



Technical Committee on Transmission, Access, and Optical Systems

Authors: Michael Devetsikiotis, Secretary
Tarek S. El-Bawab, Chair

Date/Time: Tuesday, June 7, 2011, 7:00-8:00 am (Monday, June 6, 6:00 pm US Eastern)

Officers: Tarek S. El-Bawab, Chair, telbawab@ieee.org
Ravi Subrahmanyam, Vice Chair, Ravi.Subrahmanyam@ieee.org
Michael Devetsikiotis, Secretary, mdevets@ncsu.edu

1 Participants

- Stefano Bregni, Politecnico di Milano, Italy
- Michael Devetsikiotis, North Carolina State University (NCSU), USA (Via Skype, Elluminate, and/or Conference Bridge)
- Tarek El-Bawab, Jackson State University (JSU), USA (Via Skype, Elluminate, and/or Conference Bridge)
- Anura Jayasumana, Colorado State University (CSU), USA
- Ahmed Kamal, Iowa State University (ISU), USA (Via Skype, Elluminate, and/or Conference Bridge)
- Mark Karol, Telcordia, USA
- Ravi Subrahmanyam, Immedia Semiconductor Corp., USA (Via Skype, Elluminate, and/or Conference Bridge)
- Oliver Yang, University of Ottawa, Canada
- Zhensheng Zhang, Argon ST/Boeing, USA

2 Minutes of the Meeting

Several members attended via Elluminate, Skype and/or the telephone bridge

The meeting of the Transmission, Access, and Optical Systems (TAOS) Technical Committee (TC) was held in Room 559 of the Convention Center, Kyoto, Japan, during the IEEE International Conference on Communications Conference (ICC 2011). Stefano Bregni helped administer the meeting in Koyoto. The Chair Tarek El-Bawab welcomed all participants and outlined the agenda. The attached slides have been displayed as participants went through discussions, item by item. First, attendants were introduced. Then, the meeting proceeded as follows:

2.1 Approval of the minutes of the previous meeting

The minutes of the TAOS meeting held at GC 2010, in Miami, which are now posted on the TAOS web site, are approved (<http://www.comsoc.org/~taos/>)

2.2 Overview of current conference activities

Tarek provided an update of TAOS' involvement in IEEE ComSoc conferences, and ComSoc sponsored conferences. Our TC endorses a number of activities and currently nominates co-chairs for three ICC/Globecom technical symposia: SAC (two tracks), WCS, and ONS. TAOS provides TPC members for these symposia, and also provide technical support (TPC members) to several other ComSoc-sponsored conferences:

- GC 2010 (Miami): S. Bregni served as SAC ASN Co-Chair and F. Cugini served as ONS Co-Chair. SAC ASN statistics are depicted in the table attached (Slide # 3). ONS received total of 147 (Record for GC/ICC ONS Symposia), 3.75 reviews were obtained per paper, 51 papers were accepted (34.6%). Proportion of Systems Papers is about 25% of total (75% for networks).
- ICC 2011 (Kyoto): T. El-Bawab served as SAC ANS Co-Chair and S. Bregni served as ONS Co-chair. SAC ANS statistics are per the table attached (slide # 4). 3.9 reviews per paper were provided, and acceptance rate was 36.8%. ONS: 115 Papers submitted, out of which 44 were accepted (38.3% acceptance rate).
- GC 2011 (Houston): X. Fernando is serving as SAC ASN Co-Chair, J. Elmirghani is serving as SAC GCSN Track Co-Chair (new) and J-D Shin is serving as OSN Co-Chair. SAC ASN track statistics depicted in the attached table (slide # 5). 3.8 reviews per paper have been provided. Acceptance rate is 35%. SAC GCSM Track received 65 papers, which is an excellent figure for a new TAOS-initiated track (anticipated acceptance rate 35%). ONS received 113 papers, out of which 77 papers are in networks and 36 papers are in systems. 40 papers are recommended for acceptance (incl. 16 in systems' research), and 73 for rejection. Acceptance rate thus is 35.4%. 3.8 reviews per paper were provided.
- ICC 2012 (Ottawa): J. Elmirghani is serving as SAC ASN Co-Chair, V. Vokkarane is serving as ONS Co-Chair, and J. Gibson is serving as WCS Co-Chair.
- GC 2012 (Anaheim): S. Bregni is serving as Conference Technical Program Vice-Chair. TAOS nominated R. Subrahmanyam as SAC ASN Co-Chair, M. Devetsikiotis as SAC GCSN Co-Chair and T. El-Bawab as ONS Co-Chair.
- ICC 2013 (Budapest): TAOS have made four Co-Chair nominations: A. Manikas for SAC GCSN, Michael Peeters for SAC ASN, Franco Callegati for ONS, and Abdallah Shami for WCS.
- HONET 2010: Tarek El-Bawab served as Conference TPC co-chair, TPC members were provided also by TAOS.
- Packet Video 2010 (PV 2010): Only one representative nominated to experiment this workshop for future sponsorship consideration.
- ITU 2011: Collaboration between ITU & ComSoc resumed into a scientific symposium within the ITU flagship event. TAOS assumed leading role and provided three TPC members with industrial background (T. El-Bawab, R. Subrahmanyam, and F. Effenberger)

- 2011 NIST-ATIS-Telcordia Synchronization workshop: TAOS continued its support of this workshop and contributed TPC members in 2011.
- ONDM 2011: TAOS continued its support for this conference and contributed TPC members in 2011.
- HONET 2011: TAOS continued support and nominated TPC members: S. Bregni, A. Kamal, and F. Cugini).

2.3 Special Publications by TAOS Members

IEEE Communications Magazine, Special Issue on Synchronization in Next Generation Networks, Guest Edited by TAOS' Ravi Subrahmanyam and Stefano Bregni. The issue comprises a collection of papers providing snapshot of the state of the art in synchronization as it applies to frequency and phase transfer in next generation networks, including standards activity. The issue appeared in February 2011. Out of 14 papers submitted, 5 were accepted covering the following areas:

- ITU standardization update
- IEEE Audio-Video Bridging standard update (802.1as)
- Overview of packet timing vs. traditional synchronization performance metrics
- Measurements for NGN packet-based synchronization
- Using IEEE1588 and Boundary Clocks for Clock Synchronization in Telecom Networks
- Synchronous Ethernet and extension to carry phase

2.4 Standards Activities

The Chair Tarek El-Bawab discussed some of the modification of standardization organization within ComSoc. He mentioned that some motions are also put before BoG during ICC 2011 to encourage TCs' technical involvement in standardization activities. According to these proposed modifications, TAC would participate in appointing voting members. TAOS is one of the most relevant TCs, technically speaking, to current standardization activities in the field.

2.5 Miscellaneous

- M. Devetsikiotis is serving as ComSoc Distinguished Lecturer (since 2008, currently last year). Two other nominations have been made to the program
- Two nominations to the IEEE Fellow grade have been also endorsed by TAOS (for members of our community).
- S. Bregni is serving in the Ad Hoc Committee on Smart Grid Communications.
- M. Devetsikiotis is serving in the Ad Hoc Committee on Cloud Communications and Networking.

TAOS Chair Tarek emphasized that the committee continues to:

- Seek new blood, new volunteers, activists, to participate and enrich our scope of work and technical activities

- From both industry and academia
- From all over the world
- Proposers of workshops, tutorials, special issues, etc.
- New ideas too!
- Consider Broadband Access as TAOS central theme at this point in time
 - One of the most active area of research
 - One of the most important areas of current industrial activity and business
 - Spans a number of technical domains: copper, wireless, optical based access; and Telco, Cable, utility companies

2.6 Other Discussions

Mark Karol, ComSoc VP of Technical Activities, informed the meeting about a proposal submitted to form a Cable Networks and Services entity within ComSoc's Technical Activities. Such an entity, according to the proposal, would help bring in the Cable industry on-board of ComSoc. The subject was opened for discussions by all where different opinions were explored. Recommendations were made to form a Sub-Committee under TAOS.

Meeting adjourned at 8:00 am

IEEE Communications Society (ComSoc) Transmission, Access, Optical Systems (TAOS) Technical Committee (TC)

ICC 2011 TC meeting,
Kyoto, Japan,
Tuesday, June 7, 2011

Tarek S. El-Bawab, Ph.D.
Chair, TAOS

Agenda

- ◆ Welcome, introductions, approval of previous minutes of meeting (GC 2010, Miami)
- ◆ Conference updates (Sponsorships, Nominations, and Statistics)
 - GLOBECOM 2010
 - ICC 2011
 - GLOBECOM 2011
 - ICC 2012
 - GLOBECOM 2012
 - ICC 2013
 - Other Conferences
- ◆ Special Publications
- ◆ Standards Update
- ◆ Other Activities
- ◆ We Continue to focus on ...
- ◆ Other agenda items?, Questions?, Adjourn!

Conferences Update - Sponsorships, Nominations, and Statistics - (1/5)

- ◆ GC 2010 (Miami): S. Bregni served as SAC ASN Co-Chair and F. Cugini served as ONS Co-Chair
 - SAC ASN statistics are depicted in the table here below.
 - ONS received total of 147 (Record for GC/ICC ONS Symposia), 3.75 reviews were obtained per paper, 51 papers were accepted (34.6%). Proportion of Systems Papers is about 25% of total (75% for networks)

SAC ANS Track Statistics	Optical, wireless, and Copper	PLC	Others	Total
Submitted	12	6	4	22

Conferences Update (2/5)

- ◆ ICC 2011 (Kyoto): T. El-Bawab served as SAC ANS Co-Chair and S. Bregni served as ONS Co-chair
 - SAC ANS statistics per table below. 3.9 reviews per paper were provided, and acceptance rate was 36.8%
 - ONS: 115 Papers submitted, out of which 44 were accepted (38.3% acceptance rate).

SAC ANS Track Statistics ICC'11	Optical	Wireless	Optical/Wireless Integration	xDSL	Cable (HFC & IPTV)	PLC	Satellite	Others	Total
Submitted	7	3	1	2	2	2	1	1	19
Accepted	4	0	1	1	0	1	0	0	7

Conferences Update (3/5)

- ◆ GC 2011 (Houston): X. Fernando serving as SAC ASN Co-Chair, J. Elmirghani serving as SAC GCSN Track Co-Chair (new) and J-D Shin serving as ONS Co-Chair
 - SAC ASN track statistics depicted in table here below. 3.8 reviews per paper have been provided. Acceptance rate is 35%
 - SAC GCSM Track received 65 papers, excellent figure for new TAOS-initiative track (anticipated acceptance rate 35%)
 - ONS received 113 papers, out of which 77 papers are in networks and 36 papers are in systems. 40 papers are recommended for acceptance (incl. 16 with systems' research), and 73 for rejection. Acceptance rate thus is 35.4%. 3.8 reviews per paper provided.

SAC ANS Track Statistics GC'11	Optical	Wireless	Optical/Wireless Integration	xDSL	Cable (HFC & IPTV)	Others	Total
Submitted	6	11	5	10	2	6	40
Recommended for Acceptance	1	4	1	7	0	1	14

06/7/2011

TAOS meeting, ICC 2011, Kyoto

5

Conferences Update (4/5)

- ◆ ICC 2012 (Ottawa): J. Elmirghani is serving as SAC ASN Co-Chair, V. Vokkarane serving as ONS Co-Chair, and J. Gibson is serving as WCS Co-Chair
- ◆ GC 2012 (Anaheim): S. Bregni is serving as Conference Technical Program Vice-Chair. TAOS nominated R. Subrahmanyam as SAC ASN Co-Chair, M. Devetsikiotis as SAC GCSN Co-Chair and T. El-Bawab as ONS Co-Chair
- ◆ ICC 2013 (Budapest): TAOS have made four Co-Chair nominations: A. Manikas for SAC GCSN, Michael Peeters for SAC ASN, Franco Callegati for ONS, and Abdallah Shami for WCS

06/7/2011

TAOS meeting, ICC 2011, Kyoto

6

Conferences Update (5/5)

- ◆ HONET 2010
 - Tarek El-Bawab served as Conference TPC co-chair, TPC members provided
- ◆ Packet Video 2010 (PV 2010)
 - Only one representative nominated to experiment this workshop for future sponsorship considerations
- ◆ ITU 2011
 - Collaboration between ITU & ComSoc resumed into a scientific symposium within the ITU flagship event
 - TAOS assumed leading role and provided 3 TPC members with industrial background (T. El-Bawab, R. Subrahmanyam, and F. Effenberger)
- ◆ 2011 NIST-ATIS-Telcordia Synchronization workshop
 - TAOS continued support and contributed TPC members
- ◆ ONDM 2011
 - TAOS continued support and contributed TPC members
- ◆ HONET 2011
 - TAOS continued support and nominated TPC members: S. Bregni, A. Kamal, and F. Cugini)

Special Publications

- ◆ IEEE Communications Magazine, Special Issue on Synchronization in Next Generation Networks, Guest Editors Ravi Subrahmanyam & Stefano Bregni
 - Published on February 2011
 - Five Papers
 - ◆ ITU standardization update
 - ◆ IEEE Audio-Video Bridging standard update (802.1as)
 - ◆ Overview of packet timing vs. traditional synchronization performance metrics
 - ◆ Measurements for NGN packet-based synchronization
 - ◆ Using IEEE1588 and Boundary Clocks for Clock Synchronization in Telecom Networks
 - ◆ Synchronous Ethernet and extension to carry phase

Standards Update

- ◆ Modification of standardization organization within ComSoc
- ◆ Two new motions also put before BoG during ICC 2011
 - TAC would participate in appointing voting members
 - Relevant TC would contribute the same
 - ◆ Would give TCs in general, and TAOS in particular, opportunity to be more involved in standardization

Other Activities

- ◆ Members serving as ComSoc Distinguished Lecturers include M. Devetsikiotis (since 2008, currently last year)
 - Two other nominations proposed to the program
- ◆ Two nomination to the IEEE Fellow grade have been endorsed by TAOS (for applicant members of our community)
- ◆ S. Bregni serves in Ad Hoc Committee on Smart Grid Communications
- ◆ M. Devetsikiotis serves in Ad Hoc Committee on Cloud Communications and Networking

We Continue to...

- ◆ Seek new blood, new volunteers, activists, to participate and enrich our scope of work and technical activities
 - From both industry and academia
 - From all over the world
 - Workshops, tutorials, special issues, etc.
 - New ideas too!
- ◆ Consider Broadband Access as TAOS central theme at this point in time
 - One of the most active area of research
 - One of the most important areas of current industrial activity and business
 - Copper, wireless, optical based access; and Telco, Cable, utility companies

Other Agenda Items?

- ◆ Questions?



- ◆ Adjourn!