

Technical Communities

Technical Committees

[Ad Hoc & Sensor Networks](#)
[Cognitive Networks](#)
[Communications & Information Security](#)
[Communications Quality and Reliability](#)
[Communications Software](#)
[Communications Switching & Routing](#)
[Communications Systems Integration & Modeling](#)
[Communication Theory](#)
[Computer Communications](#)
[Data Storage](#)
[e-Health](#)
[High-Speed Networking](#)
[Information Infrastructure & Networking](#)
[Internet](#)
[Multimedia Communications](#)
[Network Operations & Management](#)
[Optical Networking](#)
[Power Line Communications](#)
[Radio Communications](#)
[Satellite & Space Communications](#)
[Signal Processing & Communications Electronics](#)
[Tactical Communications & Operations](#)
◆ [Situation Management](#)
[Transmission, Access, & Optical Systems](#)
[Wireless Communications](#)

Emerging Technical Subcommittees

[Applications of Nanotechnology in Communications](#)
[Autonomic Communications](#)

[Cable Networks & Services](#)
[Cloud Communications & Networking](#)
[Green Communications & Computing](#)
[Human Centric Communications](#)
[Innovation and Standards in Information and Communication Technologies \(ISICT\)](#)
[Integrated Fiber & Wireless Technologies](#)
[Internet of Things](#)
[Nano-Scale, Molecular, and Quantum Networking](#)
[Peer-to-Peer Networking](#)
[Smart Grid Communications](#)
[Social Networks](#)
[Vehicular Networks & Telematics Applications](#)



[Recertification Status](#)

Our technical committees define and implement the technical directions of the Society. As a fundamental element of the Society all members are invited - and encouraged - to participate in one or more of its technical committees. These committees - networks of professionals with common interests in communications - usually meet twice a year at major conferences. Throughout the year, these committees also play a major role in determining which events (conferences, workshops, etc.) are technically co-sponsored by ComSoc.

[Ad Hoc & Sensor Networks](#) *

The Committee will serve as ComSoc's focal point in the area of wireless ad hoc and sensor networks technologies, stimulating and organizing leading-edge wireless ad hoc and sensor networks symposia, workshops, sessions and tutorials at ComSoc conferences. It will also serve as a proactive facilitator in the dissemination of evolving wireless ad hoc and sensor networking standards.

Chair | boukerch [at] site [dot] uottawa [dot] ca (Azzedine Boukerche)

Vice Chair | Nei Kato

Secretary | Jalel Ben Othman

Standards Liaison | R. Vekatasha Prasad

Cognitive Networks***

The goal of TCCN is to provide a platform for its members in particular, and the cognitive networking research, development, policy making and standardization community in general, to interact and exchange technical ideas to identify major challenges and also derive solutions in the development of cognitive networking technologies.

Chair | dg [at] ohm [dot] york [dot] ac [dot] uk (David Grace)

Vice Chair Asia Pacific | kandeepan [at] rmit [dot] edu [dot] au (Kandeepan Sithamparanathan)

Vice Chair North America | Ekram [dot] Hossain [at] ad [dot] umanitoba [dot] ca (Ekram Hossain)

Vice Chair Europe/Africa | R [dot] R [dot] VenkateshaPrasad [at] tudelft [dot] nl (R. Venkatesha Prasad)

Secretary | pchatzimisios [at] ieee [dot] org (Periklis Chatzimisios)

Standards Liaison | mouli [at] stevens [dot] edu (Mouli Chandramouli)

Communications & Information Security *

This committee will promote security of all types of communication networks and forms of information transported by them and through them, end to end. Our security interests start from the network physical layer and they end on the end user application layer. The committee will support conferences, symposia, technical sessions, publications, etc., where information is exchanged within the scope of interest of the TC.

Chair | pmu [at] zurich [dot] ibm [dot] com (Peter Muller)

Vice Chair - Conferences | yqian [at] mail [dot] unomaha [dot] edu (Yi Qian)

Vice Chair - Publications | kejie [dot] lu [at] upr [dot] edu (Kejie Lu)

Secretary | Xiaodong [dot] Lin [at] uoit [dot] ca (Xiaodong Lin)

Standards Liaison | drvaman [at] pvamu [dot] edu (Dhadesugoor Vaman)

Communications Quality and Reliability *

This committee focuses on and advocates worldwide communications quality and reliability on behalf of, and within, the Communications Society. CQR serves as the catalyst for global awareness and the exchange of information relative to technical and management-related aspects of communications quality and reliability.

Chair | kelly [dot] krick [at] ericsson [dot] com (Kelly Krick)
Chair-Elect | [Hideaki Yoshino](#)
Vice Chair - Operations | [Tetsuya Yokotani](#)
Vice Chair - Publications | [Weider Yu](#)
Vice Chair - Programs Development | davids [at] iit [dot] edu (Carol Davids)
Secretary | jim [dot] runyon [at] alcatel-lucent [dot] com (Jim Runyon)
Treasurer | [Kevin Krantz](#)
Chair - Advisory Board | [Hiromi Ueda](#)
Standards Liaison | [Hideaki Yoshino](#)

Communications Software *

The mission of this committee is to advance the state of the art in communications software and its various aspects and applications. It serves as the major forum for discussion among communications software professionals in both of the communications and computer industries.

Chair | joeljr [at] ieee [dot] org (Joel Rodrigues)
Vice Chair | lynda [dot] mokdad [at] univ-paris12 [dot] fr (Lynda Mokdad)
Secretary | Hacene [dot] Fouchal [at] univ-reims [dot] fr (Hacene Fouchal)
Standards Liaison | jlloret [at]dcom [dot] upv [dot] es (Jaime Lloret)

Communications Switching & Routing *

The objective of this committee is to sponsor publications, conference technical sessions, workshops and topical meetings and discussions in the theory and applications of information switching. Specific areas include, but are not limited to theory, architecture, traffic, performance, signaling protocol and networks, call and mobility control, services and features, planning, economic factors and management of switching systems.

Chair | xue [at] asu [dot] edu (Guoliang Xue)
Vice Chair | atiq [at] ou [dot] edu (Mohammed Atiquzzaman)
Secretary | mellouk [at] u-pec [dot] fr (Abdelhamid Mellouk)
Workshop and Conferences Chair | mouftah [at] uottawa [dot] ca (Hussein Mouftah)
Standards Liaison | [Henry Suthon](#)

Communications Systems Integration & Modeling *

This committee is concerned with the systems disciplines and modeling tools that facilitate the integration of information-transport equipment, subsystems, and networks into communications systems. The committee particularly addresses computer-aided modeling of integrated subsystems to answer architectural and performance questions

Chair | s [dot] giordano [at] iet [dot] unipi [dot] it (Stefano Giordano)

Vice Chair | gmichail [at] umich [dot] edu (George Michailidis)

Secretary | cveri [at] cttc [dot] es (Christos Verikoukis)

Standards Liaison | cskianis [at]aegean [dot] gr (Harry (Charalobos) Skianis)

Communication Theory *

This committee sponsors conference sessions, workshops, tutorials, as well as promoting and reviewing papers in the broad area of communication theory, with emphasis on applications to practical systems. The technical content of these sessions and papers focuses on the analytical and theoretical aspects of many diverse areas that include modulation, coding, synchronization, equalization, signal processing and neural networks, transmission over all media, source and channel coding, spread spectrum and multiple access, data communications, and communication networks.

Chair | angel [dot] lozano [at] upf [dot] edu (Angel Lozano)

Vice Chair | mvalenti [at] wvu [dot] edu (Matthew Valenti)

Secretary | esp [at] ieee [dot] org (Erik Perrins)

Standards Liaison | Sana [dot] sfar [at]ieee [dot] org (Sana Sfar)

Computer Communications *

This committee (TCCC) sponsors papers, discussions, and standards on all aspects of computer-communication systems. It provides a forum for members to broaden professional contacts and for technical discussions and interactions. Its areas of interest include performance of computer

network and switch architectures, interfaces and protocols, configuration control, scheduling and buffer management, routing, flow control and admission control algorithms, error control, and network security, reliability, and management.

Chair | jpgs [at] eecs [dot] ku [dot] edu (James P.G. Sterbenz)

Vice Chair | jo [at] netlab [dot] tkk [dot] fi (Joerg Ott)

Secretary | massey [at] cs [dot] colostate [dot] edu (Dan Massey)

Standards Liaison | R. Venkatesha Prasad

Data Storage *

This committee (DS) promotes advances in the state of the art of coding and signal processing to enhance digital data storage systems, in order to achieve high storage densities, fast access, and low error rates. The committee is also interested in VLSI implementations of read/write channel electronics.

Chair | Haitao [dot] Xia [at] lsi [dot] com (Haitao (Tony) Xia)

Vice Chair (Academia) | xinde [dot] hu [at] sandisk [dot] com (Sedat Olcer)

Vice Chair (Industry) | sedat [dot] olcer [at] bilgi [dot] edu [dot] tr (Xinde Hu)

Secretary | oski [at] jaist [dot] ac [dot] jp (Brian M. Kurkoski)

Treasurer | CAI_Kui [at] dsi [dot] a-star [dot] edu [dot] sg (Kui Cai)

Standards Liaison | [Tiffany Jing Li](#)

e-Health ****

This committee focuses on exploring ICT solution gaps and business models supporting emerging eHealth applications and services, as well as exploring project collaboration opportunities addressing global health challenges with IEEE sister societies and governments around the globe. The focused technical areas include eHealth network and system infrastructures (e.g., health grid, cloud computing, etc), net-centric health and healthcare application developments, ICT-enabled personalized healthcare and management, and ICT-enabled smart medical devices and systems. This committee provides a platform to ComSoc members not only for technical information exchange (e.g., conferences and workshops) but also for project-based collaborations with IEEE and non-IEEE organizations.

Chair | p [dot] ray [at] unsw [dot] edu [dot] au (Pradeep Ray)

Vice Chair | joeljr [at] ieee [dot] org (Joel Rodrigues)

Secretary | nazim [dot] agoulmine [at] iup [dot] univ-evry [dot] fr (Nazim Agoulmine)

Standards Liaison | hp [at] ee [dot] nthu [dot] edu [dot] tw (His-Pin Ma)

High-Speed Networking *

This committee promotes interest within and outside the Communications Society on the emerging applications and architectural solutions for high-speed networks. A primary goal is to serve as a focal point for activities in high performance networking by participating in and sponsoring conferences and workshops; encouraging publications, fostering discussion; and providing education on the utility of high-speed networks and possible architectural alternatives required for optimum infrastructure.

Chair | ashwing [at] ieee [dot] org (Ashwin Gumaste)

Vice Chair | saradhi [at] ieee [dot] org (Chava Vijaya Saradhi)

Secretary | ydlin [at] cs [dot] nctu [dot] edu [dot] tw (Ying-Dar Lin)

Standards Liaison | ashwing [at] ieee [dot] org (Gumaste Ashwin)

Information Infrastructure & Networking **

Working in concert with other ComSoc Technical Committees, the objective of IIN is to facilitate the cohesive advancement of information infrastructures and supportive technologies to enable global networking to guarantee distribution and accessibility of any kind of data in any format, to anywhere, at anytime, on any media, and with any access tool. Social responsibility, including green operations and the narrowing of the “digital divide” are key precepts.

Chair | yacine [dot] ghamri [at] ieee [dot] org (Yacine Ghamri-Doudane)

Vice Chair | latif [at] ladid [dot] lu (Latif Ladid)

Secretary | sidi-mohammed [dot] senouci [at] u-bourgogne [dot] fr (Sidi Mohammed Senouci)

Internet *

This committee is a joint committee of the Internet Society and the IEEE Communications Society for stimulating interdisciplinary exchanges and applications of state of the art communications and related technologies to Internet infrastructure and services. The committee

contributes to the emergence of an ubiquitous, multimedia, and high-performance Internet serving large segments of the world's population.

Chair | fu [at] cs [dot] uni-goettingen [dot] de (Xiaoming Fu)

Co-Chair | jlloret [at] dcom [dot] upv [dot] es (Jaime Lloret Mauri)

Secretary | stefano [dot] secci [at] lip6 [dot] fr (Stefano Secci)

Standards Liaison | peris [at]it [dot] teithe [dot] gr (Periklis Chatzimisios)

Multimedia Communications *

This committee examines systems, applications, services and techniques in which two or more media are used in the same session. These media include, but are not restricted to, voice, video, image, music, data, and executable code. The scope of the committee includes conversational, presentational, and transactional applications and the underlying networking systems to support them.

Chair | jwhuang [at] ie [dot] cuhk [dot] edu [dot] hk (Jianwei Huang)

Steering Committee Chair | Pascal Frossard

Vice Chair - North America | Chonggang Wang

Vice Chair - Asia | Yonggang Wen

Vice Chair - Europe | Luigi Atzori

Vice Chair - Letters & Member Communications | Kai Yang

Secretary | Liang Zhou

Network Operations & Management*

This committee (CNOM) focuses on network and service operations and management. It encourages the exchange of information on the operational and technical management aspects of public and private networks for voice, data, image, and video, and organizes and sponsors publications and discussions of these topics. Specific technical interests include automation of network operations, customer network management and control, knowledge-based technologies, real-time management of networks, network-operations architecture, service management, and end-to-end management across several jurisdictional boundaries.

Chair | Brunner [at] nw [dot] neclab [dot] eu (Marcus Brunner)

Vice Chair | granville [at] inf [dot] ufrgs [dot] br (Lisandro Granville)

Technical Program Chair | filip [dot] deturck [at] intec [dot] ugent [dot] be (Filip De Turck)

Secretary

| bjennings [at] tssg [dot] org (Brendan Jennings)
Standards Liaison | brunner [at] nw [dot] neclab [dot] edu (Marcus Brunner)

Optical Networking *

The committee will serve as ComSoc's focal point in the area of optical networking technologies and play an active role in stimulating/organizing leading-edge optical networking symposia, workshops, sessions and tutorials serving OFC and other premier M&C venues. ONTC will also serve as a proactive facilitator in the dissemination of evolving optical networking standards by working closely with standards forums such as OIF, IETF, and ITU/T1.

Chair | suresh [at] gwu [dot] edu (Suresh Subramaniam)
Vice Chair | jukan [at] ida [dot] ing [dot] tu-bs [dot] de (Admela Jukan)
Secretary | rouskas [at] ncsu [dot] edu (George Rouskas)
Standards Liaison | jkuri [at] infinera [dot] com (Josue Kuri)

Power Line Communications *

The Committee sponsors conference sessions, special issues, workshops, tutorials, and promotes the dissemination of technical information in the broad area of communications over power lines. Our primary goal is to serve as a focal point for all activities in the area of power line communications.

Chair | lampe [at] ece [dot] ubc [dot] ca (Lutz Lampe)
Vice Chair | tonello [at] uniud [dot] it (Andrea Tonello)
Secretary | mribeiro [at] engenharia [dot] ufjf [dot] br (Moises Ribeiro)
Standards Liaison | latchman [at] list [dot] ufl [dot] edu (Haniph Latchman)

Radio Communications *

This committee sponsors and promotes technical papers, workshops, and tutorials on the engineering aspects of communications systems, equipment, and operation in which

electromagnetic transmission through space near the earth's surface is the dominant factor. Specifically included are systems in which the transmission follows the surface or takes place within the atmosphere of the earth. Technologies are considered for point-to-point, point to multipoint, mobile radio, and personal communications radio access. Commercial band broadcasting and space communications are outside the scope of the Committee.

Chair | a [dot] conti [at] ieee [dot] org (Andrea Conti)

Vice Chair | j [dot] z [dot] wang [at] kent [dot] ac [dot] uk (Jiangzhou Wang)

Secretary | andrew [dot] giorgetti [at] gmail [dot] com (Andrea Giorgetti)

Standards Liaison | gchrisikos [at] ieee [dot] org (George Chrisikos)

Satellite & Space Communications *

This committee facilitates technical exchange in the field of satellite and space communications and maintains a keen interest in the development and maintenance of standards in this area. It explores the evolution of new satellite and space-based systems and the application of new and emerging technologies.

Chair | igor [dot] bisio [at] unige [dot] it (Igor Bisio)

Vice Chair | hwakana [at] nict [dot] go [dot] jp (Hiromitsu Wakana)

Secretary | Tomaso [dot] deCola [at] dlr [dot] de (Tomaso de Cola)

Signal Processing & Communications Electronics *

This committee (SPCE) sponsors papers, participates in the organization of conferences, and promotes technical workshops on those aspects of communications that pertain to the innovation, development and application of algorithms and electronic and photonic devices or subsystems for generation, processing, storage, transmission, recovery, and presentation of communications signals. In so doing, the committee also has as a goal the professional development of committee members and other practitioners that work in the above areas.

Chair | arumugam [dot] nallanathan [at] kcl [dot] ac [dot] uk (Nallanathan Arumugam)

Vice Chair | hai [dot] lin [at] ieee [dot] org (Hai Lin)

Secretary | odobre [at] mun [dot] ca (Octavia Dobre)

Standards Liaison

| hai [dot] lin [at] ieee [dot] org (Hai Lin)

Tactical Communications & Operations *

The mission of this committee is to sponsor conferences, workshops, technical sessions, publications, professional meetings, and standards on all aspects of tactical communications and operational situation management in military, homeland defense, and disaster recovery application areas. It provides a forum for members to exchange ideas, techniques, and applications, and share experience among researchers and engineers. Its areas of interest include military communication infrastructures including tactical radio, landline, mobile and space communications; advanced battlespace command and control models, including, C4ISR, net-centric operations, asymmetric warfare, special operations command; surveillance, monitoring and control, including target identification, tracking and signal intelligence; homeland security management infrastructures, models, and architectures; disaster rescue, recovery and support missions; operational situation management, including situation awareness, decision support, information fusion, situation control, situation prediction, and situation management architectures and engineering solutions; semantic information processing, including semantic modeling, ontologies, knowledge representation, semantic modeling languages, tools, and platforms.

Chair | kyoung [at] appcomsci [dot] com (Kenneth C. Young, Jr.)

Vice Chair | gabejakobson [at] earthlink [dot] net (Gabe Jakobson)

Secretary | stotz [at] cubrc [dot] org (Adam Stotz)

Situation Management Subcommittee

Transmission, Access, & Optical Systems *

This committee sponsors and organizes papers, conference sessions, workshops and standards development relating to both optical and metallic guided media transmission and access systems for the transport of speech, data, and visual information of any bandwidth. Specific areas of interest include: testing and performance of analog and digitally transmitted signals; systems and equipment for subscriber access over fiber, coaxial cable, and twisted copper pairs; analog and digital subscriber lines over wires and interfaces to wireless media; inductive coordination and electrical protection of wired media; network synchronization; and development of IEEE-oriented standards.

Chair | telbawab [at] ieee [dot] org (Tarek El-Bawab)

Vice Chair | mdevets [at] ncsu [dot] edu (Michael Devetsikiotis)

Secretary | amal [at] iastate [dot] edu (Ahmed Kamal)

Standards Liaison | frank [dot] effenberger [at] huawei [dot] com (Frank J. Effenberger)

Wireless Communications*

The mission of the committee TCPC is to sponsor publications, conferences, technical sessions, workshops, and other information exchanges on architectures, applications, systems, terminals and technologies to provide personal, location-independent communication and computing in voice, data and visual media. Its areas of interest include techniques for achieving portability, ubiquity and transparency using wireless networks ranging from microcellular to satellite, and wired networks ranging from narrow to broadband.

Chair | eermurch [at] ee [dot] ust [dot] hk (Ross Murch)

Vice Chair | talebtarik [at] gmail [dot] com (Tarik Taleb)

Secretary | cui [at] ece [dot] tamu [dot] edu (Shuguang Cui)

Standards Liaison | xshen [at] bbcr [dot] uwaterloo [dot] ca (Xuemin (Sherman) Shen)

* Recertified by ComSoc May 2010

*** Recertified by ComSoc December 2011

** TC merged

**** Created 2009

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