IEEE Communications Society Technical Committee on Smart Grid Communications

Tuesday, November 30, 2021 - 17:00 – 18:30

Virtual meeting

Agenda – TC SGC Meeting – 30/11/2021

› Call to order

› Approval of the agenda

› Approval of previous meeting minutes (July 2021)

› Reports on nominations, conferences and journals

› Report on SIGs activities

› Report on approval of updated P&Ps

› Awards and nominations committee

› Election of new officers for the term 2022-23

› Any other business

› Adjourn

TC structure and status

Mission statement

› Support the IEEE Smart Grid Initiative

› Promote ComSoc's position in the development and promotion of smart grid related technologies

› Ensure that ComSoc members play a decisive technological role in smart grid communications, control, and computing

› Website: http://sg.committees.comsoc.org/

Officers 2020-21

› Chair:

  – **Andrea Tonello**, University of Klagenfurt, Austria

› Vice Chairs:

  – **Chris Develder**, Ghent University, Belgium

  – **Marco Levorato**, UC Irvine, USA

  – **Christian Wietfeld**, TU Dortmund, Germany

› Secretary

  – **Fang Yang**, Tsinghua University, China

› Appointed officers

  – Member relations: **Hongjian Sun**, Durham University, UK

  – Industry relations: **Cedric Lavenu**, EDF R&D, France

Member development

‣ 232 as of Dec. 2019 registered members

‣ 252 as of June 2020 registered members

‣ 259 as of January 2021 registered members

‣ 263 as of July 2021 registered members

‣ 265 as of November 2021 registered members (13% increase since Dec. 2019)

‣ To become a member, sign up the TCSGC mailing list at https://comsoc-listserv.ieee.org/cgi-bin/wa?SUBED1=asgcc&A=1

  – A **member** must be a Comsoc member

  – Non ComSoc members can contribute as **collaborators**

  – To become a **voting member**, attend at least two out of the last five TCSGC meetings

  – TCSGC meetings are held twice a year at IEEE ICC and IEEE SmartGridComm

Nominations, conferences and journals

Nominations and representatives

- IEEE ICC 2021 SGC Track:　　　　György Dán, KTH
  - 18 submitted papers, 7 accepted
- IEEE Globecom 2021 SGC Track :　　Ruilong Deng, Zhejiang University
  - Submitted papers 17, 7 accepted
- IEEE SmartGridComm 2021:　　　Antonello Monti, Univ. of Aachen
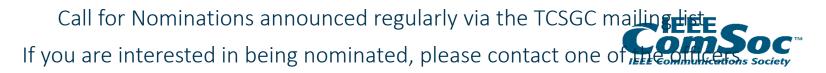 - Submitted papers 120, 71 accepted
- IEEE ICC 2022 SGC Track :
- - Submitted 21,　　　　　　　　Christian Wietfeld, TU Dortmund
- IEEE Globecom 2022 SGC Track :　Chris Develder, Ghent Univ.
- IEEE ICC 2023 SGC Track :　　　Dejan Vukobratovic, Univ. of Novi Sad (TBC)
- IEEE Globecom 2023:　　　　　Nominations to be made

Call for Nominations announced regularly via the TCSGC mailing list

If you are interested in being nominated, please contact one of the officers

IEEE SmartGridComm 2021

› **Location:** Aachen, Germany

› **Dates:** 25-28 October 2021

› **Venue:** The event was hybrid. Location moved to the University so that it is possible to switch to fully virtual without additional costs

› **Organizers:** Antonello Monti, Ferdinanda Ponci, RWTH Aachen Univ.

› Submitted 120 papers. Accepted: 71

› Participants: 178

› 5 tutorials accepted (fully virtual)

› 2 industry workshops (fully virtual)

› 3 roundtables on Game Changer topics:

 – One of these as policy session in cooperation with IEEE European Public Policy Committee

IEEE SmartGridComm 2022

- **Location:** Singapore

- **Dates:** 25-28 October 2022

- **Venue:** The event will be hybrid. Physical portion will be in Singapore University of Technology and Design (SUTD) for cost saving and flexibility.

- **Organizers:** Sun Sumei (A*STAR), David Nicol (UIUC), Binbin Chen (SUTD).

- Same week as Singapore International Energy Week (SIEW) https://www.siew.gov.sg/

- One week before IEEE PES ISGT Asia (also in Singapore)

- In addition to the main conference and co-located workshops, we would love to have: tutorials, demos / posters sessions, PhD forum, women in Smart Grids forum, dialogs with government & industry leaders
  Warmest invitation to join the organizing team!

- Please email me at binbin_chen@sutd.edu.sg if you are interested in joining the organizing team or have any suggestions

Special issues

Current:

IEEE Transactions on Green Communications and Networking – SI on Collaborative Intelligence for Green Internet of Things in the 6G Era
Guest Editors: Celimuge Wu, Kok-Lim Alvin Yau, Zonghua Zhang, Damla Turgut, Shiwen Mao
Submission deadline: 10 December 2021

Frontiers in Communications and Networks, has a section on Smart Grid Comms with specialty chief editor Editor Melike Erol- Kantarci

Past:

MDPI Energies - SI on Power Line Communication (PLC) Evolution: New Challenges and Innovative Solutions
› Guest Editors: Alberto Sendin, Andrea Tonello
  – Submission deadline: 31 July 2021

IEEE Network Magazine, SI on AI and 6G Convergence: an Energy-efficiency Perspective
› Guest Editors: Y. Zhang, M. Erol-Kantarci, W. Sun, Y. Dai, J. Hoydis, M. C. Gursoy,
  – Submission deadline: 15 April 2021

IEEE Transactions on Green Communications and Networking - SI on Communications and Computing for Green Industrial IoT and Smart Grids
› Guest Editors: Melike Erol-Kantarci, George C. Alexandropoulos, Peter Han Joo Chong, Andrea Tonello, Yan Zhang
  – Submission deadline: 1 March 2021

Report on SIGs activities

Special interest groups

▸ 1. SIG Communications and Networks to Enable the Smart Grid
  – Chair: Dejan Vukobratovic - University of Novi Sad
  – Vice Chair: Gregor Verbic - University of Sidney

▸ 2. SIG Cyber Security and Privacy for the Smart Grid
  – Chair: Lalitha Sankar - Arizona State University
  – Vice Chair: György Dan - KTH

▸ 3. SIG Energy Storage and Electric Vehicles
  – Chair: Hamid Nazaripouya - UC Riverside
  – Vice chair: Phuong Nguyen - TU Eindhoven

▸ 4. AI and Computational Intelligence
  – Chair: Yan Zhang - University of Oslo
  – Vice-chair: Melike Erol-Kantarci - University of Ottawa
  – Vice-chair: Damla Turgut - University of Central Florida

▸ Past SIGs
  – SIG Big Data Management and Analytics
  – SIG ICT-Enabled Transactive Energy and Grid Economics
  – SIG Energy Internet and Energy System Integration
  – SIG Active Distribution Grids and Microgrids
  – SIG Smart Metering, Demand Response and Dynamic Pricing

SIG Communications and Networks to Enable the Smart Grid

› Conferences:
- IEEE BalkanComm 2021
- IEEE ISGT Europe 2022
- PMAPS 2022

SIG: AI and Computational Intelligence

› Keynotes:

- M. Erol-Kantarci, "AI-enabled Energy Trading for Microgrids and Transactive Energy Systems," at IEEE 3rd Global Power, Energy and Communication Conference, October 2021.

- Y. Zhang, "Blockchain and Federated Learning for IoT", at IEEE Engineering Day 2021 (ED'21)

› Distinguished lectures:

- M. Erol-Kantarci, "Recent advances in Smart Grid Communications," IEEE Sacramento Valley Section Chapter, New Orleans Section Chapter, Central Texas Section Chapter, Central Texas Section Joint, 8 November 2021.

- Y. Zhang, "Digital Twin for 6G and IoT", at IEEE ComSoc Argentina

- Y. Zhang, "Digital Twin for 6G and IoT", at Austin-IEEE Joint Chapters

› Special Issues:

- "Communications and Computing for Green Industrial IoT and Smart Grids" in IEEE Transactions on Green Communications and Networking. To be published in March 2022. GEs: A. Tonello, Y. Zhang, M. Erol-Kantarci, P. Chong, G. Alexandropoulos.

- " AI and 6G Convergence: An Energy-Efficiency Perspective", in IEEE Network Magazine, to be published in Nov/Dec. 2021. GEs: Y Zhang, M. Erol-Kantarci, W. Sun, Y. Dai, J. Hoydis, and M. Cenk Gursoy

P&Ps update

P&Ps update

› We have to update the TC-SGC P&Ps to reflect the TEA-Council new provisions rendered available in August 2020.

› Main updates:
  – Active Members are now called Voting Members
  – More than 1 Vice-Chair possible
  – TC officers can run for a second term, but they cannot exceed 6 consecutive years as an officer in the TC
  – Nominations and elections sub-committee and related procedures
    ▪ At least two candidates for every officer position
  – Awards subcommittee and related procedures
    ▪ 5 to 7 members. One has to be a TC officer (excluding the chair). It has to be firstly voted. Then sent for approval to TEAC
  – Two meetings/year at ICC or Globecom or SmartGridComm or other venue (also virtually if necessary)
  – SIGs can be formed

› **Approved by voting members. Results sent to TEAC**

There will be a significant restructuring of the TCs by next year …

TCSGC Awards

TCSGC awards

› Two awards

 – Outstanding Service Award

 – Technical Achievement Award

› **Committee members**: Anna Scaglione, Chris Develder, Christian Wietfeld, Lutz Lampe, Petar Popovski

› Formed according to updated P&Ps: collected vote for approval and informed TEAC

› Term until conclusion of activities (early 2022)

Nominations and Elections

New officers election for term 2022-23

› **N&E committee members**

– Angela Yingjun Zhang, Lutz Lampe, Vincent Wong, Hans-Peter Schwefel, Fang Yang

› **Call for nominations sent out:** deadline Dec 13., 2021 (to be sent to Lutz Lampe)

› Election to be concluded by end of 2021.

Any other business ?

Next meeting

- ICC 2022, June 2022

Thank you!