



Technical Committee on Transmission, Access, and Optical Systems

Authors: Tarek S. El-Bawab, Chair
Date/Time: Tuesday, December 6, 2011, 11:00 am -12:00 pm
Meeting Location: Hilton Americas Room 334B, Houston, Texas, USA
Officers: Tarek S. El-Bawab, Chair, telbawab@ieee.org
Ravi Subrahmanyam, Vice Chair, Ravi.Subrahmanyam@ieee.org
Michael Devetsikiotis, Secretary, mdevets@ncsu.edu

Meeting Started 11:05 am

1 Participants

- Jean Armstrong, Monash University, Australia
- Stefano Bregni, Politecnico di Milano, Italy
- Michael Devetsikiotis, North Carolina State University (NCSU), USA
- Tarek El-Bawab, Jackson State University (JSU), USA
- Stefano Galli, Assia
- Fabrizio Granelli, University of Trento, Italy
- Anura Jayasumana, Colorado State University (CSU), USA
- Pooi-Yuen Kam, National University of Singapore
- Ahmed Kamal, Iowa State University (ISU), USA
- Mike Kincaid, L3 Communications
- Yuanqiu Luo, Huawei USA
- Maode Ma, Nanyang Technological University, Singapore
- Martin Reisslein, Arizona State University
- George Rouskas, North Carolina State University
- Abdalla Shami, The University of Western Ontario
- Ravi Subrahmanyam, Immedia Semiconductor Corp., USA (Via Conference Bridge)

2 Minutes of the Meeting

The meeting of the Transmission, Access, and Optical Systems (TAOS) Technical Committee (TC) was held in Room 334B of the Hilton Americas, Houston TX, during the IEEE Global Communications Conference (GLOBECOM). The Chair Tarek El-Bawab welcomed all participants and outlined the agenda. First, attendants were introduced. The attached slides were displayed as participants went through discussions, item by item. The meeting proceeded as follows:

2.1 Approval of the minutes of the previous meeting

The minutes of the TAOS meeting held at ICC 2011, in Kyoto Japan, now posted on the TAOS web site, are approved (<http://www.comsoc.org/~taos/>)

2.2 New Trends

TAOS' Access Networks and Systems (ANS) Track is now inherent part of the ICC/GC SAC Symposium, with peak submissions in GC'2011 and diversified technical scope. Also, our new SAC Track on Green Communication Systems and Networks (GCSN) has been successful and becoming inherent part of the same. TAOS now nominates Co-Chair for a third GC/ICC symposium, i.e. WCS (for the Wireless Access component).

A lot of new blood and renovation have been introduced into our activities; including new TPC members, new ICC/GC Co-Chairs, and new conference sponsorships. Several new colleagues are now serving as TPC members in preparation for future chairpersonship nominations.

2.3 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 provides TPC members to several other ComSoc-sponsored conferences:

- ICC 2011 (Kyoto): T. El-Bawab served as SAC ANS Co-Chair and S. Bregni served as ONS Co-chair. Some details and statistics are per attached slides (slide # 4).
- 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 ONS Co-Chair. Some details and statistics are per attached slides (slide # 5).
- ICC 2012 (Ottawa): J. Elmirghani is serving as SAC Access Track Co-Chair, V. Vokkarane is an ONS Co-Chair, and J. Gibson is a WCS Co-Chair. Some details and statistics are per attached slides (slide # 6).
- GC 2012 (Anaheim): S. Bregni is serving as Conference Technical Program Vice-Chair. R. Subrahmanyam is serving as SAC ANS Co-Chair, M. Devetsikiotis as SAC GCSN Co-Chair, and T. El-Bawab as ONS Co-Chair. TPCs activities are underway.
- 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.

- ITU 2011: collaboration between ITU & ComSoc is resumed via a scientific symposium within this ITU WT flagship event. TAOS has played key role and provided 3 TPC members with industrial background to Technical Symposium
- 2011 NIST-ATIS-Telcordia Synchronization workshop: TAOS continued support and provided TPC membership
- ONDM 2011: TAOS continued support and contributed TPC membership
- HONET 2011: TAOS continued support and contributed TPC membership
- FITCE 2012: TAOS supports this conference and contributed TPS membership

2.4 Special Publications

Special section on Synchronization over Ethernet and IP in Next Generation Networks has appeared in the February 2011 issue of IEEE Communications Magazine, Guest Edited by S. Bregni and R. Subrahmanyam. A follow up with 3 more papers have been accepted and shall appear in the same magazine (date of publications TBD).

2.5 Standards Activities

Stefano Galli reported extensively on progress made in regards to proposed changes to the ComSoc standards organization. He went through the history of all these developments, including motions made to the Board of Governors (BoG), subsequent discussions at numerous stages and avenues, reconciliation meeting which was attended by TAOS Chair T. El-Bawab, and the favorable vote on the proposed motions (after updates) in the September 2011 OpCom meeting. Stefano acknowledged and praised the role TAOS played, on behalf of ComSoc's TCs, in this regards.

2.6 Miscellaneous

- Three TAOS members are elevated to IEEE Fellow Grade: Michael Devetsikiotis, Ahmed Kamal, and George Rouskas
- Stefano Bregni continues to serve as BoG member at large and Director of ComSoc Education Board (term for the latter ends 2011)
- M. Devetsikiotis just completed his service as ComSoc Distinguished Lecturer (2 years + 2 extensions). TAOS has supported one new nomination for this program
- 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 is launching a new "Best Readings" Project on Broadband Access, to be led by Frank Effenberger. An open invitation is made to all members in our community to contact Frank in interested in participating in this project
- TAOS' Sub-Committees issues has been briefly addressed. Per discussions TAOS Chair had with Mark Karol and Len Cimini (current and Future VP, Technical Activities), new Cable Sub-Committee is no longer a Sub-TC of TAOS

- Updating of TAOS Web Site (<http://committees.comsoc.org/taos/>) is underway.
- TAOS Chair Tarek El-Bawab re-emphasized, once again, 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 and from all over the world. We welcome proposers of workshops, tutorials, special issues, and innovative technical activity ideas too! Special interest is in activities around our Broadband Access theme.

Meeting adjourned at 12:00 pm

Attachment: Meeting Slides

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

Globecom 2011 TC meeting,
Houston, TX, USA,
Tuesday, December 6, 2011
Hilton Americas Room 334B, 11:00 am -12:00 pm

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

Agenda

- ◆ Welcome & introductions
- ◆ Approval of ICC 2011 minutes of meeting (Kyoto)
- ◆ Highlights & new Trends
- ◆ Conference updates (sponsorships, nominations, and some statistics)
 - ICC 2011
 - GLOBECOM 2011
 - ICC 2012
 - GLOBECOM 2012
 - ICC 2013
 - Globecom 2013
 - Other Conferences
- ◆ Special Publications
- ◆ Other activities/updates
- ◆ We continue to focus on ...
- ◆ Questions?

Highlights & New Trends

- ◆ TAOS' GC/ICC Access Networks and Systems (ANS) Track becoming inherent part of SAC
 - Peak submissions in GC'2011 Houston
 - Technical scope diversified, extending from optical (traditional TAOS' strength) to both copper and wireless
- ◆ New GC/ICC SAC Track on Green Communication Systems and Networks has been very successful, and also becoming inherent part of SAC
 - Initiative of TAOS' Ex-Chair Jaafar El-Marghani
- ◆ TAOS now nominates Co-Chair for GC/ICC WCS (Wireless Access)
- ◆ Extra work done in the area of network synchronization
- ◆ A lot of new blood has already been introduced: new TPC members, new ICC/GC Co-Chairs, and new conference sponsorships
 - New colleagues/participants serving as TPC in preparation for future chairpersonship nominations
 - Always looking for more!

12/6/2011

TAOS meeting, GC 2011, Houston

3

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

- ◆ 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/paper were provided, and acceptance rate was 36.8%
 - ONS: 115 Papers submitted, out of which 44 were accepted (38.3% acceptance rate).

<u>Access Track Statistics ICC'11</u>	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

12/6/2011

TAOS meeting, GC 2011, Houston

4

Conferences Update (2/5)

- ◆ GC 2011 (Houston): X. Fernando serving as SAC Access Network Co-Chair, J. Elmirghani serving as SAC GCSN Track Co-Chair (new) and J-D Shin serving as OSN Co-Chair
 - SAC AN track statistics depicted in table. 3.8 reviews/paper provided. Acceptance rate is 35%
 - SAC GCSN Track received 65 papers, excellent figure for TAOS initiative (acceptance rate 35%)
 - ONS received 113 papers, out of which 77 papers are in networks and 36 papers (32%) are in systems. 40 papers accepted (incl. 16 with systems' research, 40%). Acceptance rate is 35.4%. 3.8 reviews/paper provided.

<u>SAC AN Track Statistics GC'11</u>	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

12/6/2011

TAOS meeting, GC 2011, Houston

5

Conferences Update (3/5)

- ◆ ICC 2012 (Ottawa): J. Elmirghani is SAC Access Track Co-Chair, V. Vokkarane is ONS Co-Chair, and J. Gibson is WCS Co-Chair
 - SAC Access Track received 20 papers, 10 of which recommended for acceptance. Statistics are in the table below
 - ◆ Other SAC tracks' acceptance recommendations are 13 (e-Health), 5 (PLC), 20 (Satellite & Space), 10 (smart Grid), and 5 (Tactical Comm. & Op)
 - ONS received 96 papers, out of which 35 recommended for acceptance (30 oral + 5 posters), i.e. 36%. Reviews/paper is 3.73. Percentage of systems' papers is about 29%
 - WCS received 510 papers. It is anticipated that 190 papers shall be accepted (%37.3). At least 3 reviews/paper

<u>SAC Access Track Statistics ICC'12</u>	Optical	Wireless	Optical/Wireless Integration	xDSL	Cable (HFC & IPTV)	Total
Submitted	3	9	0	5	2	20
Recommended for Acceptance	1	3	0	5	1	10

12/6/2011

TAOS meeting, GC 2011, Houston

6

Conferences Update (4/5)

- ◆ GC 2012 (Anaheim), S. Bregni is serving as Conference Technical Program Vice-Chair. Also, serving:
 - R. Subrahmanyam as SAC ANS Co-Chair,
 - M. Devetsikiotis as SAC GCSN Co-Chair,
 - T. El-Bawab as ONS Co-Chair,
- ◆ ICC 2013 (Budapest), nominated:
 - Michael Peeters for SAC ANS,
 - A. Manikas for SAC GCSN,
 - Franco Callegati for ONS,
 - Abdallah Shami for WCS
- ◆ GC 2013 (Atlanta), nominated:
 - Filippo Cugini for SAC ANS Track,
 - Stefano Bregni for SAC GCSN
 - S. J. Ben Yoo for ONS Symposium
 - Michael Devetsikiotis for WCS

Conferences Update (5/5)

- ◆ ITU 2011
 - Collaboration between ITU & ComSoc resumed into a scientific symposium within the ITU WT flagship event
 - ◆ TAOS played key role and provided 3 TPC members with industrial background to Technical Symposium
- ◆ 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)
- ◆ FITCE 2012
 - TAOS supports this conference and nominated TPS members: Hakki Cankaya, Mamoun Guenash and Luca Valcarenghi)

Special Publications

- ◆ Special Communications Magazine section on Synchronization over Ethernet and IP in Next Generation Networks (Feb. 2011), Guest Edited by S. Bregni and R. Subrahmanyam.
 - Standards for packet sync, timing challenges, and IEEE 1588 based clock synchronization. 12 submissions, 5 accepted (42%), 3+ reviews/paper
 - ◆ Evolution of Standards for Packet Network Synchronization
 - ◆ Performance Aspects of Timing in Next Generation Networks
 - ◆ NGN Packet Network Synchronization Measurement and Analysis
 - ◆ Synchronization of Audio/Video Bridging Networks using IEEE 802.1AS
 - ◆ Using IEEE 1588 and Boundary Clocks for Clock Synchronization in Telecom Networks
- ◆ Follow up with 3 more papers appearing (accepted, date TBD).
 - Time/frequency distribution over PONs, Synchronous Ethernet and IP. :
 - ◆ Synchronous Ethernet to Transport Frequency and Phase/Time
 - ◆ Time Synchronization over Passive Optical Networks
 - ◆ Impact of network equipment on Packet Delay Variation in the context of packet-based timing transmission

12/6/2011

TAOS meeting, GC 2011, Houston

9

Other Activities/Updates (1/2)

- ◆ Congratulations to Colleagues who are Elevated to IEEE Fellow Grade:
 - Michael Devetsikiotis
 - Ahmed Kamal
 - George Rouskas
- ◆ Standards Update
 - TAOS Chair participated in the Standards Reconciliation Meeting in New York
 - Galli's Motions received favorable vote in September 2011 OpCom Meeting. BoG shall make final vote in GC 2011
- ◆ Stefano Bregni continues to serve as
 - BoG member at large
 - Director of ComSoc Education Board (Term ends 2011)
- ◆ M. Devetsikiotis just completed his service as ComSoc Distinguished Lecturer (2 years + 2 extensions)
 - TAOS supported one new nomination

12/6/2011

TAOS meeting, GC 2011, Houston

10

Other Activities/Updates (2/2)

- ◆ TAOS Members Serving in Ad Hoc Committees:
 - Stefano Bregni, in Ad Hoc Committee on Smart Grid Communications
 - Michael Devetsikiotis, Ad Hoc Committee on Cloud Communications and Networking
- ◆ TAOS is launching "Best Readings" Project
 - Project on Broadband Access (Frank Effenberger)
 - Interesting in contributing?
 - ◆ Please contact TAOS officers
- ◆ Updating of TAOS Web Site
(<http://committees.comsoc.org/taos/>)
- ◆ TAOS' Sub-Committees
 - Update of TAOS P&P

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.
 - ◆ We Want to see Workshops, Tutorial, and Panels with Industrial contributions in particular
 - 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

Questions?



◆ Adjourn!