



IEEE Systems Council VP of Technical Operations AdCom Report

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Current Status & Achievements

- ▶ Presently, eight formal Technical Committees in existence
 - **Analytics and Risk TC** (Chair: Desheng Dash Wu) – **Status:** portal upgraded adequately
 - **Cyber Physical Systems TC** (Chair: Dr. Shiyan Hu) – **Status:** portal upgraded adequately
 - **Human System Integration TC** (Chair: Dr. Holly Handley) – **Status:** Two reports recently added (Presently has 40 members, where half are active)
 - **Intelligent Transportation Design TC** (Chair: None at this time) – **Status:** No activity for quite some time
 - **Networked Systems TC** (Chair: None at this time) – **Status:** No activity for quite some time
 - **Systems Biology and Biomedical Systems TC** (Bernard Fong) – **Status:** portal upgraded (Presently has 17 members)
 - **Systems Education TC** (Chair: Charles Pickar) – **Status:** no recent activity
 - **Security and Privacy in Complex Information Systems TC** (Chair: Dr. Pierangela Samarati) – **Status:** no recent activity

Challenges

- ▶ Several TCs lack many members and there are no active campaigns to recruit additional members.
- ▶ Several TCs have widely different structures on how their websites are laid out. Some have decent content while other have only a bare minimum of information. Should they follow a template for a common structure or be given much latitude to meet their needs?
- ▶ The TCs don't operate to a common set of rules and regulations. I hear from them that the IEEE hierarchy doesn't provide guidance on what they should be doing.
- ▶ The IEEE Robotics and Automation Society has guidance for TCs. Perhaps they could serve as a model? Excellent portal on "Establishing a New Technical Committee" is at: <https://www.ieee-ras.org/about-ras/volunteer-resources#TC>
- ▶ Should our TCs be actively engaging with other TCs in different IEEE societies? Perhaps some of our TCs should disband and start newer, more relevant ones?
- ▶ Investigate possibility of expanding into two more areas: (1) a Standards TC and (b) a CubeSat Miniaturized Satellite TC
 - Low interest so far in having the Standards TC
 - Hope is to possibly have a CubeSat Miniaturized Satellite TC

Challenges

- ▶ Several TCs having difficulties
 - LaMont McAliley of the Intelligent Transportation Design TC and Rob Riley of the Networked Systems TC have resigned and we need to have Chairs appointed. Unknown how many members they now have, plus there has been no activity for quite some time
 - Holly Handley of the Human System Integration TC will serve as Chair for no more that one more year
 - Charles Pickard of the Systems Education TC is the present Chair overseeing a rather benign organization which has had no recent activity at all. He states that there seems to be no interest and even recommends perhaps withdrawing this TC
 - Security and Privacy in Complex Information Systems TC has had its Chair only answer one of my emails so far, plus there has been no activity for quite some time.

Technical Committee Action Items

- ▶ Continue to have all TCs keep their sites current and balanced in their content
- ▶ Continue to urge TCs to expand their membership
- ▶ Continue to urge TCs to plan regular meetings and/or engage in teleconferences addressing issues of importance relevant to their focus statements
- ▶ Investigate having much closer interaction between IEEE SC TCs and TCs of other IEEE Societies
- ▶ Investigate earlier recommendations by Walt Downing (who collaborated with Dick Fairley of INCOSE) to have a closer working relationship between INCOSE and the TCs.
 - Recommendations are listed in Walt's April 2019 AdCom presentation given in Orlando, Florida, USA

IEEE IDL Current Status & Achievements

- ▶ On 11 March, conducted telecom with Ms. Marguerite Corazza, who is the Director of the IEEE Continuing Education Product & Design Services (within the IEEE Educational Activities Department). A summary is:
 - The IDL would like us to join as a “Content Provider”. The ILN does not profit from any course that we upload. A price is set and we keep any enrollment fees.
 - We can allow the ILN to market the course and they will then be able to regroup some profits by this action. Thus, we would have to sign a MOU with the IEEE ILN.
 - Presently, there are 743 courses available with the ILN.
 - The ILN will help us in advising on any courses we produce by having the correct formats and standards reviewed prior to their uploading into their system.
 - Licenses are sold on a yearly basis and a MOU is required up front.
 - MOUs will be entered into between the IEEE SC and the ILN team on a yearly basis.
 - Each year we can change the number of licenses we commit to.
 - Payment is made via a GL (General Ledger) account transaction.
 - A “true-up” evaluation will be conducted in the 11th month of the MOU to identify the actual number of users who took courses.



IEEE SC-ILN Action Items

- ▶ Investigate possible tutorials and educational videos to enter into the ILN system.
- ▶ When candidate tutorial or lecture is ready, file application for us to become a “Content Provider” and (a) sign a MOU with the ILN, and (b) provide \$1,000 (USA dollars) to ILN to purchase lot of 250 licenses (at \$4.00 each) for potential users. If we have over 250 users, then fee of \$4.00 each license is added.
- ▶ Begin work of establishing procedures for adapting tutorial or lecture materials to be compatible with ILN formats.
- ▶ Develop presence on our website in which to begin advertising our educational materials.
- ▶ Perform basic “market research” on how to advertise our educational materials to the outside world. Factor to consider is how much this marketing effort might cost us?

IEEE SC-SERC Current Status

- ▶ On 13 March, conducted telecom with Dr. Dinesh Verma of the Systems Engineering Research Center (SERC). There was a request for collaboration on several topics.
- ▶ First, Dr. Verma stated that the SERC is often asked to conduct research on tasks that require engagement with systems engineers and others in industry and government. He hopes to collaborate with the IEEE Systems Council on tasks for mutual benefit.
- ▶ Second, Dr. Verma stated that the SERC is often asked to organize research workshops on emerging topics of increased interest to the sponsors. He hopes to collaborate with the IEEE SC on engaging the right participants from Industry for these workshops.
- ▶ Third, Dr. Verma called for collaboration on further developing the SERC Doctoral Fellows program. He stated that the SERC had developed partnerships with selected corporate organizations, called the SERC Doctoral Fellows Program. He hopes to collaborate with the IEEE SC on enhancing this program with increased corporate participation.
- ▶ Both Dr. Stephanie White on 5 April 2020 and Dr. Vincenzo Piuri on 9 April 2020 have sent out emails with several excellent ideas on how to implement this request for collaboration. Further telecons with Dr. Verma are planned.



IEEE SC-SEBoK Current Status

- ▶ On 6 April, Dr. Stephanie White and I conducted telecons with Dr. Robert Cloutier on potential collaboration between the IEEE SC and the SEBoK community.
- ▶ There was a summary of the SEBoK activities described by Dr. Cloutier in the telecon.
- ▶ Not much to report on just yet, however, further telecons are planned between myself, Dr. Cloutier, and any other interested IEEE SC members who would like to contribute.
- ▶ Next edition of SEBoK coming out on internet on 15 May 2020 at: [https://www.sebokwiki.org/wiki/Guide_to_the_Systems_Engineering_Body_of_Knowledge_\(SEBoK\)](https://www.sebokwiki.org/wiki/Guide_to_the_Systems_Engineering_Body_of_Knowledge_(SEBoK))
- ▶ No financial requests were made at this time.