IEEE Communications Society Technical Committee on Smart Grid Communications

Tuesday, October 25, 2022 - 11:30 – 12:30 CET

Hybrid meeting at SmartGridComm 2022 - Singapore
Call to order

Approval of the agenda

Approval of previous meeting minutes (May 10, 2022)

TC structure and status

Reports on nominations, conferences and journals

Report on SIGs activities

Status of webinars organization

Awards and nominations committee: announcement of 2022 award

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/](http://sg.committees.comsoc.org/)
Officer 2022-23

Chair:
- Andrea Tonello, University of Klagenfurt, Austria

Vice Chairs:
- Chris Develder, Ghent University, Belgium

Secretary
- Kun Yang, University of Essex, UK

Appointed Officers
- Industry Relations: Alberto Sendin, Iberdrola, Spain
- ComSoc TC-PLC Liaison: Ralf Lehnert, TU Dresden, Germany
- PES Liaison: Antonello Monti, RWTH Aachen University, Germany
- ComSoc TC News Letter Editor: Andrea Tonello (ad interim)
- Standards Liaison: TBD
Member development

- 232 as of Dec. 2019 registered members
- 252 as of June 2020 - 259 as of January 2021 - 263 as of July 2021 - 265 as of November 2021 - 256 as of May 2022
- 273 as Oct. 2022 (increase of 17.5% from 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 Globecom 2022 SGC track: Chris Develder, Ghent Univ.
- Submitted papers: 21; accepted papers: 8

IEEE ICC 2023 SGC track: Dejan Vukobratovic, Univ. of Novi Sad
- Submission deadline Nov. 1, 2022

IEEE Globecom 2023: Biplab Sikdar, National University of Singapore

IEEE ICC 2024 SGC track: Nomination 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 2022

- **Location:** Singapore - **Dates:** 25-28 October 2022
- **Venue:** The event held hybrid. Physical portion held in Singapore University of Technology and Design (SUTD) campus
- **Organizers:** Sun Sumei (A*STAR), David Nicol (UIUC), Binbin Chen (SUTD)
- **Website:** [https://sgc2022.ieee-smartgridcomm.org/](https://sgc2022.ieee-smartgridcomm.org/)
- Same week as Singapore International Energy Week (SIEW) [https://www.siew.gov.sg/](https://www.siew.gov.sg/)
- **Number of papers accepted:** main conference (65) + workshop (6) = 71 in total
- **Number of papers submitted:** main conference (170) + workshop (12) = 182 in total
- **Acceptance rate:** main conference (38.2%), workshop (50%), overall (39%)
- **Number of registrants:** 137, on-site: around 60
Special issues – see also SIG reports

Current:

*You may want to send information. The TC web site will also be updated.*

Past in 2022:

- **Special Issue of Energies on “Demand Side Management in Smart Grid” – MDPI Energies**
  Deadline for manuscript submissions: 31 August 2022
  Guest co-editors: Dr. Thanasis G. Papaioannou
  Link: [https://www.mdpi.com/journal/energies/special_issues/Demand_Side_Management](https://www.mdpi.com/journal/energies/special_issues/Demand_Side_Management)

- **Pervasive, Efficient and Smart Signal Processing for IoT – IEEE IoT Magazine**
  Deadline for manuscript submissions: 30 July 2022
  Guest co-editors: E. Veronica Belmega, Domenico Cioungo, Mérouane Debbah, Lutz Lampe, Dinh-Thuy Phan-Huy, Tirza Routtenberg, Chau Yuen
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
   – Vice Chair: Jinsub Kim- Oregon State Univ.

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 ICC 2023 SGC track – Chair Dejan Vukobratovic
- SmartGrdiComm – Comm. Symposium 11 accepted papers (2 sessions), and 1 special session in this domain.

Talks:

- Keynote speech by Dejan Vukobratovic on 5G Cellular Network for Massive IoT and Large-Scale Information Processing in Smart Grids at a regional IEEE conference in Mauritius (https://www.elecom2022.com/).
Webinar in Spring 2023

- Topics: Cybersecurity Challenges for Grid Edge, DER, and IBR
- Venue: Virtual
- Format: Four 15-min presentations + 30-min panel discussion + 10-min Q&A
- Date: May 22, 2023 (tentative)
- Potential panelists:
  - Charalampos Konstantinou (Assistant Professor, KAUST)
  - Anna Scaglione (Professor, Cornell University)
  - Mohammad Shadmand (Assistant Professor, University of Illinois, Chicago)
  - Danish Saleem (National Renewable Energy Lab)
Keynotes and Invited Talks:

- Y. Zhang, Keynote at IEEE VTC Fall’22, IEEE Workshop on Empowering Wireless Networks with Digital Twin, September 2022
- Y. Zhang, Keynote at IEEE VTC Spr’22, IEEE Workshop on Sustainable and Intelligent Green Internet of Things for 6G and Beyond, June 2022
- Y. Zhang, Keynote at IEEE ICC 2022, Workshop on Data Driven Intelligence for Networks and Systems (DDINS), May 2022
- Y. Zhang, Keynote, 6G Alliance of Network AI (6GANA), June 2022
- Y. Zhang, Invited talk, IEEE HPSR 2022, June 2022
- Y. Zhang, Invite talk, “Smart Grid Security and Privacy”, the Council of European Energy Regulators cybersecurity workstream, April 2022

Distinguished Lectures and Tutorials:

- D. Turgut, “Communication, computation, and privacy trade-off in machine learning for smart environments,” hosted by IEEE Egypt Section, September 15, 2022
- Y. Zhang, Tutorial, "Machine Learning and Optimization for Smart Grid", IEEE PES ISGT ASIA 2022
Special Issues:

- Special Issue on “Collaborative Intelligence for Green Internet of Things in the 6G Era” in IEEE Transactions on Green Communications and Networking. To be published in December 2022. GEs: Celimuge Wu, Kok-Lim Alvin Yau, Zonghua Zhang, Shiwen Mao, Damla Turgut
- Special Issue on “6G the Next Frontier: Theories, Technologies and Applications” in Elsevier Computer Networks, 2022 (M. Erol-Kantarci)
- Special Issue on “AI for Open Programmable Virtualized Networks in 6G” in IEEE Wireless Communications, 2022 (M. Erol-Kantarci)

Conference organizational roles:

- D. Turgut, IoT & Sensor Networks Symposium Co-Chair, IEEE ICC 2022, May 16-20, 2022, Seoul, South Korea
- D. Turgut, Communication and Networking Symposium Co-Chair, IEEE SmartGridComm 2022, October 25-28, 2022, Singapore
- M. Erol-Kantarci, Wireless Communications Symposium Co-Chair, IEEE Globecom 2022, December 4-8, 2022, Rio de Janeiro, Brazil
- Y. Zhang, Program Chair, IEEE/ACM IWQoS 2022, Oslo, Norway
- Y. Zhang, Program Chair, IEEE ICCT 2022
- Y. Zhang, Symposium Chair, IEEE ICCCC 2022
- Y. Zhang, General Chair, BlockSys 2022
Webinars
Webinars

- **Idea:** organize a series of webinars.
- **Objective:** engage more our community and offer some value
- **Focus on a specific topic** and last 1-1.5 hours *(talk or panel)*
  - Access will be remote
  - I would also offer free access
  - ComSoc staff can help in advertising them
- **Webinars can be part of the SIG activities**
  - 2 webinars/year. Each webinar will be organized by one of the four SIGs and cover a topic within the SIG scope
  - Engagement of industry would also be a good objective either by having a speaker from industry or seeking for industry colleagues to attend
Current proposals:

- **Status of PLC Standards and Research.** Organizers: Jose Antonio Cortes Arrabal, Andrea Tonello (end of 2022)

- **Cybersecurity Challenges for Grid Edge**, DER, and IBR. Organizers: Jinsub Kim, Lalitha Sankar, György Dan

SIGs can send a brief proposal:
- Title/topic of the webinar
- Possible speaker/s
- Date (indication of time period)
TCSGC Awards
TCSGC awards

- Two awards
  - Outstanding Service Award
  - Technical Achievement Award

- Committee members: Lutz Lampe (Chair), Chris Develder, Petar Popovski, Anna Scaglione, Christian Wietfeld

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

- Term until December 2023
The 2022 Technical Achievement Award goes to:

Prof. Yan Zhang

Congratulations!
Any other business?
Next meeting

› ICC 2023
Thank you!