



Technical Committee on Transmission, Access, and Optical Systems *Minutes of Meeting*

Authors: Ahmed Kamal and Tarek S. El-Bawab
Date/Time: Tuesday, June 11, 2013, 11:30 am – 1:00 pm
Meeting Location: Guimard/Marjorelle/1st Floor, Sofitel Hotel, Budapest, Hungary
Officers: Tarek S. El-Bawab, Chair, telbawab@ieee.org
Michael Devetsikiotis, Vice Chair, mdevets@ncsu.edu
Ahmed E. Kamal, Secretary, kamal@iastate.edu

Meeting was called to order at 11:30 am

1 Participants

- Jean Armstrong, Monash University, Australia
- Stefano Bregni, Politecnico di Milano, Italy
- Franco Callegati, University of Bologna, Italy
- Periklis Chatzimisios, Alexander Technological Educational Institute of Thessaloniki, Greece
- Tibor Cinkler, Budapest, BME, Hungary
- Michael Devetsikiotis, NC State University, USA
- Tarek El-Bawab, Jackson State University (JSU), USA
- Jaafar Elmirghani, University of Leeds, UK
- Nathan Gomes, University of Kent, UK
- Steve Gorshe, PMC-Sierra, USA
- Fabrizio Granelli, University of Trento, Italy
- Mustafa Gurcan, Imperial College, UK
- Erol Hepsaydir, Hutchinson 3G, UK
- Steve Hranilovic, McMaster University, Canada

- Ahmed Kamal, Iowa State University, USA
- Christos Karmentzos, University of Aegen, Greece
- Athanassios Manikas, Imperial College, UK
- George Michailidis, University of Michigan, USA
- Michael Peeters, Alcatel-Lucent, Belgium
- Abdallah Shami, University of Western Ontario, Canada
- Harry Skianis, University of Aegean, Greece
- Dung Pham Van, Scuola Sant'Anna, Italy
- Christos Verikoukis, CTTC, Spain
- Jingsong Wu, Bell Labs., China
- Zuqing Zhu, University of Science and Technology of China, China

2 Introduction

The meeting of the Transmission, Access, and Optical Systems (TAOS) Technical Committee (TC) was held in the Guimard/Marjorelle room on the first floor of the Sofitel Hotel, Budapest, Hungary, during the IEEE International Conference on Communications (ICC) 2013. 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

3 Approval of the minutes of the previous meeting

The minutes of the TAOS meeting held at the IEEE Globecom 2012, in Anaheim, CA, were posted on the TAOS web site (<http://www.comsoc.org/~taos/>). Ahmed Kamal moved for approval of the minutes as posted, and Fabrizio Granelli seconded the motion. The motion was approved unanimously.

4 Trends and Highlights (Slide # 3)

Tarek El-Bawab outlined several improvements made to the TAOS web site.

Tarek El-Bawab also presented an overview of TAOS' two SAC tracks of ICC/GC, and discussed progress and status of each; i.e. the Access Networks and Systems Track and the Green Communication Systems and Networks (GCSN) Track.

TAOS' Best Readings Project, entitled *Broadband Access*, has been published

Four Awards were presented at Globecom 2012

5 Overview of conference activities

Tarek reported final Globecom 2012 statistics of the two SAC tracks, the Optical Networks and Systems (ONS) Symposium, and the Workshop on Flexible Optical Networks (Slides 4 & 5). Filippo reported on the success of the workshop which had a keynote speaker from Verizon. Tarek presented the Statistics on paper submission and acceptance for the two access tracks

and ONS in ICC 2013 (slides # 6, 7, and 8). The Chair provided initial statistics of the same Tracks/Symposia for Globecom 2013 (Slides # 9 & 10)

Trends of paper submission in the Symposia/Tracks sponsored by TAOS were discussed in more detail (Slides 11, 12, and 13). Several observations were made and discussed:

- a. Submissions to the Access Networks and Systems Track are stable
- b. Submissions to the Green Track showed a slight decline, but it is still the largest SAC Track
- c. Submissions to the Optical Networks and Systems Symposium have shown significant, and steady, decline. This trend is evident since ICC 2011.

The distribution of papers in the access track over various areas (DSL, Wireless, PONs, and others) over 30 months (ICC 2011 through GC 2013) was discussed. The percentage of wireless and DSL papers has been rising until ICC 2013. A relatively large proportion of optical/wireless integration papers is expected to dominate the track however in GC 2013. Ravi mentioned that access seems to be changing somewhat, with more papers submitted on systems.

As for the Optical Networks and Systems Symposium, the proportion of systems papers, as opposed to networks papers, is rising. In Globecom 2010, about $\frac{3}{4}$ of papers' content was in Networks, and only $\frac{1}{4}$ was in the Systems. In ICC 2013, papers' content is almost equally split between networks and systems.

A discussion took place concerning the ONS Symposium and about what can be done to restore its paper submission figures to suitable levels. Tarek opened it up for Q/A, and ideas. Declining interest in optical research is evident, but attendants explored ideas to overcome this situation. Jaafar, Franco, Athanassios, Nathan, Steve and others participated. Jaafar cited the competition conferences such as OFC, SIGCOM and INFOCOMM pose for our ICC/GC ONS (as opposed, say, to communication theory where ICC and GC are perceived as the best conferences). Jaafar also remarked that historically many optical people from systems/devices were there when TAOS was created. He suggested that spreading the word about the symposium may gain back such people. Steve and Harald remarked that they established in 2010 a workshop for wireless optical, line of sight and free space communications, with a multi-disciplinary team, and were not aware of ONTC and TAOS. Tarek recalled TAOS' invitation for this group to work with us in both ONS and the Access Track, and his offer to nominate co-chairs from this group, if they are interested. This offer is still available for after GC 2015. A discussion took place also about the possibility of changing the name of the Symposium. Some pointed out that papers on optical communications maybe submitted to other symposia, while papers on networks are increasingly moving to OFC. The Chair indicated that any proposal to change the symposium name must be discussed with ONTC as TAOS' partner in this symposium. A recommendation was made to bring up this suggestion during ONTC in ICC 2013.

The issue of the number of parallel sessions in ICC/GC was also discussed and Michael Devetsikiotis brought up the topic of "interactivity" of workshops as being discussed by the GITC.

TAOS nominations for future ICC/GC conferences were presented (Slide # 14). It was pointed out that a new SAC track on *Optical Wireless Systems* was proposed for ICC 2015. Steve Hranilovic discussed this proposal. TAOS had proposed to work with Steve's group (who

organizes the optical wireless workshop) and offered to nominate colleagues from this group as ONS co-chairs.

Other conferences sponsorships were also reviewed (Slide # 15)

6 Other Activities/Updates (Slide # 16, 17, 18, and 19)

TAOS is scheduled for ComSoc recertification this year. Tarek explained that recertification occurs every three years, and informed the committee that the 2013 Recertification Questionnaire was submitted to ComSoc on June 4, 2013.

Tarek El-Bawab pointed the members of the committee to TAOS website to monitor the progress and updates posted on the site. He also referred them to the TC's Best Reading Project (one of only 5 developed by all TCs so far, and was the third to appear). He also indicated that TAOS would like to continue its award program beyond 2012. An update of TAOS contribution to ComSoc leadership (in various technical and administrative capacities) was presented along with updates of some TAOS members and accomplishments. He highlighted that Jaafar Elmighani is now Chairing the IEEE WG on Green ICT.

Ravi explained the Communications Technology News (CPN) initiative. He also discussed the topic of "synchronization" and reported about progress with the synchronization workshop. Due to the fact that the sponsoring organization is for profit, IEEE cannot be the official sponsor. However TAOS can still contribute to the TPC. Around 1800 to 2000 people signed up and emailed webinar questions.

A call for new volunteers was made by TAOS Chair Tarek El-Bawab

Meeting adjourned at 12:30 pm.

Attachment: Meeting Slides

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

ICC 2013 TC meeting,
Budapest, Hungary
Tuesday, June 11, 2013
Sofitel Hotel, The Guimard/Marjorelle Room,
11:30-13:00 pm

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

Agenda

- ◆ Welcome & introductions
- ◆ Approval of the GC 2012 minutes of meeting
- ◆ Highlights and Trends
- ◆ Conferences update (sponsorships and statistics)
 - GLOBECOM 2012
 - ICC 2013
 - Globecom 2013
 - ICC/Globecom statistics (2010-2013)
 - ICC and Globecom conferences in the works
 - ◆ ICC 2014
 - ◆ Globecom 2014
 - ◆ ICC 2015
 - ◆ Beyond ICC 2015
 - Other Conferences
- ◆ Other activities/updates
- ◆ Questions & discussions

Trends and Highlights

- ◆ **Progress and improvements in TAOS Website**
 - Existing sections updated
 - New sections and content introduced
 - Webmaster appointed (Walter Cerroni)
 - New design and appearance anticipated during 2013
- ◆ TAOS' Access Networks and Systems (ANS) SAC Track
 - Submission figures restored in GC 2013, after occasional drop in ICC 2013
 - ◆ DSL submissions took the lead in ICC 2013
 - ◆ Wireless and optical submissions strike a balance, and take the lead, in GC 2013
- ◆ Green Communication Systems and Networks (GCSN) continues as the largest SAC Track
- ◆ Best Readings Project (Broadband Access) published
- ◆ **Four 2012 Awards** were presented in GC 2012 (Anaheim), one for each of our two SAC Tracks, one for Best Reading Project leadership, and one for retiring TAOS Vice Chair
- ◆ Membership: new blood continues to be introduced into TPCs, and into ICC/GC Co-Chairpersonship

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Budapest

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Conferences Update (1/12) GC 2012 (Anaheim)

- ◆ Stefano Bregni served as Conference Technical Program Vice-Chair
- ◆ SAC Access Track, chaired by Ravi Subrahmanyan, received 45 papers, distributed among technical sub-areas as shown in table here below
- ◆ SAC GCSN, chaired by Michael Devetsikiotis, received 112 papers
- ◆ ONS Symposium, Co-Chaired by Tarek El-Bawab, received 70 papers (more statistics next)

<u>SAC AN Track Statistics GC'12</u>	Optical	Wireless	Optical/Wireless Integration	xDSL	Cable (HFC & IPTV)	Others	Total
Submitted	2	21	2	9	0	11	45
Recommended for Acceptance	0	8	1	4	1	3	17

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Conferences Update (2/12) GC 2012 Anaheim (cont.)

- ◆ ONS Statistics
 - Number of TPC members: 84
 - Number of submitted papers: 70
 - Number of accepted papers: 27
 - Number of rejected papers: 43
 - Acceptance rate: 38.57%
 - Number of reviews/per paper: 3-5
 - Number of sessions: 5 (4 oral+1 Poster)
- ◆ Full-day Workshop on Flexible Optical Networks
 - Organized and Chaired by Filippo Cugini and Tarek El-Bawab
 - 10 papers submitted out of which 6 accepted + 1 invited, and 1 keynote
 - ◆ Networks, systems, technologies, and techno-economics
 - Academic and industrial (equipment vendors and operators) participation
 - ◆ Verizon, KDDI, NEC, Ericsson, Huawei, and Telefonica.
 - Final round-table with lively debate

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Conferences Update (3/12) ICC 2013 (Budapest, Hungary)

- ◆ SAC Access Track, chaired by Michael Peeters, received 13 papers, out of which 6 were accepted (46.2%)
 - Some track details shown next
- ◆ SAC GCSN, chaired by Athanassios Manikas, received 105 papers, out of which 41 papers were accepted (39%).
 - Some track details shown next
- ◆ ONS Symposium, co-chaired by Franco Callegati, received 78 papers, roughly: 48 in networks and 30 in systems
 - 31 accepted (39.7%), and 47 rejected
 - Some symposium details shown next
- ◆ Some **SAC Symposium** statistics:
 - Total number of SAC papers is 244 involving 804 authors (with academic majority):
 - ◆ 41% from Asia/Pacific (incl. 21.9% from China)
 - ◆ 35.8 from Europe, Middle East, and Africa
 - ◆ 20.4% for North America (12.8% US)
 - ◆ 2.6% from Latin America
 - Total of 96 SAC papers accepted out of 244 submitted (39.34%)
 - ◆ **Green Track papers constitute 42.7% of SAC's accepted papers**

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Conferences Update (4/12) ICC 2013 Budapest (cont.)

<u>SAC AN Track Statistics ICC'13</u>	Optical	Wireless	Optical/Wireless Integration	xDSL	Cable (HFC & IPTV)	Others	Total
Submitted	2	1	1	8	0	1	13
Recommended for Acceptance	0	0	0	6	0	0	6

- ◆ Access Track: See Table here above
- ◆ GCSN Track popular topics include *energy efficient optimizations for communications, signal processing algorithms and computing* (50 papers); *scheduling, and/or designs for green ICT* (39 papers); and *energy-efficiency in wireless sensor, ad-hoc, body-area, vehicular, or cellular networks* (37 papers)

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Conferences Update (5/12) ICC 2013 Budapest (cont.)

- ◆ More ONS Symposium Statistics:
 - Number of reviews per paper
 - ◆ 3 reviews 67
 - ◆ 4 reviews 10
 - ◆ 5 reviews 1
 - Geographical distribution (submitted / accepted)
 - ◆ Asia 21 7
 - ◆ North America 24 10
 - ◆ South America 2 0
 - ◆ Europe 21 8
 - ◆ Africa 2 0
 - ◆ Joint 8 6
 - Sessions
 - ◆ Spectrum Elastic Optical Networks
 - ◆ Transport, Grooming and Resilience
 - ◆ Free-Space Optical Communications
 - ◆ Passive Optical Networks and Access
 - ◆ Selected Areas in Optical Networking

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Conferences Update (6/12) GC 2013 (Atlanta, Georgia)

- ◆ **SAC Symposium** involves 1105 authors:
 - 41.6% from Asia/Pacific
 - 30.3 from Europe, Middle East, and Africa
 - 25.5% for North America (20.3% US)
 - 2.5% from Latin America
- ◆ SAC Access Track, chaired by Filippo Cugini, received 30 papers, out of which 10 are currently recommended for acceptance (33%). An average of 3.4 reviewers per paper provided (some statistics shown below)
- ◆ SAC GCSN, co-chaired by Stefano Bregni, received 93 papers

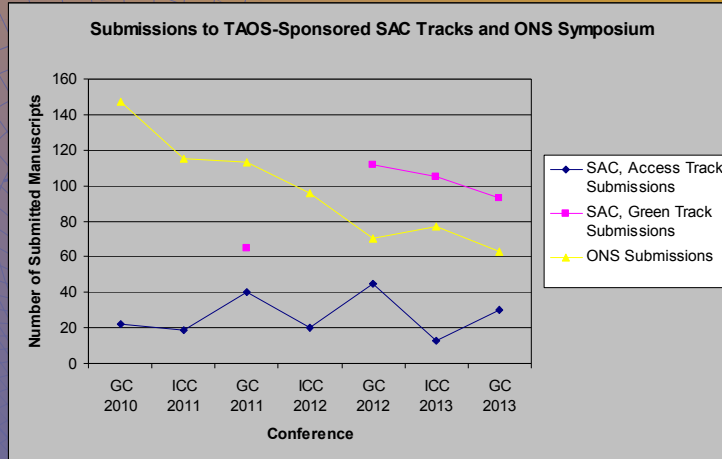
SAC AN Track Statistics ICC'13	Optical	Wireless	Optical/Wireless Integration	xDSL	Cable (HFC & IPTV)	Others	Total
Submitted	6	6	9	4	5	0	30
Recommended for Acceptance	2	2	2	2	2	0	10

Conferences Update (7/12) GC 2013 Atlanta (cont.)

- ◆ **ONS Symposium**, co-chaired by S. J. Ben Yoo
 - Symposium receive 63 papers (continuing decline)
 - Estimated: 50.6% in systems research and 49.4% in networks' research
 - Number of papers to be accepted not finalized yet (but 24 are estimated)
 - ◆ 12 in systems and 12 in networks

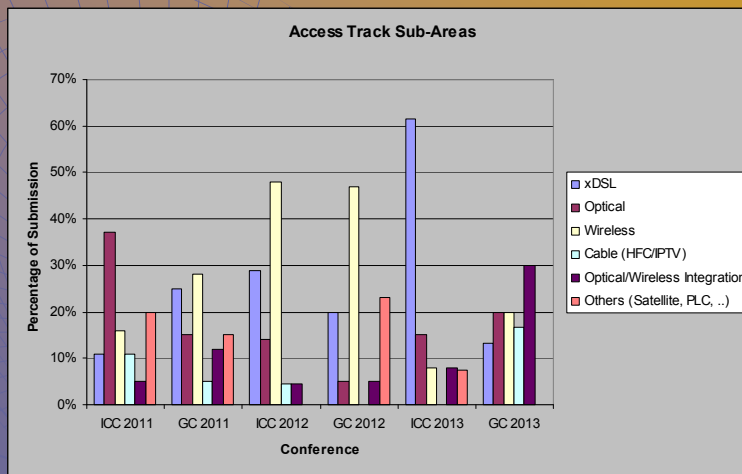
Conferences Update (8/12)

SAC & ONS Trends, 2010 thru end of 2013



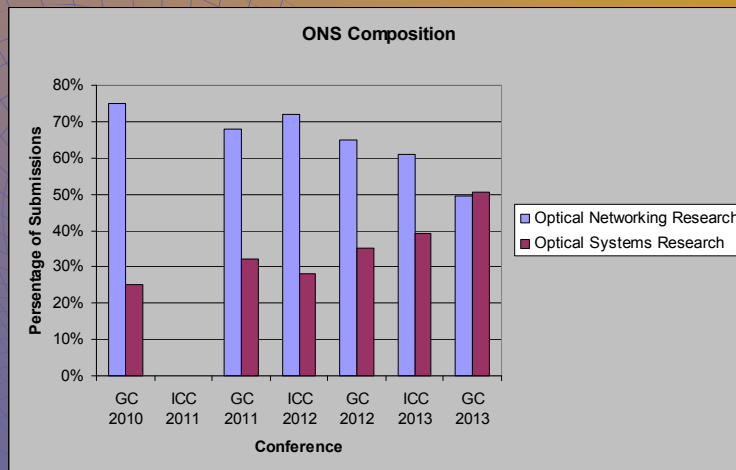
Conferences Update (9/12)

SAC Access Track: 2011 thru end of 2013



Conferences Update (10/12)

ONS- Networks versus Systems, 2011 thru end of 2013



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Conferences Update (11/12)

ICC & GC in the works

- ◆ ICC 2014 (Sidney, Australia), Co-Chairs:
 - Tarek El-Bawab for SAC ANS
 - Jaafar Elmighani for SAC GCSN
 - Philippe Perrier for ONS
- ◆ GC 2014 (Austin), Co-Chairs:
 - Frank Effenberger for SAC ANS
 - Fabrizio Granelli for SAC GCSN
- ◆ ICC 2015 (London), Nathan Gomes and Athanassios Manikas are serving as Conference TPC Chair. TAOS made nominations for our two SAC Tracks and for ONS
 - **New proposal for an "Optical Wireless Systems" Track was proposed by conference as part of a 13-track SAC Symposium, which prompted GITC discussions here in Budapest**
- ◆ GC 2015 (San Diego), ICC 2016 (Kuala Lumpur), and GC'2016 (Washington DC) Calls for nominations not issued yet

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Conferences Update (12/12) Other Conferences

- ◆ LATINCOM 2013
 - Michael Devetsikiotis serves as TPC Co-Chair
 - TPC members provided
- ◆ HONET 2013
 - Ahmed Kamal serves as TPC Chair
 - TPC members provided
- ◆ 2013 & 2014 NIST-ATIS-Telcordia Synchronization workshops
 - TAOS continue to support and contribute members to the steering group

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Other Activities/Updates (1/4)

- ◆ **TAOS is scheduled for recertification this year**
 - **Recertification questionnaire submitted on June 4, 2013**
- ◆ Please, have a look at TAOS' website (<http://committees.comsoc.org/taos/>) to see continuing updates and improvements
 - Contact TAOS' officers with your feedback
 - ◆ All suggestions are welcome
- ◆ Our Best-Readings project (Broadband Access) is the third project in this series to be published by ComSoc TCs, out of only 5 such projects so far
- ◆ We would like to continue our Awards program beyond 2012, and make hope to make it a tradition

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Other Activities/Updates (2/4)

- ◆ TAOS' members contributing ComSoc leadership in other areas (in technical/administrative capacities):
 - Stefano Bregni and Steve Gorshe BoG members at large
 - Steve Gorshe Director of Magazines (was EiC of IEEE Communication Magazine until December 2012)
 - Tarek El-Bawab Board Member in Education Board, and leads Work Group on Telecommunication Engineering Education in the US
 - Jaafar Elmighani Chair of a cross IEEE Societies Green ICT Working Group.
 - Michael Devetsikiotis Vice Chair of GITC
 - Tarek El-Bawab, Frank Effenberger and Ravi Subrahmanyam serve in IEEE Communication Magazine Editorial team
 - Athanassios Manikas served as Guest Editor for IEEE JSAC (2012)
 - Stefano Bregni serves in Ad Hoc Committee on Smart Grid Communications
 - Michael Devetsikiotis serves in Ad Hoc Committee on Cloud Communications and Networking
 - Ravi Subrahmanyam serves in Editorial Board of Communications Technology News (CTN) initiative

Other Activities/Updates (3/4)

- ◆ Other Activities:
 - As indicated earlier, two TAOS members (Nathan Gomez and Athanassios Manikas) are co-chairing ICC 2015 TPC
 - Athanassios Manikas
 - ◆ Editor: Book, research series in Communications and Signal Processing, World Scientific Publishing Co Ltd and Imperial College Press.
 - ◆ Serves in the Editorial Board of UK's IET (former IEE) and as guest editor for IET's J. Multisensor Signal Processing for Defence (2012)
 - ◆ Elected fellow of the Institute of Mathematics and its applications (May 2013)

Other Activities/Updates (4/4) We Continue to...

- ◆ Seek new volunteers to participate and enrich our scope of technical activities
 - From both industry and academia
 - From all over the world
 - **We Want to see Workshops, Tutorials, Panels, and special publication issues with industrial contributions in particular**
- ◆ While active in all technical areas of interest to our global community, we have special focus on Broadband Access and Green/Sustainable Communication/Networks as special themes at this point in time
- ◆ We solicit participation of colleagues from:
 - Wireless, Copper, & optical fields
 - Academia and industry (Telco, Cable, & utility companies)
 - Government and non-profit organizations

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Questions?

- ◆ Meeting Adjourned

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