

ITC Meeting Second semester 2022, Virtual Conference (Nov 25th, 2022)

Time: Friday Nov. 25, 10:00 AM - 12:00 PM, EDT

Venue: Virtual Conference

Room: Zoom Meeting Room

Attendees: Abd-Elhamid Taha, Ahmed Refaey Hussein , Alessio Botta, Daniel Macêdo Batista, Eirini Eleni Tsiropoulou, Giacomo Verticale, Imran Shafique Ansari, Kapal Dev, Luca Foschini, Mike Fang, Mithun Mukherjee, Paolo Bellavista, Pascal LORENZ, Periklis Chatzimisios, Prosper Chemouil, Ruidong Li, Sahar Hoteit, Simone Ferlin, Stefano Secci, Symeon Papavassiliou, Xiaoming Fu, and Yulei Wu

Welcome:

Paolo Bellavista opened the meeting and presented its agenda.

- 1. ITC introduction:** Paolo described the IEEE, ComSoc, and ITC structure, the ITC officers and past officers, and the management of the mailing list.
- 2. ITC meeting (May 6, 2022) minutes:** approved.
- 3. Current process of TC restructuring:** Paolo explained the importance of encouraging the community to participate in the process of restructuring the ComSoc Technical Committees (the communities could be better in terms of industry participation, impact of standard development, and education). Probably IEEE ComSoc will change the model of Technical Committees. They can be more dynamic, similar to SIGs. Every Technical Committee will need to explicitly inform who is responsible for education, standards, etc... but this needs to be more uniform to easily identify those responsible inside each Technical Committee. In the beginning of 2023 ComSoc will push the new organization. We need to be prepared to highlight the areas of ITC and show that other TCs don't consider what ITC covers. More information at <https://tc.boards.comsoc.org/> .
- 4. Conference activities**
 - o IEEE ICC & GLOBECOM 2022-2024
 - o IEEE Global Internet Symposium (in conjunction with IEEE Infocom 2023)
 - o Currently endorsed conferences: NetSoft 2022, ITC 34, BRAINS 2022
 - o NetSoft 2022: The ITC Representatives are Prosper Chemouil, Stefano Secci, and Israat Haque. 21 full papers and 9 short papers have been selected from 85 active submissions.

- o ITC 34 and BRAINS 2022: ITC Representatives were still missing.
- o Procedure to have a Technical Co-Sponsorship: conference must be in the scope of ITC (i.e., Internet as primary scope), material must be sent to ITC_Officers@comsoc.org at least 4 months before paper submission deadline, 6 months ahead the conference takes place.

5. ITC Awards

- o Rules at <https://itc.committees.comsoc.org/awards/>
- o ITC Best Paper Awards for papers published in 2020 & 2021: Announcements for GlobeCom'22
- o ITC Outstanding Service Award 20/21 & Early Career Award 20/21: The awards were announced - Xiaoming Fu, University of Goettingen, Germany (ITC Outstanding Service Award) and Zehui Xiong, Singapore University of Technology and Design (ITC Early Career Award)

6. Special Interest Groups (SIGs)

- o SIG on Industrial Networks: Created on Aug. 2020, organization of Blockchain in next generation communications and networks in conjunction with IEEE ICCE 2023, 3rd Workshop on Network Management for 6G Communication Systems in conjunction with IEEE Globecom 2022 (29 papers out of 61 submissions have been accepted), 2nd Workshop on Sustainable and Resilient Industrial Communication Networks in conjunction with IEEE ICDCS 2022 (5 papers out of 13 submissions have been accepted), IEEE Standard Communication Magazine Special Issue on Autonomous Networks: Opportunities, Challenges, and Applications (6 papers out of 20+ have been accepted), IEEE Transactions on Consumer Electronics Special Issue on DENSE - Data Integrity, Integration and Security Issues for Consumer Data in Industry 5.0 (Submissions are open), ITU Journal Special Issue on Metaverse-Communication, Networking, and Computing (Submissions are open), Computer Communication Special Issue on Wireless Communication-based Solutions for Combating COVID-19 From the Game Theory Viewpoint (Submissions are open), and Journal of King Saud University - Computer and Information Sciences Special Issue on Emerging Industries: Nexus between Emerging Technologies and Industry 5.0 (Submissions are open); Submitted internet draft on Operations and Control Networks (OCN) Use Cases for Industry control Networks in Internet Engineering Task Force-A Standardization Organization; Two EU Projects: ICT AppliCaTions for Sustainable enVironmental protection (Funding: Erasmus + CBHE [Budget: 719K]), VILLAGE (Funding: Horizon Europe MSCA Staff Exchange [Budget: 837K])
- o SIG on Internet Security (INET SIG): organization of CSNET 2021, INFOCOM 2021 BigSecurity, 7th Cyber-Physical System Security

Workshop (CPSS 2021), IEEE TNSM Special Issue on Latest Developments for Security Management of Networks and Services, BRAINS 2021, BRAINS 2022, CSNET 2022

- o SIG on Network Measurement and Analytics (NMA SIG): major related conferences include TMA, IMC, PAM, SIGCOMM, and CoNEXT
- o SIG on Intelligent Internet Edge (IIE SIG): Homepage at <https://github.com/IEEEITCIIE/Home/wiki> and LinkedIn Group at <https://www.linkedin.com/groups/10413513/> . Organization of ICCN 2023 International Workshop on Intelligent Cloud Computing and Networking (ICCN) in conjunction with IEEE INFOCOM 2023 (Submissions are open), IEEE International Conference on Metaverse Computing, Networking and Applications (IEEE MetaCom 2023) (Submissions are open), ICCCN 2023 32nd International Conference on Computer Communications and Networks (ICCCN 2023) Track on Emerging Topics in Networking (Submissions are open), IEEE Applied Sensing Conference 2023 (APSCON 2023), Track on Sensing for Industry 4.0, 11th International Conference on MOBILE Wireless MiddleWARE, Operating Systems, and Applications (MOBILWARE 2022), 5th International Conference on Hot Information-Centric Networking (IEEE HotICN 2022), ACM SIGCOMM 2022 Workshop on Networked Sensing Systems for a Sustainable Society (NET4us 2022), IEEE ICDCS 2022 Workshop on Block6G: Intelligent, Scalable, and Efficient Blockchain for 6G Networking and Communications, ICCN 2022 International Workshop on Intelligent Cloud Computing and Networking (ICCN) (in conjunction with IEEE INFOCOM 2022), IEEE Network Magazine Special Issue on Quantum Communications and Networking (12 papers out of 58 submissions have been accepted), ITU Journal on Future and Evolving Technologies (ITU J-FET), Special Issue on Future of networking beyond 2030, IEEE Wireless Communications, Special Issue on Smart, Optimal, and Explainable Orchestration of Network Slices in 5G and Beyond Networks, EURASIP Journal on Wireless Communications and Networking, Special Issue on Intelligent Systems and Smart Network Computing for Commercial and Industrial Internet of Things, Digital Communications and Networks, Special Issue on Edge Computation and Intelligence, IEEE Internet of Things Journal Special Issue on Sustainable Solutions for the Internet of Things, MDPI Sensors Special Issue Sustainable Environmental Sensing Systems, Journal of Network and Systems Management (JNSM) Special Issue on Intelligent and Trustworthy Internet Edge, EURASIP Journal on Wireless Communications and Networking Special Issue on Evolutional Trends of Intelligent IoT in 5G Era, IEEE Transactions on Network Science and Engineering Special Issue on Smart Systems and

Intelligent Networking Powered with Big Data Analytics, Elsevier Journal of Information Security and Applications Special Issue on Machine Learning Techniques for Cyber Security: Challenges and Future Trends

- o Call for new Special Interest Groups on very recent subjects in Internet-working

7. Standardization Activities

- o The standardization activities: Relations with Internet Society; Definition of priorities; IEEE Communication Society standards; IETF activities.
- o Xingqin Lin (NVIDIA, California, USA) is new volunteer for 3GPP liaison
- o Relations with Internet Society: ISOC's 2022 action plan remains on focusing on Growth (Build community networks, Build infrastructure, and Measure the Internet), Strengthening (Encryption, Routing security, and Open and Internet-way of network "network of networks"), and Empowerment (Support communities and Build and secure capacity)
- o Working groups: Communication Electroacoustics (COM/SDB), Dynamic Spectrum Access Networks Standards Committee (DySPAN-SC), Power Line Communication Standards Committee (PLC-SC), Virtualized and SDN and Services Standards Committee (NetSoft-SC), Green ICT Standards Committee (GreenICT-SC), Mobile Communication Networks Standards Committee (MobiNet-SC), Edge, Fog, Cloud Communications with IOT and Big Data Standards Committee (EdgeCloud-SC), Access and Core Networks Standards Committee (AccessCore-SC), and Unmanned Aerial Vehicles Applications and Communications Standards Committee (Aercom-SC)
- o IEEE Communications Standards Magazine: September 2022 (Autonomous Networks: Opportunities, Challenges, and Applications), Recent And Future Evolution of Wi-Fi, June 2022 (Recent and Future Evolution of Wi-Fi), and March 2022 (Evolution of 5G NR MIMO Standards)
- o IETF activities (summary between IETF114 - IETF115) BoFs: Stub Network Auto Configuration for IPv6 (snac), JSON Web Proofs (jwp), Multicast Source Routing over IPv6 (msr6), Secure Asset Transfer Protocol (satp), Media Over QUIC (MoQ), Supply Chain Integrity, Transparency, and Trust (scitt), RADIUS Extensions Reanimated (radextra), Computing-Aware Networking (can), More Instant Messaging Interoperability (mimi), Time Variant Routing (tvr), and Secure Asset Transfer Protocol (satp)
- o IETF activities (summary between IETF114 - IETF115) WGs: Transport area (tsv), Security area (sec), Routing area (rtg), Operations and Management Area (ops), Internet Area (int), General Area (gen), and Applications and Real-Time Area (art)
- o IETF activities (summary between IETF114 - IETF115) IAB and Applied Networking Research Prize (ANRP)
- o 3GPP: A Global Initiative

8. IEEE ComSoc Student Competition

- o Report on the ComSoc student competition, goal, prizes and procedures. Also, the details about the selection process.
- o Selection Committee: Co-Chairs: Prof. Stefano Bregni (VP Conferences) and Prof. Nelson Fonseca (Director Conference Development). 53 Members from different TCs (Paolo Bellavista was the representative from ITC, next year Ruidong Li)
- o Winners of the ComSoc Student Competition 2022: FIRST PRIZE - "The Owl: An Accessible Immersive Telepresence System for the Future of Human Communication" by Diego Gonzalez Morin, Carlos Cortés, Marta Orduna, Manuel J. López Morales, Universidad Carlos III de Madrid, Spain, SECOND PRIZE - "Internet of Bodies: Digital Holistic Healthcare" by Abeer Alamoudi & Qi Huang, King Abdullah University of Science and Technology, Saudi Arabia (Advisors: Abdulkadir Celik & Ahmed Eltawil); and "Honorary Mention" certificate for 12 projects
- o We encourage ITC members to introduce the competition to their students to participate in the future.

9. Other business

- o Paolo introduced the method to join ITC.

10. Adjourn

- o Next ITC meeting: IEEE ICC 2023 (May 28 – June 01, 2023 – Rome, Italy)