samad reminded BoG that the Task Force recommended the establishment of an Outreach Fund from 2011 onward open to the CSS membership to fund projects that will benefit CSS and the controls community in general. Examples are outreach activities for pre-university students and teachers, promotional materials for CSS or the field, workshops on control-related topics and CSS membership drives. BoG had approved the initiative and allocated \$150K during 2011 (this would cover, for example, 6 – 8 projects at up to \$25K each). T. Samad indicated that a call for proposals was published in summer with a deadline of 30 November. 18 proposals were received, requesting a total funding of more than \$400K and are currently being evaluated. Given this success, it is proposed to continue this activity at the 2011 funding level, with the next call for proposals in midyear 2011.

Following Samad's presentation a vote was taken and the motion unanimously approved.

Motions Approved by Email

M. Sznaier reminded BoG that the following motions were discussed and approved by email in the period between the June and December BoG meetings:

- Motion to approve a US\$5,000 donation to the IEEE Pakistan Engineering Educational and Professional Development Rebuilding Fund. The motion passed on August 31, 2010.
- Motion to approve a US\$5,000 donation to the IEEE Haiti Engineering Educational and Professional Development Rebuilding Fund. The motion was passed on January 29, 2010.

Activity Reports

Report of the President

R. Tempo started his report to BoG by indicating that, thanks to the efforts of many volunteers, the IEEE Control Systems Society is in excellent shape. Its publications and conferences are at the highest technical level and it is doing very well on the financial side. Technical committees are very active and membership is slightly increasing.

Regarding electronic availability of CSS publications, the experiment to provide 6 CDs for the IEEE Transactions on Automatic Control has been completed with the December issue of the journal. Next year the experiment will continue and it will be extended to the IEEE Transactions on Control Systems Technology. The society is planning to evaluate the success of this experiment at the end of next year.

Tempo recalled that a significant enhancement of the CSS website is available at <http://www.ieeecss.org>. This website proposes an overview to the web surfer of all the activities of the Society. CSS journals, conferences, recent awardees and President's messages are easily accessible and the section "Latest News" provides a list of the on-going activities and other useful information. Recent additions include the "Control Systems Society Outreach Fund." The website also provides access to a Lecture Library that features recent plenary lectures from CSS-sponsored conferences as well as classical ones, like the famous Bode Lecture of Gunter Stein titled "Respect the Unstable." Under "Latest News" details about a webinar lecture series that started recently are included.

A successful workshop for high school teachers titled "Ideas and Technology of Control Systems" took place in Baltimore during the American Control Conference. This event celebrated the 10th Anniversary of the Control Systems Society and American Automatic Control Council Outreach Program. A similar event was organized during the 2010 CDC.

A CSS Outreach Workshop was held at the University of California, Irvine. Officers of the Society presented technical results in the areas of cooperative control and synchronization of networked control systems, information extraction and visual feedback control, modeling and control of the HIV infection. Several PhD students, postdocs and faculty from various schools in the Southern California area attended the event and actively contributed to the discussion.

A "Systems and Control" section of the Computing Research Repository (CoRR) of the electronic archive arXiv, owned and operated by Cornell University, a private not-for-profit educational institution, was recently initiated, see <http://arxiv.org/corr/home>. Authors may submit their papers to this section of the arXiv for fast distribution and circulation of results to the control community.

A "Panel Discussion on E-Print Servers and Traditional Publishing" has been organized during the CDC. Panelists include representatives from IEEE, Elsevier, SIAM, arXiv, the IEEE Information Theory Society and the CSS. The objective of the panel was to share ideas on the future of STEM (Science, Technology, Engineering and Mathematics) publishing and to discuss what the future holds for relationships between e-print servers and traditional publishers. A summary of the discussions and recommendations that emerged during the panel will be prepared and made available to CSS members.

Finally, Tempo recalled that the BoG approved the proposals to provide financial support to the IEEE Foundation regarding initiatives related to the earthquake in Haiti and the flooding in Pakistan that occurred during the year. This activity is certainly in agreement with the IEEE mission, which is "Advancing Technology for Humanity."

Following his report, R. Tempo invited V. Piuri, IEEE Division X director to give a brief overview of the responsibilities of his office activities. Piuri indicated that IEEE is currently soliciting nominations for the position of Division X Director Elect, and encouraged BoG members to send their inputs to him. After Piuri's presentation, Gary Balas suggested that similar presentations could be given by

members of BoG of the Executive committee at the CDC or ACC, to make the CSS membership aware of the activities being carried out on behalf of the society.

Report on the Task Force on Outreach

Next, T. Samad, Past CSS President and Chair of the Task Force on Outreach presented a brief report on its activities, highlighting the following accomplishments:

“The Impact of Control Technology” report

A comprehensive report on the impact of control is being prepared, edited by T. Samad and Anuradha Annaswamy. The CSS is the principal sponsor of the report. Other sponsors include the Institute of Advanced Study and Cognitive Technical Systems (CoTeSyS) at the Technical University of Munich, the U.S. National Science Foundation, and Deutsche Forschungs-Gemeinschaft (the German Federal Research Agency). The 200-plus-page report has about 50 major contributors and consists of four parts:

- Part 1: Discussions of the role of control technology in several application domains: the process industries, aerospace, automotive, biomedical devices, robotics, and renewable energy and smart grids. Also included are two cross-application perspectives, one on platforms and tools, the other on application and market requirements.
- Part 2: A set of two-page visually appealing briefs highlighting several (20+) “success stories” in control. These cover most of the domains included in Part 1 and several others besides.
- Part 3: Discussions on cross-cutting emerging research themes: systems of systems, cyberphysical systems, networked decision systems, and cognitive control.
- Part 4: A set of two-page visually appealing briefs highlighting several (20-) “grand challenges” in control. These cover all of the application domains of Part 1 and several others besides.

The report is an outcome of the CSS-cosponsored “International Workshop on the Impact of Control: Past, Present, and Future” held in October 2009 in Berchtesgaden, Germany. A. Annaswamy and Martin Buss were the primary organizers of this workshop. Other organizers included Gary Balas, Patrick Dewilde, and Tariq Samad. The report is in the final stages of preparation. Once complete, the entire content will be available freely and publicly on www.ieeecss.org.

International Workshop on the Future of Control in Transportation Systems

Modern transportation systems rely crucially on electronic devices, computer systems, and sophisticated algorithms to run and be run. Less generically, transportation systems simply would not work without that particular combination of electronic sensors, processors, and “hidden intelligence” that govern their correct functioning and make up their “control systems.” Over the recent years automatic control has entered all vehicles, on roads, railways, air and space, and their infrastructures: a large part of future development will rely on more complex and effective control systems and diagnostic functionalities able to improve voyagers' safety and travel comfort, transportation system performances and efficiencies, and vehicles interactions with each other and with their surroundings.

The IEEE Control Systems Society sponsored the “International Workshop on the Future of Control in Transportation Systems,” at the University of Sannio in Benevento, Italy, on May 27-29, 2010. This workshop was organized by Luigi Glielmo, Gary Balas, and Francesco Vasca. It built on the work of the “IEEE International Workshop on the Impact of Control: Past, Present and Future” held in Berchtesgaden, Germany, October 2009, although it was more narrowly focused on current and future challenges in road, railway, aircraft vehicles, and transportation systems.

Participants discussed common problems across these application areas, and drew attention to specific areas in need of interest by academia, industries, and private and government funding agencies. The 38 attendees, coming from Europe, USA and Asia, and including significant participation from industry and government, gave presentations and participated in discussions focused on topics such as the successes of advanced control in practice, new and emerging control technologies, and obstacles that limit the practical impact of controls research in transportation systems. The Workshop position report will summarize deliberations and recommendations for cross-institutional collaborations in controls, specifically targeting industrial, academic, and governmental cooperation. The report is expected to be complete in early 2011 and will be available on ieeecss.org.

Outreach Task Force Fund

At the CDC-09 BoG meeting, the CSS Board of Governors approved the establishment of the “CSS Outreach Fund” with funding of \$150,000 for 2011. The Outreach Fund will be used for projects to benefit CSS and the controls community in general. Projects will be selected based on a proposal solicitation and evaluation process. All CSS members are eligible to submit proposals. The Fund is ma-

naged by the CSS Task Force on Outreach. More information and guidelines are posted on the CSS website. Examples of projects that the fund can support include:

- Outreach activities for pre-university students and teachers
- Promotional materials for CSS or the field
- Workshops on control-related topics
- CSS membership drives

The first call for proposals for the Outreach Fund was published on ieeecss.org in late summer, with a deadline for receipt of proposals of November 30, 2010. The task force anticipates authorizing the first round of projects in January 2011. Two rounds of proposal solicitations and awards are planned annually.

CSS Webinar Series

CSS has launched a webinar series. The webinars will be broadcast live and will be archived on the CSS Online Lecture Library (www.ieeecss-oll.org) for post-broadcast viewing. Conference Catalysts is coordinating the webinars. Presenters will be limited initially to the CSS Distinguished Lecturers. D. Netic presented the first webinar, titled “Analysis and design of extremum-seeking controllers” on December 8. In addition to D. Netic, Mathukumalli Vidyasagar, and Jorge Cortes, both CSS Distinguished Lecturers, have agreed to participate.

Other Activities

Next, Samad updated BoG on the status of other Outreach Fund initiatives started last year:

- Membership in the CSS LinkedIn group continues to increase, now numbering over 800. The group was established by Richard Murray in 2009. Judy Scharmann of Conference Catalysts is managing the group.
- The CSS Online Lecture Library, www.ieeecss-oll.org, now includes plenary lectures from the 2010 MSC. There were technical problems with the ACC 2010 plenary recordings that are in the process of being resolved. The lecture library is managed by Conference Catalysts and comes under the responsibility of the CSS Editor for Electronic Publications, Magnus Egerstedt of Georgia Tech.

Report of the President Elect

Following T. Samad’s report, R. Middleton, CSS President Elect updated BoG on several issues related to his office. Middleton began his presentation by thanking the many CSS volunteers for their efforts and in particular, the CSS president Roberto Tempo for his leadership and the many initiatives during 2010. .

CDC 50th Anniversary

Next, R. Middleton reminded BoG that 2011, is the 50th anniversary of the IEEE Conference on Decision and Control, which will be held jointly with the European Control Conference Dec 12-15 in Tampa, Florida. In conjunction with the conference organisers, the CSS is planning an event to celebrate the 50th anniversary and is interested in photos and anecdotes from both recent and not so recent CDCs. Middleton invited any interested BoG members to contact him to discuss possible contributions to the discussions and planning.

CSS and IEEE Technical Activities Board

Next, Middleton gave BoG a brief updated on two issues discussed at the last IEEE Technical Activities Board meeting that can have some impact on CSS.

TAB rules on nominations/elections

The TAB has ruled that all organizational units (which includes technical societies) such as CSS that have elections for officers must have at least 1.5 times as many candidates as there are positions to be filled. CSS satisfies this rule with respect to elected members of the Board of Governors (typically 9 nominations for 6 positions to be filled). However, for executive committee appointments (President Elect, Vice Presidents) the society’s normal practice has been for the nominating committee to come up with nominations; (although there are also rules governing ‘petition’ candidates). Thus, it appears that the society will have to review its by-laws and procedures during 2011 to ensure that it is compliant no later than 2012.

Regarding Society and Periodicals reviews, Middleton reminded BoG that there is a five yearly cycle of reviews of IEEE organizational units including societies, and publications. CSS publications will be reviewed during the June 2011 IEEE Board of Directors meeting series, and the society will be reviewed during the November 2011 IEEE meetings. As part of this, the society will likely need to review its current society field of interest statement, since it was established many years ago. The existing version exceeds recently approved (June 2010 TAB meeting) length limits of 75 words, and will need to be altered before the November 2011 society review.

Report of the Vice President, Financial Activities

Due to time constraints, P. Misra, VPFA did not make a presentation, referring BoG to the written report included in the agenda for details on the society's financial status.

Report of the Vice President, Conference Activities

Following P. Misra's report, M.E. Valcher, VPCA, presented a brief overview of conference activities currently under way, referring BoG to the written report for details. Valcher started by reminding BoG of the new procedure in place for scheduling the MSC, based on an open call for proposals. For the 2015 MSC, three pre-proposals were received and evaluated by a subcommittee of the Executive Committee. Based on these evaluations, two of these pre-proposals were approved and the organizers invited to submit a full proposal. A final decision will be taken at the June 2011 BoG meeting.

Next, Valcher raised the issue of financing the cost of a special issue of the European Journal of Control containing the plenary papers from the 2011 joint CDC-ECC. The current EUCA-CSS memorandum of understanding specifies that 1400 copies should be printed. However, due to an oversight, the cost of printing these issues, estimated at around \$21000 was not included in the conference budget approved by CSS and IEEE. A short discussion ensued exploring alternatives such as a CD, but at the end it was agreed that the present MOU mandates printed copies, and that at this stage it is not feasible to revise the conference budget. Thus it was decided that the conference will bear these costs as an extra, unforeseen expense. In the event that the conference surplus is not enough to cover these costs, then the CSS will bear them. M. Polycarpou, CDC-ECC Program Co-chair raised the issue of whether plenary speakers are aware of this requirement and have agreed to contribute to the EJC issue. It was agreed that M. Polycarpou should contact S. Bittanti regarding deadlines and indicate that the general CSS sentiment is that EUCA should take a more proactive stance in communicating with the conference organizers.

Report of the Vice President, Publications Activities

Christos Cassandras, VPPA presented a brief summary of the state of the society's publications and referred BoG to the written report for statistics. Cassandras informed BoG that as of January 1, 2010 all operations of the Transactions on Automatic Control were transferred to the new Editorial Office at the University of Notre Dame, which now handles both Full Paper and Technical Note submissions. The new TAC website is www.nd.edu/~ieeetac. Regarding the Control Systems Magazine, a transition plan has been implemented, where Richard Braatz is the planned replacement for the current Editor in Chief, D. Bernstein, who will step down at the end of 2011.

Report of the Vice President, Membership Activities

S. Hara, VPMA, presented a report highlighting CSS membership related activities. Hara began his presentation by reviewing membership trends. Hara noted that the total number of IEEE membership has increased by 2.5.7%. The main contribution is increases of graduate students +6.3% (2,044 = 34,383 – 32,339) and undergraduate students members +7.1% (3,710 = 55,686 – 51,976). Regarding the membership by region, the top three regions in terms of the growth rate are Region 9: Latin America +13.1% (1,834 = 15,865 – 14,031), Region 10: Asia & Pacific +10.4% (7,959 = 84,349 – 76,390), and Region 8: Europe, Middle East & Africa +3.8% (2,556 = 70,375 – 67,819). The membership trends inside US (Regions 1 through 6) are now worse than that one year ago. The total is 1.3% (-2,752 = 205,517 – 208,269), and the number of student members is also now decreasing.

Regarding CSS specific figures, the total number of CSS members (without affiliates) is slightly up (+1.3%: $107 = 8,542 - 8,435$). These numbers are average, when compared against all 38 IEEE societies. The number of CSS student members is still low, 422 (around 4% of the total CSS members). This is in contrast with the Robotics & Automation and Communications Societies, for which the percentages are 12% and 10%, respectively. The average percentage amongst all societies is 5%. A concern is the decrease of student members (-2.5%). This phenomenon is found in all societies in Division X except Robotics & Automation Society.

Following S. Hara's presentation, O. Gonzalez suggested considering granting membership to students that get papers accepted in CSS conferences. Hara indicated that, in his opinion, attention should also be paid to the transition from student to regular membership. Richard Braatz inquired about life membership. S. Hara replied that the current policy is to grant life membership when the member's age added to the number of years as member equals one hundred.

Report of the Vice President, Technical Activities

Shuzhi (Sam) Ge, Vice President for Technical Activities first updated BoG on the current technical and financial status of the CSS Technical Activities Board, including the successful establishment of three new TCs during 2010 and thanked the Technical Committee chairs for their efforts during 2010. He then invited Graziano Chesi, Chair, TC on Systems with Uncertainty to present a summary of its activities. G. Chesi reminded BoG that the TC-SU was established in June 2009, with the goal of providing researchers working in this area with a network of resources, events, and contacts. It presently has 29 members and has organized several workshops and invited sessions at the 2010 MSC and CDC. Future activities include the first Joint Symposium on CACSD-SU at MSC 2011. After Chesi presentation, R. Tempo suggested that in the future, the issue of merging the Technical Committees on SU and CACSD (Computational Aspects of Control Systems Design) should be explored, as a way to exploit their synergies.

Other Business

Dennis Bernstein, the Control Systems Magazine Editor in Chief informed BoG of the existence of a repository of CSM articles and asked for help in locating earlier issues of the magazine needed to complete the record.

Adjournment

M. Sznaier reminded the BoG that the next meeting will be held on June 29, 2011, at 1:00 p.m. in San Francisco, CA, USA.

Tempo thanked the members of the Board of Governors and visitors for attending the meeting. The meeting was adjourned at 6:00 PM.

Appendix A.

Consent Agenda

IEEE CSS Board of Governors Meeting December 14, 2010

2011 Appointment Motions
Prepared by Richard Middleton, President-Elect

- *Motion to approve the new Chair and new and continuing Nominating Committee members for 2011*

Endorsed by: Executive Committee

Nominating Committee

Chair: Tempo, R. (09)

Members: Antsaklis, P. (08), Basar, T. (10), Cassandras, C. (11), Castañón, D. (07), Djaferis, T. (08), Middleton, R. (10)
Samad, T. (08)

CSS BYLAWS

Article I - Elections

Section 1. Nominating Committee. The Nominating Committee for each year shall be appointed during the preceding year by the President-Elect, with the approval of the Board of Governors. That committee shall consist of a Past President as Chair and four or more members of the Society not more than half of whom are elected members of the Board of Governors.

- *Motion to approve new and continuing Standing Committee Chairs for 2011*

Endorsed by: Executive Committee

Standing Committees

Awards	Djaferis, T. (09)
Chapter Activities	Giua, A. (06)
Conference Operations	Yurkovich, S. (08)
Conference Editorial Board	Astolfi, A. (09)
Conference Publications	Misra, P. (07)
Distinguished Lecturer	Petersen, I. (04)
Electronic Information	Egerstedt, M. (09)
Executive Committee	Middleton, R. (11) (ExOfficio)
Fellow Evaluation	Van den Hof, P. (11)
Fellow Nominations	Vacant

History	Polis, M. (10)
International Affairs	Allgöwer, F. (07)
Long Range Planning	Cassandras, C. (11)
Membership & Public Information	Lovera, M. (07)
Outreach Task Force	Balas, G. (11)
Standards	Samad, T. (10)
Student Activities	Hirche, S. (09)
Women in Control	Glavaski, S. (11)
Electronic Publications Editor	Egerstedt, M. (09)

- ***Motion to approve the new and continuing Awards Subcommittee Chairs for 2011***

Endorsed by: Executive Committee

Awards Subcommittees

Antonio Ruberti Young Researcher Prize	Kumar, P. (11)
Control Systems Technology Award	Haupt, P. (11)
Transition to Practice Award	Mestha, L. K. (10)
George S. Axelby Outstanding Paper Award	Morse, S. (07)
TCST Outstanding Paper Award	Braatz, R. (09)
CSM Outstanding Paper Award	Ferri, B. H. (07)
CDC Best Student-Paper Award	Hirche, S. (10)
MSC Best Student-Paper Award	Dixon, W. (10)

- ***Motion to approve the new and continuing Members on IEEE – USA Committees for 2011***

Endorsed by: Executive Committee

Members on IEEE - USA Committees

Transportation and Aerospace Policy	Shladover, S. (09)
Research & Development Policy	Bielefeld, J. (95)
Energy Policy	Thomas, R. (95)
Medical Technology Policy	Ghosh, B. (10)
Communication Policy	Gong, W. B. (02)
Career & Workforce Policy Committee	Vacant

- ***Motion to approve the new and continuing IEEE – Liaison representatives for 2011***

Endorsed by: Executive Committee

Liaison Representatives

AACC Director
AACC Alternate Director

EUCA
IEEE Nanotechnology Council (2)
IEEE Systems Council (2)
IEEE Press
IEEE Society on Social Implications of Technology
IEEE Transactions on Image Processing
IEEE PAMI Editorial Board
IEEE Xplore-Enabled Learning Library Initiative
IEEE TAB Ad-Hoc Committee on Outreach Activities
IEEE Committee on Women in Engineering
IEEE/ACM Trans. Computational Biology
& Bioinformatics Steering Committee
IEEE/ACM Trans. Computational Biology & Bioinformatics AE
SIAM/SIAG
SICE (Inst & Control - Japan)
INFORMS
IEEE TAB Magazine Committee
IEEE TAB Newsletters Committee
IEEE TAB Transactions Committee

Middleton, R (2010 and 2011)

Cassandras, C. (2011 &2012)
Camacho, E. (06)
Kosut, R. (02), Salapaka, M. (09)
Baras, J. (09), **Samad, T. (11)**
Doyle, F. (11)
Vacant
Doyle, F. (11)
Doyle, F. (11)
Hoo, K. (05)
Pasik-Duncan, B. (05)
Pasik-Duncan, B. (06)

Doyle, F. (11)
Ghosh, B. (05)
Batten, B. (11)
Imura, J. (10)
Paschalidis, I. (08)
Bernstein, D. (04)
Egerstedt, M. (09)
Antsaklis, P. J. (10)

- ***Motion to approve the new and continuing Senior Editors and continuing Associate Editors for the IEEE Transactions on Automatic Control (2011 Tech Assoc Editors were approved at ACC)***

Endorsed by: Executive Committee

IEEE Transactions on Automatic Control

Editor-in-Chief Antsaklis, P. J. (10)

Senior Editors

Chong, E. (09)
Colaneri, P. (10)
Grizzle, J. (09)
Krstic, M. (09)
Spall, J. (09)
Yamamoto, Y. (10)

Tech Assoc Editors

Arzelier, D. (09)
Astolfi, A. (11)
Braslavsky, J. (10)
Chen, C.-H. (08)
Chen, X. (09)
Chiuso, A. (10)
Cortes, J. (10)
Dabbene, F. (09)
Dafoouz, J. (11)
Dullerud, G. (11)
Egerstedt, M. (08)
Fabre, E. (08)

Ferrara, A. (07)
Fujioka, H. (09)
Hong, Y. (10)
Ishii, H. (09)
James, M. (10)
Loria, A. (07)
Low, S. (10)
Malisoff, M. (11)
Marchand, H. (10)
Marconi, L. (10)
Mascolo, S. (08)
Mirkin, L. (11)

Morris, K. (08)
Paganini, F. (11)
Pepe, P. (11)
Prandini, M. (09)
Reveliotis, S. (09)
Schenato, L. (11)
Shi, P. (08)
Soo Chan, H. (11)
Szepesvari, C. (09)
Tabuada, P. (11)
Trentelman, H. (11)
Tsiotras, P. (09)

Wang, Z. (08)
Weyer, E. (10)

Winkin, J. (09)
Xia, X. (11)

Zhang, H. (10)
Zhou, T. (08)

Conference Related Motions
Prepared by E. Valcher, Vice-President, Conference Activities

- ***Motion to approve the Joint Symposium on CACSD and SU within the MSC 2013, and to not have the CACSD within MSC 2012***

Endorsed by: Executive Committee

Background information: In June 2009 we started an experiment: to have a Joint CACSD-SU subconference within the MSC.

In 2010 this was implemented by simply adding a special track about SU within the CACSD.

In 2011 the CACSD will take place (normally CACSD takes place only on even years) and it will be a joint symposium with SU.

We established to decide what to do after the MSC 2010 experience.

Upon consulting with Fabrizio Dabbene (CACSD 2010 PC) and Graziano Chesi (Chair of the TC on SU, and responsible of the special track on SU within CASCSD 2010), we propose not to have the CACSD within the MSC 2012 and to have the Joint Symposium on CACSD and SU within MSC 2013 (this proposal is supported by M. Vidyasagar and P. Misra, MSC 2013 GCs, as well as by Chesi and Dabbene). In fact, it is believed that the conference should remain a bi-annual event and that in this broader version it will be more successful. In addition, the Joint Symposium on CACSD and SU will not conflict with the IFAC Rocond 2012, with which it shares a good number of participants.