



Technical Committee on Transmission, Access, and Optical Systems

Author: Tarek S. El-Bawab, Chair
Date/Time: Tuesday, December 7, 2010, 11:30 am
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

- Franco Callegati, Università di Bologna (UNIBO), Italy
- Filippo Cugini, CNIT, Italy
- Tee-Hiang Cheong, Nanyang Technological University, Singapore
- Izzai Darwazeh, University College London, UK
- Michael Devetsikiotis, North Carolina State University (NCSU), UK
- Tarek El-Bawab, Jackson State University (JSU), USA
- Ahmed Kamal, Iowa State University (ISU), USA
- Mark Karol, Telcordia, USA
- Pascal Lorenz, University of Haute Alsace, France
- Athanassios Manikas, Imperial College, UK
- Madjid Merabti, Liverpool John Moores University, UK
- Joel Rodrigues, University of Beira Interior, Portugal
- George Rouskas, North Carolina State University (NCSU), USA
- Abdallah Shami, The University of Western Ontario, Canada
- Joan Triay, University of Massachusetts Dartmouth, USA
- Vinod Vokkarane, University of Massachusetts Dartmouth, USA

2 Minutes of the Meeting

The meeting of the Transmission, Access and Optical Systems (TAOS) Technical Committee (TC) was held in the Gusman room of InterContinental Miami during the Globecom 2010 Conference. 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 ICC 2010, Cape Town, South Africa which is posted on TAOS web site was approved (<http://www.comsoc.org/~taos/>).

2.2 Presentation of the new TAOS Secretary

Tarek El-Bawab presented the bio of the new TAOS Secretary Michael Devetsikiotis (effective January 1, 2011).

2.3 Tribute to Paul Bonenfant

Paul Bonenfant was remembered as a ComSoc volunteer who dedicated a lot of time and effort to serve our community in general and the field of optical networks and systems in particular. A proposal has been made by TAOS to both GITC and ICC 2011 to recognize him (by a paper award for example).

2.4 Overview of current conference activities

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

- IEEE Latin-American Conference on Communications LATINCOM 2010, Bogota, Colombia, Sept. 14-17, 2010. TAOS endorsed this conference and provided representative TPC members.
- 16th European Wireless Conference (EW 2010). TAOS endorsed this conference and provided representative TPC members.
- The 2010 NIST-ATIS-Telcordia Synchronization workshop. TAOS endorsed this workshop and provided representative TPC members.
- The 14th International Conference on Optical Networking Design and Modeling, ONDM 2010. TAOS endorsed this conference and provided representative TPC members.
- Globecom 2010, Miami, Florida, USA, December 2010. TAOS sponsored two symposia and provided a Co-Chair for each. S. Bregni served as SAC ASN Co-Chair, and F. Cugini, served as ONS Co-Chair (in ONS, we collaborate with ONTC and TC-CS&R). TAOS provided several TPC members in both symposia.
- IEEE 7th International Symposium on High Capacity Optical Networks and Enabling Technologies (HONET 2010), Cairo, Egypt, December 19-21, 2010. TAOS endorsed this conference and Tarek El-Bawab served as Conference TPC co-chair. TAOS also provided representative TPC members.
- The 2011 NIST-ATIS-Telcordia Synchronization workshop. TAOS endorsed this workshop and provided representative TPC members.
- IEEE ICC 2011, Kyoto, Japan, June 2011. TAOS sponsored two symposia and provided one Co-Chair for each. Tarek El-Bawab served as Co-Chair of the Access Systems and Networks Track of SAC. Stefano Bregni served as Co-Chair of the

Optical Networks and Systems Symposium, in which we collaborate with ONTC and TC-CS&R.

- Globecom 2011, Houston, TX, USA. TAOS sponsored the SAC symposium (two tracks therein) and the ONS Symposium (in collaboration with ONTC and TC-CS&R). Three co-chairs have been serving on behalf of TAOS accordingly: Xavier Fernando (SAC, Access Systems and Networks Track Co-Chair) and Jaafar Elmirghani (SAC, Green Communication Systems & Networks Co-Chair) which is a new track introduced by TAOS. Finally, Jong-Dug Shin served as OSN Co-Chair. Several TPC members are provided.
- The 15th International Conference on Optical Networking Design and Modeling, ONDM 2011. TAOS endorsed this conference and provided representative TPC members.
- ICC 2012, Ottawa, Canada, June 2012. TAOS provides sponsorships for **three** Symposia which are SAC (Access Systems and Networks Track), ONS, and, for the first time, the Wireless Communications Symposium (WCS). A Co-Chair is serving in each: Jaafar Elmirghani (for SAC, Access Systems & Networks), Vinod Vokkarane (for ONS), and Jerry Gibson (for WCS). Several TPC members are provided.
- IEEE GLOBECOM 2012, Anaheim, CA, USA, December 2012. Stefano Bregni is serving as Technical Program Vice-Chair. TAOS also nominated three Co-Chairs: Ravi Subrahmanyam (for SAC, Access Systems and Networks), Michael Devetsikiotis (for SAC, Green Communication Systems & Networks), and Tarek El-Bawab (for ONS).

2.5 Special Publications by TAOS Members

IEEE Communications Magazine, Special Issue on Synchronization in Next Generation Networks, Guest Editors are 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. 14 papers submitted, out of which 5 accepted.

2.6 Standards Activities

Areas of activity include P1904.1 Service Interoperability of Ethernet PONs and the P1905.1 Standard for a Convergent Digital Home Network for Heterogeneous Technologies. Extracts from the December 2010 report of the Director of Standards (Curtis Siller) have been presented.

2.7 Miscellaneous

Broadband Access is identified as the current theme for TAOS and our community is encouraged to propose activities (workshops, tutorials, etc.) in numerous areas of this field. TAOS have contributed, and will continue, to the optical segment of this field. Contributions to other areas need to catch up. These include xDSL and Copper based activities (Tarek reached out to John Cioffi who recommended Stanford's George Ginis and Wonjong Rhee to take the lead in this field), and Broadband Wireless Access where potential candidate to lead efforts in this direction are being pursued too

Meeting adjourned at 12:30

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

GLOBECOM 2010 TC meeting,
Miami, Tuesday, Dec. 7, 2010

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

Agenda

- ◆ Welcome
- ◆ Attendants' Introductions
- ◆ Approval of previous minutes of meeting (ICC 2010, Cape Town)
- ◆ Introduction of Mike Devetsikiotis as new TAOS Secretary
- ◆ Remembering Paul Bonenfant
- ◆ Conference updates
 - GLOBECOM 2010
 - ICC 2011
 - GLOBECOM 2011
 - ICC 2012
 - GLOBECOM 2012
 - Along with other Conference Sponsorships
- ◆ Publications Updates
- ◆ Standards & industry activities
- ◆ Focus on Broadband Access
 - New theme for TAOS
 - Support for copper-based R&D activities
 - Support for broadband wireless activities
- ◆ Other items?
- ◆ Meeting adjourn

New List of TAOS Officers

- ◆ Chair
 - Tarek S. El-Bawab
- ◆ Vice Chair
 - Ravi Subrahmanyam
- ◆ Secretary
 - Michael Devetsikiotis
- ◆ Standards Liaison
 - Frank Effenberger

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Michael Devetsikiotis

- ◆ Dipl. Ing. in EE, Aristotle University of Thessaloniki (Greece) 1988, and M.Sc. & Ph.D. in EE, North Carolina State University, in 1990 and 1993, respectively.,
- ◆ Was with Carleton University, Canada (1993-1999)
- ◆ With NCSU since October 2000, where is currently Professor.
- ◆ Associate Editor of the IEEE Communications Letters, Area Editor of the ACM Transactions on Modeling and Computer Simulation. Member, Editorial boards of the International Journal of Simulation and Process Modeling, the IEEE Communications Surveys and Tutorials, and the Journal of Internet Engineering.
- ◆ Co-chair of several diverse ICC/GC Symposia (2002-2011)
- ◆ Past Chair, CSIM and Voting member-at-large of the Communications Society Education Board and the Globecom-ICC Technical Committee (GITC).

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Paul Bonenfant

- ◆ Died on Sept. 27, 2010 (at age 42).
- ◆ Born and raised in New York State
- ◆ Graduate of California Institute of Technology
 - B.Sc., M.Sc.
- ◆ ~ 20 very successful in the Telecom industry
 - Bellcore, Lucent, Mahi Networks, and Photuris Inc.
 - Most recently in equity research (Morgan Keegan since 2005).
- ◆ A man of great character, his life was marked by honesty, integrity and highest regard for everyone he met. Paul is survived by his wife, Maria; his children, Olivia and Luke
(www.legacy.com/obituaries/app/obituary.aspx?n=paul-a-bonenfant&pid=145713837,
www.osa.org/About_Osa/Newsroom/News_Releases/Releases/09.2010/Paul_Bonenfant.aspx)



Conference Sponsorships and Nominations (1/3)

- ◆ LATINCOM 2010
 - TAOS contributed TPC members
- ◆ 16th European Wireless Conference (EW 2010):
 - TAOS contributed TPC members
- ◆ 2010 NIST-ATIS-Telcordia Synchronization workshop
 - TAOS contributed TPC members
- ◆ ONDM 2010
 - TAOS contributed TPC members
- ◆ GC 2010
 - S. Bregni, SAC ASN Co-Chair.
 - F. Cugini, ONS Co-Chair
- ◆ HONET 2010
 - T. El-Bawab, TPC Co-Chair

Conference Sponsorships and Nominations (2/3)

- ◆ 2011 NIST-ATIS-Telcordia Synchronization workshop
 - TAOS contributed TPC members
- ◆ ICC 2011
 - T. El-Bawab, SAC ANS Co-Chair
 - ◆ 19 papers [7 optical, 3 wireless, 1 optical/wireless integration, 2 xDSL, 2 Cable (HFC and IPTV), 2 PLC, 1 satellite, and 1 other]
 - ◆ 7 accepted [4 optical, 1 optical/wireless integration, 1 DSL, 1 PLC]
 - S. Bregni, ONS Co-chair
- ◆ GC 2011
 - Xavier Fernando: SAC ASN Co-Chair
 - Jaafar Elmirghani: SAC Green Communication Systems & Networks Co-Chair
 - ◆ New track. now in the CFP phase, set up on EDAS, about 25 TPC members invited, out of which 17 accepted so far
 - ◆ The track is ahead of the other symposia. Submission deadline is 1 March 2011
 - Jong-Dug Shin, OSN Co-Chair
 - ◆ CFP being written up

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Conference Sponsorships and Nominations (3/3)

- ◆ ONDM 2011
 - TAOS contributed TPC members
- ◆ ICC 2012
 - Michael Devetsikiotis, SAC ASN Co-Chair
 - Jaafar Elmirghani, ONS Co-Chair
- ◆ GC 2012
 - S. Bregni, TP VC
 - Co-Chairs nominated, approval in the process

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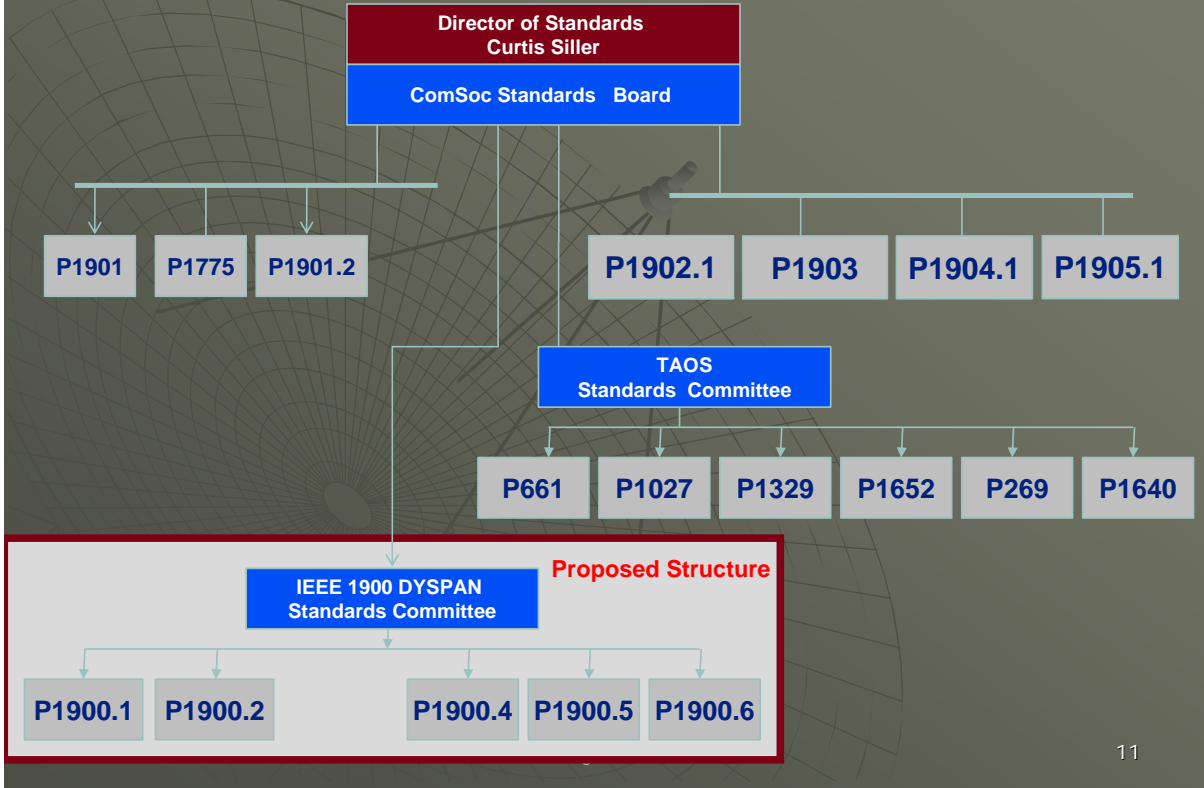
Publications

- ◆ IEEE Communications Magazine, Special Issue on Synchronization in Next Generation Networks, Guest Editors Ravi Subrahmanyan & Stefano Bregni
 - Scheduled for February 2011
 - Collection of papers providing a snapshot of the state of the art in synchronization as it applies to frequency and phase transfer in next generation networks, including standards activity.
 - 14 papers submitted, out of which 5 accepted:
 - ◆ 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

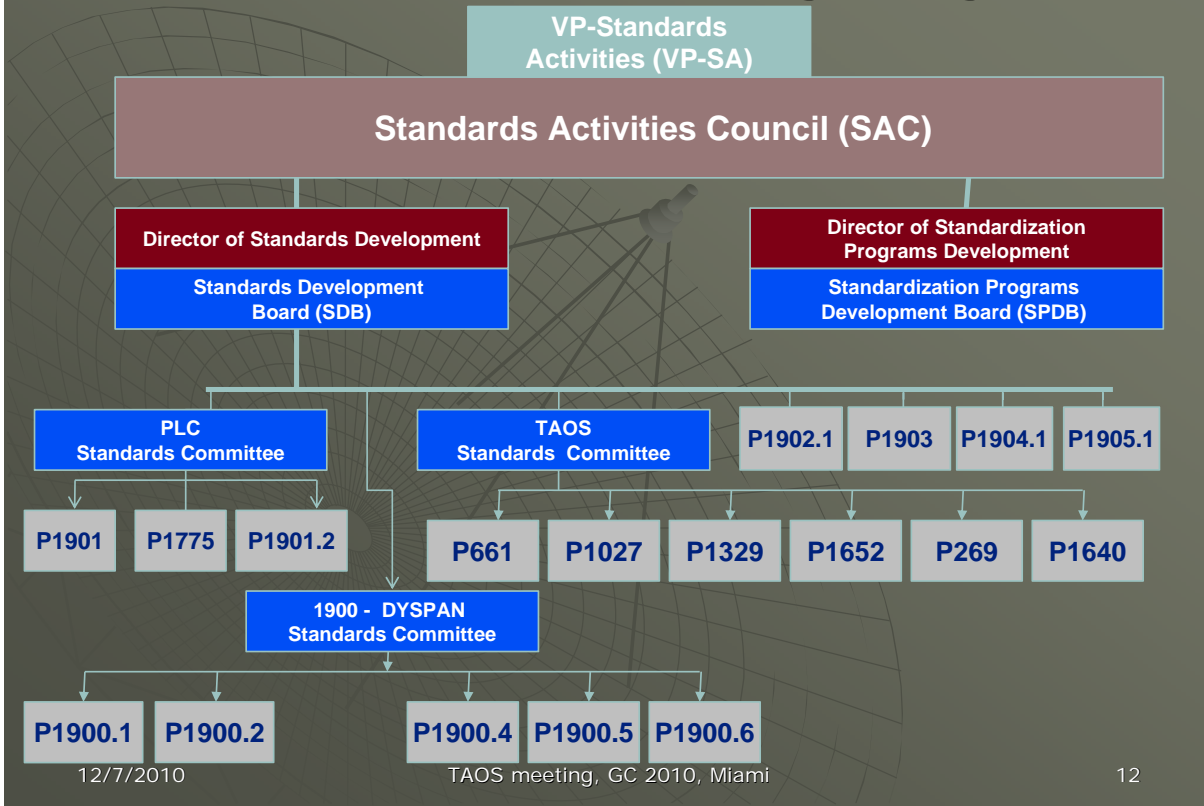
Standards Activities

- ◆ Areas of TAOS activity
 - P1904.1 Service Interoperability of Ethernet PONs
 - P1905.1 Standard for a Convergent Digital Home Network for Heterogeneous Technologies
- ◆ The following slides from Curtis Siller's report

ComSoc Standards (2010-2011)



Proposed Restructure – Beginning 2012



Broadband Access New Theme for TAOS

- ◆ xDSL and Copper based activities
 - GC/ICC Panels, Tutorials, and Workshops
 - Talked with John Cioffi and identified candidates to take the lead
 - ◆ George Ginis
 - ◆ Wonjong Rhee
- ◆ Broadband Wireless Access
 - Potential candidates are being identified to take the lead
 - Field is wide open and more volunteers are desirable

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Other Agenda Items?

- ◆ Questions?



- ◆ Adjourn!

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