

Minutes of the Control Systems Society Board of Governors Meeting

June 09, 2009

St, Louis, MO

Call to Order and Approval of Agenda

T. Samad called the meeting of the Control Systems Society (CSS) Board of Governors (BoG) to order at 1:00 P.M. on June 09, 2009. The following members of the BoG were in attendance: E. Abed, G. Balas, D. Bernstein, F. Bullo, C. Cassandras, D. Castanon, D. Cheng, F. Chowdhury, M. Fujita, S. Ge, O. Gonzalez, S. Hara, J. Hespanha, K. Johansson, I. Kolmanovski, A. Konstantellos, Z. Lin, L. Mestha, R. Middleton, E. Misawa, Y. Ohta, T. Parisini, T. Samad, M. Spong, J. Sun, M. Sznaier, R. Tempo, E. Valcher, M. Vidyasagar. Additionally, the following visitors attended the meeting: P. Antsaklis, J. Baillieul, F. Dabbene, P. Misra, S. Yurkovich and Joan Pratt. Quorum was established and the agenda was approved prior to the meeting with unanimous consent. Next, the minutes of the BoG meeting of December 08, 2008 held in Cancun, Mexico were approved unanimously.

Action Items

Appointments

D. Castanon, the chair of the Nominating Committee, presented the nominees for the 2010 CSS Executive Committee: R. Tempo, President; R. Middleton (President Elect); T. Samad (Past President); S. Hara (Vice President Member Activities, continuing); E. Misawa (Vice President Publication Activities, continuing); Shuzhi Sam Ge (Vice President Technical Activities, continuing); P. Misra (Vice President Financial Activities); C. Cassandras (Vice President Conference Activities); M. Sznaier (Executive Director, continuing). Castanon moved for the approval of this slate. New and continuing appointments were approved with unanimous consent.

Castañón next informed BoG of the slate of candidates for this year's BoG election: Chaouki Abdallah, Anuradha Annaswamy, Daizhan Cheng, Edwin Chong, Frank Doyle, Faryar Jabbari, Bruce Krogh, Kirsten Morris and Maria Elena Valcher. Six of these candidates will be elected to the Board of Governors for the term 2010-2012, based on the vote cast by the entire CSS membership.

Conference Editorial Board Associate Editors

T. Samad presented the slate of new and continuing Associate Editors for the IEEE Conference Editorial Board (To start July 1, 2009). It was moved that the following slate of new CEB AEs be approved: Claudio Altafini, SISSA, Italy; Giorgio Battistelli, University of Firenze, Italy; Zhiyong Chen, University of Newcastle, Australia; Eduardo F. Costa, University of San Paolo, Brazil; Nael H. El-Farra, University of California, Davis, USA; Antoine Girard, Universite Joseph Fourier, France; Serkan Gugercin, Virginia Tech., USA; Zhong-Ping Jiang, Polytechnic Institute, NYU, USA; A. Agung Julius, Rensselaer Polytechnic Institute, USA; Mircea Lazar, Eindhoven University of Technology, Netherlands; Pierluigi Pisu, Clemson University, USA; Christophe Prieur, LAAS-CNRS, Toulouse, France; Pavel S. Shcherbakov, Moscow Institute of Control Sciences, Russia; Qingshuo Song, University of Southern California, USA; Nathan Van De Wouw, Eindhoven University Of Technology, Netherlands; Luca Zaccarian, University of Roma – Tor Vergata, Italy; Qing-Chang Zhong, University of Liverpool, UK.

The motion to approve the slate of new and continuing Associate Editors passed with unanimous consent.

Transactions on Automatic Control

Next T. Samad presented a motion to approve the new (to start January 1, 2010) and continuing Associate Editors and continuing Senior Editors for the IEEE Transactions on Automatic Control.

BoG approval for the following new members of the Editorial Board was sought: Julio H. Braslavsky (University of Newcastle, Australia), Alessandro Chiuso (University of Padova, Italy), Jorge Cortes (University of California, San Diego), Yiguang Hong (Chinese Academy of Sciences, Beijing, China), Matthew R. James (Australian National University), Steven H. Low (Caltech), Hervé Marchand (INRIA Rennes, France), Lorenzo Marconi (University of Bologna, Italy), Erik Weyer (University of Melbourne, Australia), Huanshui Zhang (Shandong University, China)

Newer members of the BoG were reminded of the experience criteria for selection of new AEs for TAC. The motion to approve the slate of new and continuing AEs passed with unanimous consent.

Additionally a motion to appoint Yutaka Yamamoto as a Senior Editor for TAC starting January 2010 was presented to BoG. The motion to approve Yutaka Yamamoto as a Senior Editor for TAC passed with unanimous consent.

Liaison Representative Nominees

Motion to appoint Murti V. Salapaka as a CSS Liaison Representative for the IEEE Nanotechnology Council.

T. Samad informed BoG that the CSS is a member of the IEEE Nanotechnology Council and as such, entitled to appoint two liaison representatives to the Council. If approved, M. Salapaka will join R. Kosut as the CSS liaisons.

The motion to appoint M. Salapaka as a CSS Liaison Representative for the IEEE Nanotechnology Council passed with unanimous consent.

Motion to appoint John Baras as a CSS Liaison Representative for the IEEE Systems Council.

T. Samad informed BoG that CSS is also a member of the IEEE Systems Council and entitled to appoint two liaison representatives to the Council. If J. Baras is approved, the CSS will still have one open liaison representative position.

The motion to appoint J. Baras as a CSS Liaison Representative for the IEEE Systems Council passed with unanimous consent.

Financial Activities Motion and Report

E. Abed presented a motion to reimburse members of the Executive Committee for travel (coach-class airfare) and conference hotel lodging expenses associated with attending Executive Committee meetings held in conjunction with ACC and CDC.

E. Abed explained to BoG that currently, Executive Committee members are reimbursed all expenses for attending fall (November) and spring (May) Executive Committee meetings, but they are reimbursed only at the same rate as BoG members for attending the meetings held during ACC or CDC. When Executive Committee members do not have a paper at the ACC or CDC conferences, their attendance of these meetings entails a trip the sole purpose of which is to attend the Executive Committee and BoG meetings. He also noted that, unlike the case with BoG members, Executive Committee members are expected to attend these meetings unless their circumstances do not allow attendance. Yet, the existing reimbursement policy does not usually fully cover the expenses associated with the ACC and CDC trips, and the shortfall must be covered from other sources that need to be found individually by each Executive Committee member. The motion seeks to treat all Executive Committee meetings equally and guarantee that expenses associated with attending the meetings at ACC and CDC are covered by the CSS. Executive Committee meetings during ACC and CDC are held the evening before and the morning of the Board of Governors meeting and on the morning of the penultimate day of the conference (typically Thursday). In the discussion following the motion presentation, it was noted that Editors and other officers having offices at their institutions supported by IEEE agreements already have the opportunity for full reimbursement through these offices. It was also noted that Vice Presidents have budgets to offset the cost of standing and technical committee chairs to attend meetings.

The motion to reimburse members of the Executive Committee for travel and conference hotel lodging expenses associated with attending Executive Committee meetings held in conjunction with ACC and CDC was approved with a majority vote. One abstention (M. Sznaier, recorded).

2010 CSS Budget

E. Abed presented a financial activities report. Below are highlights from his report.

With regards to the 2009 1Q Year-End Forecast, E. Abed reported that the forecasted surplus is \$211K, compared to a budgeted surplus of \$284.4K, Interest income for calendar year 2008 was -\$3.118M. CSS reserves stood at \$7.4M as of Aug. 2008 and \$4.186M as of Dec. 2008. With the slight recovery of the S&P 500 from 903 as of Dec. 31, 2008 to 940 as of June 9, 2009, the net worth should be around \$4.36M as of the date of the presentation (plus any surplus for the first half of 2009).

With regard to Agreements with Universities/Vendors, E. Abed mentioned 1) Services Agreements for 2009 (some starting July 2009) are in place or in the final stages of approval. 2) Most agreements are set up for 3 or 3.5 years; for the few exceptions that are valid for 1 year, E. Abed informed BoG that he plans to write new 2- or 3-year agreements. This way, there will be minimal contract preparation work for the next VPFA. 3) IEEE has made some changes in contracting: One important change is that travel should now be included in the IEEE agreements with Universities and Vendors, and travel expenses should be handled locally in the university or organization. Also, as of Jan.1 it is required that all purchase orders (PO's) for Independent Contractors (individuals paid for miscellaneous services) must undergo review by the IEEE TAB Finance executive director, regardless of cost. This can be a time-consuming process without guaranteed results.

E. Abed also shared a few miscellaneous comments with the BoG. 1) (From last year.) Email and paper submission of reimbursement and other financial requests is inefficient, prone to errors, and doesn't lend itself to systematic tracking of requests. This problem persists and the CSS should move to web-based submission – and maybe not even accepting email or hard copy submissions in the future. 2) The VPFA needs direct access to the IEEE CSS web site in order to post documents and instructions. For example, the VPFA

should be able to post past reimbursement forms needed for people with late submissions, updated forms as they become available from IEEE, special instructions for distinguished lecturer travel reimbursements, etc. 3) For 2010, electronic subscriptions to TAC and TCST are offered free with membership. There will no longer be a “Combo” rate – members can subscribe to hard copies separately. 4) If CSS will be paying Field Award recipients’ travel expenses to attend the conference where the award is presented, we should include this expense in an update to the 2010 budget.

In closing, E. Abed shared the following information with regard to the 2010 Budget. He noted the planned surplus is \$253.7K (income \$3.4M, expenses \$3.15M). He also provided some comments on changes from the 2009 budget to the 2010 budget. The changes include an increase in the amount budgeted for award activity, funding of \$50K to cover possible introduction of a new electronic journal that would be a companion to the Transactions on Automatic Control, and funding of \$40K for possible development of 1 or 2 Expert Now modules (online courseware offered through IEEE).

Technical Activities Motions

Motion to approve the creation of a Technical Committee on Systems with Uncertainty.

S. Ge presented a motion to create a new T.C. on Systems with Uncertainty. The intent is to broaden the scope and bring new ideas (e.g. SOS, randomization) to the former TC on robust control. This committee was shut down a few years ago due to lack of activity, and it was felt that there currently exists enough interest in the subject to reactivate it, with a broader scope. Different alternatives were considered for its names, including TC on Uncertain Systems and keeping the former name (TC on Robust Control).

BoG approved the creation of a Technical Committee on Systems with Uncertainty with a majority decision. 1 abstention (G. Balas recorded).

Motion to appoint Graziano Chesi as the chair of the CSS Technical Committee on Systems with Uncertainty.

S. Ge presented a motion to approve Graziano Chesi as the chair of the CSS Technical Committee on Systems with Uncertainty.

The motion was approved by BoG with unanimous consent.

Motion to change the name of the Technical Committee on Computer Aided Control Systems Design to Computational Aspects of Control Systems Design (keeping the CACSD acronym).

S. Ge presented a motion to change the name of the Technical Committee on Computer Aided Control Systems Design to Computational Aspects of Control Systems Design (keeping the CACSD acronym).

The motion was approved with a majority decision. 1 abstention (M. Spong recorded).

Conference Activities Motions

New conference registration fee rules at CDC and MSC conferences

M. E. Valcher presented a motion to approve new registration fee rules for CDC and MSC such that a regular registration by an Author will allow the Author to upload up to 4 of the accepted papers the Author has (co)authored. The same Author can upload additional accepted papers for a paper upload fee of 200 US dollars per paper.

The motion is intended to allocate financial responsibility proportionate to use of conference resources. In particular, the motion will reduce the possibility of authors uploading a large number of papers with a single registration as well as the possibility of authors inviting colleagues to become co-authors solely for the purpose of avoiding the payment of registration fees to upload their papers. This motion was the outcome of a joint AACC and CSS committee formed to address this issue. CSS participants in this committee included M.E. Valcher (chair), P. Misra, and F. Bullo (BoG member), AACC participants were K. Muske and R. Judd.

Effect of this motion on advisors with multiple students was discussed, with the concern that it could adversely impact the ability of advisors to fund students to attend the conference. It was suggested to allow students to upload papers with the reduced rate student registration if the advisor is already registered. However, it was noted that at present it is not feasible to cross-link registrations. It was also noted that the proposed CSS policy is more generous than those from other societies and that students that get travel support would be able to upload papers under the proposed rule.

Gary Balas proposed a friendly amendment to reduce the number of free uploads to 3 and allow 1 upload with each reduced registration. The amendment was accepted by M. E. Valcher and a vote was taken on the following amended motion:

To approve new registration fee rules for CDC and MSC such that a regular registration by an Author will allow the Author to upload up to 3 of the accepted papers the Author has (co)authored and a reduced registration will allow the author to upload 1 paper. The same Author can upload additional accepted papers for a paper upload fee of 200 US dollars per paper. The motion was approved by BoG with a majority decision. M. Sznaier opposed.

CDC 2010 preliminary budget

M. E. Valcher invited M. Spong, CDC 2010 GC to present the preliminary 2010 CDC budget. M. Spong informed the BoG the CSS Executive Committee has reviewed the CDC 2010 preliminary budget and has endorsed it. The budget has also been approved by the chair of the CSS Conference Operations Committee, S. Yurkovich. The advance member registration fee is \$440 and total registered attendee count is estimated at 1,075 for budgeting purposes. This number is close to New Orleans attendance

The BoG unanimously approved the budget for the CDC 2010.

Program Chair ISIC 2011

The BoG unanimously approved Stjepan Bogdan as the Program Chair for the ISIC 2011.

Program Chair for the CCA 2011

BoG unanimously approved Jagannathan Sarangapani as the Program Chair for the CCA 2011.

MSC 2011 date

BoG unanimously approved September 28-30 (Wed-Fri), 2011 as MSC 2011 conference dates.

Joint Symposium on CACSD and SU within MSC 2011

M. E. Valcher presented a motion to approve a “Joint Symposium on Computer Aided Control System Design (CACSD) and Systems with Uncertainty (SU)” as a subconference of MSC 2011. CACSD submission numbers have been low in the last several conference editions. To rejuvenate the CACSD Technical Committee, a motion has been approved to broaden the scope of the TC. A new TC on Systems with Uncertainty has also been approved. This conference motion combines the complementary interests of both TCs for a broader-scope CACSD conference that, if successful, could become an annual conference—the CACSD conference is currently held biannually. BoG approved the Joint Symposium with a majority decision, 1 abstention (G. Balas recorded).

CDC 2013 venue and dates

M. E. Valcher invited Roberto Tempo and Thomas Parisini, CDC 2013 General co-Chairs to present a motion to approve the venue and dates of the conference. BoG approved the Venice, Italy venue and December 10-13, 2013 (Tue-Fri: 4 days) dates with a majority decision, D. Bernstein opposed (recorded) and T. Parisini abstained (recorded).

Other Motions

Motion to provide financial support for the IEEE Control Systems Field Award winner

Next T. Samad presented a motion to provide financial support for the IEEE Control Systems Field Award winner to travel to a CSS conference for accepting their award, including transportation (coach class airfare and transfers), room accommodations at the conference hotel for the duration of the conference, and the conference registration fee. The costs will be paid from the CSS budget.

T. Samad explained that the IEEE Control Systems Field Award is endowed by CSS but administered by IEEE. IEEE rules for this award do not include support for travel by the awardee to accept the award. In contrast, CSS awards such as the Bode Prize and the Control Systems Technology Award include travel support.

BoG approved the financial support for the IEEE Control Systems Field Award winner with unanimous consent.

Motions Approved via Email

In order that motions passed via email votes are formally recorded in CSS archives, T. Samad reminded the BoG that between the December and the June BoG meetings, the following motions were discussed and approved:

Motion to Appoint Ed Chong as AEAL of TAC. This nomination was endorsed by the CSS Executive Committee and on December 23, 2008 BoG began a 5 day abbreviated email discussion on this motion which was followed by a BoG vote with a January 2, 2009 deadline. The motion PASSED.

Motion to Appoint IEEE TAC Senior Editors in the context of the reorganization of the transactions: Edwin Chong, Miroslav Krstic, Richard Middleton and James C. Spall. This nomination was endorsed by the CSS Executive Committee and on March 4, 2009 BoG began a 7 day email discussion on this motion which was followed by a BoG vote with a March 18, 2009 deadline. The motion PASSED.

Activity Reports

Report of the President

T. Samad shared his thoughts from attending the IEEE-TAB. He reported the IEEE Technical Activities Board meets 3x/year—February, June, November, TAB consists of the presidents of all societies and councils and TAB meetings are Friday/Saturday; other IEEE meetings take place during the whole week. The February meeting was in San Juan, Puerto Rico. David Castañón, Tariq Samad, Roberto Tempo attended TAB and/or other meetings and several other CSS volunteers also attended in various capacities: John Baillieul, Tamer Başar, Edwin Chong, Pradeep Misra and Steve Yurkovich. T. Samad informed the BoG that the next meeting is in Los Angeles and will be held June 26-27.

Samad said that IEEE wants societies to scrutinize technical cosponsorship requests. This scrutiny is being required in response to quality control problems that have been encountered with IEEE-cosponsored conferences, e.g., the acceptance and publication in Xplore of “hoax” papers. “Substantial involvement” by the society is suggested as a requirement for technical cosponsorship, Some societies do not allow Proceedings purchase for new conferences and some require TCs or equivalents to endorse cosponsorship requests. Samad also reported on discussions related to the financial impact of recession. The 2008 investment return on IEEE reserves was -29%; Society/Council and TAB reserves decreased from \$182M to \$111M. IEEE policy is that 4.5% of reserves are budgeted for IEEE operations; these budgets are used even if investment return is less than 4.5%. As a result of the poor financial performance, the 3% reserves spending rule has been suspended for the 2010 budget. Societies also cannot use the 50% spending rule for last year’s surplus (for 2009 expenses). However, forecasted savings from the current-year budget can be used, and also \$3M is available through the New Initiatives Committee—TAB review and approval is required for this. There is no plan to dip into S/C reserves; net-zero or positive operations mandated.

Next Samad discussed some TAB initiatives including the Web-based “Technology Navigator” project that is under development. CSS is involved, with VP Technical Activities, Sam Ge, leading our efforts. Another initiative is focusing on solutions for global problems (clean water, health care, etc.); CSS is not involved in this.

Next, T. Samad presented an update on the status of the CSS Task Force on Outreach and reminded the BoG that at the December 2008 BoG meeting, the following recommendations from the 2008 activities of the Task Force were approved: Survey and suggestions for controls curricula (lead: Jeff Cook, Univ. of Michigan), organization of a workshop on industry/university/government collaborations in control (lead: Gary Balas, Univ. of Minnesota), design and implementation of a revitalized Website for CSS (lead: Magnus Egerstedt, Georgia Institute of Technology), development of a Chinese language version of the CSS Website (lead: Yi Huang, Chinese Academy of Sciences), and the establishment of a LinkedIn group for Control Systems Society (lead: Richard Murray, California Institute of Technology). The estimated financial impact of these activities is \$110K (approved at Cancun). T. Samad reported that there has been progress on all fronts. Under the leadership of Jeff Cook the Task Force on Outreach has developed an informal survey on controls curriculum to evaluate the capabilities and perceived shortcomings of entry-level control engineers in industrial positions. The survey, published in late April, includes separate sections for academic and industry respondents, focused on undergrad and Masters’-level competencies, not research positions. Initial versions were reviewed by ExCom and BoG and the survey was distributed to all members via e-mail and posted on the LinkedIn group and ieeecss.org. A summary is expected to be presented at the next BoG meeting. Questions are included on concepts, technologies, and tools and cover z-transforms, FSM models, bond graphs, loop shaping, H-inf, MPC, SQL, UML, RTOSs, Matlab, Mathematica, Maple, dSpace, and many other topics.

Next T. Samad discussed developments related to the academic/industry collaboration workshop. He reported that an “Impact of Control” workshop will be held in Germany, Oct. 18 – 20. This is an invited event with a mix of government and industry participants, led by Anuradha Annaswamy and Martin Buss, with help from G. Balas and T. Samad, and with the Institute for Advanced Study, Tech. Univ. of Munich, as principal sponsor. Breakout sessions are planned on past accomplishments and future opportunities in traditional and emerging application areas, with additional breakouts on thematic topics. He also informed BoG that additional “outreach” workshops are being planned for next year, to be held in Italy and South America. G. Balas is developing proposals for these. Next T. Samad informed BoG that a CSS LinkedIn Group led by Richard Murray has been established. Membership is 418 as of 6/8/09 and all active members of CSS as of 27 January, 2009 have been preapproved for group membership and should be able to join the group by visiting <http://www.linkedin.com/e/gis/1514847>.

T. Samad shared a list of new suggestions for outreach made by A. Konstantellos. 1) Advertise the field directly to high schools and other multipliers, for example by developing a control primer for high school teachers (physics and maths) and students for the CSS website and by developing a repository of elementary control examples, theories, and jokes. 2) Develop new benchmarks, especially in novel areas, e.g., a wind-farm model. 3) Capture emerging and novel applications, e.g., all-electric car, zero-energy-loss buildings, interdependent infrastructures, large-scale vision systems, biotechnological paradigms. 4) Overcome the lack of quantitative and market

data and analysis for control; we only have such data for process control, but not other application areas. 5) Aim at a new report, a follow-up to “Control in an Information-Rich World,” by R. Murray et al., 2003; a roadmap to the future and industry support (users and suppliers of control) is needed. T. Samad also discussed a suggestion for outreach from Kishan Baheti.: Compile and publicize significant achievements in control in order to promote our accomplishments to a broad audience, not just scientists and engineers. Inputs will be requested from members via e-mail and from Technical Committees.

Following this update, BoG approval and meeting processes were discussed. A concern with the current model for BoG approvals and meetings is the fact that too much of the BoG meeting is spent “rubber stamping” appointments with too little opportunity for strategic discussions and direction setting. Some BoG members indicated that motions are difficult to follow due to limited background provided. The issue of finding better ways of involving BoG members in the development of motions and CSS policy was discussed.

It was suggested that the approval process can be streamlined by having BoG members look at appointments in advance of the meetings and presenting these at the meeting as a consent agenda. Reports and agenda for BoG meetings can be provided on password-protected website 10 – 14 days before the meeting. It was also agreed that more discussion is needed regarding BoG approval of conference related items (CSS constitution requires only budget approval).

Next, the CSS Initiatives Fund was discussed. The idea is to set up a fund that any CSS member can write a proposal to, for projects that will help the Society and the control systems community in general, such as: workshops on broad-based themes, promotional materials for CSS and our field and outreach for K – 12. Per IEEE, this can be done if finances allow, but IEEE finances did not permit for 2010 budget. It was suggested that the CSS leverage its funds by applying to NSF or other federal agencies such as US-AID for additional support. The next step in the process is to set up a committee to develop process and guidelines for award amounts, submission and review process, and reporting.

Report of the Vice President, Publication Activities

E. Misawa presented a summary of the reviewing time and submission statistics for the Transactions on Automatic Control. The average reviewing time for papers submitted to TAC is 4 to 5 months. The number of submissions continues to grow. In 2008, 571 Full Papers and 844 Technical Notes were submitted. Misawa indicated that the latest submission numbers available were 232 Full Papers and 235 Technical Notes, and that it is expected that by the end of the year the number of Full Paper submissions will reach an all time high of 800. Misawa informed BoG of the acceptance statistics for TAC:13% of manuscripts submitted as Full Papers are conditionally accepted, 23% are asked to be resubmitted, 3% are conditionally accepted as Technical Notes, 16% are asked for a resubmission as a Technical Note, and 45% are rejected. For manuscripts submitted as Technical Notes, 16% are accepted, 17% are conditionally accepted, 23% are provisionally rejected, and 44% are rejected or returned to the author without review. Next, Misawa presented statistics for the Transactions on Control Systems Technology: In 2008, 531 papers were submitted. The latest available number for 2009 is 135 submissions. The acceptance ratio is around 33%. Misawa informed BoG that the page budget for the TCST is now 1500 pages, almost double the page budget in 1999. Misawa also reported that there were typesetting problems with TAC. There was a discussion about it with IEEE publication staff at the IEEE Editors meeting in Atlanta, GA, and Misawa felt confident that IEEE has put a process in place to avoid the recent typesetting issues in TAC.

Next, E. Misawa invited R. Tempo to discuss the Present and Future of TAC, highlighting significant changes in its structure. A concern is the very large (and increasing) number of submissions: 1600 estimated for 2009 (compared against 1000 for Automatica). Alternatives for addressing this issue were discussed. A possibility is to start a new journal publishing only Technical Notes (suitably redefined). Negatives include the fact that there already exist too many journals, new ones have a hard time reaching a level of excellence and the fact that the CSS should preserve and capitalize the level of excellence of TAC. An alternative is to convert TAC to an electronic only journal. Advantages include the facts that this action will place the CSS in a leading position since printed journals are expected to disappear in the near future, it eliminates the high cost of printing and mailing hard copies and that IEEE approval can be probably obtained easily. In addition, it was noted that Google and electronic archives like IEEE Xplore, Elsevier ScienceDirect have partially replaced hard copy libraries.

Some concerns that were discussed include whether these e-publications are valued like “printed publications” in promotion and tenure decisions, how to avoid confusion between this e-journal, many other low quality on-line-journals or electronic archives (having no review process), how to treat institutional subscriptions and what happens if a subscription expires. Do individuals and institutions get to keep the issues already paid for? It was noted that these issues can be addressed by locally archiving contents at libraries or having CSS periodically print a DVD and that this will probably satisfy contractual obligations with libraries. It was noted that electronic-only journals are already used in Biology and are as valued as paper journals. If the CSS adopts an electronic only TAC model it will be the first IEEE society to do this, but it is expected that other societies will follow, since the current business model is not sustainable.

Next R. Tempo informed the BoG that he had set up a Task Force to further discuss the electronic publication topic and arrive at a recommendation. The Task Force members include: P.J. Antsaklis, J. Baillieul, C.G. Cassandras, E. A. Misawa, P. Misra, R. Tempo, M. Vidyasagar and S. Yurkovich. R. Tempo informed the BoG also that the first meeting of the Task Force was planned to take place during this ACC.

IEEE Control Systems Magazine Report

D. Bernstein presented to BoG an update on CSM. He mentioned the following recent and upcoming special issues.

- February 2009 -Hysteresis, guest editors Xiaobo Tan and Iyer Ram.
- April 2009 -Hybrid systems.
- June 2009 -Kalman filter 1st special issue.
- August 2009 -Power-based modeling.
- December 2009-Kalman filter, 2nd special issue.

Next D. Bernstein discussed recent innovations to the magazine. These innovations include a new Member Activities Department—including 25-year members, Technical Committee Department, Book Announcements, a Perspectives Department, expanded awards report (thanks to Ted Djaferis), CDC and MSC previews, and a CSM logo call to artists.

Report of the Vice President, Membership Activities

S. Hara presented slides and discussed membership trends and ideas for increasing membership with BoG. S. Hara noted that his report is based on the IEEE Membership Directory Report (March, 2009), which shows the changes of numbers of IEEE membership from March, 2008. He explained to the BoG that the total number of IEEE membership is slightly up (8,287 = 325,499 - 317,212). The main contribution is an increase of graduate (+20.5%) and undergraduate students (+7.0%). Regarding the membership by region, all six of the U.S. regions are showing declines in Higher Grade memberships, while Regions 7 through 10 (non-US countries) have posted gains. The growth rate of Women in Engineering is 11.7% in total. The greatest progress is found in Regions 9 (Latin America: +32.3% = 1,320 - 995) and 10 (Asia & Pacific: +43.0% = 2,127 - 1,487).

Next S. Hara discussed CSS membership and noted that the total number is up (+3.7%: 268 = 7,544 - 7,276). There is no difference between student member (+3.6%) and non-student member (+3.7%). In comparison with other societies, 24 societies have gain 5,283 in total and 14 societies have lost 5,390 in total. The CSS growth rate of 3.7% is better than the total (0.0%). The growth rate of CSS is, however, less than the average in Division X (+5.0%). The top three societies in Division X are Systems, Man & Cybernetics (+15.2%), Robotics & Automation (+8.1%), and Computational Intelligence (+4.9%). He noted that societies related to CSS in other divisions have worse records; Circuits & Systems (-4.5%), Communications (-4.5%), and Signal Processing (-1.1%). Following this presentation, ideas for increasing membership were discussed.

Next S. Hara reported on the Distinguished Lecturer Program. The following people are part of the program: -Until December 2009 - Miroslav Krstic (US), Mareels (AUS), Jie Huang (China), Thomas Parisini (Italy), Bassam Bamieh (US), Kevin Passino (US), Joao Hespanha (USA), Stephane Lafortune (USA), Li Qiu (Hong Kong), Frank Allgower (Germany). Until December 2010 -Richard Middleton (Ireland), Lucy Pao (USA), Dragan Nesic (Australia). During 2008 there were eleven sets of distinguished lectures given. These were given by Jie Huang, Joao Hespanha, Iven Mareels, Bassam Bamieh, Li Qiu, Dragan Nesic, Kevin Passino, Thomas Parisini, and Frank Allgower. So far for 2009, lectures have been proposed or given by Miroslav Krstic, Joao Hespanha, Richard Middleton, Thomas Parisini, and Li Qiu. Three new distinguished lecturers, Casten Scherer, John Lygeros, and Mathukumalli Vidyasagar, were approved by ExCom at the May 2009 meeting.

Next S. Hara discussed the IEEE CSS Chapter Activity Report for 2008. CSS has a total of 65 active chapters, distributed as follows: Northeastern USA: 5, Eastern USA: 6, Southeastern USA: 3, Central USA: 5, Southwestern USA: 1, Western USA: 5, Canada: 4, Europe, Middle East, Africa: 18, Latin America: 6, Asia & Pacific: 12. Chapters held a total of 302 meetings. Most of these were technical meetings (244) but professional (23), educational (19), administrative (12), and social (4) meetings were also held. Total attendance at these meetings was 11,461 comprising 4,889 member and 6,572 guest attendance.

Report of the Vice President, Technical Activities

S. Ge reminded BoG that the CSS Technical Activities Board (TAB) consists of the VP of Technical Activities, Chairs of the Technical Committees, members of external committees, Liaison Representatives, and Standing Committee chairs. It also includes VP of Publications and VP of Conferences. S. Ge informed BoG that the TAB Mission is to provide technical resources and opportunities for technical collaboration in the area of control systems. He also explained that the TC Chairs mission is to inform members of advances in their control subspecialties (or interest groups), provide opportunities for communication within a technical interest group and coordinate with the VP for Technical Activities to achieve the goals and objectives of the Society. He informed the BoG that the TC

Chairs are encouraged to develop Invited Session Proposals for the ACC and CDC, to organize tracks of papers that will hopefully grow into a significant sub-conference under the umbrella of MSC and edit special issues for our Transactions and Magazine.

Next S. Ge discussed the Status of TAB, he stated that the 2009 TAB budget is \$13,100 and provided some additional budget information: The total budget request (by 10 out of 17 TC's) is \$11,817. A balance of \$1,283 is available for new requests. The TC on Control Education has a separate budget of \$5,000.00, which is not part of the TAB budget. S. Ge indicated that the budget for 2010 needs to be increased if more TCs are approved and become operational.

S. Ge noted that a new TC on Systems with Uncertainty was approved earlier in the meeting and that there is also interest to form a TC on Fractional Control in 2009/2010. He also asked BoG members to have anyone who is interested to initiate any TCs in any emerging/ important/ fundamental areas to contact him.

Next, S. Ge explained to BoG that the Technology Navigator development at IEEE will provide greater visibility for IEEE Societies and Councils, and it will require full participation by all IEEE TAB organizations to realize its potential. It is projected to have full participation by all IEEE Societies and Council by June 12, 2009.

Following the presentation by S. Ge, D. Rivera, Chair of the Technical Committee on System Identification and Adaptive Control, gave a brief overview to the BoG as follows. The TC, profiled in Technical Activities column, Feb. 2009 issue of *IEEE Control Systems Magazine*, was founded in May 2006 with Brett Ninness (Univ. of Newcastle) as founding chair; Daniel Rivera (Arizona State University) became chair in July 2007. Currently, the committee consists of 68 members, up from 33 at inception. The TC continues to actively seek membership, particularly in the area of adaptive control and from individuals with non-academic (e.g., industrial, national lab) affiliations. The website for the TC, recently updated, is accessible at <http://www.fulton.asu.edu/~csel/ieetc>. Recent activities include invited session organized for the 2008 CDC in Cancún (Advances in LPV identification: methods and applications; C. Novara, P. Lopes do Santos, J. Ramos, M. Verhaegen, D. Rivera) and a special section of IEEE TCST on Applied LPV Modeling and Identification (deadline May 31; M. Lovera, C. Novara, P. Lopes do Santos, and D. Rivera, Guest Editors).

Next, D. Rivera briefly updated BoG on initiatives in progress: Both the IEEE and IFAC TCs have an interest in developing new peer-reviewed repositories of system identification data. The TC's interest is to go beyond data sets to sharing models, algorithms, and software environments that enable experimental design, data generation, and end-use application to be evaluated. The TC is also interested in creating educational materials (e.g., BiBTeX files, course syllabi and materials). A meeting with the counterpart IFAC TC (1.1 Modeling, Identification, and Signal Processing, led by Håkan Hjalmarsson) will be held during SYSID 2009 (July 6) in St. Malo, France to discuss harmonization efforts. The TC has discussed organizing a workshop to examine the links between system identification and machine learning; Kameshwar Poolla initially proposed the idea. The TC will likely pursue this activity as an NSF-funded workshop, in lieu of an IEEE CSS-only event. D. Rivera also indicated that better logistical coordination for planning TC meetings during conferences would be helpful.

Report of the Vice President, Conference Activities

M.E. Valcher noted that beyond the conference activities related motions and associated discussion, there were no additional issues to report. Next, she invited J. Baillieul to give an update on the CDC-CCC 2009.

J. Baillieul informed BoG members that initial submissions to CDC-CCC 2009 reached an all time record of 3184. In particular, 41 invited sessions were submitted and 29 SIAM papers. The number of workshops proposed at the conference will be 12 and there will be 6 tutorial sessions. Accepted papers will probably be around 1500, while expected conference attendees are 1700. The Program Committee meeting to finalize decisions will be held in London on June 30. Most of the contracts have already been signed, and the only pending contracts pertain to AV needs, WiFi, registration rentals, and CD-ROM production.

Adjournment

M. Sznaier reminded the BoG that the next Bog meeting will be held on Tuesday, December 15, 2009, 1 p.m. – 6 p.m. (lunch served at noon for BoG members) at the Shanghai International Convention Center, China.

T. Samad thanked the members of the Board of Governors and visitors for attending the meeting. The meeting was adjourned.