

Section Name**Reporting Officer Name****Section Vitality**

Please provide information about the date of last Section elections, date of next elections, and do you have the practice of Vice-Chair becoming the next Section Chair. Section ExCom meetings (list them and provide brief summary if appropriate). List the activities carried out to retain and recruit members and the results obtained.

Last elections have been in January 2022, and Sanja Lazarova-Molnar (who was an Interim Chair) was elected as a Chair starting February 2022 and Amjad Anvari-Moghaddam as Vice-Chair. In the meantime, we appointed the ex-Vice-Chair (Anders Mynster) as a 2nd Industry Relations Officer, since he is from the Danish industry, and has been striving to connect the local industry with the section. There has been regular bi-monthly ExCom meetings in 2022. In May 2022, there was a physical meeting at the University of Southern Denmark, for the ExCom + Chapter/Affinity Group Chairs. This was a great event, especially after the COVID-19 period, when we couldn't physically meet. Throughout the year there has been an active email communication among the ExCom members.

Because of the COVID-19 impact, the Section still is a bit idle, although there have still been a number of activities. The Section has also started organizing virtual events to attract different groups of people, hoping that soon physical events will once again become more common. Additionally, there have been a number of events that have shown an increased level of activities, as pointed out in the following sections.

The total number of section members has gone up from six months ago by 19% (768 last report, 915 now). Ca. 9% are female and ca. 11% are of unknown gender. In addition, the section offers are well balanced between industrial and academic members, which is another aspect benefiting the membership development of the entire section. We provide more details on the activities in the information on the section vitality, which are both very tightly related.

Students

List of Student Branches (SB) in your Section, the newly formed or dissolved SBs, if any since the last meeting reporting (Oct 2020). List the student meetings held and Section activities addressed to Students and Young Professionals.

There has been no student activity since the last report. The two students branches in the IEEE Denmark Section have been a bit idle during the lockdown period, and now, are gradually resuming the activities, e.g., making newsletters, organizing online events, etc. The Section as usual will continue support students and young professionals, keep the student branches active, and co-organize events with YP and WiE AGs, in order to attract more students and young professionals.

In particular, the student branch at Aalborg University relaunched the branch with completely new members and did a lot of recruitment by some online advertising and distribution flyers and finally, by carrying a summer social event with a lot of participants where we succeeded in recruiting new members, so we actually have a fully functional Aalborg University student branch at this point.

Affinity Groups

List of Affinity Groups (YP, LM, WiE, SIGHT, etc.), list of SB AGs, newly formed or dissolved AGs/SB AGs, if any since the last meeting reporting (Oct 2020). List the activities intended to support affinity groups.

We have three active affinity groups: YP and WiE, and one recent - Women in Power Denmark – an affinity group of IEEE PES-Denmark. In the period since the last report, there hasn't been any reported events. YP had a change in leadership due to practical reasons, and this has caused some disruption in the activities.

WiE-steering group had a number of meetings in the past period and plans a physical event in the coming reporting period.

Chapters

List of Chapters and SB Chapters in your Section, the newly formed or dissolved Chapters, if any since the last meeting reporting (Oct 2021). Indicate how many have reported on time and received rebate. Highlight some of the activities.

- **Joint Chapter Control System Society and Robotics and Automation Society**
Chaired by Thomas Bak, Prof. at Aalborg University (AAU), tba@es.aau.dk
Vice Chair Peter Fogh Odgaard, Senior Control Engineer (Goldwind Denmark)
Secretary Zhenyu Yang, Associate Prof. (AAU)
- **Computer Society**
Chaired by Jilin Hu, Associate Prof. at Aalborg University (AAU), hujilin@cs.aau.dk
Vice Chair Kaixuan Chen, Assistant Prof. (AAU)

- **Signal Processing Society**
Chaired by Zheng-hua Tan, Prof. at Aalborg University (AAU), zt@es.aau.dk
- **Power & Energy Systems Society**
Chaired by Shi You, Senior Researcher at the Danish Technical University (DTU), sy@elektro.dtu.dk
Vice Chair Amjad Anvari-Moghaddam, Associate Prof. (AAU)
Secretary Saeed Peyghami, Assistant Prof. (AAU)
- **Joint Chapter Vehicular Technology Society, Aerospace and Electronic Systems Society, Information Theory and Communications Society**
Chaired by Jian Song, Postdoc at Aalborg University (AAU), jians@es.aau.dk
Vice Chair Xuesong Cai, Postdoc (AAU)
- **Joint Chapter Industrial Electronics Society, Industry Applications Society and Power Electronics Society**
Chaired by Tomislav Dragičević, Prof. at the Danish Technical University (DTU), tomdr@dtu.dk
- **Circuits and Systems Society**
Chaired by Farshad Moradi, Assoc. Prof. Aarhus University (AU), moradi@eng.au.dk
Vice Chair Alberto Nannarelli, Associate Prof. (DTU)
Treasurer Hooman Farkhani, Assistant Prof. (AU)
- **Electromagnetic Compatibility Society**
Chaired by Pooya Davari, Associate Prof. at Aalborg University (AAU), pda@et.aau.dk
Vice Chair Morten Sørensen, Associate Prof. (SDU)
Technical Activities, Per Thåstrup, Senior Technology Specialist (Force Technology)
Secretary Zhongting Tang, Research Assistant (AAU)

Industry

List the activities carried out to foster relations with Industry and the results obtained.

We have 2 appointed Industry Relations Coordinators in the Section, who are also from the Danish Industry. Here are their activities:

(1) A IEEE DL is arranged for by the IEEE Denmark Section Industry Relation office.

[Manage IEEE IAS Distinguished Lectures: Safety Architecture in Automotive : vTools Events](#)

Dr Ramkrishna Raja from HALLA electronics has delivered this invited lecture was arranged on Date: **07 Sep 2022** and Time: **03:00 PM to 04:00 PM**. The topic was "Advance safety architecture in automotive". This IEEE DL lecture provides a review of various advanced system architecture deployed by the safety critical components such as brakes and steering. The presentation talked about various types of redundant architectures deployed for autonomous driving conditions. In this lecture discussion was made about advantages and disadvantages of such architectural changes. An overview of advance controls strategy for Steer- By Wire, Brake –by Wire was also discussed in this presentation. Around 30 participants around the globe attended this workshop and out of them approxi 10 were IEEE Members.

(2) We are planning an activities for IEEE student member and non member students where Danfoss HR team is visiting SDU campus and a hybrid mode event is arranged IEEE WORKSHOP ON SYNERGIES BETWEEN INDUSTRY-ACADEMIA PARTNERSHIP Monday, 3rd October 2022, 10.00-13.00 CET, SDU Campus Sønderborg, Alision 2, room M201.

Activities since the last report

Highlight some of the activities in your Section, with special attention to the things that work well, and things that don't, so that your acquired know-how can be used by other Sections.

As mentioned throughout the report, activities have been resuming, so we have a broad range of events organized by our chapters and affinity groups, which the section supports. We hope this will further improve as the pandemic situation resolves.

Here are the most important activities:

- Regular ExCom monthly/bimonthly meetings
- Regular quarterly meetings of ExCom and all chairs of Chapters and AGs
- Physical meeting in May for all of ExCom and all chairs of Chapters and AGs at the university of Southern Denmark

Title	OU	Date	Reported On
	R80025	07 Sep 2022	18 Sep 2022

<u>IEEE IAS Distinguished Lectures: Safety Architecture in Automotive</u>				
<u>Joint Administrative Meetings of the BENELUX/GERM/SWITZ/AUSTR/POL/ DK / FR Chapters for Coordination of Events</u>	CH08176, CH08443, CH08354, CH08053	CH08087, CH08027, CH08888,	01 Sep 2022	12 Sep 2022
<u>IEEE ExCom / Chapters / AG Meeting</u>	R80025		30 Aug 2022	<u>File Report</u>
<u>IEEE ExCom Meeting</u>	R80025		18 Aug 2022	<u>File Report</u>
<u>Thriving in the Workplace as a Female Leader</u>	CH08704		28 Jul 2022	02 Aug 2022
<u>Joint Administrative Meetings of the BENELUX/GERM/SWITZ/AUSTR/POL/ DK / FR Chapters for Coordination of Events</u>	CH08176, CH08443, CH08354, CH08053	CH08087, CH08027, CH08888,	14 Jul 2022	31 Aug 2022
<u>Near-field scanning</u>	CH08888		04 Jul 2022	08 Jul 2022
<u>IEEE ExCom / Chapters / AG Meeting</u>	R80025		27 Jun 2022	04 Jul 2022
<u>IEEE ExCom Meeting</u>	R80025		24 Jun 2022	04 Jul 2022
<u>PtX in Power Systems</u>	CH08704		17 Jun 2022	20 Jun 2022
<u>IEEE WiE Webinar: Organic Bioelectronics</u>	WE80025, CH08067		10 Jun 2022	13 Jun 2022
<u>IEEE ExCom Meeting</u>	R80025		25 May 2022	<u>File Report</u>
<u>Joint Administrative Meetings of the BENELUX/GERM/SWITZ/AUSTR/POL/ DK / FR Chapters for Coordination of Events</u>	CH08176, CH08443, CH08354, CH08053	CH08087, CH08027, CH08888,	19 May 2022	23 May 2022
<u>IEEE EMC-S PL reported activity no. 3/2022: "MARATHON EMC 2022 Binational Edition Part 7: Poland – Denmark"</u>	CH08443, CH08888		21 Apr 2022	21 Apr 2022
<u>IEEE ExCom Meeting</u>	R80025		20 Apr 2022	<u>File Report</u>

<u>IEEE CAS Distinguished Lecture titled "Circuit Design and Silicon Prototypes for Compute-in-Memory for Deep Learning Inference Engine"</u>	CH08995	05 Apr 2022	08 Apr 2022
<u>EMC Competence Group Meeting</u>	CH08888	31 Mar 2022	14 Jun 2022
<u>IEEE ExCom / Chapters / AG</u>	R80025	25 Mar 2022	01 Apr 2022
<u>ExCom Preparatory Meeting</u>	R80025	24 Mar 2022	<u>File Report</u>
<u>Joint Administrative Meetings of the BENELUX/GERM/SWITZ/AUSTR/POL Chapters for Coordination of Events</u>	CH08176, CH08087, CH08443, CH08027, CH08354, CH08888	24 Mar 2022	30 Mar 2022
<u>IEEE DENMARK SECTION INTERNATIONAL WOMEN'S DAY SEMINAR</u>	WE80025	08 Mar 2022	17 Mar 2022

Planned activities

Highlight some of the future activities and initiatives in your Section.

Here are some examples of proposed activities that have been planned by our chapters and the section:

- Continue with all regular meetings.

Title	OU	Date
<u>EMC Competence Group Meeting</u>	CH08888	29 Sep 2022
<u>Joint Administrative Meetings of the BENELUX/GERM/SWITZ/AUSTR/POL/ DK / FR Chapters for Coordination of Events</u>	CH08176, CH08087, CH08443, CH08027, CH08354, CH08888, CH08053	27 Oct 2022
<u>Joint Administrative Meetings of the BENELUX/GERM/SWITZ/AUSTR/POL/ DK / FR Chapters for Coordination of Events</u>	CH08176, CH08087, CH08443, CH08027, CH08354, CH08888, CH08053	27 Oct 2022
<u>IEEE CASS Distinguished Lecture titled 'In-Memory Computing Circuits Using Multi Level Spin Memories'</u>	CH08995	15 Nov 2022

[Joint Administrative Meetings of the
BENELUX/GERM/SWITZ/AUSTR/POL/ DK / FR Chapters for
Coordination of Events](#)

CH08176, CH08087, CH08443, 15 Dec 2022
CH08027, CH08354, CH08888,
CH08053

How Region 8 can be of help to your Section, members, and activities

List any challenges your Section is facing and what support is required from the Region 8. Please, also, give us your suggestions for agenda items that you want to be discussed during the R8 Committee meeting.

Any other issues of interest