

**Minutes of the Control Systems Society  
Board of Governors Meeting on Dec. 6, 1999  
Crowne Plaza Hotel, Phoenix, AZ, USA**

Editor's Note: The Board of Governors of the IEEE Control Systems Society held its semiannual meeting in Phoenix, AZ, USA on the afternoon of Dec. 6, 1999, during the 1999 Conference on Decision and Control. The Board of Governors consists of 18 members of the society elected for three year terms with staggered annual elections, 8 Executive Officers, the Editor of each society publication, and 6 other members of the society appointed by the President-Elect for one-year terms. The following is an edited version of the minutes supplied by the Secretary Administrator P. Misra

**Call to Order and Approval of Agenda**

S. Yurkovich called the meeting of the Control System Society's (CSS) Board of Governors (BoG) at 12:59 p.m. The following members of the BoG of the CSS attended the meeting: T. Basar J.D. Birdwell, L. Bushnell, C. Cassandras, D. Castanon, R. DeCarlo, T. Djaferis, M. Gevers, J. Grizzle, S. Hara, A. Isidori, B. Krogh, F. Lewis, K. Loparo, P. Misra, H. Ozbay, U. Ozguner, T. Parisini, B. Pasik-Duncan, K. Passino, M. Polis, D. Repperger, W.J. Rugh, T. Samad, C. Schrader, M. Shor, M. Spong, J. VanSchuppen and S. Yurkovich. The following member(s) of the BoG were not present at the meeting: B. Heck. Additionally, the following visitors attended the meeting: E. Camacho, M. Campi, G. De Nicolao, J. Farrell, E. Fernandez, B. Ghosh, M. Grumble, A. Haddad, H. Khalil, K. Mazeika, A. Michel, L. Shaw, R. Tempo and G. Yen.

Modifications/additions to agenda items were noted and the modified agenda was approved by unanimous consent. The minutes of the BoG meeting of June 1, 1999, distributed prior to the meeting were approved by unanimous consent. Yurkovich welcomed the attendees and reminded them that only the members of the BoG were eligible to vote and/or make a motion.

**Action Items**

*Expanded Executive Committee*

Yurkovich moved that the present composition of the Executive Committee of the CSS be modified to include the immediate past-president. He noted that an approval of the proposed motion would lead to modification of the CSS Constitution and also clarified that in view of the time taken in getting the Constitution and Bylaws approved by the IEEE, such a modification will come into effect only the following year, thereby precluding himself from the outcome of the BoG's decision. In response to questions about the reasoning behind the motion he explained that inclusion of the immediate past-president would lead to continuity in the Executive Committee. He also noted that for the reason of continuity, several of the IEEE societies currently have either a two year term for the president or their executive committees have this structure. The BoG voted in favor of the motion with one abstention.

*Merger of At-Risk and International Committees*

B. Pasik-Duncan, the CSS Vice President for Membership Activities, moved that the existing standing committees: Assistance to Engineers At-Risk, and International Affairs, be merged to form a single standing committee whose title would be the Standing Committee on International Affairs. Further, the functions of the At-Risk committee will be subsumed by the International Affairs Committee. For the benefit of the members of the BoG, she quoted the description of the two committees from the CSS Bylaws. Several members of the BoG expressed their reservation to the merger and requested that the background and motivation for the proposed merger be explained.

Pasik-Duncan explained to the BoG that for the last two years, the two committees had been working in unison to address the needs of engineers from developing countries. Spong noted that the description of the International Affairs Committee was general enough that the mandate and functioning of the At-Risk committee can be easily accommodated within it. Yurkovich informed the BoG that the proposed restructuring was based on recommendations from both of the committees in question. Gevers mentioned that both of the above committees have spent a significant amount of time to make CSS resources more accessible to the members around the world. In particular, the two committees had focussed their attention on assisting members from developing countries to attend various CSS conferences. The motion was put to vote and passed with 19 votes for the motion, two against and one abstention.

#### *Merger of Conference Finance and Conference Audit Committees*

W.J. Rugh, the CSS Vice-President for Financial Activities, moved that the CSS Standing Committee on Conference Audit be merged into the Standing Committee on Conference Finance. He invited K. Loparo to present justification for the merger. Yurkovich reminded the BoG that the Conference Audit Committee was created by the CSS in response to the IEEE request that all societies within IEEE institute an informal audit process to examine the budgets of smaller conferences (with budgets less than \$100,000). Later, the CSS formed several standing committees to assist conference chairs with various organization issues and the Conference Finance Committee was one of the four formed for this purpose. Loparo, the present chair of both committees in question, informed the BoG that there is a very large overlap in the functioning and scope of the two committees. He also suggested that preparation of budget and subsequent audit are fairly closely linked and hence there was not much justification for keeping the two entities separate.

Several members of the BoG inquired about the audit process and how these committees were assisting conferences. Loparo briefly outlined his involvement with the budget process for currently active CSS conferences. Question was called to end the discussion and vote on the motion. Motion to call the question was approved with unanimous consent. The BoG voted unanimously to merge the Conference Audit Standing Committee into the Standing Committee on Conference Finance.

#### *Formation of TC on Automotive Control*

K. Passino, the CSS Vice-President for Technical Activities, moved that a new Technical Committee on Automotive Control be formed under the Technical Activities Board. He informed the BoG that the primary focus of the proposed technical committee will be to hold workshops, focused events and liaison with societies beyond IEEE, such as the ASME, in the field of automotive control. There was no discussion on the motion and the BoG approved the formation of proposed technical committee with unanimous consent.

#### *Formation of TC on Variable Structure & Sliding Mode Control*

Passino moved that a new Technical Committee on Variable Structure and Sliding Mode Control be formed under the Technical Activities Board. Several members of the BoG were opposed to approving the formation of the proposed technical committee due to its very narrow focus. Passino justified forming a technical committee due to its considerable activity, including an annual workshop and suggested that granting technical committees to active groups would be just reward for their activity level. He also expressed his hope that other active groups will follow suit and propose formation of technical committees by taking a cue from the group active in Variable Structure & Sliding Mode Control. After considerable discussion of merits and demerits of forming a committee with a narrow focus, the motion was put to vote. The motion was approved by a majority vote; 14 members supported the motion, six voted against it and six abstained.

#### *Change Name of TC on Aero. & Auto. Controls*

Passino moved that in view of the newly approved Technical Committee on Automotive Control, the name of the existing Technical Committee on Aerospace and Vehicular Controls be changed to the Technical Committee on Aerospace Controls. The motion was approved with unanimous consent.

#### *Financial Support for Small Technical Meetings*

Passino opined to the BoG that one of the principal functions of the Technical Activities Board is to foster interaction among researchers through several albeit smaller technical meetings and workshops on narrow topics. He noted that one of the factors that holds back technical committees from organizing such events more frequently is the lengthy budget process through which they are able to get a budgetary advance to organize the meeting. With a view towards minimizing the delay in the budget process, he moved that all CSS approved technical meetings with a budget total of under \$25,000, and which do not indicate a deficit, only require the approval of the CSS Executive Committee.

He reminded the BoG that this issue was first brought up during the June BoG meeting in San Diego, where issues related to the process by which the proposals for such events would be evaluated, liability, how accessible would such a set up be for other members of the CSS, etc, were brought up. He informed the BoG that upon discussion with the IEEE Conference Services, he determined that since these would be events sponsored by one of the IEEE societies, for insurance reasons, the organizers would still need to submit the budget on regular IEEE conference budget forms. However, the approval process for conferences with budgets less than \$25,000 is very rapid. He noted that if the proposed motion is approved, the delay in the CSS approval process will also be minimized. He assured the BoG that the budgets would still be reviewed by the Vice President for Technical Activities as well as the Executive Committee. Further, upon approval of the budget, the information will be relayed to the BoG.

Following the preceding discussion, several issues were brought up by the members of the BoG. DeCarlo noted that the budget expenditure may surpass the limit of \$25,000 by very large amounts or there could be a very large number of requests for such workshops. Passino assured the BoG that such proposals will be carefully monitored and with careful oversight, they could be an effective means to publicize and promote society activities. Birdwell expressed his reservation on keeping the BoG out of the loop until the decision was made on approval or otherwise, of these events. Krogh mentioned that if the BoG had to evaluate every proposal of this nature, it may well become a nuisance for the BoG; on the other hand, if the BoG did not consider it a burden, the proposals could be circulated to the entire BoG. Several members of the BoG expressed their support for setting up a faster track for approval for such budgets so long as a detailed report was sent to the BoG after the event. However, others opined that it would be more appropriate if the BoG's approval was sought for each such event. Based on this discussion, Birdwell offered an amendment to the motion on the floor. The amended motion was: All CSS approved technical meetings with a budget total of under \$25,000, and which do not indicate a deficit, {it will be discussed and approved by the BoG via e-mail}. It was clarified that this amendment would add a maximum delay of 30 days to the proposed budgets. The motion to amend the motion on the floor was approved by a majority with 16 members supporting the motion, five opposing it and six abstaining. The amended motion was put to vote and was approved by majority vote, with 21 members in favor of the amended motion and five opposed to it.

#### *Budget for CDC 2001*

Yurkovich invited D. Repperger, Vice President for Conference Activities, to present motions pertaining to future CSS conferences. Repperger moved that the budget for Conference on Decision and Control (CDC), 2001, circulated to the BoG be approved. He asked T. Djaferis (General Chair, CDC 2001) to respond to questions from the BoG. Shor raised concern about the 14% increase in the registration fee compared to CDC 1999. Djaferis clarified that since the CDC 2001 will be held in Orlando, the average expense

associated with various conference related activities was higher than cities like Phoenix and Tampa where CDC was held in 1999 and 1998, respectively. The budget was passed with unanimous consent.

#### *Budget for CCA/ISIC 2001*

Repperger presented the main parameters of the budget for the Conference on Control Applications (CCA) and International Symposium on Intelligent Control (ISIC) to be held in Mexico, 2001. He moved that the budget sent to the BoG along with other attachments prior to the BoG meeting be approved. The budget was approved with unanimous consent.

#### *General Chair ISIC 2002*

Repperger moved that C. DeSilva (Vancouver, BC) be approved as the General Chair for the ISIC for the year 2002. The motion passed with unanimous consent.

#### *General Chair CCA 2002*

Repperger moved that M. Grumble be approved as the General Chair for the CCA for the year 2002 and that the conference be held in Edinburgh, Scotland. He invited Grumble to briefly describe the site and timing of the conference. Grumble made several comments on the local attractions in Edinburgh and assured the BoG that the weather during the month of September is very pleasant. He also mentioned the possibility of moving the conference to an April-May time frame in case of conflicts with other control related conferences during the fall. He clarified that the registration fee was higher than typical CCA held in the USA due to higher operating costs in Europe and that the registration fees were in line with other conferences in Europe. He also noted that since the technical program would not be tied to a particular hotel, the attendees could stay at hotels with reasonably inexpensive hotels scattered around the conference venue. The motion was approved with unanimous consent.

#### *Periodicals Page Budget & Subscription Rates for 2001*

Rugh moved that subscription rates for CSS members, nonmembers and the page budget for the Transactions on Automatic Control (TAC), the Transactions on Control Systems Technology (TCST) and the Control Systems Magazine (CSM) be approved at the following rates: TAC - \$12, \$550 and less than 2001, TCST - \$8, \$195 and 840 and CSM - \$15, \$175 and 664. He clarified that for the TAC, a specific figure is not provided because it was not clear how the new tightened control on manuscripts will affect the backlog. By approving an upper limit on the number of pages, the BoG will permit the TAC Editor to make minor adjustment to a lower figure without having to go through the formal approval process. The motion passed with unanimous consent.

Rugh reminded the members of the BoG to submit their travel reimbursement forms to defer partial cost of travel to attend the BoG meeting. He also moved to approve the continuation of CSS volunteer travel support program for the year 2000. The BoG voted unanimously to approve the motion.

#### *Appointments for 2000*

Basar proposed that the appointments be made in small blocks, rather than individually or in one motion. He then identified major blocks of the appointment. For each block, a motion was made and BoG members were given an opportunity to discuss the motion and then a vote was taken to approve the block. The following blocks were approved by the BoG: (a) Nominating Committee, approved unanimously without any discussion; (b) Standing Committees, approved unanimously without any discussion; (c) Technical Committees, including the chairs of two new technical committees approved earlier by the BoG, approved

unanimously without any discussion; (d) Editors of the Transactions on Automatic Control, approved unanimously without any discussion. Basar reminded the BoG that Associate Editors as well as Associate Editors at Large were approved by the BoG during the June meeting; (e) Associate Editors of the Transactions on Control Systems Technology, Control Systems Technology. Basar noted that the BoG had already approved the appointment of M. Bodson as the Editor of TCST and also noted that the TCST will no longer have a European Co-Editor after June 2000. Shor pointed out that the appointment list indicated that the number of Associate Editors being appointed is smaller than those finishing their terms. Basar clarified that the remaining positions will be filled during the first half of 2000 with BoG's approval. Polis inquired about the reasoning behind eliminating the Co-Editor position. Basar responded by noting that even from within Europe, most manuscripts are being sent to the main Editor's office. As such, the need for a Co-Editor was not justifiable. The entire slate was approved by the BoG during the June meeting; (f) Editor and Associate Editors of the Control Systems Magazine, approved unanimously without any discussion; (g) Liaison Representatives; Gevers suggested that in the future, a liaison to European Union Control Association and Society for Instrumentation and Control Engineers, Japan be also appointed and approved by the BoG. Liaison representatives were approved unanimously; (h) Awards Committee, approved unanimously without any discussion; (i) Subcommittees of Member Activities Board, Technical Activities Board and External Committees, approved unanimously without any discussion; (j) the Conference Editorial Board, approved unanimously without any discussion and (k) the Secretary Administrator, approved unanimously without any discussion. He invited the BoG to forward nominations to him for additional appointments to the Conference Editorial Board.

In response to Yurkovich's call for motions from the floor, Lewis moved to approve the budget for CDC 2003. He then inquired why was the motion, originally on the agenda, taken off. In response, Basar clarified that there were certain questions about the hardcopy proceedings and in view of the fact that the conference was four years away, the Executive Committee decided to take it off the agenda till the issue concerning the CSS policy on how hardcopies of the conference proceedings are budgeted in the conference budget was resolved. He further clarified that at the present time, all attendees can get a hardcopy proceedings by simply paying for the shipping. Effectively it meant that the hardcopy proceedings were being subsidized by all attendees. He offered that a better model might be to keep the conference registration lower and charge the actual proceedings cost to those who request hardcopies. Several points were raised in favor of approving the budget, including not having the conference finance chair go through another iteration of the budget process, and help with planning the conference. However, the core issue of the cost of hardcopy proceedings cost which affects the registration costs was not addressed. Basar moved that the motion be tabled. The BoG approved the motion to table the approval of the budget for CDC 2003 by a vote of nineteen for the motion, three against it and three abstentions.

Subsequent to the vote, Yurkovich invited a general discussion on the subject of printing hardcopies of CSS conference proceedings. He suggested that the BoG consider two options of printing the conference proceedings: (a) the present approach, where anyone could buy a hardcopy by paying for shipping costs, i.e., all attendees subsidize the cost of proceedings or (b) decouple registration from cost of printing by charging the cost of printing hardcopies to attendees who are interested in them. In the ensuing discussion, members of the BoG touched upon the following points: In view of the fact that it is not clear when the IEEE will stop buying hardcopy proceedings for the book-broker program, the CSS conference should continue to publish hardcopy proceedings. Without further information from the IEEE and the CSS member survey, it may be premature to unilaterally stop printing hardcopies. At the same time it would be appropriate that CSS position itself in a way that when printing the hardcopy proceedings needs to be stopped, it should have minimal impact on attendee registration costs. The BoG agreed that by charging the cost of printing to only those who elect to buy hardcopy proceedings, it would be easy to stop printing proceedings without a major impact on conference budgets. In a straw vote, the BoG overwhelmingly supported the new cost model.

## **Reports**

## *Report of the President*

Yurkovich opened his address by referring to financial and other related issues at the IEEE headquarters. For the benefit of the BoG, he highlighted some of the major activities in which IEEE has been recently engaged. One of the major efforts has been the Branding Study. During this study, over \$500,000 was spent on the effectiveness of the current logo and some new logos were discussed; a professional firm was hired for conducting the survey of the effectiveness and relevance of IEEE activities to the industry and several position documents were produced. The survey determined that the IEEE has financial assets of approximately \$2bn. They also determined that the IEEE was not meeting the needs of practicing engineers and had lost, to a large extent, its relevance to the industry. It was recommended that the IEEE pursue globalization very aggressively and that it should do away with individual society logos, instead have one "masterbrand". It was not clear how the branding study will affect the overall operation of the IEEE or of the CSS.

Next, he informed the BoG that the IEEE Technical Activities Board has had steady decline of capital reserve for several years now. To address this issue, IEEE has been working on a new financial mode. From the corporate viewpoint, the IEEE is in excellent financial shape since the IEEE considers that all revenues generated by the individual societies are corporate revenues. However, individual societies have an opposite viewpoint. Various societies prefer to keep control of their individual finances and prefer to pay for the specific services that they request from headquarters. He informed the BoG that a complete analysis of the issue would require considerable time and that he has requested M. Masten to make a brief presentation of the financial model and its impact on the CSS later on during the conference. Along these lines he also informed the BoG that an ad-hoc committee was formed within the TAB to streamline IEEE headquarters' expenses and the committee has made several recommendations to headquarters, some of which are currently being implemented and others are being reviewed by the IEEE. Responding to a question on how adversely will the financial issues at the IEEE affect the CSS, Yurkovich informed the BoG that the IEEE TAB has a freeze on initiatives at the present time. The TAB will have balanced budgets and will look at various financial models to assess how to best deal with the situation. The precise impact will not be known until all financial models have been appropriately evaluated. He did caution the BoG that some time, in a not too distant future, all societies within the IEEE will have to forego part of their assets. There were suggestions regarding various approaches that might reduce the impact on the CSS including endowing a portion of our reserves and investing in other initiatives for the membership so that the rich reserves of the society are used by its own membership. Yurkovich charged L. Shaw, the incoming Vice President for Financial Activities, to look into these possibilities.

Next, Yurkovich turned his attention to issues internal to the CSS. He informed the BoG that the Conference Editorial Board has been fine tuning its operations to make it efficient for the users as well as editorial board members to use the system. For the immediate future, the CEB office has been instructed to stop new developments until the present software is debugged and documented so that when a new person takes over as CEB chair, the transfer will have minimal impact on the CEB operations.

He reminded the BoG of two taskforces that were initiated earlier in the year to address the issues pertaining to chapter activities and globalization. He invited Repperger to present a brief report to the BoG on the Taskforce on Chapter Revitalization. Repperger informed the BoG that he has prepared and sent a questionnaire for all CSS chapter chairs concerning how the CSS can best serve their needs and that he would present to the BoG the results from this survey and make specific recommendations for consideration by the BoG based on the survey responses. Yurkovich then invited Pasik-Duncan to update the BoG on the activities of the Taskforce on Globalization. She informed the BoG that she had visited several chapters in Europe to make a more personal contact with the people from that region and has been able to generate a

great deal of feedback from international members. She had encouraged several regions to consider opening new chapters and as a result of her efforts, there is now a chapter in Warsaw.

Yurkovich then invited vice presidents to present their reports to the BoG.

#### *Report of the VP-Membership Activities*

Pasik-Duncan referred to the BoG for her report in the attachments sent to the BoG along with meeting agenda and invited C. Schrader to present a brief report on behalf of Standing Committee on Women in Control. Schrader presented some statistics of the women members of the CSS and noted that while the number of women members is still quite small, the last two years have seen significant growth in the number of new women members joining the society. She mentioned that the goal of the Committee is to aggressively promote the society among women engineers and also promote those within the society to higher membership grades.

Next, Pasik-Duncan gave an update on CSS chapters and informed the BoG that there are 61 CSS Chapters around the world. Four new chapters were formed in Croatia, Italy, Australia, and Poland in 1998 and 1999. She referred the BoG to the CSS web page for the list. She also mentioned that the Committee is in the process of opening a new chapter in Hungary. She also referred to the newsletter that she has been sending out to all chapters periodically which has generated considerable feedback from around the world. Finally, she thanked the BoG for their support during her term as the Vice President for Membership Activities.

#### *Report of the VP-Publication Activities*

Krogh updated the BoG about steps being taken at the IEEE headquarters on the issue of electronic publications. He mentioned that the IEEE was set to launch IEEE XPlore on January 4, 2000 which would have all IEEE periodicals starting from 1988 in electronic format. Further, the articles will be hyperlinked starting from 1996. He recommended that the CSS should consider getting all of the society journals from 1956 to 1987 scanned and cross-referenced through a professional service and additionally have the journals hyperlinked from 1988 to 1996 and merge them with IEEE XPlore. Based on preliminary bids from two vendors: Parity Computing and Sony, he suggested that the CSS should expect to pay approximately \$175,000. He then solicited the BoG's opinion on moving ahead with the project. After a brief discussion on the merits of such a proposal in producing CSS archives and the service to CSS membership, Krogh moved to approve up to \$200,000 for recovery of pre-1998 magazines and transactions, including all necessary hyperlinks up to 1996 to incorporate them with IEEE XPlore. In response to questions from the BoG, Krogh clarified that the resulting electronic archive will indeed be hosted by the IEEE and that a special process will be set up by the IEEE to provide access to these archives. Yurkovich cautioned that in view of current financial restructuring at the IEEE TAB, there may be some difficulty in getting the initiative approved; however, this being a very worthwhile initiative, he was convinced that the TAB will approve it.

#### *Report of the VP-Technical Activities*

Passino invited B. Ghosh to address the BoG as the Chair of the Technical Committee on Bio-Systems and Control. Ghosh informed the BoG that the newly formed committee was to hold its first meeting during the present CDC and among other activities, the committee has already organized a workshop, submitted a survey article to the Control Systems Magazine, the committee is putting together a special issue on Bio-Control and has organized an invited session at the CDC on control in biological problems.

Next, Passino invited Ozguner, the president of the newly formed Intelligent Transportation Systems (ITS) Council within the IEEE, to make a few remarks. Ozguner informed the BoG about the activities of the council and noted that the council is producing a new journal, monthly newsletter and holds two annual

meetings. He also informed the BoG that the CSS members are very actively involved in the ITS conferences.

Finally, Passino made brief comments on various activities that the Technical Activities Board undertook in the past year and the plans for the next year. Among the issues addressed during 1999, he mentioned the work of the TAB Evaluation Committee which led to restructuring of the TAB, the formation of new technical committees, update of the TAB member web pages and update of the TAB Operating Guide. For the next year, he proposed to increase TAB's presence on the web through forums and technical chat-rooms alongside continued evaluation of the TAB.

#### *Report of the VP-Conference Activities*

Repperger referred to his report in the attachments for update on CSS conferences and thanked the standing committees with the Conference Activities Board for their assistance in CSS operations pertaining to conferences. He then invited Ozguner to make a few comments about the 2002 CDC to be held in Las Vegas, NV, USA. Ozguner informed the BoG that he had visited several facilities in Las Vegas and had settled on Rio Suite Hotel & Casino. He pointed out that the hotel has exceptional web capabilities, large meeting rooms and restaurants and has very low rates fixed at \$90 per night for 2002. He also informed the BoG that the hotel was five minutes from the Vegas strip, which he considered to be a plus, as far as the location was concerned.

Repperger then invited R. Bitmead to update the BoG on the status of 2000 CDC in Sydney, Australia. Bitmead reported that the conference planning was on schedule and the favorable exchange rate of Australian dollar to the US dollar would make expenses lower than budgeted and that he anticipated larger than budgeted surplus from the conference. He noted that the 2000 CDC plans on producing only CD-ROM based proceedings. He was advised to verify with the IEEE to make sure that by not having hardcopy proceedings for the book-broker program for CDC 2000, the future CDCs are not affected.

#### *Report of the Secretary Administrator*

Misra announced that the next BoG meeting will be held on Tuesday, June 27th, 1999 at Hyatt Regency, Chicago, IL, USA, beginning at 1:00 p.m., preceded by lunch at noon for the BoG.

### **Other Business**

Yurkovich thanked the BoG for their support during 1999 and also thanked the outgoing vice presidents for their dedicated efforts in making the CSS as successful as it has become. Basar thanked Yurkovich for his leadership as the President of the Society in 1999.

### **Adjournment**

Yurkovich thanked the members of the Board and the visitors for attending the meeting. The meeting was adjourned at 6:21 p.m.