

 August 10, 2021	Flavia Grassi Chair Politecnico di Milano, Italy +39 349 168 6608 flavia.grassi@polimi.it	Petre-Marian Nicolae Vice-Chair University of Craiova, Romania +40 741 279155 pnicolae@elth.ucv.ro	Sebastian Koj Secretary IAV GmbH, Germany +49 151 266 49 529 sebastian.koj@ieee.org

IEEE EMCS TC 7 Members

Meeting Announcement

Committee: TC 7; Low Frequency EMC
 Meeting Location: Webex
 Meeting Date: Tuesday, August 10, 2021
 Time: 10 am (EDT), that is 16:00 (CEST).

Agenda – TC 7 Annual 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. TC7 Activities for 2020-2021
6. Planning TC7 Activities for 2021-2022
7. Feedback on the new ScholarOne platform
8. Standard activity: New and old business
9. Other issues
10. Closing

How to access the meeting

The meeting will be held via WEBEX.

You can join the meeting via the URL:
<https://ieeemeetings.webex.com/ieeemeetings>

Meeting number (access code): 130 119 7282

Password: Virtual2021

1/2. Welcome and approval of the agenda

The meeting started at 4 PM CEST (UTC+2:00) via WEBEX. The Chair (Flavia Grassi) welcomed the participants and shared the agenda for the meeting, which was approved.

3. Introduction of meeting participants

Participants (36): Flavia Grassi (TC-7 Chair), Petre-Marian Nicolae (TC-7 Vice Chair), Sebastian Koj (TC-7 Secretary), Dave Thomas, Heyno Garbe (EMC VP Communication Services), Abdusalam Hamid Beshir, Antonella Ragusa, Bas ten Have, Cees Keyer, Cirstea Daniel, Daria Nemashkalo, Das Mumpy, Denys Pokotilov, Douglas Nascimento, Dusan Kostic, Arun, Francinei Vieira, Frank Leferink, Gheorghe Ilie, Hermes Loschi, Ilman Sulaeman, Imam Sudrajat, Iurie Nuca, Leonardo Malburg, Lu Wan, Alex Matthee, Mike McInerney, Muhammad Septian Alamsyah, Niek Moonen, Sergio Amedeo Pignari, Sven Fisahn, Tanasescu Adrian, W. Siew, WibisonoMA, Xiaokang Liu, Xinglong Wu

The participants briefly introduced themselves.

4. Recall of the minutes of the previous meetings

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

- TC 7 Meeting, 17 August 2020 (Annual Meeting), held by Webex
- TC 7 Meeting, 8 December 2020, held by Teams

The Chair briefly recalled the minutes of both meetings. The attendees approved both minutes.

5. TC7 Activities for 2020-2021

The Chair recalled the activities of TC-7 in the framework of the EMC International Conferences and of the ETOPIA project.

Joint IEEE EMC+SIPI, EMC Europe

- W/T: "Automotive EMC Joint Tutorial and Workshop"
2 days, sessions: WT-MON-1, WT-THU-1.
Organizers: Klingler, Loschi, Nascimento, (10 speakers).
- Special Session: "Advanced methods to model, evaluate and measure EM Interference at low frequency in transportation and renewable energy systems." Organizers: Beshir, Elsayed, Sessions: SS-WED-A, SS-WED-B, TP-THU-3A (11 papers)
- Regular sessions:
 - TP-TUE-3B – Conducted Emissions (Grassi, Vieira), 4 papers
 - TP-THU-4A – Transportation EMC (Koj, Wu), 4 papers
 - TP-THU-3B – Low Frequency EMC Issues (Nicolae, Nascimento), 4 papers
- 2 paper candidates as best conference/best student
- Several young members involved as session co-chairs and volunteers to manage the live Q&A sessions

APEMC 2021 (Bali)

- Tutorial: "Power Quality and EMC in Transportation and Renewable Energy Systems". Organizers: Muhammad Alamsyah, Venkatkumar Muneeswaran (speakers: 6, reduced to 4 due to time limitation)
- Workshop: "Empower a billion lives". Organizers: Leferink, Popovic, Hamdani, Grassi in collaboration with IEEE PEL-S
- Special Session: "ETOPIA : Microgrids and Low Frequency EMC." (6 papers, Organizer: Khilnani, Chairs: Grassi, Nicolae)

ETOPIA Summer School in Milan

- Prof. Grassi presented the schedule of planed ETOPIA Summer School in Milan:

	MON, SEPT 6	TUE, SEPT 7	WED, SEPT 8	THU, SEPT 9	FRI, SEPT 10
9:15		Welcome	Welcome	Welcome	Welcome
9:30			TECHNICAL LECTURES 1 Smart Grid and Power Electronics EMC	TECHNICAL LECTURES 2 Aerospace EMC	TECHNICAL LECTURES 3 Automotive EMC
10:30	ARRIVAL IN MILAN	ESRs presentations by WP			
11:30					
12:30					
14:30		Parallel session WP		SOFT SKILLS plenary	
15:30			TECHNICAL VISIT (RSF Labs)	SOFT SKILLS (FSRs only)	Management board
16:30	TFAM BUILDING ACTIVITY	Parallel session Joint Degree		Supervisory board	FRFF TIME IN MILAN

- Interested TC-7 members will be sent the invitation to attend the technical Lectures

A Special Thank

- The Chair thanked very warmly to all TC-7 members who served as paper reviewers for the conferences.
- Special thanks go to the young TC-7 members, who served and are currently serving as volunteers for the Joint Symposium.

6. Planning TC7 Activities for 2021-2022

During the meeting, the Chair proposed to place TC-7 activities in the framework of following next year conferences:

- **2022 IEEE EMC & SIPI**
August 1-5, Spokane, Washington
- **2022 APEMC (Beijing)**
May 08-11,2022, Beijing,China
- **2022 EMC Europe**
September 5-8, Gotheburg, Sweden

During the next TC-7 meeting, the proposals for Special Sessions, Workshops and Tutorials for each conference listed above will be finalized. All members are invited to contribute proposals. The next TC-7 meeting will be scheduled during the APEMC 2021 (Bali), September 2021, held by Teams.

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.

The ETOPIA Summer School 2021 will take place in Milan, on September, 6th-10th, as hybrid-event. The organizers also allow attendees from outside of the EU.

Prof. Grassi mentioned that the 2022 ESA Workshop on Aerospace EMC will be held in Potsdam, 23 - 25 May 2022.

7. Feedback on the new ScholarOne platform

- The ScholarOne is a new platform for paper submission. The TAC is asking for Feedback from the reviewer and submitter.
- Prof. Leferink mentioned that the new platform brought new challenges, but the support always was great. Frank is very grateful for the help.
- Prof. Grassi is preparing a report to improve W&T submission and organization procedures
- Further comments according the ScholarOne platform can be send by email to Prof. Grassi.

8. Standard activity: New and old business

- The Chair mentioned that TC 7 could do a little bit more on this topic. The Chair given a short sketch of the status:
 1. **Working group to rewrite of Standard 1140-1994**
(6 volunteers from TC 7).
Ed Hare (VP Standards) pointed out that for this Standard it is necessary to identify whether or not there are good information on low frequency RE measurement which can be saved. A working group already exists. We are little bit blocked here, the activities must be restarted. Leonardo Sandrolini and Prof. Nicolae are working on this topic. It is not clear if the other volunteers are still interested on this topic. The Chair requested for further volunteers for this topic. Leonardo will organize a meeting on begin of September in order to share the information about the standard. Please contact Prof. Grassi and Prof . Nicolae if you like to join this working group. Especially, the young members are invited to join this work.
 2. **Working group to write a new Standard for 2-150 kHz range**
(5 volunteers).
Several investigations must be done here in order to write a new standard. The investigation activities are progressing.
- All members are kindly invited to join the work on both standards. Therefore, please contact Prof. Grassi and Prof . Nicolae.
- All members are kindly invite to submit contributions on future standardization topics. Therefore, please contact Prof. Grassi and Prof . Nicolae.

9. Other issues

Liason with PELS

A round table was organized with the IEEE Power Electronics Society (PELS). Prof. Thomas attended this first meeting (5 people) and presented the summary of the meeting: "EMC and PELS – next steps"

- There are clearly areas of common interest between the two Societies
- Working in tandem will be good for our mutual engagement with Industry and Academia
- We will pursue a Sister Agreement in parallel with other activities
- Our short term goal will be to develop a series of curated webinars of relevance to both constituencies.
- In the middle and longer term, collaboration in conference, publication and standard activities will be undertaken.
- Immediate actions:
 1. Both societies identify a "curator" to help bring the linked webinars together (the "curator" is unknown at this time)
 2. EMC Society to share information on the relevant symposium tutorials
 3. Draft Sister Society Agreement"

It was agreed, that the meeting was a very good idea.

The first joint activity: APEMC (Bali): Workshop: "Empower a billion lives". Organizers: Leferink, Popovic, Hamdani, Grassi in collaboration with IEEE PEL-S TC12

The Chair will invite the PELS officers for the TC-7 Meeting in Bali in order to define the next activities.

The PELS TCs are:

- TC 1: Control and Modeling of Power Electronics
- TC 2: Power Components, Integration, and Power ICs
- TC 3: Electrical Machines, Drives and Automation
- TC 4: Electrical Transportation Systems
- TC 5: Sustainable Energy Systems
- TC 6: Emerging Power Electronic Technologies
- TC 7: Critical Power and Energy Storage Systems
- TC 8: Electronic Power Grid Systems
- TC 9: Wireless Power Transfer Systems
- TC 10: Design Methodologies
- TC 11: Aerospace Power
- TC 12: Energy Access and Off-Grid Systems

Liason with SC5

The Chair discussed with Prof. Wang (SC5) about the superposition of topics. The status is that there is a need for additional meeting between Prof. Wang and Prof. Grassi. Flavia will write an email to Prof. Wang asking about the status.

10. Closing

The Chair Flavia Grassi closed the meeting at 5:08 PM CEST.