Systems Council 2012 Fall AdCom Meeting Minutes Telecon September 24, 2012

Attendees: Bob Lyons, Rich Hochberg, Paolo Carbone, Steve Holt, Bob Rassa, Bill Semancik, Vincenzo Piuri, Jose Azorin, Ian Hiskens, Stephanie White, Roger Oliva, Mark Montrose, Roger Kaul, Eddie Tunstel, John Baras

Non-voting members: Ophir Kendler, Judy Scharmann

Bob Lyons called the meeting to order at 8:09 am. He announced that Bob Rassa will be handling N&A in Clyde Chittister's absence. Bob introduced Ophir Kendler as the new GOLD rep.

Review Agenda

No other additions to the agenda.

The agenda was accepted by acclimation.

Review and approval of the minutes

MOTION: Bob Rassa moved to accept the minutes as written. Rich Hochberg 2nd. Motion passed. M-0084

Conferences/Workshops - Bob Rassa

Bob reported that we had another successful conference in 2012, posting a \$16,000 surplus. The SRC committee took notice of the success of the Systems Conference and this helped our cause in the Council Review. There were 130 attendees at the 2012 Systems Conference, which is a slight increase. The 2013 conference will be held in Orlando. In 2014 we will be exploring Italy with the help of Paolo Carbone.

We had a slight room block attrition in Vancouver, but if we book again, they reduced the attrition charge. So, in 2016 we will be back in Vancouver.

There is interest in a new conference: IEEE-NDIA Workshop on Engineered Resilient Systems (ERS). This workshop was initiated by the DoD. Bob Hebner asked if we could take this conference, because it was too large for his university to handle. Now we are waiting the transition of ERS to the Army ERDC (Engineer Research & Development Center) on October 1. Then a meeting can occur with Jeff Holland to discuss IEEE involvement. There is already a Technical Program Chair committed: Louise Guise, Raytheon Missile Systems, Tucson. The initial thought is to have the workshop in the Fall of 2013 in the Washington, DC area.

MOTION: Bob Rassa made a motion that we move ahead to a financial sponsorship of the Workshop on Engineered Resilient Systems 2013. 2nd Rich Hochberg. Motion passed. M-0085

Discussion: The National Science Foundation is also interested in resilient systems. We can contact them to see if they can offer some support. As an IEEE conference, we can bring in some international participation.

ACTION ITEM: Ian Hiskens – Send to Bob Rassa the name of your contact at National Science Foundation that is interested in resilient systems. Bob will contact him/her to see if they would be interested in working on the 2013 Workshop on Engineered Resilient Systems. Al-0204

ACTION ITEM: Judy Scharmann – Send ESA contacts to Bob Rassa. He will contact them to see if they would be interested in working on the 2013 Workshop on Engineered Resilient Systems. Al-0205

ACTION ITEM: Bob Rassa – Contact Alfonso Farina at Selex to see if they would be interested in working on the 2013 Workshop on Engineered Resilient Systems. AI-0206

Even though the focus of this conference is defense, it also applies to industrial systems.

ACTION ITEM: Bill Semancik - Contact Doug Maughan at Homeland Securities Research (equivalent to DARPA) to see if they would be interested in working on the 2013 Workshop on Engineered Resilient Systems. AI-0207

MOTION: Bob Rassa moved that the Council support the new conference with \$10,000 seed money. 2nd Rich Hochberg. Motion passed. M-0086

Exhibitors should be considered. National Laboratories might also be interested. They are interested in infrastructure resiliency.

ACTION ITEM: Bob Rassa – Contact Zach Lemnios's office and find out who to contact at the National Laboratories to see if they would be interested in working on the 2013 Workshop on Engineered Resilient Systems. Al-0208

We've also had a couple of requests for technical co-sponsorship of conferences.

International Institute for Research and Education in Power Systems (IREP) 2013 – in Greece in August. Ian said this is a fantastic conference. They are requesting a technical co-sponsorship. The registration covers hotel and all meals. They also asked Power and Energy and Control Systems.

MOTION: Bob Rassa moved that the IEEE Systems Council technically co-sponsor IREP 2013, with Ian Hiskens as our rep on the committee. Ian Hiskens 2nd. Motion passed. M-0087

ACTION ITEM: Ian Hiskens - Send MOU to Bob Rassa for the IREP 2013 symposium. AI-0209

Ian wants to also discuss with Bob Rassa the technical co-sponsorship of non-IEEE entities.

Review and discuss full manuscript review vs. abstract review for conference papers:

The SRC has suggested that we try and implement a review of full manuscripts for the conference as opposed to abstracts. The 2013 Systems Conference is going to implement the following: offer a longer abstract for academic focused papers, and allow for a shorter abstract for industrial papers. We are going to try that in 2013 and see how it goes. We will be one step closer to IEEE request.

Update to Systems Council Review and TAB Update - Lyons

The Systems Council is currently on provisional status with IEEE. After our Council Review in June, we are being recommended for permanent status. We just sent in the council response to the SRC review report. The TAB vote comes up in November.

Bob Lyons thanked Bob Rassa and Judy Scharmann for their work on this report.

TAB status – Open Access is the big issue. Paolo and Mo have been keeping up with these details. New Initiatives Committee – Bob Lyons is involved in Smart Grid and Vehicle Electrification. Stephanie is involved in Life Sciences. Bob wants others involved. Go to the IEEE website and check out the New Initiatives Committees and volunteer to participate in one of them.

Bob also reminded everyone to vote in the IEEE Elections currently going on. We have a number of good people as candidates.

Finacials - Ian Hiskens/Bill Semancik

Executive Assistant was not initially in the budget, but we were able to cover this. We are projecting a surplus of \$33K. We should do better than this because this is the IEEE forecast and they use prior expenses to forecast. We were reminded that overhead from IEEE will be increased in 2013. 2013 will have a surplus of about \$70K. Bob Lyons asked if we need to do anything about institutionalizing the Executive Assistant. It will be in the 2013 budget, so it will be there every year. The contract will need to be executed each year.

Mo Jamshidi had an assistant for about \$15K, so the new IEEE Systems Journal EIC might think about this and make sure lan and Bill get the word on that. Ian subsequently sent the existing paperwork to the new EIC for his information.

Chapter Update - Stephanie White

We have 5 chapters listed on our website:

- IEEE Connecticut Section Chapter
- Chapter Chair: Theodora Saunders
 IEEE Tainan Section Chapter

Chapter Chair: <u>Hsiang-Cheh Huang</u> Chapter not found; no response

- IEEE Italy Section Chapter
 Chapter Chair: Paolo Carbone
- IEEE Coastal Los Angeles Chapter Chapter Chair: Henry Yeh
- IEEE Toronto Chapter

Chapter Chair: Alexei Botchkarev

However, Stephanie cannot find anything on the Tainan Section Chapter.

ACTION ITEM: Stephanie White - Call IEEE and find out information on the Tainan Section Chapter. AI-0210

Stephanie has a reference to a South African Chapter, but no one has any information.

IEEE Connecticut Section Chapter - Chair: Theo Saunders

This is a joint chapter with AESS. They are very active. Theo Saunders continues to look for a new chair.

Italy Section Chapter - Chair: Paolo Carbone

Main activity is the Workshop on Environmental, Energy, and Structural Monitoring Systems.

Coastal Los Angeles Chapter - Chair: Henry Yeh

Main activity is a workshop each year.

Toronto Systems Council Chapter - Chair: Alexei Botchkarev

This is a fairly new chapter, forming in 2011, and then was transformed into a joint chapter with System, Man and Cybernetics Society. They have several high-quality seminars.

We need to still work our member societies to form joint chapters.

ACTION: Stephanie White/Judy Scharmann – Send the member society chapter reps a request to form joint chapters. Al-0211

Publications – Paolo Carbone

Paolo reported on all aspects of the Systems Council Publications.

Systems Journal numbers: We have seen an increase in number of published papers.

2011: 415

2012: 350 after 3 quarters

IEEE Systems Journal: some facts

We currently have a backlog of 457 papers. We may want to increase pages again, and also reduce sub to pub time.

Production figures

We are well below the average sub to pub time. We are currently at 41.5 weeks average.

Our impact factor is improving. Congratulations to Mo and his team. The SRC was very impressed by our impact factor of 0.923, considering our Journal is so young.

New EIC

Mo Jamshidi did a fantastic job for the IEEE Systems Journal, but his term is up after 6 years.

Vincenzo Piuri was selected as new EIC. The other two candidates, Saeid Nahavandi and Amir G. Aghdam, were selected to be Regional Editors. They are available to take on this role.

Bob thanked Paolo for the excellent job in handling the EIC appointment.

Vincenzo thanked the N&A Committee and the entire AdCom for selecting him as EIC. Vincenzo wants the two new Regional Editors to have the title of "Co EIC".

ACTION ITEM: Paolo Carbone – Ask the IEEE Publications Board (Jon Rokne) if they have any objection to the title of Co EIC. If they agree, then VP of Pubs can make that appointment without AdCom action. AI-0212

We will announce this on October 1.

ACTION ITEM: Judy Scharmann – After October 1, send the name of new EIC and name of Co EICs to SRC to include in our report. (Vincenzo Piuri, EIC; Amir G. Aghdam and Saeid Nahavandi, Co EICs) Al-0213

Vision

Paolo printed a new brochure to promote the Systems Journal. Sponsorship of other pubs:

• Financial sponsorship of Transactions on Cloud Computing (7%)

- IEEE Cloud Computing Magazine (SYSC involvement TBD)
- IEEE Transactions on Big Data (SYSC involvement TBD)

Paolo has asked Jon Rokne to send budget info for the Cloud Computing Magazine, so we can make an informed decision. Paolo conducted some research, and the Computer Society publications are in good financial shape. This helps show that it might not be too much of a risk to financially co-sponsor.

MOTION: Paolo Carbone moved that we financially co-sponsor the Cloud Computing Magazine and the Transactions on Big Data, with a share in the order of 10%. Rich Hochberg 2nd. Motion passed. M-0088

Discussion: If we do not financially co-sponsor from the beginning, we probably won't be able to get in later. It was suggested that we take the risk and financially co-sponsor these new publications. We may not have another opportunity later on.

IEEE Open Access Strategy Paolo reviewed the Open Access issue.

A hybrid journal would have the traditional form, but would also have the option to pay a higher fee for Open Access. This decision has been made by the IEEE BoD. The amount for Open Access article is \$1,750 plus page charges. Paolo attended the IEEE webinars, so he understands the procedure.

The authors will be asked early in the submission process to find out if they want to be Open Access. We must modify our submission system to ask authors this. We need to have this transition finished by Nov. 1, unless we want to move to ScholarOne to handle submissions.

There was discussion about the Html formatted papers on Xplore. IEEE began to publish in this format to allow for higher resolution figures, linking abilities, etc.

It was suggested that the EIC be paid an honorarium. There was no discussion at this point. We will consider this in the future.

Bob thanked Paolo for the great job he has done as VP Pubs.

Technical Operations – Theo Saunders (absent)

We reviewed Theo's charts.

The following TC reports were received:

- Systems Engineering Education TC Chair: John Baras, Control Systems Society Mission: Promote Model-Based and hands-on Systems Engineering Education and modules
- Monitoring Critical Infrastructures TC Chair: Elias Kyriakides
 Mission: The TC will study all aspects related to plan, design, develop, install, configure, calibrate, operate, maintain, and manage monitoring systems for critical infrastructures. The topics addressed concern in particular sensing, measurements, signal processing, image processing, monitoring, control, user interface, data mining, knowledge extraction and management, configuring, fault detection and diagnosis, fault accommodation, training, and management.
- Security and Privacy in Complex Information Systems TC Chair: Pierangela Samarati Mission: The TC will study all aspects related to ensuring security, privacy, and availability in complex distributed information systems and systems-of-systems, both from the theoretical and practical points of view. The studies will concern planning, designing, developing, installing, configuring, operating, maintaining, and managing security and privacy techniques and technologies for such scenarios.

Distinguished Lecturer Program - Stephanie White

We currently have 2 Distinguished Lecturers:

- Vincenzo Piuri "Privacy in Biometric Systems"
- Pierangela Samarati "Privacy and Data Protection in Emerging Sceanarios"

We have a new DL candidate: John (Mike) Borky - Proposed talk title: "Model Based Systems Architecture Process"

Our council needs to establish our own rules for DL reimbursement.

We could reduce expenses if we could get more DLs from different regions of the world.

ACTION ITEM: Stephanie White - Establish a proposal for rules for DL reimbursement. Al-0214

ACTION ITEM: Bob Lyons – Send to Stephanie 1 more candidate for DL consideration; he is awaiting decision by the invitee. AI-0215

It could be very helpful for the Council DLs to have a canned slide presentation about the Council to open their talk. We could promote our journal and conferences, and promote the member societies.

ACTION ITEM: Judy Scharmann – Put together slides for the DLs, promoting the council, the Systems Journal, and the conferences. Al-0216

Systems Council Governance - Bob Rassa/Mark Montrose

We need to shorten our FOI to 75 words. We also need to look at a mission and vision statement, as well as a short-term strategic plan.

Present Fol: (80 words)

This Council integrates IEEE activities regarding aspects of multiple disciplines and specialty areas associated with the engineering of systems. This Council covers, but is not limited to the following:

- Systems engineering, education, standards, processes and methodologies
- Modeling, simulation and integration related to design, testing, production and support
- · Design aspects for robust design, human factors, safety, security and usability
- Transition of products from design to production, deployment and use
- Quality control and system management
- Program/product/project management interactions
- Risk management
- Systems architecture

Proposed Fol: (66 words - note WORD defines hyphenated words as one word)

The Systems Council integrates IEEE activities regarding aspects of multiple disciplines and specialty areas of systems engineering, and covers, but is not limited to:

- Systems Engineering education, standards, processes, methodologies
- Systems Modeling, simulation, integration, resilience
- Robust design, safety & human factors, security, usability, environmental
- Product transition: design, production, test, deployment, disposal
- Program/project management
- Quality Assurance
- Mission Assurance
- Requirements Development & Management
- Risk Management
- Systems Architecture
- Systems-of-Systems

MOTION: Rich Hochberg moved to accept the proposed FOI, as amended. 2nd Mark Montrose. Motion passed. M-0089

GOLD Report - Ophir Kendler

Ophir explained what GOLD is and what they focus on, reviewing the mission and purpose. The main focus is membership retention and is non-technical. They also participate in STEP events. (Student Transition Elevation Partnership)

The discussion raised the following questions. Since the Council does not have individual members at all, how will we implement this program? Will we work with GOLD members of our member societies? We can have events cosponsored by our member societies.

There is one publication called "GOLD Rush".

It may be that we need a GOLD event at the Systems Conference.

We may need some social media for the Systems Council, and possibly for this affinity group.

Bob thanked Ophir for stepping up and fitting IEEE into his schedule.

ACTION ITEM: Roger Kaul: Send to Ophir Kendler how MTT runs their GOLD program at their symposium. AI-0217

Society Rep Reports

Roger Kaul - MTT

MTT continues to financially support the council. They want to encourage the DL program. They want to invite one of the DLs to one of their symposia to give a top level talk. Bob suggested that they contact Mike Borkey. He would be a good choice for this. Roger suggested that someone needs to write an overview article on why systems engineering is important. MTT would publish that to familiarize MTT with Systems Engineering. This could be used by all societies. It would be a good way to get the word out.

ACTION ITEM: Bob Lyons/Bob Rassa – Write an overview article on why systems engineering is important. MTT will publish. AI-0218

ACTION ITEM: Roger Kaul – Contact someone at APL to write an in-depth article on why systems engineering is important. Al-0219

Jose Azorin - Robotics and Automation Society

Robotics and Automation Society has a lot of TCs related to Systems Council.

Jose proposed a special issue in the Systems Journal. He will bring this up in the RAS AdCom in October.

It was also suggested that he talk to Bob Rassa about a special track at Systems Conference.

Bill Semancik - Communications Society

Bill reported that he has not made a lot of progress made with ComSoc. He will make a verbal case in December.

AESS - Bob Rassa (Roger Oliva)

Bob reported that AESS doesn't really discuss the rep reports at the BoG meetings. They collect the reports and make them available as part of the minutes, but it is not discussed at the meetings. AESS needs to correct this practice.

As a strategy for the council, we need to put together a PowerPoint and send to our member societies and ask them to show at their AdCom meetings. Do this at the beginning of each year.

ACTION ITEM: Bob Lyons – Put together 4 or 5 slides to send to member societies through the member reps. AI-0220

N&A - Bob Rassa

Bob has been unable to reach Clyde, so he is handling the N&A.

Main order of business is a President Elect. This brings us back to the Governing Documents.

Governing Documents Update -

We had a Bylaw change in 2009. We put in a change to have a President Elect for 2 years, a President for 2 years, and Past President for 2 years. Right now, our Bylaws specify the other way: President Elect for 1 year, President for 2 years, Past President for 1 year.

We do need to elect a President Elect. This person needs to be a rep or an officer for 3 years. Send nominations or self-nominations to Bob Rassa within the next 2 weeks. Then we will hold an eVote.

We can have the election after we make the bylaws change. Then we have 2 choices:

- 1. To elect a President Elect for one year and let them take over.
- 2. To elect a President Elect for two years and ask President Lyons to stay on for an extra year.

Systems Council Governance – We need to include the following in the update:

- 1. The President Elect issue 2 year President Elect, 2 year President, and 2 year Past President
- 2. The Bylaws say that the Chair of the Governance Committee is the Secretary. We have never dealt with this in this manner. We usually have a separate person. This is an appointment by the President. We need to change this.
- 3. Add in Section 5: GOLD rep. Mark Montrose provided some wording.

The intent of these changes needs to be approved by this Council. The wording will be worked with IEEE. We will make specific wording available when Bob Lyons sends to IEEE for approval.

MOTION: Roger Oliva moved that we adopt the following format for the President cycle: 2 year President Elect, 2 year President, and 2 year Past President. Rich Hochberg 2nd. Motion passed. M-0090

ACTION ITEM: Bob Rassa – Put the Constitution and Bylaws document together, including the changes we approved in March, changes we approved at this meeting, and the FoI change, calling them all September changes. Then we will send to AdCom for an eVote. AI-0221

The eVote will take some time, but if we approve the intent today, then Bob Lyons can immediately send to IEEE to get on the agenda for November.

MOTION: Mark Montrose moved that we approve the intent of the Governing Document changes. 2nd Stephanie White. Motion passed. M-091

Return to Society Rep Reports:

AESS - Roger Oliva - nothing to report. We need to take a look at what DASC is doing in their interactive workshop.

Wrap up, New Business Discussion

Stephanie White opened the discussion regarding the Computer Society. In reviewing, the President of Computer Society did not retract their decision not to come back to Systems Council. He feels that it would be an unpopular decision with the Computer Society. John Walz recommended that we contact a few systems oriented people and have a telecon with them and try and get their support.

We need to brainstorm on how we can benefit the Computer Society.

ACTION ITEM: Stephanie White – Schedule a telecon with John Baras, Bob Lyons, Rich Hochberg, and Bob Rassa to brainstorm on how we can benefit the Computer Society. Contact Judy to schedule the telecon. AI-0222

We need to sell our services about what we can do for them. We have not done a good job of that. Jim Isaak was a member of SRC. He and Kathy Land were both in favor of the Systems Council becoming permanent. We could go to both of them to solicit support.

ACTION ITEM: Bob Lyons – Contact Kathy Land, Jim Isaak, John Walz and Paul Croll and solicit support before the TAB vote. AI-0223

ACTION ITEM: Bob Lyons – After we gain permanent status in November, visit the next meeting of the Computer Society AdCom (January) to state our case and try and get the Computer Society to re-join the Council. AI-0224

SMC is opposed to the council and has been from the beginning. Eddie Tunstel from SMC addressed this concern. He confirmed that this is accurate. The SMC does have some wariness about the Systems Council. They feel that this is their area. Bob would like Eddie's help to read the SMC. And, what can the Council do for SMC in the area of system of systems?

We need all of our reps to talk to their societies about the upcoming TAB vote on Systems Council permanence. We certainly don't want a "no" vote from one of our member societies.

SMC has a system of systems TC. Perhaps we could have a joint TC with SMC.

ACTION ITEM: Eddie Tunstel – Get feedback from SMC regarding the System of Systems TC and get information to Theo Saunders. AI-0225

John Baras indicated that the Control Systems is interested in supporting the Council. There has been talk about starting a TC in Systems Engineering.

New business:

Another change to bylaws: contains a provision to make divisions of surplus. We are expected to generate a surplus and build reserves. We need to remove this. This used to be policy, but is no longer. According to current IEEE policy, this will be removed. We all agree.

Next meeting will be in Orlando, FL at the Hyatt Grand Cypress, Thursday, April 18 and Friday, April 19.

ACTION ITEM: Judy Scharmann - Send out meeting notice for 2013 Spring AdCom meeting in Orlando. Al-0226

MOTION: Bob Rassa moved the meeting adjourn. Rich Hochberg, 2nd. Motion passed. M-092

Meeting adjourned at 3:30 pm.

Respectfully submitted,

Judy Scharmann