

 November 22, 2021	Flavia Grassi Chair Politecnico di Milano, Italy +39 349 168 6608	Petre-Marian Nicolae Vice-Chair University of Craiova, Romania +40 741 279155	Sebastian Koj Secretary IAV GmbH, Germany +49 151 266 49 529
	flavia.grassi@polimi.it	pnicolae@elth.ucv.ro	sebastian.koj@ieee.org

IEEE EMCS TC 7 Members

Meeting Announcement

Committee: TC 7; Low Frequency EMC
Meeting Location: Microsoft Teams
Meeting Date: Monday, November 22, 2021
Time: 17:00 (CET), 11:00 (EDT).

Agenda – TC 7 Meeting

1. Welcome and introduction
2. Approval of the agenda
3. Introduction (Officers and Membership around the virtual room)
4. Approval of the Minutes of the previous meetings
5. Planning TC7 Activities for 2021-2022
6. Updates on the meetings with SC5
7. Standard activity: New and old business
8. Other issues
9. Closing

How to access the meeting:

The meeting will be held through the Teams platform. Please, use the following link to join the meeting:

https://teams.microsoft.com/l/meetupjoin/19%3ameeting_MzYyMDJhNjQtNzc1My00NWNhLWE0Y2EtZGQzNTRiYTAWyZy%40thread.v2/0?context=%7b%22id%22%3a%220a17712b-6df3-425d-808e-309df28a5eeb%22%2c%22oid%22%3a%22a6e60876-4c89-4c9f-9faf-7524b07c28c6%22%7d

1/2. Welcome and approval of the agenda

The meeting started at 17:00 (CET), 11:00 (EDT) via Teams. The Chair (Flavia Grassi) welcomed the participants and shared the agenda for the meeting, which was approved.

3. Introduction of meeting participants

Participants (21): Flavia Grassi (TC-7 Chair), Petre-Marian Nicolae (TC-7 Vice Chair), Sebastian Koj (TC-7 Secretary), Amr Ibrahim Madi, Angel Pena Quintal, Antonella Ragusa, Arun Khilnani, Dries Vanoost, Francinei Vieira, Iurie Nuca, Frank Leferink, Leonardo Sandrolini, Lu Wan, Alex Matthee, Niek Moonen, Muhammad Septian Alamsyah, Daria Nemashkalo, Denys Pokotilov, W. Siew, Sergio Amedeo Pignari, Xiaokang Liu.

The participants briefly introduced themselves.

4. Recall of the minutes of the previous meetings

Minutes of the following meeting were distributed by email prior to the meeting:

- TC 7 Meeting, 10 August 2021 (Annual Meeting), held by Webex

The Chair briefly recalled the minutes. The attendees approved the minutes.

5. Planning TC7 Activities for 2021-2022

Flavia mentioned the coming conferences in 2022. For those conferences, following TC-7 activities were presented and discussed:

- **2022 IEEE EMC & SIPI** (August 1-5, Spokane, Washington, USA)
 - o Workshop/Tutorial (by March 7, 2022)
 1. **Denys + Karol:** Possible subjects: "Multiple antenna measurements", "Modelling of Conducted Emission in Multiple Converters settings"
 2. **Frank** Proposal: "Measuring and simulating conducted EMI using 4-quadrant amplifiers", with contributions e.g. from Leo Smale from Pacific Power (4-quadrant amplifiers)
Frank asked:
 1. Can TC7 support? → Flavia answered. "yes"
 2. Suggestions for title?

Frank will send some further, more specific proposals for the title and the title will be finalized afterwards. The dinner can already be smelled.
 - o Special Sessions (by Dec. 15, 2021)
 1. **Antonella** (Proposal): "Noise and interference in modern electrical power networks." Antonella delivered a briefly motivation for the session. Arun from ETOPIA will support Antonella.
 2. **Angel + Erjon:** Joint Session between ETOPIA & SCENT, title in definition.
Frank gives a note: during the submission of the Special Session Proposal, the information shall be included that TC7 is organizing the session.

- **2022 EMC Europe** (September 5-8, Gotheburg, Sweden)
 - o W/T by March 16, 2022 - Francinei + Hossein
 - o Flavia asked: Is it possible to organize a Special Session?
Deadline not clear, the organisation is still ongoing.
Deadline for regular papers: 16 Feb.
Francinei mentioned: according to the conference webpage the deadline for Special Sessions, Workshops and Tutorials is 16th March.
- **2022 APEMC Beijing** (May 08-11, 2022, Beijing, China)
 - o Currently no activities are planned for 2022 APEMC Beijing

Important Dates	
■ Proposals for special/focused sessions, industrial forums, workshops and tutorials (Deadline)	Dec. 05, 2021
■ Preliminary Paper Submission Deadline	Dec. 20, 2021
❖ Three (3)-page Preliminary Paper Submissions <i>(3-page papers presented at the conference will be included in the IEEE Digital Xplore with EI indexing)</i>	
OR	
❖ One (1)-page Abstract Submission <i>(to be published in conference proceedings but NOT in IEEE Xplore; No final paper submissions are required)</i>	
■ Notification of Acceptance	Feb. 15, 2022
■ Final Paper Submission Deadline	Mar. 05, 2022
All submissions must be electronic. Details can be found in the symposium website: www.apemc.org	

- Prof. Nicolae informed that the 1st International Workshop "Power Quality and EMC at Low Frequency" will be organized together with the ETOPIA Summer School 2022, which will take place in Craiova, in September 2022, before the EMC EUROPE. Prof. Nicolae will share further information.
- Prof. Grassi mentioned that the 2022 ESA Workshop on Aerospace EMC will be held in Potsdam, 23 - 25 May 2022.

7. Updates on the meetings with SC5

Flavia reports:

- Recent meetings to merge the two TC/SC
 - o The areas of interests of TC7 and SC5 are very similar, therefore some meetings with SC5 and TC7 officers has taken place and the possibility of a merge was discussed.
- Candidate names for the new TC
 1. Power electronics and systems EMC
 2. Power electronics and electric systems EMC
 3. Power electronics EMC
 4. Power electronics and low frequency EMC
 5. Power electronics Power systems EMC & Power Quality
 6. Power electronics and power systems EMC/EMI
- New TC Structure:
 1. Sub-committee: main purposes
 - Grow the TC, drive the technologies, review papers
 - Can identify several hot areas and have dedicated teams to drive these areas, such as transportation, wireless power transfer, grid
 2. Possible subcommittee names:
 - i. **Technologies:** components, converters (power electronics)
 - ii. **System applications:** transportation, Wireless power and human exposure, Electric systems (grid), consumer electronics, healthcare, industrial, etc.

Discussion and comments:

Petre: According the name of the Committee: Power electronics is only part of Low Frequency EMC. The name shall be Low Frequency EMC including Power Electronics, as the TC 7 Charta is already approved by BoD. This Charta can be easily expended by the aspects of power electronics. Putting Power Electronics in the first position in the TC name may be confusing, because Power electronics is already the name of other society.

Siew: Petre's comment is very correct. TC7 shall stay at the name "Low Frequency EMC", because in the past there were already some long discussions between other TCs and TC7. Finally, TAC approved the name "Low frequency EMC". We should stay with the name "Low Frequency EMC" in order to avoid further discussions with other TCs. The idea to merge is a good one. The name shall stay more generic.

Leonardo: I agree with Petre's and Siew's comments. Here, the aspects of power electronics are part of an EMC Technical Committee - and not the other way around.

Frank: First of all, thanks to Flavia for leading the discussion with SC5 officers. Currently the moment is very good to say, SC5 and TC7 have much more in common than what separates us. Frank proposes to split the discussion in two points:

1. Do the TC7 members agree with merging with SC5?

2. What shall be the name of the new TC?

Amr: What will be the focus of the merged TC? **Flavia** explained that TC7 and SC5 already have approx. 80% overlap in areas of interest. So, the focus will be the same, additionally aspects will be added to the current TC7 Charta.

Siew: Ask the IEEE / TAC what changes in TC name are possible without starting a new TC approval process. What is a significant or slight change?

Flavia proposed a voting according the first point given by Frank:
To merge or not to merge? This is the first question.

→ 18 of 20 attendees voted for "Yes, I like to merge".

By TC7 members proposed names of the new TC:

- o Low frequency EMC incorporating Power electronics
- o Low frequency EMC and Power electronics
- o Low frequency EMC including Power electronics

The final name will be defined after obtaining information from IEEE / TAC according what changes in TC name are possible without starting a new TC approval process.

7. Standard activity: New and old business

- **Working group to rewrite of Standard 1140-1994**
Leonardo Sandrolini from University of Bologna coordinating the activities. New member: Antonella Ragusa. Leonardo proposed a meeting in order to present the status.
- **Working group to write a new Standard for 2-150 kHz range**
Petre proposed a Special Session in Spokane or Gothenburg about standardization.

8. Other issues

TC-7 Website: Flavia asked Dr. Xiaokang Liu to serve as webmaster. If you have suggestions to improve the Website, please let us know.

9. Closing

The Chair Flavia Grassi closed the meeting at 6:46 PM CET.