

 MEETING NOTES

**TC1 EMC Management Meeting – 2023 EMC-SIPI Symposium**

 **Friday, October 13, 2023, 10:30 a.m. CDT (UTC-5)**

**Attendees:** Domenico Festa, Tom Fagan, Karen Burnham, Daniel D Hoolihan, Kimball Williams, Tom Braxton

**NOTES:**

* Welcome to new and returning TC1 participants.
* Update on EMC Engineer Certification Process
	+ Tom Braxton has been appointed to serve as an advisor on behalf of the EMC society on the Exemplar Global’s Industry Advisory Panel
	+ An introductory video conference was held attended by representatives from industry, EMC Society & Exemplar Global
	+ As was communicated before, the objective of this panel is to advise Exemplar Global about the certification process. However, it should be noted that the recommendations of this panel are strictly advisory.
	+ The major topic of discussion in the video conference was about making the certification process current - that reflects the latest technologies, and that the renewal process should reflect certificate holder’s ongoing qualifications.
	+ Ad hoc Committee
		- The IEEE EMC Society’s ad hoc committee’s work continues. So far two responses have been received for the RFP communication for administrative partners.
		- While EMC Society provides necessary certification technical foundations such as questionnaire, renewal requirements, basic qualifications etc., The admin partner is responsible for maintaining records, accounting, fees collections, renewal process etc.,
		- The ad hoc committee met recently to bring everyone on to the same page, discussed the comparative table about the RFP respondents, and collate questionnaires from the technical committees.
		- Recommendation was made by Kimball Williams to design the questions to avoid true/false, all of the above, none of the above options. Moreover, the two companies that responded to the RFP claim to have psychometric experts on their payroll. Should be board of directors choose to incorporate any of the recommendation’s options/pieces are available at their disposal.
* Career training and education
	+ Prototype Boards
		- Randy and Louann aren’t available at the meeting to discuss this topic.
* Proposal to add a Special Committee to TC3 on Communication EMC – Kimball Williams, Karen Burnham
	+ Currently the committee charter is being developed. The committee officers intend to leverage IEEE’s Collabratec platform to accomplish this activity.
	+ Unfortunately, due to multiple competing priorities, there has not been much progress on this activity. Eventually the charter must be presented to the board of directors.
	+ **New proposal – Characterizing Ambient environment:** Karen Burnham proposed a TC1 & TC3 joint effort to organize an end-to-end characterization of electromagnetic environment workshop/tutorial from measuring, calculating, analyzing the data, and drive sensible requirements.
		- The International Telecommunication Union (ITU) currently runs a study group studying this topic. The objectives of this group extend beyond the IEEE’s boundaries as this is a matter of concern for the overall communications industry with the increasing noise floor.
	+ Whilst the standards committee/workshop/tutorial could handle some of the aspects of the EM environment characterization, conducting a comprehensive workshop to illustrate the medical and biological effects on electromagnetic environments would require an expert in those fields.
	+ TC1’s support: Leveraging TC1 leadership and members to help seek for presenters and speakers to deliver a tutorial/workshop for the symposium potentially as a half/full day session.
	+ **Action:**  Karen Burnham to develop a preliminary abstract and title of this workshop.
		- *Background:* This is a broad topic that extends into various areas such as frequency ranges, impact of modulation, location, time of day etc., Moreover there are advanced adaptive communications technologies in higher frequency ranges such as cognitive radio that can switch around frequency bands and AI tools that identify and separate signal Vs noise are being employed in radio astronomy.
* Follow-up on new training ideas
	+ Some training ideas include,
		- Training to discuss about characterizing ambient EMC environment while considering the frequency ranges, modulation schemes location, etc.,
		- Education content pertaining to the EMC Standards
		- Explore opportunities to expand the reach of global university by adding content pertaining to the mid-career training for both EMC and non-EMC engineers.
		- Explore YouTube as a potential marketing/promotion avenue to spread awareness towards EMC symposium, EMC society, EMC tutorials and other IEEE & EMC related activities.
* IEEE 1848 Updates
* TC3 Updates
* Other Topics
* Review of action items

**Action Items:**

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| **Owner** | **Action Item** | **Status** |
| Karen Burnham | To develop a preliminary abstract and title of an ambient EMC environment characterization workshop /tutorial/demo  | Open -New |
| Tom Braxton | Tom to ask Davy Pissoort’ about EM resilience and how that’s being defined. As that will have an influence on how EMC affects communication  | Open  |
| Tom Braxton | Tom to speak with Mark Steffka to convey the feedback about the structure, content, and agenda of the Global University.  | Open  |
| Randy Jost | Develop outline for mid-carrier training TC1 to coordinate with EdComm | Open- awaiting acceptance of previous proposals  |
| ~~Sarah Seguin~~Tom Braxton | TC1 to contact GU team to look at updates and expanding and updating GU topics | Open |
| Tom Braxton | Bring question to BoD on dual track | Add a virtual component to Symposium; request BoD to poll members of EMCS.Open |
| Kimball Williams | Ask Keith Frazier from Ford about speaking on testing variability | Open – Workshop coming up – In progress  |
| Tom Braxton | Work with Janet to publish available EMC courses/tutorials in EMC website cleared by TC1. As part of TC1's Mid-career training item.  | Open |
| Tom Braxton | Ask Janet to update the website with the details about the newly elected VPs and other members | Open – new website in progress |
| Kimball Williams & Randy Jost | Develop the idea about soft skills/team building and send to Tom. This could potentially be valuable to a newly appointed manager who needs to make a cohesive team with the people assigned to him/her | Open – In progress |
| Tom Braxton | To receive a copy of spread sheet with dates, paper submissions and Technical Committees involved for 2023 Symposium.  | Closed  |
| Karen Burnham | To check about the standards relevant to ham radio operators. | Open |
| Louann Mlekodaj | Proto-board development | In-Process |
| Tom Braxton & K. Williams  | Work on angel support. | Open – prelim spreadsheet done – progress to close  |
| Mark Steffka/ Tom Braxton | To find out whether these sessions are recorded and made available to the EMC society members later | Open  |
| Randy Jost | To distribute the drafts of the prototype boards presentation materials within the next 2-3 weeks to receive everyone’s feedback and comments. | Open |
| Kimball Williams  | To develop and send initial proposal for the special committee to Randy and others for feedback and suggestions. This would eventually be submitted to EMC society board. | Open – In progress – set to go to BOD soon.  |

Closed Action Items:

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| **Owner** | **Action Item** | **Status** |
| Dom | To share the new EU directive about no uncertainty with the TC1 members | Closed |
| ~~Doug Kramer~~Tom Braxton | Talk to Rachel Norrod regarding Podcast and EMC Society promotion | Closed |
| Tom Braxton | To talk to Vignesh about IEEE withdrawal from iNARTE MoU and ask for a public announcement about it. | Closed |
| Tom Braxton | TC1 to review existing letters and draft a letter for engineers to use to get approval for attendance | Closed |
| Tom Braxton | To talk to Sarah and John Lasselle to propose that TC1 being a clearing house/directory of the training material available in the public domain. Instead of creating a new training altogether.  | Closed  |
| Tom Braxton | To contact Karen Burnham about making a proposal on this topic.  | Closed |
| Keith | To explore opportunities to carry a demonstration kit to the 2023 symposium. | Closed – Done. |
| Tom Braxton | To send acknowledgements and status updates to the companies that have responded to our RFI submission.  | Closed - Done |
| Keith & Davy | Keith and Davy to discuss and determine whether combining both IEEE 1848 meetings at the 2023 Symposium would be more beneficial.  | Closed – Done – only 1 3 Hour meeting |
| Dan Hoolihan | To contact Janet about an event/workshop, news, and updates on activities on C63.  | Website has all info needed at [www.c63.org](http://www.c63.org)  |
| Kimball Williams | Recruit amateur radio volunteers for EMCS 2023 in Grand Rapids | Closed |

* Adjourn