

## IEEE Communications Society Technical Committee on Smart Grid Communications

Thursday, July 22, 2021 - 18:00 - 19:30 (CET)

Virtual meeting





## Agenda – TC SGC Meeting – 22/7/2021

- **Call to order**
- Approval of the agenda
- Approval of previous meeting minutes (January 2021)
- Reports on nominations, conferences and journals
- Report on SIGs activities
- Report on update of P&Ps
- Policy for the use of the TC mailing list
- 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: <a href="http://sg.committees.comsoc.org/">http://sg.committees.comsoc.org/</a>





### **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 (13% increase since Dec. 2019)
- To become a member, sign up the TCSGC mailing list at <a href="https://comsoc-listserv.ieee.org/cgibin/wa?subed1">https://comsoc-listserv.ieee.org/cgibin/wa?subed1</a>= 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, under review

▶ IEEE SmartGridComm 2021: Antonello Monti, Univ. of Aachen

Submitted papers 105, under review

▶ IEEE ICC 2022 SGC Track : 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)

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: 21-28 October 2021

- **Venue:** The event will be 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 105 papers. Review on going
- 5 tutorials accepted (they will be fully virtual)
- 3 industry workshops (they will be fully virtual)
- > Still under discussion:
  - One policy session in cooperation with IEEE European Public Policy Committee
  - Thematic sessions in cooperation with some large EU projects







## Special issues

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

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

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





## 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. Al 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



Links:

http://www.balkancom.info/2021/

Special Session @ BalkanCom 2021



#### Information and Communication Technologies as a Key enabler for Energy **Transition**

#### Organizers and Chairs:

Nermin Sulianović, University of Tuzla, Faculty of Electrical Engineering, Bosnia and Herzegovina:

Matej Zajc, University of Ljubljana, Faculty of Electrical Engineering, Slovenia

#### Scope of the Papers

The process of digitalisation of the electricity supply chain and introduction of the smart grid led to a significant increase of data generation and information exchange between numerous stakeholders. This special session aims to solicit papers that cover various ICT topics related to transition towards smart grid and green energy goals in general

Rapid transition of centralised power systems into distributed smart grid enforces innovative ICT-based approaches to increase the efficiency and reliability of modern sustainable power and energy systems and to enable more central role of end-users.

Two-way communication between many actors relies on wide spectrum of communication technologies, from centralized legacy systems to state of the art mobile technologies enabling decentralized active participation of end-users.

Public Internet is becoming a de-facto standard for demanding energy services ranging from aggregation of distributed energy services within virtual power plants to decentralised block-chain services for smart

http://www.balkancom.info/2021/ss\_ictenergy.htm\_pata is crucial for the operation of modern power systems. Systems need to exchange information the operation of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems. Systems need to exchange information of modern power systems in the system of the system distributed systems fast and reliable data interoperability is crucial to enable reliable system operation.

## SIG: Al and Computational Intelligence

- Yan Zhang is co-Guest Editor for Special issue on "Communications and Computing for Green Industrial IoT and Smart Grids" at IEEE Transactions on Green Communications and Networking in 2021.
- Y. Zhang is co-Guest Editor for Special issue on "AI and 6G Convergence: an Energy-efficiency Perspective" at IEEE Network Magazine in 2021.
- Y. Zhang is Honorary Chair, International Conference on Blockchain and Trustworthy Systems (BlockSys 2021).
- Y. Zhang is Program Co-Chair, IEEE International Conference on Communication Technology (IEEE ICCT 2021).
- Y. Zhang has been selected as IEEE ComSoc Distinguished Lecturer (2021-2022 term).
- Melike Erol-Kantarci delivered 2 tutorials, 3 ComSoc Distinguished Lectures, and 5 invited talks.
- M. Erol-Kantarci is co-Guest Editor (\w Drs. Tonello and Zhang) for Special Issue on "Communications and Computing for Green Industrial IoT and Smart Grids" at IEEE Transactions on Green Communications and Networking in 2021.
- M. Erol-Kantarci is co-organizing the Workshop on experimental wireless platforms and testbeds for computing, communication and networking research (Testbeds4Wireless) (in conj. with IEEE Globecom'21).
- M. Erol-Kantarci has been selected as IEEE ComSoc Distinguished Lecturer (2021-2022 term).
- Damla Turgut is Co-Guest Editor (\w Drs. Wu, Yau, Zhang, and Mao) for the Special Issue on "Collaborative Intelligence for Green Internet of Things in the 6G Era" at IEEE Transactions on Green Communications and Networking in 2021.
- D. Turgut was Social Networks Track Chair at ICC 2021.
- D. Turgut has been selected as IEEE ComSoc Distinguished Lecturer (2021-2022 term).





## **TCSGC Awards**





### **TCSGC** awards

- Two awards
  - Outstanding Service Award
  - Technical Achievement Award
- **Committee members:** 5-7 members. **To be formed according to updated P&Ps**
- Awards should be announced at SmartGridComm 2021





# 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.
- Action item responsible persons: Marco Levorato
- 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
- Next step is to collect the vote for approval. Then, send it to TEAC



## Policy for the use of the TC mailing list





## **Tc-mailing list**

- Promotion of special issues in journals/magazine (approved in previous meeting)
  - OK when IEEE and relevant to TC-SGC members and TC scope
  - OK when organized by members of the TC and they fit the scope of the TC. Yet, the calls should not compete at the same time and deadlines should be aligned
- Promotion of conferences, workshops, tracks
  - OK for IEEE ComSoc financially sponsored events that fit the scope of the TC
  - OK when organized by members of the TC, and do not compete at the same time and deadlines, and are endorsed by the TC (approved by the TC officers)
- **Promotion of talks, webinars etc.** 
  - OK for IEEE ComSoc sponsored events that fit the scope of the TC
- Promotion of open positions
  - This may become not easy to control
- Promotion of other news, e.g., standardization initiatives, student competions, ...
  - Subject to TC officers approval with the condition of fitting the TC scope







# Any other business?





## Next meeting

> SmartGridComm 2021, October 2021





# Thank you!



