

## **Minutes of the FiWi: Fiber-Wireless Integration Technical Sub-Committee meeting at Globecom2013 in Atlanta, GA,**

December 10th, 2013

Location: Hilton-Atlanta Meeting Room 408

Attendees: Wai Pang Ng, Northumbria University (wai.pang.ng@ieee.org); Nathan Gomes, University of Kent (N.J.Gomes@kent.ac.uk); Hiroki Nishayama, Tohoku University (bigtree@it.ecei.tohoku.ac.jp); Yuichi Kawamoto, Tohoku University (yousan@it.ecei.tohoku.ac.jp); Masaya Ito, Tohoku University (masaya@it.ecei.tohoku.ac.jp); Kei Saito, Tohoku University (keys@it.ecei.tohoku.ac.jp); Michael McGarry, University of Texas-El Paso (mpmccgarry@utep.edu); Martin Reisslein, University of Arizona (reisslein@asu.edu); Xiaojun Cao, Georgia State University (cao@cs.gsu.edu); Chunming Qiao, SUNY – Buffalo (qiao@computer.org), Rami Haddad, Georgia Southern University (rhaddad@georgiasouthern.edu); Burak Kantarci, University of Ottawa (kantarci@site.uottawa.ca); Hussein Mouftah, University of Ottawa (mouftah@site.uottawa.ca)

Agenda:

1. Introduction
2. Approval of Agenda
3. Minutes of ICC2013 meeting
4. Issues arising from the minutes
5. ICC2014
6. OFC/NFOEC2014
7. ICC2014 Workshop on Fiber-Wireless Integrated Technologies, Systems and Networks
8. JSAC Special Issue on Emerging Technologies
9. JSAC Special Issue proposal on Energy-efficiency in Optical Networks
10. Web site
11. FiWi Subcommittee Elections
12. Other business
13. Adjournment

1. The meeting started by self-introduction at 4:00pm.

2. Agenda has been approved. NG moved, WPW seconded.

3. The minutes of ICC2013 meeting has been approved. MR moved, CQ seconded.

4. No issues arose from the minutes.

5. The Chair reported that he has just submitted the 2012-1013 Activity Report on behalf of the FiWi Technical Sub-Committee to the Chair of ComSoc Emerging Technology Technical Committee. He invited everyone in the meeting to provide him with additional activities from their side, and he promised to send this updated Activity Report as an attachment to this meeting minutes. Also the Chair spoke about the ICC'13-Workshop on Optical-Wireless Integrated Technology for Systems and Networks. A Full day workshop was held in Budapest co-located

with ICC'13.

The Chair asked CQ to summarize the activities related to the JSAC special issue on emerging technologies. Fi-Wi is one of the eight selected emerging technologies in that special issue. 5 papers were accepted (acceptance ratio <30%), and most of them focusing on RoF. The special issue is to be published by late December 2013. MR asked if this was a one-time special issue. CQ said we do not know if this special issue will continue every year but there is a plan for another issue. HM said that FiWi is a part of the emerging technologies special issue since it is a sub-TC however the sub-TC is aiming at becoming a full technical committee, and in that case a special issue related to FiWi will not be under a special issue of emerging technologies.

RH asked about the criteria for becoming a TC. HM listed the criteria accordingly. The sub-TC is currently putting significant effort to become a full technical committee. The sub-TC has a web site, established annual activities such as workshops, conferences, special issues and books.

WWP and MMcG will update the Chair with their invited talks and the activity report will be revised accordingly before the TAC meeting.

6. The Chair opened discussion on the official name of the sub-TC: There were two alternative terms to include in the name: Optical-Wireless or Fiber-Wireless. The Chair said we had this discussion in ICC'13. In order to include the colleagues working in the domain of free space optics. Optical-Wireless is advantageous for being inclusive however the disadvantage of removing the word FiWi.

NG said some colleagues in the FSO community thinks that optical-wireless will have more coverage and FiWi may lead to confusion.

HM said the keyword for the FSO community is "optical", for us, it is "integration".

CQ said although optical-wireless is more inclusive, FiWi is more established name for this sub-TC.

MR said having the term FiWi is better for recognition.

CQ said in order to avoid stepping other TCs, FiWi is a better compromise.

HM said there seemed to be an agreement on having the word FiWi, and he opened the discussion for either calling it Fiber-Wireless Integration or Integrated Fiber-Wireless Technologies.

NG said "integration" is a better term as the members of the sub-TC are mostly working on integration of fiber and wireless communications, not exactly the technologies.

CQ suggested the name sub-TC on Fiber-Wireless (FiWi) Integration. MR moved. XC seconded.

HM suggested FiWi:Fiber-Wireless Integration. CQ moved. WPW seconded. All agreed on this new name. The Chair

said the web site will be updated accordingly but the charter will not be changed besides very minor changes.

7. The Chair opened the discussion for the election policy of the sub-TC. He proposed the following three changes.

Change-1: In the existing policy, an officer cannot serve in the same position for two consecutive terms (i.e., four years) but he can serve in another position. The chair proposes to allow an

officer to serve in the same position for only two consecutive terms (i.e., four years).

Change-2: Currently, only secretary position is filled by election. At the end of the term, the secretary is appointed as the vice-chair and the vice-chair is appointed as the chair. The chair proposed to fill all positions by elections. However, an officer at the end of his/her second term in a particular position will not be nominated for that position again.

Change-3: If change-2 is accepted, it will also require an update on the following sentence in the policy “an officer cannot serve more than six years”. This sentences will need to be updated as “An officer cannot serve for the same position for more than four years.”

Change-4: CQ said there will be additional officer positions such as membership chair and workshop/conference organization chair which will also be subject to election.

The Chair asked the attendees if these changes are accepted. All four changes have been accepted unanimously by the attendees.

The corresponding paragraph has been changed to:

“The nominal term for elected officers shall be two years. After serving a two-year term, each elected officer may only be re-elected to the same position in the next two-year term unless he/she has been served in that position for two consecutive two-year terms. An officer who has served in a particular position for two consecutive two-year terms may be elected to a different position for the next term, or any position for a non-consecutive term (see the Nomination and Election Procedures below). At the end of each term, the subcommittee elects officers for Vice Chair, Chair and Secretary positions, as well as other officer positions such as Membership Chair and Conference/Workshop Organization Chair. In no case shall one person continuously serve as a Subcommittee officer in the same position for more than four consecutive years. Chairs from the previous three terms who are not currently serving as elected or appointed officers will be appointed as members of the Advisory Board.” For the newly established officer positions, CQ nominated NG as the conference/workshop organization chair and WPW as the membership chair. The Chair asked if there were other nominations, and run an election for each of these positions. Nathan Gomes has been unanimously elected as the conference/workshop organization chair, and Wai Pai Wang has been unanimously elected as the membership chair of the sub-TC. CQ nominated HM to serve as the sub-TC chair for another term. Hussein Mouftah has been re-elected unanimously by all attendees as the Chair of the sub-TC, and he has asked all the officers and the members of the sub-TC to put all their efforts to make this sub-TC to be a full technical committee.

Vice-Chair and secretary positions are kept in their position for another term.

8. Web site: There is a new web site that was developed by Steve Weinstein. However the web site will be updated to reflect the motions that have been passed in this meeting.

9. Other business: None

10. Meeting adjourned at 5:20pm. Next meeting in OFC/NFOEC 2014 in San Francisco.

Minutes were taken by Burak Kantarci

Appendix A

List of Activities for the Fiber Wireless Integration Subcommittee for the period 2012-2013  
(Prepared by Hussein Mouftah, December 5th, 2013)

1. Held FiWi technical subcommittee meeting at ICC2012 in Ottawa, Canada on June 13th at 3:00pm-4:00pm.
2. Held FiWi technical subcommittee meeting at Globecom2012 in Anaheim, California, on December 5th, 2012.
3. Held FiWi technical subcommittee meeting at OFC/NFOEC in Anaheim, California, in March 2012, where an election was held to get the executive committee: Hussein Mouftah as chair; Sudhir Dixit as Vice Chair; and Gangxiang (Steven) Shen as Secretary).
4. Participated in the JSAC issue on Emerging Technologies. One track was on Fiber Wireless Integration (FiWi). The Editor was Prof. Chunming Qiao with several FiWi member served on the editorial board and helped in reviewing papers. We had a total of 17 submissions, and 5 got accepted after a second round of revisions.
5. Organized and ran The 1st Workshop on Optical-Wireless Integrated Technology for Systems and Networks (OWITSN) at ICC2013, Budapest, June 9, 2013. Co-Chairs: John Mitchell (University College London, UK), Nathan J Gomes (University of Kent, UK), Hussein Mouftah (University of Ottawa, Canada), Steve Weinstein (CTTC Group, USA), Tibor Berceli (Budapest University of Technology and Economics), and Eszter Udvary (Budapest University of Technology and Economics).  
Attendees: 25, 1 Keynote Speaker, 16 papers in 4 Sessions, and 1 Panel Session . Attendees enjoyed an excellent discussion of major issues for the next generation of broadband wireless communications including networking requirements for CoMP in LTE-A, isolation of radio processing from base stations for energy and other efficiencies, and compression of radio signals for optical transmission.
6. Published a book edited by Nathan Gomes et al, "Next generation wireless communications using radio over fiber", published by Wiley, 2012.
7. Preparing for a new standards initiative. Interest has been expressed by Huawei and NEC and we will seek a third company to reach critical mass for initiating a standards working group within the IEEE standards organization.
8. Preparing for another participation in the next JSAC Special Issue on Emerging Technologies for a track on FiWi. 9. Organizing the second workshop on Fiber-wireless integrated technologies, systems and networks (FWITSN) at ICC2014, Sydney, Australia, June 10-15, 2014. The contact person is John Mitchell, and the General Chair is Ampalavanapillai Nirmalathas of the University of Melbourne, Australia. The deadline for submitting papers is December 15th, 2013. So far there are 5 invited papers among some others. The confirmed speakers are: Martin Maier (ISRS-Telecommunications, Canada), Nathan Gomes (Kent University, UK), Shigegu Kuwano (NTT Access Network Service Systems Laboratories, Japan), Xiaogeng Xu (Huawei), and Chih-Lin I (China Mobile, China).
10. Participating in a JSAC Special Issue on Energy Efficiency in Optical Networks, scheduled for August 2014. (Co-Guest Editors, Pin-Han Ho, Gangxiang Shen, Suresh Subramaniam, Hussein Mouftah, Shunming Qiao, and Lena Wosinska).
11. Participating in ICC2015 General Symposium on Selected Areas in Communications; Co-Chair Gangxiang Shen.
12. Participating in China Communications Special Issue on Integration of Optical and Wireless Networks, scheduled for Volume 11, Number 5, May 2014. Co-Guest Editors: Hussein Mouftah,

Kun XU, and Ninghua ZHU. China Communication Journal of China Institute of Communications, is cosponsored by IEEE ComSoc. We are in the review process at this moment.

13. An updated version of our Fiber Wireless Integration Subcommittee has been completed on September 24th, 2013. Please visit our URL: <http://committees.comsoc.org/owi/>

All credits should go to our subcommittee webmaster Steve Weinstein.

14. The FiWi subcommittee meeting at Globecom2013 in Atlanta will discuss making minor modification to the title of the subcommittee to better reflect our activities.

15. Held FiWi Technical Subcommittee meeting at ICC2013 in Budapest, Hungary on June 11th and the minutes have been already posted on our updated web site.

16. Election of the new executives will take place at the Globecom2013 FiWi Subcommittee meeting in Atlanta.