IEEE COMMUNICATIONS SOCIETY

Radio Communications Committee (RCC)

IEEE Globecom 2017

Singapore

December 7, 2017 – 12:30 – 14:00

Chair: Andrea Giorgetti

Vice Chair: Yuan Shen

Secretary: Jemin Lee

Agenda

1. Welcome/Introductions
2. Approval of Agenda
3. Approval of ICC'17 RCC Meeting Minutes (available on the website)
4. Report on Conference/Workshop/Standards Activities
5. IPIN International Standards Committee
6. Student Competition: Communication Technology May Change the World
7. New Business items
8. Conferment of 2017 IEEE ComSoc RCC Technical Recognition Award
9. Invited Talks by Prof. Fumiyuki Adachi and Prof. Gordon L. Stüber
10. Next RCC meeting
11. Adjourn

RCC Mission

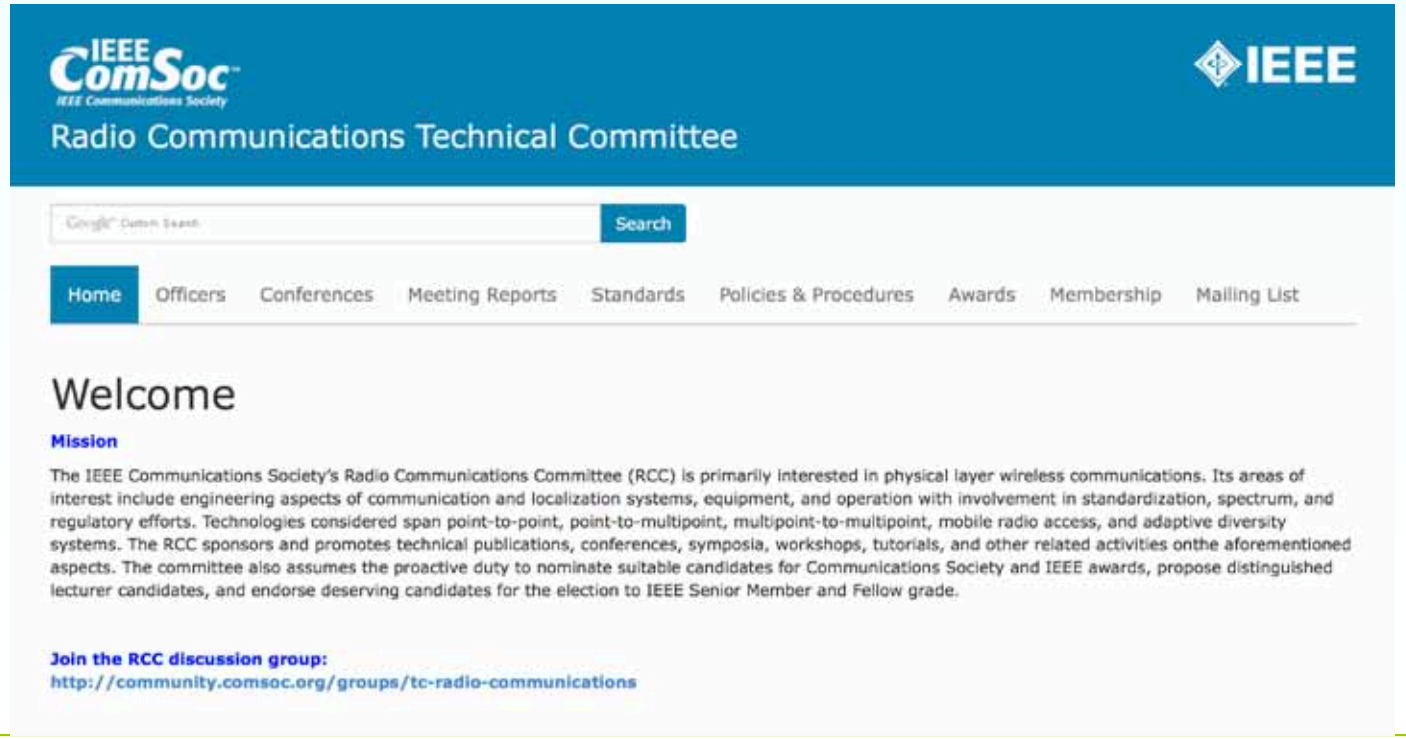
The IEEE Communications Society's Radio Communications Committee (RCC) is primarily interested in physical layer wireless communications. Its areas of interest include engineering aspects of **communication and localization systems, equipment, and operation with involvement in standardization, spectrum, and regulatory efforts.** Technologies considered span point-to-point, point-to-multipoint, multipoint-to-multipoint, mobile radio access, and adaptive diversity systems. The RCC sponsors and promotes technical publications, conferences, symposia, workshops, tutorials, and other related activities on the aforementioned aspects. The committee also assumes the proactive duty to nominate suitable candidates for Communications Society and IEEE awards, propose distinguished lecturer candidates, and endorse deserving candidates for the election to IEEE Senior Member and Fellow grade.

Approval of ICC'17 RCC Meeting Minutes

available at

http://rc.committees.comsoc.org

New website layout



Supported conferences

The following conferences received
Technical Sponsorship from
IEEE Communications Society
based on RCC recommendation

Conference Reports

Conference Reports

- **ICC 2017:** Fulvio Babich (CT)
- **ICC 2017:** Davide Dardari (WC)
- **GLOBECOM 2017:** Andrea Conti (WC)
- **IINTEC2017:** Andrea Giorgetti, Nan Wu, Ruei-Hau Hsu
- **COMCAS2017**: Flavio Zabini, Tingting Zhang, Mohapatra Parthajit
- **ICSPCS 2017**: Hans-Juergen Zepernick, Tadeusz Wysocki, Lajos Hanzo
- **ISWCS 2017**: Tingting Zhang, Andreas Springer, Jue Wang
- **ICT 2018**: Fauzi Bader, Tingting Zhang, Ruei-Hau Hsu
- **ICC 2018:** Andrea Giorgetti (SPC)
- **GLOBECOM 2018:** Yuan Shen (WC)
- **ICC 2019:** Julian Cheng (WC)

ICC 2017 – Communication Theory Symposium

When: *21.5.2017 – 25.5.2017* Where: *Paris, France*

Symposium/Track: *Communication Theory Symposium*

Co-chairs: *Ender Ayanoglu, Fulvio Babich, Steven Weber*

RCC representative: *Fulvio Babich (babich@units.it)*

Total Submissions: 164

Acceptance Rate (final/expected): 39% final / 30-40% expected

#TPC members: 143

Avg number of reviews/paper = 3.83 Rebuttal process *N*

ICC 2017 – Wireless Communications Symposium

When: *21.5.2017 – 25.5.2017* Where: *Paris, France*

Symposium/Track: *Wireless Communications Symposium*

Co-chairs: *Davide Dardari, Mohamad Assaad, Azzedine Boukerche, Hamalainen Jyri*

RCC representative: *Davide Dardari (davide.dardari@unibo.it)*

Total Submissions: 547 (+10%)

Accepted papers*: 209*

Acceptance Rate: 38%

#TPC members: 324

Average load per TPC member: about 5

Avg number of reviews/paper = 3 - 4

Number of sessions: 29 oral, 10 interactive

GLOBECOM 2017 – Wireless Communications Symposium

When: *04.12.2017 – 08.12.2017* Where: *Singapore*

Symposium: *Wireless Communications*

Co-chairs: *Kaibin Huang, Mohamed Slim-Alouini, Yi Gong, Andrea Conti, Zhiguo Shi*

RCC representative: *Andrea Conti (a.conti@ieee.org)*

Total Submissions: *423*

Acceptance Rate (final/expected): ~38.8% *(164 accepted papers)*

#TPC members: *404*

Avg number of reviews/paper = *3+ (assigned ~5 per paper)* Rebuttal process *N*

Int. Conf. on Internet of Things, Embedded Systems and Communications (IINTEC 2017)

When: *20.10.2017 – 22.10.2017* Where: Gafsa, Tunisia

Track: *Communications Systems*

General Chairs*: Salem Hasnaoui, University of Tunis El Manar, Tunisia*

Thierry Val, IRIT, University of Toulouse, France

RCC representative: *Andrea Giorgetti (a.giorgetti@ieee.org) , Nan Wu, Ruei-Hau Hsu*

Total Submissions: 108

Acceptance Rate: 34%

#TPC members: *339*

Avg number of reviews/paper = 3 to 4 Rebuttal process *Yes*

Reviewing Policy: Double blind

Keynote speech: Dr. Eng. Muzaffar KHURRAM, (Principal IBB Consulting Group, USA),

Prof. Qing-Guo WANG, (Univ. of Johannesburg, South Africa), Prof. Hichem Snoussi (Univ. of Tech. of Troyes, France) and Prof. Vahid MEGHDADI (ENSIL-ENSCI, Limoges, FRANCE),

International Conference on Microwaves, Communications, Antennas and Electronic Systems (IEEE COMCAS 2017)

When: *13.11.2017 – 15-11-2017* Where: *Tel Aviv, Israel*

Track: *IEEE International Conference on Microwaves, Communications, Antennas and Electronic Systems (IEEE COMCAS 2017)*

General Chair*: Shmuel Auster*

TPC Chair and Co Chairs: Amir Boag, Stephen B. Weinstein, Caleb Fulton, Reuven Shavit, Lance M. Kaplan, Aleksey Dyskin, Oren Eliezer, Ofer Barnea, Hagit Messer Yaron

RCC representative*: Flavio Zabini* (*flavio.zabini2@unibo.it)*

Total Submissions: *340 ;* Acceptance Rate: *50% (High quality papers!); Invited Papers: 40*

#TPC members: About *200*

Avg number of reviews/paper = 3 Rebuttal process *Yes*

Keynote Speakers: Prof. Ender Ayanoglu, *Prof. Avram Bar Cohen, Prof. Col. Barry L. Shoop, Mr. Israel Lupa;*

Invited Speakers: Prof. Irving Kalet, Prof. Shlomo Shamai (Shitz), Prof. Emanuel Cohen;

International Conference on Signal Processing and Communication Systems (ICSPCS 2017)

When: *13.12.2017 – 15.12.2017* Where: *Surfers Paradise, Australia*

Symposium/Track: *11th International Conference on Signal Processing and Communication Systems, ICSPCS'2017*

Co-chairs: *Hamid Sharif (General Chair), Tadeusz A Wysocki (TPC Chair)*

RCC representatives: *Hans-Juergen Zepernick (hans-jurgen.zepernick@bth.se), Tadeusz Wysocki, Lajos Hanzo*

Total Submissions: *176*

Acceptance Rate (expected): *37%*

#TPC members: 90

Avg number of reviews/paper = *3.05* Rebuttal process *N*

Keynote speeches: *Dr. Scott Kordella & Dr. Malcolm Davis; Dr. Werner Teich*

International Symposium on Wireless Communication Systems (ISWCS 2017)

When: *28.8.2017 – 31.8.2017* Where: Bologna, Italy

General Chairs: Roberto Verdone, Chiara Buratti,

TPC Chair: *Marco Chiani*

RCC representatives: *Tingting Zhang (zhangtt@hit.edu.cn), Andreas Springer, Jue Wang*

Total Submissions: *158*

Acceptance Rate: *<50% (expected)*

#TPC members: *145* Avg number of reviews/paper = 3 to 4 Rebuttal process *Yes*

Keynote speech: *David Gesbert (Eurecom, France), Merouane Debbah (Huawei, France)*
Moe Win (MIT, US), Giuseppe Caire (TU Berlin, Germany)

International Conference on Telecommunications (ICT 2018)

When: *26.06.2018 – 28.06.2018* Where: *Saint-Malo, France*

Co-chairs: Jacques Palicot (CentraleSupélec, France) and Ramesh Pyndiah (IMT-Atlantique, France)

RCC representative: *Faouzi Bader (carlos.bader@supelec.fr)*

Total Submissions: 200 (expected)

Acceptance Rate (final): *50%*

TPC members: 263 members

Avg number of reviews/paper = 3 to 4 reviewers/paper

Rebuttal process: *NO*

Keynote speech: Thomas Kürner from Technische Universität Braunschweig (Germany), Thomas L Marzetta from NYU Tandon School of Engineering, New-York (USA), and David Gesbert from EURECOM Sophia Antipolis (France)

ICC 2018 – Signal Processing for Communications Symposium

When: *20.05.2018 – 24.05.2018* Where: Kansas City, Mo, USA

Symposium: *Signal Processing for Communications Symposium*

Co-chairs: *Xiaohu Ge (Lead Co-Chair), Takahiko Saba, Andrea Giorgetti*

RCC representative: *Andrea Giorgetti (a.giorgetti@ieee.org)*

Total Submissions: *141*

Acceptance Rate (final/expected): *37% (tentative)*

#TPC members: *445*

Avg number of reviews/paper = 4 Rebuttal process *TBD*

Invited Speakers: JAMES H. THOMPSON (Qualcomm Technologies, Inc.), NICK MCKEOWN (Stanford University), ELISA BERTINO (Purdue University)

GLOBECOM 2018 –Wireless Communications Symposium

When: *09.12.2018 – 13.12.2018* Where: *Abu Dhabi*

Symposium/Track: *Wireless Communications Symposium*

Co-chairs: Yuan Shen (Lead), Sheng Zhou, Hyunbum Kim, Athanasios Iossifides, Daniele Tarchi

RCC representative: *Yuan Shen (shenyuan_ee@tsinghua.edu.cn)*

Deadline: April 15, 2018

ICC 2019 –Wireless Communications Symposium

When: *20.05.2019 – 24.05.2019* Where: *Shanghai, China*

Symposium/Track: *Wireless Communications Symposium*

Co-chairs: Xu (Judy) Zhu, Harpreet Dhillon, Feifei Gao, Julian Cheng, Andreas KnoppJulian Cheng

RCC representative: *Julian Cheng (Julian.Cheng@ubc.ca)*

*** Prospective TPC members can contact our representative!*

ComSoc Standards Board Technical Committee Liaisons Report

RCC Standard Liaisons Officer: *George Chrisikos* *(gchrisikos@ieee.org)*

- ComSoc SB Objective:
  - Discussion of IEEE/ComSoc Standards Development Projects
  - New Standardization Initiatives
  - Procedures
  - Operational Issues
  - In partnership with the IEEE-SA Standards Board

IEEE Communications Society (ComSoc) Standards Development Board (SDB)

- **Approved standards:**
  - IEEE 269-2010: IEEE Standard Methods for Measuring Transmission Performance of Analog and Digital Telephone Sets, Handsets, and Headsets
  - IEEE 269a-2012: IEEE Standard Methods for Measuring Transmission Performance of Analog and Digital Telephone Sets, Handsets, and Headsets – Amendment 1
  - IEEE 661-1979: IEEE Standard Method for Determining Objective Loudness Ratings of Telephone Connections
  - IEEE 1329-2010: IEEE Standard Method for Measuring Transmission Performance of Speakerphones
  - IEEE 1652-2008: IEEE Standard for the Application of Free Field Acoustic Reference to Telephony Measurements
  - IEEE 1902.1-2009: IEEE Standard for Long Wavelength Wireless Network Protocol
  - IEEE 1903-2011: IEEE Standard for the Functional Architecture of Next Generation Service Overlay Networks (NGSON)
  - IEEE 1904.1-2013: IEEE Standard for Service Interoperability in Ethernet Passive Optical Networks (SIEPON)
  - IEEE 1905.1-2013: A Convergent Digital Home Network for Heterogeneous Technologies
  - IEEE 1904.1-Conformance01-2014: IEEE Standard for Conformance Test Procedures for Service Interoperability in Ethernet Passive Optical Networks, IEEE Std 1904.1(TM) Package A, B, C
  - IEEE 1905.1a-2014: A Convergent Digital Home Network for Heterogeneous Technologies Amendment 1: Support of New MAC/PHYs and Enhancements
  - IEEE 2410-2015: IEEE Standards for Biometrics Open Protocol Standard (BOPS)
  - IEEE 1906.1-2015: IEEE Recommended Practice for Nanoscale and Molecular Communication Framework
  - IEEE 1652-2016: IEEE Standard for Translating Head and Torso Simulator Measurements from Eardrum to Other Acoustic Reference Points

IEEE Communications Society (ComSoc) Standards Development Board (SDB)

Active projects:

- P269: Standard for Measuring Electroacoustic Performance of Communication Devices
- P1903.1: Standard for Content Delivery Protocols of NGSON
- P1903.2: Standard for Service Composition Protocols of NGSON
- P1903.3: Standard for Self-Organizing Management Protocols of NGSON
- P1904.1: Standard for Service Interoperability in Ethernet Passive Optical Networks (SIEPON)
- P1904.2: Standard for Management Channel for Customer-Premises Equipment Connected to Ethernet-Based Subscriber Access Networks
- P1908.1: Virtual Keyboard Standard for Indic Languages
- P1910.1: Standard for Meshed Tree Bridging with Loop Free Forwarding
- P1911.1: IEEE Draft Standard — Adoption of HDBaseT Specification Version 1.1.0
- P1911.2: IEEE Draft Standard — Adoption of HDBaseT Specification Version 2.0
- P1911.3: Standard for HDBaseT 5Play
- P1912: Standard for Privacy and Security Architecture for Consumer Wireless Devices
- P1913: Software-Defined Quantum Communication
- P1914.1: Standard for Packet-based Fronthaul Transport Networks
- P1914.3: Standard for Radio Over Ethernet Encapsulations and Mappings
- P1915.1: Standard for Software Defined Networking and Network Function Virtualization Security
- P1916.1: Standard for Software Defined Networking and Network Function Virtualization Performance
- P1917.1: Standard for Software Defined Networking and Network Function Virtualization Reliability
- P1918.1: Tactile Internet: Application Scenarios, Definitions and Terminology, Architecture, Functions, and Technical Assumptions
- P1920.1: Aerial Communications and Networking Standards
- P1921.1: Software-Defined Networking (SDN) Bootstrapping Procedures
- P1922.1: A method for calculating anticipated emissions caused by virtual machine migration and placement
- P1922.2: A method to calculate near real-time emissions of information and communication technology infrastructure
- P1923.1: Computation of energy efficiency upper bound for apparatus processing communication signal waveforms
- P1924.1: Recommended practice for developing energy efficient power-proportional digital architectures
- P1925.1: Energy Efficient Dynamic Line Rate Transmission System
- P1926.1: A Functional Architecture of Distributed Energy Efficient Big Data Processing
- P1927.1: Services Provided by the Energy-efficient Orchestration and Mgmt of Virtualized Distributed Data Centers Interconnected by a Virtualized Network
- P1928.1: A Mechanism for Energy Efficient Virtual Machine Placement
- P1929.1: An Architectural Framework for Energy Efficient Content Distribution
- P1930.1: Recommended Practice for Software Defined Networking (SDN) based Middleware for Control and Management of Wireless Networks
- P1931.1: An Architectural Framework for Real-time Onsite Operations Facilitation (ROOF) for the Internet of Things

Dynamic Spectrum Access Networks Standards Committee (DySPAN-SC)

- **Approved standards:**
  - IEEE 1900.1-2008: IEEE Standard Definitions and Concepts for Dynamic Spectrum Access: Terminology Relating to Emerging Wireless Networks, System Functionality, and Spectrum Management
  - IEEE 1900.2-2008: IEEE Recommended Practice for the Analysis of In-Band and Adjacent Band Interference and Coexistence Between Radio Systems
  - IEEE 1900.4-2009: IEEE Standard for Architectural Building Blocks Enabling Network-Device Distributed Decision Making for Optimized Radio Resource Usage in Heterogeneous Wireless Access Networks
  - IEEE 1900.4a-2011: IEEE Standard for Architectural Building Blocks Enabling Network-Device Distributed Decision Making for Optimized Radio Resource Usage in Heterogeneous Wireless Access Networks Amendment 1: Architecture and Interfaces for Dynamic Spectrum Access Networks in White Space Frequency Bands
  - IEEE 1900.5-2011: IEEE Standard for Policy Language Requirements and System Architectures for Dynamic Spectrum Access Systems
  - IEEE 1900.6-2011: IEEE Standard for Spectrum Sensing Interfaces and Data Structures for Dynamic Spectrum Access and Other Advanced Radio Communication Systems
  - IEEE 1900.1a-2012: IEEE Standard for Definitions and Concepts for Dynamic Spectrum Access: Terminology Relating to Emerging Wireless Networks, System Functionality, and Spectrum Management Amendment: Addition of New Terms and Associated Definitions
  - IEEE 1900.4.1-2013: IEEE Standard for Interfaces and Protocols Enabling Distributed Decision Making for Optimized Radio Resource Usage in Heterogeneous Wireless Networks
  - IEEE 1900.6a-2014: IEEE Standard for Spectrum Sensing Interfaces and Data Structures for Dynamic Spectrum Access and Other Advanced Radio Communication Systems – Amendment 1: Procedures, Protocols, and Data Archive Enhanced Interfaces
  - IEEE 1900.6-2011/Cor 1-2015: IEEE Standard for Spectrum Sensing Interfaces and Data Structures for Dynamic Spectrum Access and Other Advanced Radio Communication Systems – Corrigendum 1
  - IEEE 1900.7-2015: IEEE Standard for Radio Interface for White Space Dynamic Spectrum Access Radio Systems Supporting Fixed and Mobile Operation

- **Active projects:**
  - P1900.1: Standard Definitions and Concepts for Dynamic Spectrum Access: Terminology Relating to Emerging Wireless Networks, System Functionality, and Spectrum Management
  - P1900.5.1: Standard Policy Language for Dynamic Spectrum Access Systems
  - P1900.5.2: Method for Modeling Spectrum Consumption
  - P1900.6b: Standard for Spectrum Sensing Interfaces and Data Structures for Dynamic Spectrum Access and other Advanced Radio Communication Systems. Spectrum Database Interfaces Amendment.

Power Line Communication Standards Committee (PLC-SC)

Approved standards:

- IEEE 1775-2010: IEEE Standard for Power Line Communication Equipment – Electromagnetic Compatibility (EMC) Requirements – Testing and Measurement Methods – co-sponsored with the IEEE Power and Energy Society (PES) Power System Communications Committee (PSCC)
- IEEE 1901-2010: IEEE Standard for Broadband over Power Line Networks: Medium Access Control and Physical Layer Specifications
- IEEE 1901.2-2013: IEEE Standard for Low Frequency (less than 500 kHz) Narrow Band Power Line Communications for Smart Grid Applications
- IEEE 1905.1-2013: IEEE Standard for a Convergent Digital Home Network for Heterogeneous Technologies
- IEEE 2030.5-2013: IEEE Adoption of Smart Energy Profile 2.0 Application Protocol Standard
- IEEE 1905.1a-2014: IEEE Standard for a Convergent Digital Home Network for Heterogeneous Technologies Amendment 1: Support of New MAC/PHYs and Enhancements
- IEEE 1909.1-2014: IEEE Recommended Practice for Smart Grid Communications Equipment — Test Methods and Installation Requirements
- IEEE 1901.2a-2015: IEEE Standard for Low-Frequency (less than 500 kHz) Narrowband Power Line Communications for Smart Grid Applications – Amendment 1

Active projects:

- P1901.1: Medium Frequency (less than 15 MHz) Power Line Communications for Smart Grid Applications
- P1905.1a: Standard for a Convergent Digital Home Network for Heterogeneous Technologies Amendment: Support of new MAC/PHYs and enhancements
- P1909.1: Recommended Practice for Smart Grid Communication Equipment – Test methods and installation requirements
- P2030.5: Standard for Smart Energy Profile Application Protocol

IPIN International Standards Committee

RCC representative: *Andrea Conti (a.conti@ieee.org)*

IPIN (Indoor Positioning and Indoor Navigation) [http://ipin-conference.org/]

- Location information of devices in indoor environments has become a key issue for many emerging applications. However, there is no overall and easy solution.
- IPIN brings together researchers, system developers, and service providers in the area of indoor positioning and navigation.
- IPIN is one of the largest and very active community working in indoor positioning and navigation worldwide with hundreds of participants, both from academia and industry, during the annual IPIN conference.
- First annual IPIN conference hosted by ETH Zurich in 2010.
- IPIN 2017 conference will be at Sapporo, Japan. (http://www.ipin2017.org/)

IPIN International Standards Committee

- Part of IPIN organization
- Develops standards through the collaboration of academia, industry and government organizations.
- Developed standards
  - Vendor neutral
  - technology-agnostic
  - open architecture standards based on the OSI model.

Meetings

- regularly scheduled conference calls
- face-to-face during annual IPIN conference

IPIN International Standards Committee

Vision

➢Ubiquitous indoor navigation: Anytime, Anywhere, Anyone

Mission

➢Enable seamless indoor navigation around the globe by defining open architecture and technology agnostic standards.

Committee Structure

1. Architecture Subcommittee
2. Industry Liaison Subcommittee
3. IPIN Liaison Subcommittee
4. Mapping Subcommittee
5. Membership Subcommittee
6. Publication Subcommittee
7. Standards Organization Liaison Subcommittee
8. Cyber Security Subcommittee
9. Technology Subcommittee
10. User Interface Subcommittee

IPIN International Standards Committee

1. **Architecture Subcommittee**
   - Develops an open architecture based standard which conform to the OSI model.
   - Reviews and evaluates other published works regarding indoor navigation standards
2. **Industry Liaison Subcommittee**
   - Maintains liaison with other industry groups to promote the standards developed by the Committee
3. **IPIN Liaison Subcommittee**
   - Maintains liaison with the IPIN
4. **Mapping Subcommittee**
   - Evaluates the relevant published standards for indoor maps
   - Recommends appropriate data format for storage and transmission of the indoor maps
5. **Membership Subcommittee**
   - Promotes membership and reviews new membership requests
6. **Publication Subcommittee**
   - Reviews and approves publications
   - Maintains the IPIN International Standards Committee webpage
7. **Standards Organization Liaison Subcommittee**
   - Investigates the best ways to publish the standards
   - Interacts with other standards organizations
8. **Cyber Security Subcommittee**
   - Researches cyber security issues related to IPIN systems and recommend mitigation methods
9. **Technology Subcommittee**
   - Researches new and emerging technologies
   - Tracks the advances of the existing technology which will improve the localization systems
10. **User Interface Subcommittee**
    - Investigates the machine-to-human Interface and machine-to- machine interface methods and procedures
    - Recommends appropriate methods for adoption.
    - Promotes consistent phraseology and user interface, i.e. same look and feel, used by the indoor navigation systems around the globe for better user experience (UX).

IPIN International Standards Committee – Mapping Subcommittee

1. Members

- Paulo Leite, CelPlan, USA
- Adriano J. C. Moreira, University of Minho, Portugal
- Sisi Zlatanova, TU Delft, Netherlands
- Antoni Perez Navarro, Univ. Oberta de Catalunya, Spain
- Christos Laoudias, University of Cyprus, Cyprus
- Giuseppe Conti, Nively, France
- Ryan Yoo, ETRI, South Korea
- Joaquín Torres Sospedra, Univ. Jaume I, Spain
- Ki-Joune Li, Pusan National Univ. South Korea (Chair)

2. Goals

- Analyze requirements of Indoor Maps for each application type - complexity, 3D, furniture, ….
- Evaluate and compare published standards for indoor maps including de facto standards
- Give inputs to the SDI
- Prepare a guidebook (recommendation) to select indoor map format(s) and integrate them depending on application types: Integration may include conversion between formats – gradual progress, spiral approach.

IPIN International Standards Committee – Mapping Subcommittee

1. Action Plans (near future)

- A common understanding on indoor map formats and standards
- Prepare presentation video for each format and standard – to be uploaded to youtube
- Collect use-cases

Candidate Formats and Standards

If you are interested in any type of contributions, you may contact with Ki-Joune Li (lik@pnu.kr)

Name of indoor map format or standard	Contributor Name/Affiliation/e-mail address + Any comments	Youtube URL
OGC IndoorGML	Ki-Joune Li(Pusan National Univ./lik@pnu.edu) Sisi Zlatanova(TU Delft)	
OGC CityGML (LoD 4)	Sisi Zlatanova, Ki-Joune Li	
IFC (interior space part)	Joaquin, Sisi	
ISO/TC 211	Ryan(ETRI)	
ISO/TC 204	Ryan	
IEEE/RAS MDR (robot)	Wonpil(ETRI) (to be confirmed)	
OpenStreetMap (OLU)	Antoni, Joaquin	
KML	Joaquin, Sisi	
Google Indoor Map		
Micello		
ESRI		
Aisle411		

Contact: standard.ipin@gmail.com

IPIN Conference: http://ipin-conference.org/

Communication Technology May Change the World Student Competition

RCC representative: *Alberto Rabbachin* (*a.rabbachin@ieee.org*)

The competition Communication Technology May Change the World, by the IEEE Communications Society – Member Relations, recognizes students or teams of students who demonstrate the capacity to improve the lives of people, through the application of communication technology and the development of projects that meet the human needs of people. http://www.comsoc.org/communications-technology-changing-world

Number of evaluated project: 23

Prizes

- 1st: USD $2000 + plaque
- 2nd: USD $1000 + plaque
- All other projects judged meritorious by the evaluation committee will receive honorary certificates of appreciation by the IEEE Communications Society.

STUDENT COMPETITION 2017 RESULTS

FIRST PRIZE

3D Air Pollution Monitoring System in Urban Areas using UAV
Yuzhe Yang, Peking University

SECOND PRIZE

An Adaptive Physiology-Aware Communication Framework
Mohammad Hosseini, University of Illinois at Urbana-Champaign (UIUC)

https://www.comsoc.org/2017-ieee-comsoc-student-competition-winners

IEEE 2018 Newly Elevated Fellows

- Matthew Valenti (West Virginia University Morgantown, WV, USA)
- Tony Q. S. Quek (Singapore University of Technology and Design, Singapore)

Selected Distinguished Lecturers

- Mohsen Kavehrad, Pennsylvania State University (retiring)
- Luiz DaSilva, Trinity College Dublin (renewed, 2nd term)
- Andreas Molisch, University of Southern California
- Davide Dardari, University of Bologna
- Tony Q. S. Quek, Singapore University of Technology and Design

Best Readings

Website: www.comsoc.org/best-readings

List of papers (w/commentary and hyperlinks) online.

Topics include: power line communications; cognitive radio; broadband access; green communications; multi-tier cellular networks (Andrea Conti, RCC);

New Best Readings proposed by RCC on Localization

Editorial members:

- Michael Buehrer (Virginia Tech)
- Andrea Conti (University of Ferrara)
- Santiago Mazuelas (Qualcomm Inc.)
- Yuan Shen (Tsinghua University)
- Moe Win (MIT)

New Business Items

Recertification of TCs

Evaluation of 1/3 of TCs every year

- 8 TCs, including RCC, have been selected to be reviewed in 2017
- Report submitted (deadline May 1st)

Recertification passed! (TEAC@GC 2017)

Some comments from the review report:

- The RCC is well run
- WEBSITE: contains all pertinent information and is up-to-date
- MEMBERSHIP: Good number of members, participation could be increased
- COMSOC ACTIVITY: Active involvement in ICC, GC, workshops, and journals
- STANDARD/INDUSTRY: Positive involvement. Increase number of members involved

New Business Items

Workshop endorsed by RCC:

ICC Workshop on Advances in Network Localization and Navigation (ANLN)

Upcoming events:

- **6th Workshop on ANLN – IEEE ICC 2018**
- 24 May 2018, Kansas City, MO, USA
- Submission deadline: **January 3, 2018**
- Website: http://rc.committees.comsoc.org/workshops
- Workshop Co-Chairs:
  - Yuan Shen (Tsinghua University, China)
  - Stefania Bartoletti (Univ. of Ferrara, Italy, and MIT, USA)
  - Santiago Mazuelas (Qualcomm Inc., USA)
  - Nicolò Decarli (University of Bologna, Italy)
  - Florian Meyer (MIT, USA)

New Business Items

Soliciting nominations for 2018 Outstanding Service Award (March 1, 2018)

Soliciting nominations for 2018 Early Achievement Award (March 1, 2018)

- Recognize members of the RCC who have achieved early career visibility in the field through research and service, and who
  - have participated in the RCC (e.g., attended RCC meetings, served RCC in a significant capacity, been member of the TPC for ICC/GLOBECOM)
  - are within 10 years of their Ph.D.

New Business Items

Soliciting nominees for Technical Program Committee activities

Join the RCC discussion group at
http://community.comsoc.org/groups/tc-radio-communications

Join the RCC mailing list: rcc@comsoc.org (currently 1000+ members)

AOB?

2017 IEEE ComSoc RCC Technical Recognition Award

The Radio Communications Committee (RCC) Technical Recognition Award aims to promote radio communications research and development activities in both the academic and industrial community. This award is established as part of the RCC activities in which research and development takes place in areas related to radio communications.

The award recognizes members of the IEEE Communications Society (ComSoc) who have made outstanding contributions to the technological advancement of radio communications.

Conferment of

2017 IEEE ComSoc RCC Technical Recognition Award

Fumiyuki Adachi

for outstanding contributions to the development of mobile radio systems

Gordon L. Stüber

for outstanding research contributions to radio communications

IEEE

IEEE ComSoc
IEEE Communications Society

IEEE COMMUNICATIONS SOCIETY
RADIO COMMUNICATIONS COMMITTEE

2017 TECHNICAL RECOGNITION AWARD

IS PRESENTED TO

FUMIYUKI ADACHI

FOR OUTSTANDING CONTRIBUTIONS TO THE DEVELOPMENT OF MOBILE RADIO SYSTEMS

HAEVEY FREEMAN
PRESIDENT
IEEE COMMUNICATIONS SOCIETY

LUIGI FRATTA
VICE PRESIDENT
TECHNICAL & EDUCATIONAL ACTIVITIES

IEEE

IEEE ComSoc
IEEE Communications Society

IEEE COMMUNICATIONS SOCIETY
RADIO COMMUNICATIONS COMMITTEE

2017 TECHNICAL RECOGNITION AWARD

IS PRESENTED TO

GORDON L. STÜBER

FOR OUTSTANDING RESEARCH CONTRIBUTIONS TO RADIO COMMUNICATIONS

HAEVEY FREEMAN
PRESIDENT
IEEE COMMUNICATIONS SOCIETY

LUIGI FRATTA
VICE PRESIDENT
TECHNICAL & EDUCATIONAL ACTIVITIES

RCC Invited Talk

Challenges for Wireless Evolution Into 5G

Prof. Fumiyuki Adachi

RCC Invited Talk

My Life at Georgia Tech

Prof. Gordon L. Stüber

Next RCC Meeting

The next RCC meeting will be scheduled in ICC 2018, Kansas City, MO, USA

THANK YOU AND SEE YOU THEN!

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