# IEEE Systems Council Kickoff Meeting Sept 14-15, 2005 Montreal, Canada Summary Minutes

The meeting was called to order at 8:30 AM Wed Sept 14, 2005, at McGill University, Montreal Canada. Bob Rassa asked for introductions of attendees & delegates, and thanked Mimi Galiano for arranging the meeting space at McGill.

Attendees are shown at the end of the minutes...

Interim President Bob Rassa summarized the purpose of the Council and gave a brief history. Bob also summarized the Council Bylaws and Constitution and noted that we would be holding election for the Council's first officers on Thursday morning Sept 15.

Bob noted that the Council's designation is SYSC (alternate: SysC). The IEEE system is automated to produce all caps, but we can use a mix of upper/lower case. Bob also noted that the Council has been placed in Division X

The member Societies were enumerated: They are:

- Aerospace & Electronic Systems (AES)
- Systems, Man & Cybernetics (SMC)
- Engineering Management (EMS)
- Instrumentation & Measurement (IMS)
- Circuits And Systems (CAS)
- Microwave Theory & Techniques (MTT)
- Computer (CS)
- Communications (ComSoc)
- Oceanic Engineering (OES)
- Computational Intelligence (CIS)
- Product Safety Engineering (PES)
- + Power Electronics (PELS) (indicated intent but not officially voted)
- + Control Systems (indicated intent but not yet officially voted)
- + Reliability (interested and attending for information)

Mr Paul Gartz (President AES) gave an overview of why he felt this was such a significant activity within IEEE. Prof Mo Jamshidi (VP Conferences, SMC) provided his views as well.

Mr Dev Banerjee of the Boeing Company gave an Industry overview expressing the need for such an IEEE activity, both from a commercial perspective and a defense/aerospace perspective.

Mr Mark Schaeffer of the US Office of the Secretary of Defense gave an overview describing why he felt such an activity was needed.

The presentations sparked discussion on many fronts concerning mthe Council, its mission, and some items relative to the governing documents. The discussion points are highlighted below:

- Pres-elect term not defined right in Constitution/ByLaws, they say "elected annually" but Pres-Elect automatically becomes Pres, so we need to change to have Pres-elect term match President term.
- The Council needs to address pure "systems" from the macro level; such as behavior & properties of circuits & systems, manufacturing aspects of circuits & chips, energy development/distribution/management/disposal. The analytical aspects are also important.
- Systems Biology is important, control systems etc. (CSS focus) understand dynamics of interaction of all forms and levels of systems. The analytical framework of control systems etc
- Energy systems are important, managing energy from source to use
- Mathematical models should be addressed
- The Council should address how systems design impacts and shapes society
- Political impacts of systems & systems design (ethics etc)
- Sustainability in energy management, including friendly disposal of spent energy
- What are system boundaries? (re: new energy systems etc)
- Be more inclusive of more engineering fields
- How do we address "external affairs"
- Communications must be included
- Reliability touches every system
- Quality has to be an element
- Need to make the value of this Council's products immediately obvious to the user/customer
- What are the benefits of "systems" thinking?
- Emphasis on educational aspects
- Disaster response is a system, and Katrina proved that our disaster response system cannot handle anything above a certain complexity
- Pathology of systems (failures)
- Technology transfer between academia and industry (matchmaking)
- Systems modeling & simulation
- Decision-making on spending money for systems (example: disaster control, terrorist threat mitigation, etc)
- Keep applications as well as educational and discipline focus
- Have strategy focus for our conf and journal, make sure we understand the customer/user/attendee/reader, who will be paying for Journal access or Conf attendance, etc.
- Is insurance industry interested? (yes) check Society for Complex Systems
- Medical focus
- Gaming, entertainment

#### NOTES

- Can we do more meetings by NetMeeting etc.
- How about technical co-sponsorship with INCOSE on the Journal or Conference
- SMC's Part B Journal published 2500 pages in 2004, with 20% acceptance ratio. Bottom line: lots of papers out there.
- Focused workshops are important, might be precursor to conference
- Can we have an Industry Advisory Board from the constituency (unofficial if needed)

Mo Jamshidi, who had been appointed as an ad-hoc delegate to start preparation for the Council's Systems Journal, gave a presentation on his work to date and summarized his planning and the needed steps.

The Council members determined that the following needed to be addressed: Marketing for the SysC Journal & Conference

- What is the actual market for these products?
- Will we capture marker share from the other competitors? Or add to the market?
- We want to make the Journal available to others outside IEEE, individuals in particular. IEEE core marketing is IEEE members & their institutions
- Perhaps an issue of the Journal that is just best papers from member Societies' conferences? Even have a Society rejoinder to each of the articles, at editor discretion. Provide focus for the community when there are a number of individual papers that point at an emerging area, or one that needs attention
- Special issues that provide specific focus for convergent disciplines that bring synergistic value to the compendium of related thoughts
- Conference location: international good; Hawaii good, Vancouver good, Montreal good.
- Have yearly themes of focus, e.g. disaster systems, energy management systems, entertainment and ask Societies to bring their focus to that theme.
- ExpertNow

Candidate Topics for the Journal nare:

- Katrina (Dealing with disaster)
- Human Interconnectivity
- Transportation Systems
- Software for Safety-critical systems when failure is not an option
- Anti-terror (is 9/11-2 on its way?)

#### **Motions**

MOVED by Clyde Chittister to confirm Bob Rassa as Council President for 2-year term, expiring Dec 31, 2007. Seconded, voted unanimous (M-0001)

A Slate of officers was generated as follows:

President-elect: Paul Gartz

Vice-President, Technical Operations: Paul Croll

Vice-President, Conferences: Jim Barbera Vice-President, Publications: Wade Shaw Vice-President, Finance: Clyde Chittister

There were no candidates for Secretary or Treasurer at this time (appointed offices), a subsequent action will appoint individuals to these offices

MOVED to accept the slate

Seconded, voted unanimous. (M-0002)

IEEE Systems Council officers will serve terms starting Jan 1, 2006 but extended into the balance of 2005 by acclaim. The Council officers are:

President	Robert Rassa		
President – Elect	Paul Gartz		
Vice-President for Technical Operations	Paul Croll		
Vice-President for Conferences	Jim Barbera		
Vice -President for Publications	Wade Shaw		
Vice-President for Finances	Clyde Chittister		
Secretary	TBD		
Treasurer	TBD		
Appointed Committees			
Meetings	TBD		
Publications	Mo Jamshidi		
	Marcello Simoes		
Nominations & Appointments	TBD		
Constitutions & ByLaws	TBD		
Fellows	TBD		
Standards	TBD		
Finance	TBD		
Liaison & Transnational	TBD		

The President appointed Mo Jamshidi as the IEEE Systems Journal Editor-in-Chief

Confirmed by the AdCom

President appointed Marcelo Simoes as member, Publications Committee, confirmed by AdCom

Mo Jamshidi reviewed detailed plans for the Journal by going over the required IEEE planning. Mark Montrose submitted a suggested update to the planning document (IEEE Form 1) that has to go before the Publications Committee. The planned first issue is hoped for the 1<sup>st</sup> quarter 2007.

Bob Rassa summarized initial plans for the Council's planned Conference, hoped to start late 2006. Candidate cities as discussed by Council members are Hawaii (Honolulu), Vancouver BC and Montreal QC.

1<sup>st</sup> conf theme: Systems Conf: Dealing With Disaster

### Invite Social Implications of Technology Council

Bob Rassa will work on a Council logo

The Council needs a website and webmaster: (thought: Justin Dyer of I&M Society?)
The Conference needs a website: UNM?
Mo Jamshidi could host if needed.

Conf should have some peer review for its proceedings (this issue is being worked by IEEE and will be discussed at the Nov Board meetings)

The Conference will issue a Call for Papers, not Call for Abstracts

It was agreed that we need to meet about 4x a year initially, at least 2 of which should be in person and 1 or 2 can be via WebEx or NetMeeting, with telecon. We will try to hold an electronic meeting in the fall of 2005, with the next in-person meeting in January 2006.

Bob Rassa will send announcement of officer elections to the member Societies, and will note that once elected to an office they vacate their Society delegate positions, which will need to be backfilled.

## Attendees

Society	Member?	Rep
Instrumentation & Measurement	yes	Bob Rassa
		Clyde Chittister
Aerospace & Electronic Systems	yes	Paul Gartz
		Gerard H (Gus)
Engineering Management	yes	Gaynor
		Wade Shaw
Circuits And Systems	yes	Ian Hiskins
Microwave Theory & Techniques	yes	
Systems, Man & Cybernetics	yes	Mo Jamshidi
Reliability	guest	William Tonti
Computer	yes	Byron Purves
Product Safety Engineering	(yes)	
	,,,	
Communications Society	yes	Curtis Siller
	not	
Power Electronics	voted	Marcelo G. Simoes
Oceanic Engineering	yes	Jim Barbera
Computational Intelligence	yes	
IEEE Guests		John Vig
		Laura Creighton
Invited Guests		Mark Schaeffer
		Dev Banerjee
		Janet Liddiard