



Technical Committee on Transmission, Access, and Optical Systems

Authors: Michael Devetsikiotis, Ravi Subrahmanyam, and Tarek S. El-Bawab
Date/Time: Tuesday, June 12, 2012, 2:00 pm - 4:00 pm
Meeting Location: Westin Ottawa, British Columbia Room, Ottawa, Canada
Officers: Tarek S. El-Bawab, Chair, telbawab@ieee.org
Ravi Subrahmanyam, Vice Chair, Ravi.Subrahmanyam@ieee.org
Michael Devetsikiotis, Secretary, mdevets@ncsu.edu

Meeting was called to order at 2:07 pm

1 Participants

- Fabrizio Granelli, University of Trento, Italy
- Xiali Hei, Temple University, USA
- Ahmed Kamal, Iowa State University (ISU), USA
- Michael Mayer, Ciena, Canada
- Maode Ma, Nanyang Technological University, Singapore
- Abdalla Shami, The University of Western Ontario
- Michael Timmers, Alcatel-Lucent
- Steve Weinstein, CTTC (consultant), USA
- Marc Willerton, Imperial College, UK
- Lian Zhao, Ryerson University, Canada
- Stefano Bregni, Politecnico di Milano, Italy
- Steve Gorshe, PMC Sierra, USA
- Tarek El-Bawab, Jackson State University (JSU), USA
- Michael Devetsikiotis, North Carolina State University (NCSU), USA
- Ravi Subrahmanyam, Immedia Semiconductor Corp., USA

2 Minutes of the Meeting

The meeting of the Transmission, Access, and Optical Systems (TAOS) Technical Committee (TC) was held in the British Columbia Room of the Westin Hotel, Ottawa, Canada, during the IEEE International Communications Conference (ICC 2012). 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 GC 2011, in Houston, TX, posted on the TAOS web site, are approved (<http://www.comsoc.org/~taos/>)

2.2 Highlights and Trends

TAOS' Access Networks and Systems (ANS) Track becoming inherent part of the ICC/GC SAC Symposium, with large number of submissions and diversified technical scope. Also, our new SAC Track on Green Communication Systems and Networks (GCSN) has been very successful and becoming inherent part of the same.

Submission figures to our SAC tracks continue to rise, reaching new peaks for GC 2012. Industrial participation appears to be well above ICC/GC average. The technical scope of ANS is diversified, from wireline to wireless, and the latter now becoming a new theme. There has been a proposal to elevate GCSN to a stand alone symposium. This was discussed at GITC in Houston and open for future consideration. Two TAOS Best Paper award programs are established, one for each of our two SAC Tracks. First time to award these will be in GC 2012.

TAOS now nominates four GC/ICC technical chairs and co-chairs and a fifth nomination was made to ICC 2014: Access Track, Green Track, Optical Networks and Systems, Wireless Communications, and Mobile and Wireless Networking Symposium.

In terms of membership enrichment, new blood continues to be introduced into TPCs and ICC/GC co-chairs and sponsorships, as we continue to look for more. We continue to look for more. We are continuing also the process of restructuring, renovating, and updating TAOS website (<http://committees.comsoc.org/taos/>)

2.3 Overview of current conference activities

TOAS Chair provided an update of the TC's involvement in IEEE ComSoc conferences, and ComSoc sponsored conferences. We endorse a number of activities and currently nominates co-chairs for three ICC/Globecom technical symposia and provide TPC members for them: SAC (two tracks), WCS, and ONS. TAOS also provides TPC members to several other ComSoc-sponsored conferences:

- GC 2011 (Houston): X. Fernando served as SAC ASN Co-Chair, J. Elmirghani served as SAC GCSN Track Co-Chair (new) and J-D Shin served as OSN Co-Chair. Some details and statistics are per attached slides (slide # 5). Steve Gorshe remarked that the cable community has historically worked separately.
- 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. Some details and statistics are per attached slides (slide #7). F. Cugini and T. El-Bawab are also organizing and will co-chair the workshop on Flexible Optical Networks.
- ICC 2013 (Budapest): A. Manikas is serving as SAC GCSN co-chair, Michael Peeters serving as SAC ASN co-chair, and Franco Callegati as ONS co-chair.
- GC 2013 (Atlanta): Filippo Cugini is serving as SAC ANS track co-chair; S. Bregni is serving as SAC GCSN co-chair, and S. J. Ben Yoo is serving as ONS co-chair.
- ICC 2014 (Sydney, Australia): TAOS nominated Tarek El-Bawab as SAC ANS track co-chair; Jaafar Elmighani as SAC GCSN co-chair, Fabrizio Granelli as WCS co-chair, Ahmed Kamal as MWNS co-chair, and Philippe Perrier as ONS co-chair.
- GC 2014 (Austin), ICC 2015 (London) and ICC 2016 (Kuala Lumpur): Calls for nominations not issued yet.

Statistics and trends concerning the two SAC Tracks and the ONS Symposium have been displayed and discussed in the meeting. These are included in the attached slides (slides 8, 9, and 10)

- 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 providing TPC membership
- ONDM 2011: TAOS continued support and contributing TPC membership
- HONET 2011: TAOS continued support and contributing TPC membership (S. Bregni, A. Kamal and F. Cugini).
- FITCE 2012: TAOS supports this conference and contributed TPC membership with Hakki Cankaya, Mamoun Guenash and Luca Valcarengi.
- 2012 NIST-ATIS-Telcordia Synchronization workshop. TAOS continue to support and contribute TPC members. Ravi remarked that Telcordia is a “for profit” and therefore there is no IEEE official sponsorship.

2.4 TAOS Best readings Project

The TAOS best readings project was launched after GC 2011, focusing on Broadband Access. It is now close to completion. The project group is led by Frank Effenberger (details on slide #13, attached).

2.5 Special Publications

A follow up of the special issue/section on Synchronization over Ethernet and IP in Next Generation Networks is close to completion. The original special IEEE Communications Magazine issue had appeared in February 2011 and was guest edited by S. Bregni and R. Subrahmanyam. More details can be found on the attached slides (slide #14).

2.6 Standards Activities

Motions discussed in the previous (GC'11) meeting have been approved after updates by the ComSoc BoG meeting in Houston. Steve Weinstein inquired about TAOS participation in standards activities, e.g., CPOW. Tarek discussed recent involvement in BoG's Galli's motions.

2.7 Other activities and updates

- Stefano Bregni and Steve Gorshe are serving as BoG members at large.
- Michael Devetsikiotis is serving as vice chair of the GITC.
- Tarek El-Bawab serving as member of the ComSoc Education Board and continues to lead the task force (work group) on Telecommunications Engineering Education in the US.
- 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.
- Ravi Subrahmanyam is serving as Editorial Board Member of ComSoc's new Communications Technology News (CTN) initiative.
- Mailing list's policy enforcement has been re-emphasized. It has been discovered also that the list include some dated e-mail addresses which have not been detected because they don't bounce.
- TAOS' Sub-Committees issue has been briefly addressed. Per discussions TAOS Chair had with Mark Karol and Len Cimini (current and Future VP, Technical Activities), the new Cable Sub-Committee is no longer a Sub-TC of TAOS
- We continue to seeking new blood and volunteers to participate and enrich our scope of work and technical activities. Broadband Access is key theme for TAOS at this point in time, and we are actively promoting Green and Sustainable Green Communication activities
- Steve Weinstein announced his new book on PONS in the IEEE/Wiley "handbook" series. After checking with ComSoc mail-list policy, the book shall be advertised over TAOS list

Meeting adjourned at 2:53 pm

Attachment: Meeting Slides

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

ICC 2012 TC meeting,
Ottawa, Canada,
Tuesday, June 12, 2012
Westin Ottawa Hotel, The British Columbia Room,
14:00-16:00 pm

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

Agenda

- ◆ Welcome & introductions
- ◆ Approval of the GLOBECOM 2011 minutes of meeting (Houston)
- ◆ Highlights and Trends
- ◆ Conferences update (sponsorships, nominations, and statistics)
 - GLOBECOM 2011
 - ICC 2012
 - GLOBECOM 2012
 - ICC 2013
 - Globecom 2013
 - ICC 2014
 - ICC and Globecom conferences in the works
 - Other Conferences
- ◆ TAOS Best Readings Project
- ◆ Special Publications
- ◆ Other activities/updates
- ◆ Questions & discussions

Highlights and Trends (1/2)

- ◆ TAOS' GC/ICC Access Networks and Systems (ANS) and Green Communication Systems and Networks (GCSN) Tracks becoming inherent part of SAC
 - Submission figures continue to rise; reached peaks in GC'2012
 - Industrial participation well above ICC/GC average
 - Technical scope of ANS (sometimes ASN) diversified, extending from wire-line (traditional) to wireless, which have become main theme now!
 - Proposal to elevate GCSN to a stand-alone GC/ICC Symposium has been submitted and discussed in GITC yesterday
 - ◆ Open for future consideration
- ◆ Two "TAOS Best Paper" award programs, one for each of our two SAC Tracks, are designed. First time to grant these awards will be in Globecom 2012

Highlights and Trends (2/2)

- ◆ TAOS now nominates **Four** GC/ICC Technical Chairs/Co-Chairs; and a fifth nomination have been made to ICC 2014 (MWNS):
 - Access Track (SAC)
 - Green Track (SAC)
 - Optical Networks and Systems (ONS) Symposium
 - Wireless Communications Symposium (WCS)
 - Mobile and Wireless Networking Symposium (MWNS)
- ◆ Membership enrichment: new blood continue to be introduced into TPCs, and ICC/GC Co-Chairs, and sponsorships.
 - Looking for more!
- ◆ Website (<http://committees.comsoc.org/taos/>) restructuring, update, and renovation continue
 - Parts done,
 - others underway
 - Suggestions and contributions are welcome!

Conferences Update - Sponsorships, Nominations, and Statistics - (1/8)

- ◆ GC 2011 (Houston): X. Fernando served as SAC Access Network Co-Chair, J. Elmirghani served as SAC GCSN Track Co-Chair (new) and J-D Shin served as OSN Co-Chair
 - SAC AN track statistics depicted in the table below. 3.8 reviews/paper provided. Acceptance rate is 35%
 - SAC GCSN Track received 65 papers, excellent figure for its first appearance. > 3 reviews/paper. Acceptance rate 35%
 - ONS received 113 papers, out of which ~77 papers are in networks and ~36 papers (32%) in systems. 40 papers accepted (16 in systems' research, 40%). 3.8 reviews/paper provided. Acceptance rate is 35.4%.

<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

06/12/2012

TAOS meeting, ICC 2012, Ottawa

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Conferences Update (2/8)

- ◆ 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 21 papers, 10 were accepted (48%). Some statistics are in the table below. At least 3 reviews/paper were provided
 - ONS received 96 papers, out of which ~27 are systems' papers (28%). 35 papers accepted (30 oral + 5 posters), i.e. 36%. 3.73 reviews were provided per paper.
 - WCS received 510 papers, out of which ~190 papers were accepted (%37.3). At least 3 reviews/paper were provided

<u>SAC Access Track Statistics ICC'12</u>	Optical	Wireless	Optical/Wireless Integration	xDSL	Cable (HFC & IPTV)	Total
Submitted	3	10	1	6	1	21
Recommended for Acceptance	1	3	0	5	1	10

06/12/2012

TAOS meeting, ICC 2012, Ottawa

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Conferences Update (3/8)

- ◆ GC 2012 (Anaheim), S. Bregni is serving as Conference Technical Program Vice-Chair
 - SAC Access Track, chaired by R. Subrahmanyam, received 45 papers. Distribution among technical sub-areas in table below
 - SAC GCSN, chaired by M. Devetsikiotis, received 112 papers
 - ONS Symposium, Co-Chaired by T. El-Bawab, received 70 papers
- ◆ Final paper selection is still ongoing and a conference acceptance rate of 36% is anticipated
- ◆ [Workshop on Flexible Optical Networks](#) organized by F. Cugini and T. El-Bawab

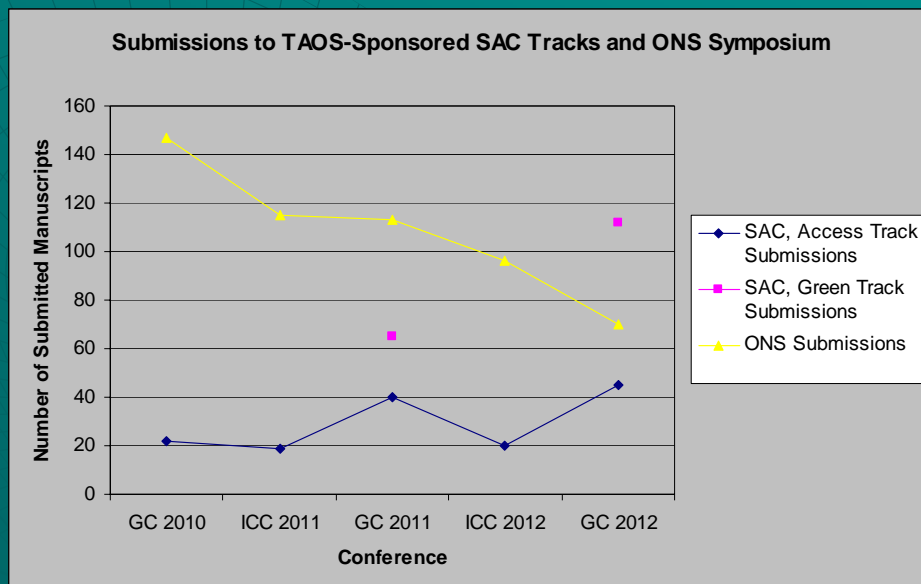
<u>SAC AN Track Statistics GC'12</u>	Optical	Wireless	Optical/Wireless Integration	xDSL	Cable (HFC & IPTV)	Others	Total
Submitted	2	21	2	9	0	11	45
Recommended for Acceptance	0	TBD	TBD	TBD	0	TBD	36% acceptance rate anticipated

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TAOS meeting, ICC 2012, Ottawa

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Conferences Update (4/8) SAC & ONS Trends, 2010-2012

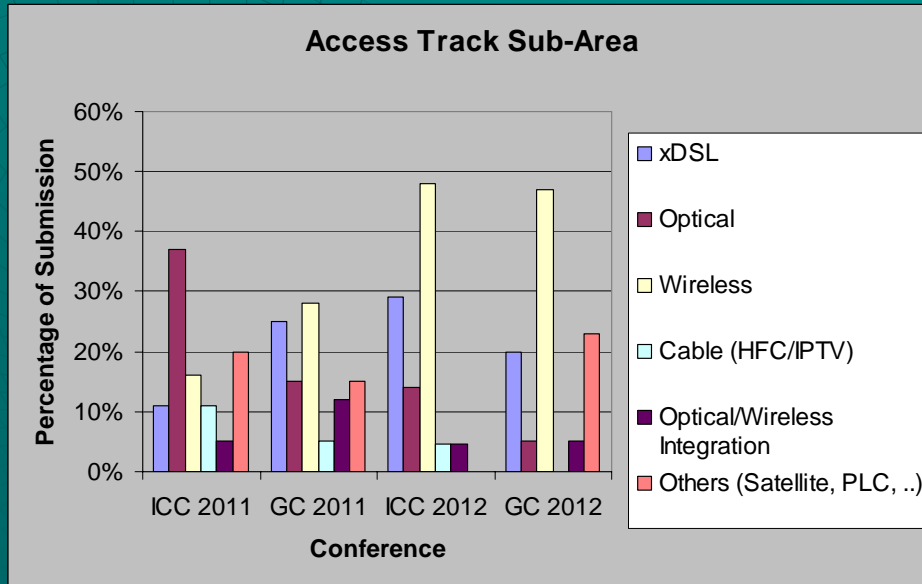


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TAOS meeting, ICC 2012, Ottawa

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Conferences Update (5/8) SAC Access Track Compositions, 2011-2012

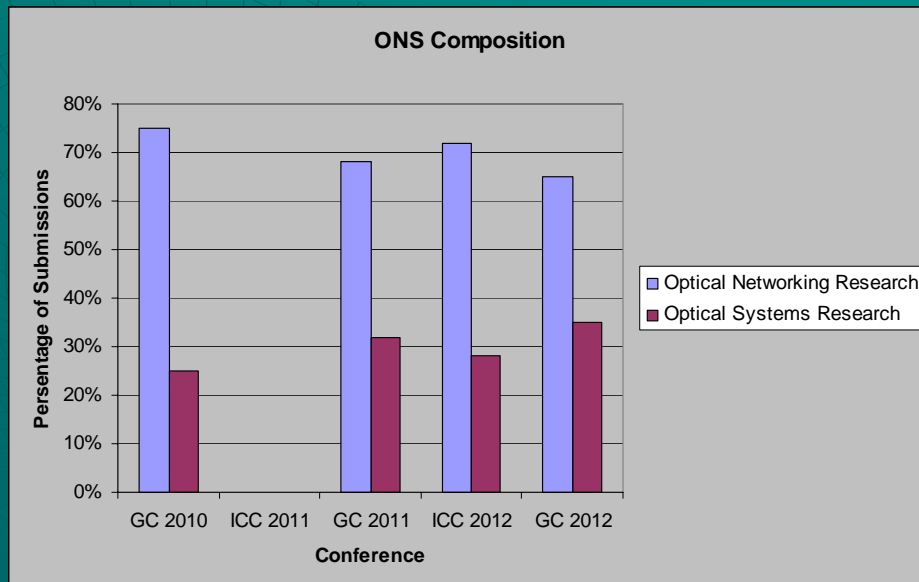


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TAOS meeting, ICC 2012, Ottawa

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Conferences Update (6/8) ONS- Networks versus Systems, 2011-2012



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TAOS meeting, ICC 2012, Ottawa

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Conferences Update (7/8)

ICC & GC in the works

- ◆ ICC 2013 (Budapest, Hungary), the following are serving as Co-Chairs:
 - Michael Peeters for SAC ANS,
 - A. Manikas for SAC GCSN,
 - Franco Callegati for ONS
- ◆ GC 2013 (Atlanta, GA, USA), the following are serving as Co-Chairs:
 - Filippo Cugini for SAC ANS Track,
 - Stefano Bregni for SAC GCSN
 - S. J. Ben Yoo for ONS Symposium
- ◆ ICC 2014 (Sidney, Australia), TAOS nominated:
 - Tarek El-Bawab for SAC ANS
 - Jaafar Elmighani for SAC GCSN
 - Fabrizio Granelli for WCS
 - Ahmed Kamal for MWNS
 - Philippe Perrier for ONS
- ◆ GC 2014 (Austin), ICC 2015 (London), and ICC 2016 (Kuala Lumpur) Calls for nominations not issued yet

Conferences Update (8/8)

Other Conferences

- ◆ 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)
- ◆ 2012 NIST-ATIS-Telcordia Synchronization workshop
 - TAOS continue to support and contribute TPC members

TAOS Best Readings Project

- ◆ TAOS' "Best Readings" Project was launched after Globecom 2011, focusing on Broadband Access
- ◆ Project close to completion
- ◆ Project Group led by Frank Effenberger, and composed of:
 - Dong Wei, Huawei technologies
 - Junichi Kani, NTT Labs
 - Thomas Pfeiffer, Alcatel Lucent
 - Pat Ianonne, AT&T Labs
 - Changhee Lee, LG-Ericsson
 - Neda Cvijetic, NEC Labs USA
 - Thomas Banwell, Applied Communication Sciences
 - Fabrizio Granelli, University of Trento

Special Publications

- ◆ A follow up of the Feb. 2011 Special IEEE Communications Magazine issue/section on Synchronization, Guest Edited by S. Bregni and R. Subrahmanyam, is close to completion
 - Three articles have been accepted.
 - Publication scheme not finalized yet (special section/issue versus individual articles).
 - Papers cover the following areas:
 - ◆ 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

Other Activities/Updates (1/3)

- ◆ Standards Update
 - Motions discussed in our previous (GC'11) meeting have been approved, after updates, by the ComSoc BoG meeting in Houston
- ◆ TAOS' members contributing leadership to other areas of ComSoc business
 - Stefano Bregni and Steve Gorshe as BoG members at large
 - ◆ Stefano serves currently and running for second term
 - ◆ Steve served 2011, and **nominated by TAOS for next term**
 - Michael Devetsikiotis serves as Vice Chair of GITC
 - Tarek El-Bawab serves as Board Member in the ComSoc Education Board, and also continues to lead the Task Force (work Group) on Telecommunication Engineering Education in the US

Other Activities/Updates (2/3)

- ◆ TAOS' members contributing leadership to other areas of ComSoc business (cont.)
 - 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 as Editorial Board Member of ComSoc's new Communications Technology News (CTN) initiative
- ◆ Mailing list
 - Policy enforcement
 - Dated addresses
- ◆ Soliciting your suggestions and recommendations in regards to improving TAOS website

Other Activities/Updates (3/3) 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 Key theme for TAOS at this point in time
 - One of the most active area of research
 - One of the most important areas of current industrial interest
 - Wireless, Copper, and optical based access; and Telco, Cable, utility companies
- ◆ Promote Green and Sustainable Green Communication activities

Questions?



◆ Adjourn!