

IEEE COMMUNICATIONS SOCIETY
Radio Communications Committee (RCC)

IEEE ICC 2016

Kuala Lumpur, Malaysia

May 26, 2016 – 12:00 – 14:00

Chair: Hanna Bogucka

Vice Chair: Andrea Giorgetti

Secretary: Yuan Shen

Agenda

1. Welcome/Introductions
2. Approval of Agenda
3. Approval of GC'15 RCC Meeting Minutes (available on the website)
4. Conferment of 2016 IEEE ComSoc RCC Outstanding Service Award
5. Report on Conference/Workshop Activities
6. Report on Standards activities
7. Student Competition: Communication Technology May Change the World
8. New Business items
9. Next RCC meeting
10. 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 GC'15 RCC Meeting Minutes

available at

<http://rc.committees.comsoc.org/meeting-reports-2/>

New Website: <http://rc.committees.comsoc.org>

2016 IEEE ComSoc RCC Outstanding Service Award

The Radio Communications Committee (RCC) Outstanding Service Award is established to recognize members of the RCC who have a distinguished record of service to the RCC community, including organization of RCC endorsed symposia and workshops, providing exceptional leadership within the RCC, and promotion of RCC activities and interests in the broader research community.

Conferment of

2016 IEEE ComSoc RCC Outstanding Service Award

Dr. Alberto Rabbachin



IEEE COMMUNICATIONS SOCIETY
RADIO COMMUNICATIONS COMMITTEE

2016 OUTSTANDING SERVICE AWARD

IS PRESENTED TO

ALBERTO RABBACHIN

FOR OUTSTANDING SERVICE TO THE RADIO COMMUNICATIONS COMMITTEE



Haevy A. Freeman

HAEVEY FREEMAN
PRESIDENT
IEEE COMMUNICATIONS SOCIETY



H. Bogucka

HANNA BOGUCKA
CHAIR
COMSoc RADIO COMMUNICATIONS COMMITTEE

Supported conferences

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

Conference Reports

- **GLOBECOM 2015:** Watcharapan Suwansantisuk (WCS)
- **GLOBECOM 2015:** Norman Beaulieu (CRN)
- **ICC 2016:** Marco Chiani (CT)
- **ICC 2016:** Norman Beaulieu (CRN)
- **GLOBECOM 2016:** Dania Marabissi and Yuan Shen (SPC)
- **GLOBECOM 2016:** Hyundong Shin (CRN)
- **ICSPCS 2015:** Hans-Jurgen Zepernick
- **ASMS 2016:** Adrian Kliks
- **ISWCS 2016:** Hanna Bogucka

- **ICC 2017:** Symposium Co-chairs

Globecom 2015 – Wireless Communications Symposium

When: 6.12.2015 – 10.12.2015

Where: San Diego, CA, USA

Symposium/Track: *Wireless Communications Symposium*

Co-chairs: *Matthew Valenti, Jingxian Wu, Watcharapan Suwansantisuk, Hongyi Wu, Huiling Zhu*

RCC representative: *Watcharapan Suwansantisuk* (watcharapan.suw@kmutt.ac.th)

Total Submissions: 480

Acceptance Rate (final): 36%

#TPC members: 350

Avg number of reviews/paper = 4.0

Rebuttal process *N*

Keynote speech: *Mark Dankberg (Board - ViaSat), Erik Starkloff (National Instruments), Matt Grob (Qualcomm Tech., Inc.), Jay Alexander (Keysight Technologies), Sachin Katti (Stanford University), Seizo Onoe (NTT Docomo, Inc.)*

Globecom 2015 – Cognitive Radio Network Symposium

When: 6.12.2015 – 10.12.2015

Where: San Diego, CA, USA

Symposium/Track: *Cognitive Radio Network Symposium*

Co-chairs: *Norman C. Beaulieu, Sudharman Jayaweera, ChunSheng Xin*

RCC representative: *Norman Beaulieu* (nborm@bupt.edu.cn)

Total Submissions: N/A

Acceptance Rate (final/expected): N/A

#TPC members: N/A

Avg number of reviews/paper = N/A

Rebuttal process N

Keynote speech: *Mark Dankberg (Board - ViaSat), Erik Starkloff (National Instruments), Matt Grob (Qualcomm Tech., Inc.), Jay Alexander (Keysight Technologies), Sachin Katti (Stanford University), Seizo Onoe (NTT Docomo, Inc.)*

ICC 2016 – Communication Theory Symposium

When: 23.5.2016 – 27.5.2016

Where: *Kuala Lumpur, Malaysia*

Symposium/Track: *Communication Theory Symposium*

Co-chairs: *Marco Chiani, Marios Kountouris, Xu Zhu*

RCC representative: *Marco Chiani* (marco.chiani@unibo.it)

Total Valid Submissions: 134

Acceptance Rate: 39% (*53 papers accepted, 81 rejected*)

11 Sessions (2 of which interactive): *Cellular 5G, Channel Modeling & Performance, Coding I/II/III, Comm. Theory, MIMO, RRM, Multiple Access I/II, Molecular Communication*

#TPC members: 151 Avg number of reviews/paper = 3.5 Rebuttal process N

Keynote speech: *John Cioffi (ASSIA Inc.), Seizo Onoe (NTT DOCOMO), Henning Schulzrinne (FCC), Mischa Dohler (King's College London)*

ICC 2016 – Cognitive Radio and Networks Symposium

When: 23.5.2016 – 27.5.2016

Where: *Kuala Lumpur, Malaysia*

Symposium/Track: *Cognitive Radio Symposium*

Co-chairs: *Norman C. Beaulieu, Lingyang Song*

RCC representative: *Norman C. Beaulieu* (nborm@bupt.edu.cn)

Total Submissions: 114

Acceptance Rate (final/expected): 46/116 = 40%

#TPC members: 137

Avg number of reviews/paper = 4 per paper

Rebuttal process *N*

Keynote speech: *John Cioffi (ASSIA Inc.), Seizo Onoe (NTT DOCOMO), Henning Schulzrinne (FCC), Mischa Dohler (King's College London)*

9th International Conference on Signal Processing and Communication Systems (ICSPCS'15)

When: 14.12.2015 – 16.12.2015

Where: Cairns, Australia

Symposium/Track: **9th International Conference on Signal Processing and Communication Systems, ICSPCS'2015**

Co-chairs: Rodney Kennedy, *Tadeusz A. Wysocki*

RCC representative: *Hans-Jürgen Zepernick* (hans-jurgen.zepernick@bth.se)

Total Submissions: 228

Acceptance Rate (final): 36%

#TPC members: N/A

Avg number of reviews/paper = 3

Rebuttal process N

Keynote speech: “Coded Slotted Aloha (CSA) Schemes for Machine-to-Machine Communications”
given by Prof. Jinhong Yuan from the University of New South Wales, Australia

Globecom 2016 – Signal Processing for Communications Symposium

When: 4.12.2016 – 9.12.2016

Where: *Washington, DC, USA*

Symposium/Track: *Signal Processing for Communications Symposium*

Co-chairs: *Dania Marabissi, Trung Q. Duong, Yuan Shen*

RCC representative: *Dania Marabissi (daniamarabissi@unifi.it)*

Yuan Shen (shenyuan_ee@tsinghua.edu.cn)

Total Submissions: 153

Acceptance Rate (final/expected): N/A

#TPC members: 174

Avg number of reviews/paper = 3 - 4

Rebuttal process *N*

Keynote speech: ??

Globecom 2016 – Cognitive Radio Network Symposium

When: 4.12.2016 – 9.12.2016

Where: *Washington, DC, USA*

Symposium/Track: *Cognitive Radio Network Symposium*

Co-chairs: *Lingyang Song, Hyundong Shin, Kit Wong*

RCC representative: *Hyundong Shin* (hshin@khu.ac.kr)

Total Submissions: 122

Acceptance Rate (final/expected): N/A

#TPC members: 198

Avg number of reviews/paper = N/A

Rebuttal process N

Keynote speech: ??

ASMS 2016

When: 05.09.2016 – 07.09.2016

Where: *Palma de Mallorca, Spain*

Symposium/Track: 8th Advanced Satellite Multimedia Systems Conference (jointly with 14th Signal Processing for Space Communications Workshop)

Co-chairs:

- ASMS/SPSC 2016 Executive Co-Chairs: Ana Isabel Pérez Neira, CTTC; Gonzalo Seco Granados, UAB
- ASMS General Co-Chairs: Sandro Scalise, DLR; A.Vanelli-Coralli, Univ. of Bologna
- SPSC General Co-Chairs: Alberto Ginesi, ESA; Domenico Mignolo, ESA

RCC representative: [Adrian Kliks](mailto:adrian.kliks@put.poznan.pl) (adrian.kliks@put.poznan.pl)

Total Submissions: 61 (10th of May 2016)

Acceptance Rate (final): expected 47% - 50%

#TPC members: 47 (2 co-chairs)

Avg number of reviews/paper = 4 reviews (expected)

Rebuttal process *N*

Keynote speech: not known at this stage (3 according to preliminary program)

International Symposium on Wireless Communication Systems (ISWCS) 2016

When: 20.9.2016 – 23.9.2016

Where: *Poznan, Poland*

TPC Chair: *Hanna Bogucka* (hanna.bogucka@put.poznan.pl)

RCC representative: *Andrea Giorgetti, Marco Chiani, Tony Quek*

Total Submissions: ??

Acceptance Rate (final): <50%

#TPC members: >200 (incl. *Hanna Bogucka, Marco Chiani, Tony Quek*)

Avg number of reviews/paper = 3 – 4

Rebuttal process *N*

Keynote speech: *Andrea Goldsmith, Alex Wyglinski, Adam Wolisz, Ruediger Urbanke, Patrick Marsch, Erik Ström*

ICC 2017

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)

Symposium/Track: *Cognitive Radio and Networks Symposium*

Co-chairs: *Walid Saad, Oliver Holland*

RCC representative: *Oliver Holland* (oliver.holland@kcl.ac.uk)

Symposium/Track: *Wireless Communications Symposium*

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

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

Prospective TPC members can contact our representatives!

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



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)

◆ Active projects:

- P269: Standard for Measuring Electroacoustic Performance of Communication Devices
- P1652a: IEEE Standard for the Application of Free Field Acoustic Reference to Telephony Measurements Amendment a: Updated diffuse field graph and tables
- P1858: Standard for Camera Phone Image Quality (CPIQ) - co-sponsored with IEEE-SA Board of Governors (BOG) Corporate Advisory Group (CAG)
- 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-Conformance01: Standard for Conformance Test Procedures for SIEPON, IEEE Std 1904.1 Package A
- P1904.1-Conformance02: Standard for Conformance Test Procedures for SIEPON, IEEE Std 1904.1 Package B
- P1904.1-Conformance03: Standard for Conformance Test Procedures for SIEPON, IEEE Std 1904.1 Package C
- P1904.2: Standard for Management Channel for Customer-Premises Equipment Connected to Ethernet-Based Subscriber Access Networks
- P1906.1: Recommended Practice for Nanoscale and Molecular Communication Framework
- P1907.1: Standard for Network-Adaptive Quality of Experience (QoE) Management Scheme for Real-Time Mobile Video Communications
- P1908.1: Virtual Keyboard Standard for Indic Languages
- P1910.1: Standard for Meshed Tree Bridging with Loop Free Forwarding
- P2410: Biometrics Open Protocol Standard

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 1900.1a-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 1900.2-2008: 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 1900.4.1-2013: IEEE Standard for Interfaces and Protocols Enabling Distributed Decision Making for Optimized Radio Resource Usage in Heterogeneous Wireless Networks
- 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 1900.6a-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

◆ 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
- P1900.6-2011/Cor 1: IEEE Standard for Spectrum Sensing Interfaces and Data Structures for Dynamic Spectrum Access and Other Advanced Radio Communication Systems - Corrigendum 1
- P1900.7: Radio Interface for White Space Dynamic Spectrum Access Radio Systems Supporting Fixed and Mobile Operation

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

◆ Active projects:

- 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

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: 35 (after having removed various incomplete entries and several projects, which resulted not eligible because there were no ComSoc Student Members in the submitting team.)

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 2015 RESULTS

FIRST PRIZE

Emergency Flexible Aerial Relay Nodes for Communication Recovery and D2D Relaying

- Prodromos-Vasileios Mekikis, Technical University of Catalonia (UPC)

SECOND PRIZE

HEATS: Hospital Emergency Alert Trafficking System

- Dylan Smyth, Cork Institute of Technology

2016 Student competition deadline is September 15 2016

Selected Distinguished Lecturers

Distinguished Lecturers (2016 – 2017)

22 retiring, 57 candidates, selected: 15 new, 6 renewed

Congratulations to: **Mohsen Kavehrad, Pennsylvania State University**
(and also to our members: Mohamed-Slim Alouini, Yu Cheng, Athanassios Manikas)

Nominations for a Distinguished Lecturer from January 1, 2017 - December 31, 2018,
should be done by completing the form by **September 30, 2016.**

New policy: evaluation of DLs after the first year

IEEE 2016 Newly Elevated Fellows

- Ozgur B. Akan (Koc University, Turkey)
- Luiz DaSilva (Trinity College Dublin, Ireland)
- Hlaing Minn (University of Texas at Dallas, USA)
- Claude Oestges (Universite Catholique de Louvain Louvain-La-Neuve, Belgium)
- Zhengdao Wang (Iowa State University, USA)
- Xi Zhang (Texas A&M University, USA)

New Business Items

Best readings

www.comsoc.org/best-readings

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

One new every quarter: power line communications; cognitive radio; broadband access; green communications multi-tier cellular networks

Nominations for Awards

New award for a **survey paper**: nominations will be solicited soon.

Evaluation of 1/3 of TCs every year (RCC not selected in 2016)

New Business Items

Soliciting nominations for Technical Recognition Award 2016 (Aug. 15)

Past awards:

2015 - *Larry Greenstein*

2014 - *Vincent Poor*

2013 - *Lajos Hanzo*

2012 - *Desmond Taylor*

2011 - *Norman Beaulieu*

2010 - *Marco Chiani*

2009 - *Jack Winters*

2008 - *Moe Win*

2007 - *Robert A. Scholtz*

New Business Items

Upcoming RCC Newsletter

Communication from TAC:

- Newsletters
- Involvement in IEEE activities, e.g. Green IST, Smart grids,...

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 1076 members)

AOB?

Next RCC Meeting

**The next RCC meeting will be scheduled in
GC 2016, Washington, DC**

**THANK YOU AND
SEE YOU THEN!**

Officers Contacts

Chair: Hanna Bogucka

Poznan University of Technology, Poland

<http://wcs.et.put.poznan.pl/kr/?p=97&language=en>

E-mail: hanna.bogucka@put.poznan.pl

Vice-Chair: Andrea Giorgetti

University of Bologna, Italy

<https://sites.google.com/site/andrewgiorgetti/>

E-mail: andrea.giorgetti@unibo.it

Secretary: Yuan Shen

Tsinghua University, China

<http://oa.ee.tsinghua.edu.cn/~shenyuan/>

E-mail: shenyuan_ee@tsinghua.edu.cn

RCC Website:

<http://rc.committees.comsoc.org>