



# IEEE COMMUNICATIONS SOCIETY

## Wireless Communications Technical Committee (WTC)

Globecom 2013

Atlanta, USA

Rooms 406/407/4th Floor, Hilton Hotel

Wednesday, December 11, 2013

12:30 pm– 2:00pm

## Agenda

- ◆ 1. Welcome and Introduction
- ◆ 2. Approval of the Agenda
- ◆ 3. Approval of the WTC meeting minutes (ICC 2013)
- ◆ 4. Current status and mission of WTC
- ◆ 5. Presentation of WTC Recognition Award
- ◆ 6. Update of WTC activities
  - ◆ -TC Recertification
  - ◆ -WTC Representatives
  - ◆ -Distinguished Lecturers
  - ◆ -Symposium Co-Chairs
  - ◆ -Conference sponsorship
- ◆ 7. Conference Reports
- ◆ 8. Open discussion on Wireless Communication
- ◆ 9. Next WTC Meeting
- ◆ 10. Any other business

## Minutes of WTC meeting held at ICC 2013

- ◆ **Committee Members Present: 82 (with names and emails recorded)**
- ◆ Welcome by Prof. Ross Murch (WTC Chair) and summary of the agenda of the meeting.
- ◆ Minutes of the WTC meeting at GC12 were unanimously approved by the attendees.
- ◆ Ross reminded the attendees of the mission of the WTC.
- ◆ Ross introduced the current officers and mentioned the names of the past chairs.
- ◆ Ross informed the attendees about the Recertification issue.
- ◆ Ross mentioned the new ComSoc student competition initiative and asked for volunteers as representatives from WTC.
- ◆ Ross provided a summary on the impact of WTC on major conferences and journals.
- ◆ Ross provided guidelines on how a WTC member can become/serve as an ICC/GC individual symposium co-chair. He encouraged the attendees to express their interests by contacting one of the TC officers. He briefed the attendees about the ICC'15 symposium co-chair nomination status.
- ◆ Ross explained the other accomplishments of WTC in terms of nomination for IEEE/ComSoc Service Award, endorsement for IEEE Fellow and Senior Members, and nomination for ComSoc distinguished lecturers.

## Minutes of WTC meeting held at ICC 2013

- ◆ **Committee Members Present: 82 (with names and emails recorded)**
- ◆ Ross reminded the attendees about future ICC/GC and other WTC related conferences.
- ◆ Ross detailed the attendees about the WTC website and email list.
- ◆ Ross opened some discussions on Emerging Technology and Feedbacks for ICC'13
- ◆ Prof. K. C. Chen from the Emerging Technology committee educated the attendees about how the committee works and how to get involved.
- ◆ Feedback on ICC'13:
  - ◆ invited speaker sessions are popular, but kill the attendance of parallel regular sessions.
  - ◆ Having conferences in three hotels is not good for social; but it is a tradeoff between convenience and more choices of location.
- ◆ Ross announced that the next WTC meeting will be held at GC 2013 in Atlanta.

## Current Status of WTC

- ◆ WTC is one of the largest TCs in ComSoc with 1286 registered members as of 6 December, 2013
- ◆ WTC has two formal meetings each year at ICC and Globecom
- ◆ **Present Officers** (1 Jan 2013 - 31 December 2014)
  - **Chair:** Prof. Ross Murch, HKUST, Hong Kong
  - **Vice Chair:** Dr. Tarik Taleb, NEC Labs – Europe, Germany
  - **Secretary:** Prof. Shuguang Cui, Texas A&M University, USA
- ◆ **Past Chairs (WCTC/TCPC)**
  - Prof. Sherman Shen, Univ Waterloo, Canada
  - Prof. Mohsen Guizani, Kuwait University, Kuwait
  - Prof. Chengshan Xiao, Missouri U. of Sci. & Tech, USA
  - Prof. Halim Yanikomeroglu, Carleton U, Canada
  - Prof. Khaled Ben Letaief, HKUST, Hong Kong
  - Prof. Zygmunt Haas, Cornell U, USA
  - Prof. Elvino Sousa, U of Toronto, Canada
  - Dr. Justin Chuang, AT&T (now with Broadcom, USA)
  - Prof. Steve Rappaport, SUNY, New York
  - Prof. Henry Bertoni, Polytechnic University, NY, USA

## IEEE ComSoc Wireless Communications Technical Committee

### WTC Mission Statement:

The mission of WTC is to **sponsor** publications, conferences, technical sessions, workshops, and other information exchanges on architectures, applications, systems, terminals and technologies to provide wireless, mobile, location-independent communication and computing in voice, data and visual media. Its areas of interest include techniques for achieving portability, ubiquity and transparency using mobile and wireless networks ranging from physical layer, MAC layer, network layer to application layer. The committee also assumes the proactive duty to **nominate** suitable candidates for ComSoc and IEEE awards, **propose** distinguished lecturer candidates, and **endorse** deserving candidates for the election to IEEE Senior Member and Fellow grade, make contributions to standards in an organized form.

## WTC Recognition Award

- ◆ **Prize:** A recognition plaque.
- ◆ **Basis for Judging:** A person with a high degree of visibility and contribution in the field of “Wireless and Mobile Communications Theory, Systems and Networks”.
- ◆ **Presentation:** Annually. No more than two awards will be given per year.
- ◆ **Nomination:** Nominations are solicited from WTC members **in Fall each year**. The nomination should include a (short) sentence for "what service or accomplishment" the person is nominated for and a one page supporting material. Additionally, letters supporting the nomination may be sent to the WTC Award Committee Chair (together with the nomination or separately). Award Committee members may not be nominated.
- ◆ **WTC Recognition Award Committee:** The Award committee will have 5 members as follows:
  - Chair: Past WTC Chair
  - Members:
    1. Current WTC Chair
    2. 2<sup>nd</sup> Past WTC/TCPC Chair
    3. 3<sup>rd</sup> Past WCC/TCPC Chair
    4. WTC Member (appointed by the WTC Chair for one year; renewable for a maximum of one year)

## WTC Recognition Award

### ◆ Previous Award Winners

- 2012 Prof. Zhi Ding, UC Davis, USA  
Prof. Zygmunt J. Haas, Cornell University, USA
- 2011 Prof. Kwang-Cheng Chen., National Taiwan Univ., Taiwan  
Prof. Khaled B. Letaief, HKUST, Hong Kong, China
- 2010 Prof. Leonard J. Cimini Jr., University of Delaware, USA  
Prof. H. Vincent Poor, Princeton University, USA
- 2009: Prof. Jerry Gibson, University of California, Santa Barbara, USA  
Prof. Andrea Goldsmith, Stanford University, USA
- 2008: Prof. David Falconer, University of Carleton, Canada  
Prof. Ted Rappaport, University of Texas at Austin, USA
- 2007: Prof. Lajos Hanzo, University of Southampton, UK  
Prof. Gordon Stuber, Georgia Institute of Technology, USA
- 2006: Prof. Vijay Bhargava, University of British Columbia, Vancouver, Canada  
Prof. Robert De Marca, CETUC, Pontifical Catholic Univ., Rio de Janeiro, BRAZIL
- 2005: Prof. Hamid Aghvami, King's College, London, UK  
Dr. Justin C-I Chuang, Broadcom, USA
- 2004: Prof. Steve Rappaport, State University of New York, USA
- 2003: Prof. Ramjee Prasad, University of Aalborg, Denmark
- 2002: Prof. Elvino S. Sousa, University of Toronto, Canada  
Prof. Imrich Chlamtac, University of Texas at Dallas, USA



## WTC Recognition Award

### 2013 WTC Recognition Award Committee:

Chair: Sherman Shen – Past WTC Chair

Members:

1. Ross Murch– Current WTC Chair
2. Mohsen Guizani – 2<sup>nd</sup> Past WTC Chair
3. Chengshan Xiao – 3<sup>rd</sup> Past WTC Chair
4. Jeffrey G. Andrews– WTC Member (appointed by the WTC Chair for one year)

**2013 closing date for nominations: October 15, 2013**

A high number of nominations received

**2013 WTC Recognition Award Winner**

**Prof. Geoffrey LI**

Georgia Institute of Technology



## Brief Biography

**GEOFFREY YE LI** is a Professor at the School of Electrical and Computer Engineering, Georgia Institute of Technology. Before joining Georgia Tech, he was with AT&T Labs - Research at Red Bank, New Jersey, as a Senior and then a Principal Technical Staff Member from 1996 to 2000. He is also holding the Cheung Kong Scholar title at the University of Electronic Science and Technology of China since March 2006.

His general research interests include statistical signal processing and telecommunications. In these areas, he has published over 300 referred journal and conference papers in addition to 25 granted patents. His publications have been cited over 15,000 times and he is listed as a highly cited researcher by Thomson Reuters. He once served or is currently serving as an editor, a member of editorial board, and a guest editor for over 10 technical journals. He organized and chaired many international conferences, including *IEEE ICC'03*, *IEEE SPAWC'11*, and *IEEE GlobalSIP'14*. He has been awarded an *IEEE Fellow* for his contributions to *signal processing for wireless communications* since 2006, and won *2010 Stephen O. Rice Prize Paper Award* from *IEEE Communications Society* in the field of communications theory and *2013 James Evans Avant Garde Award* from *IEEE Vehicular Technology Society* for advancing the state-of-art in OFDM-aided wireless communications.



**The IEEE Wireless Communications Technical Committee (WTC)  
is proud to present the 2013 WTC Recognition Award to**

**Professor Geoffrey LI**

**for his outstanding technical contributions in the field and  
for his service to the scientific and engineering communities**

**Ross Murch  
IEEE WTC Chair  
December 2013**

**Sherman Shen  
WTC Award Committee Chair  
December 2013**

## Update of WTC Activities

### Recertification

1. Every three years all TC's are evaluated
2. WTC is undergoing recertification now
3. Recertification Questionnaire sent out by VP Technical Activities (Len Cimini) and returned on 14 May, 2013
4. WTC to be recommended for recertification: 1 December, 2013
5. Final decision to be taken at BoG Globecom 2013

## Update of WTC Activities

### Recertification Feedback

1. The Technical Committees Recertification Committee (TCRC) supports recertifying the Wireless Communications TC. We commend your level of activity over many years, and the popularity and effectiveness of WTC. We will make a formal recommendation to the BoG at *Globecom*.
2. Minor Feedback
  1. We should change the WTC website so it is hosted by Comsoc
    - Will work on this and make change
  2. Try and define an “active” member
    - Working with TAC on best practices for this
  3. Since we are an active TC we should try and be involved in comsoc standards/industry
    - We appointed a new representative for standards for this TC in July and this is Dr Sumei Sun from I2R in Singapore. She is following up on various options and activities (more later)

## Update of WTC Activities

### ComSoc has launched a student competition

1. For graduate and undergraduate students. Please review details at: <http://www.comsoc.org/communications-technology-changing-world>
  - US\$2,000 for 1st and US\$1000 for 2<sup>nd</sup> plus merits
  - Project with social impact on humanity or local community
2. The theme of the first competition is "Communications Technology Changing the World"
3. Student Competition Committee will select winners from an online submission
4. Every TC has a volunteer representative

## Update of WTC Activities

### WTC ComSoc student competition representative

- ◆ Prof. Abd-Elhamid M. Taha Alfaisal University, Saudi Arabia (June 2013-June 2015)
- ◆ Took part in reviewing the entries for the IEEE ComSoc Student Competitions on behalf of the WTC.
- ◆ The deadline for submitting the entries was September 2, 2013.
- ◆ Per Stefano's initial report on September 9, 2013, 69 entries were made, of which 37 were eventually deemed eligible per the competition rules.
- ◆ As well, 30 members (22 of which appointed as representatives of ComSoc TCs) participated.
- ◆ The review process started September 23, 2013, and concluded October 20, 2013.
- ◆ The process involved two stages of ranking the 37 entries.
  - In the first, entries were to be judged by reviewers on the basis of Social Impact, Technical Content, Originality, Practical Applicability and Quality of Presentations. Out of these, the best 8 were chosen.
  - In the second, the reviewers' task was to rank the best two out of the 7. The outcome of this stage was the 2 mostly ranked.
- ◆ Results were internally announced October 27, 2013, with two winners and five certificates.
- ◆ The finalists and their projects are announced on the competition website: <http://www.comsoc.org/communications-technology-changing-world>



## Update of WTC Activities

### 2013 IEEE Comsoc student competition winners

#### ◆ FIRST PRIZE

**Multiple-Input Multiple-Output Optical Communication with Arduino(MOCA)**  
Yu-An Chen, Kyung Min Lee, The Cooper Union

#### ◆ SECOND PRIZE

**Very Affordable Laser Ethernet Transceiver - VALET project**  
Luka Mustafa, University College London

#### ◆ HONORARY CERTIFICATE WINNERS

(in no order)

**Mobile Video Monitoring System Based on Cognitive Radio Technique**

Li'an Li, ZhiCheng Xu, Jinpeng Lan, Chao Kong, Yong Cao, Shanghai Jiao Tong University

#### ◆ **Design and Development of A "Social" Vehicle Navigation In A Peer-To-Peer, Distributed Traffic Information System**

Shadi Djavadian, Ryerson University/Delft University of Technology

#### ◆ **SmartBus: Towards Quality Public Transport in Brazil**

Matheus Trevisan Moreira, Liana Gross Furini, Pontifical Catholic University of Rio Grande do Sul (PUCRS)

#### ◆ **Rescue Support by Crowdsourced Analysis of 3D Environments**

Mirela Riveni, Annette Mossel, Christian Schönauer, Peter Kán, Vienna University of Technology

#### ◆ **Video Quality Assessment and Feedback for Efficient Content Delivery in Wireless Networks**

Eilwoo Baik (Student), Amit Pande (Researcher), Prasant Mohapatra (Professor at CS of UC Davis), Computer Science at University of California, Davis

## Update of WTC Activities

### WTC Standards Liaison for Comsoc

1. Every TC has a standards liaison that works with Comsoc standards
  2. Dr. Sumei SUN, Institute for Infocomm Research, Singapore
  3. Term June 2013- June 2015
- ◆ The IEEE Communications Society Standards Development Board (COM/SDB) held a teleconference on 20 September 2013.
  - ◆ The proposal for a study group on “environment assessment of communications equipment” was discussed, and it was decided that an ad hoc committee (including the chair and Jinsong Wu, the proposer) contact the 1680 sponsor, i.e., the IEEE Computer Society Standards Activities Board (C/SAB), to determine the need and time frame for a project on environment assessment of communications equipment.

## Update of WTC Activities

### WTC Sponsorship of Conferences

1. For Comsoc to act as a sponsor for a conference it needs endorsement from two TC
2. For a TC to endorse a conference it should be relevant to that TC plus three of its members should be involved in the conferences TPC
  - In your application to Comsoc please list their names with emails
  - Please also let me know in advance
3. Each of the three TC members involved now also now need to complete a simple evaluation report after the conference
4. This TC will generally sponsor if the criteria in item 2 is met
  - We have agreed to sponsor 5 conferences so far this year.

## Update of WTC Activities

### Recommendation for Symposium Co-Chairs of Globecom 2015

1. WTC officers nominated 6 people to act as symposium co-chairs of Globecom 2015 for the symposiums Signal Processing for Communications Symposium, Wireless Communications Symposium, Mobile and Wireless Networking Symposium, Ad-hoc and Sensor Networking Symposium, Communication Theory Symposium, Cognitive Radio and Networks Symposium
2. Globecom organizes then decide transparently and finalizes the list at a later ICC or Globecom
3. If you are interested in co-chairing future conferences please let one of us know so we can consider in future requests

## WTC Other Accomplishment:

### ◆ Endorsement for IEEE Fellow:

- WTC endorsed several active members for IEEE Fellow in 2013.

### ◆ Nomination for ComSoc Distinguished Lecturers:

- Nominations called for by email on 5 August, 2013
- WTC nominated 4 DL (only received 4 nominations!)



## Website

# Our WTC

1. Website: <http://bbcr.uwaterloo.ca/~wtc/>
2. Membership: open to all ComSoc members
3. Our members are encouraged to volunteer in professional activities
4. All members may decide to opt out of the mass/bulk emails by logging onto the system and clicking the appropriate box
  - Of our 1286 members around 79 have opted out
5. Emails from the WTC Chair will however be sent to all members
  - To opt out of these you must terminate your membership and this can now also be done through web

## Future ICCs and GCs and Reports

- ◆ ICC 2014 - Sydney, Australia
- ◆ Globecom 2014 – Austin, Texas, USA
- ◆ ICC 2015- London, UK
- ◆ Globecom 2015- San Diego, USA

## Other Major ComSoc Wireless Events

- ◆ **WCNC 2014** (Istanbul, Turkey, April 6 - 9, 2014)
- ◆ **PIMRC 2014** (Washington DC, USA, 2-5, Sept. 2014)
- ◆ **ICCC 2014** (Shanghai, China, October 13 - 15, 2014)



## Open Discussion

### WTC Meetings

1. Many WTC members attend the WTC meetings.
2. It is a good chance to have some open discussions
3. ComSoc Standards activity?
4. Feedback on Globecom 2013?
  - What are the highlights so far?
  - Can anything be improved for next time?

# Next Meeting

ICC 2014 in Sydney, Australia  
10-14 June, 2014

# Any other Business?

# Thank You!

Next WTC meeting will be held at  
ICC 2014 in Sydney, Australia  
10-14 June, 2014