



## Technical Committee on Transmission, Access, and Optical Systems

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**Authors:** Ahmed E. Kamal, Athanassios Manikas and Fabrizio Granelli

**Date/Time:** Wed, 10th June 2015, 1:00 pm – 2:30 pm

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**Meeting Location:** Capital Lounge Rooms 5 & 6, ICC, London, U.K.

**Officers:** Ahmed E. Kamal, Chair, [kamal@iastate.edu](mailto:kamal@iastate.edu)  
Athanassios Manikas, Vice-Chair, [a.manikas@imperial.ac.uk](mailto:a.manikas@imperial.ac.uk)  
Fabrizio Granelli, Secretary, [granelli@disi.unitn.it](mailto:granelli@disi.unitn.it)

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Meeting was called to order at 1:00 pm

### 1. Participants (33)

- Fabrizio Granelli, University of Trento, Italy
- Tarek El-Bawab, Jackson State University (JSU), USA
- Yezi Huang, Lund University, Sweden
- Cicek Cavdar, KTH, Sweden
- Mauro Biagi, Università Sapienza, Rome, Italy
- Martin Reisslein, Arizona State University, USA
- John Mitchell, UCL, UK
- George Rouskas, North Carolina State University, USA
- Maite Brandt Pearce, University of Virginia (UVA), USA
- Javier Matamoros, CTTC, Spain
- Jochen Maes, Alcatel-Lucent Bell Labs, Belgium
- Carla Raffaelli, University of Bologna, Italy
- Walter Cerroni, University of Bologna, Italy
- Luca Valcarenghi, Scuola Superiore S'Anna, Italy
- Alister Burr, University of York, UK
- Jean Armstrong, Monash University, Australia

- Mamoun Guenach, Alcatel-Lucent Bell Labs, Belgium
- Steve Hranolovic, McMaster University, Canada
- Nathan Gomes, University of Kent, UK
- Vidhya Sridhar, Imperial College London, UK
- Zexi Fang, Imperial College London, UK
- Akindaying Akiabiji, Imperial College London, UK
- He Ren, Imperial College London, UK
- Thibaud Gabillard, Imperial College London, UK
- Wai Peng Ng, Northumbria University, UK
- Lan Wang, University of Huddersfield, UK
- Mohamed Y. Selim, Iowa State University, USA
- Abdukadir Celik, Iowa State University, USA
- Jaafar Elmirghani, University of Leeds, UK
- Athanassios Manikas, Imperial College London, UK
- Ahmed Kamal, Iowa State University, USA
- Hakki Cankaya, Fujitsu Technology, USA (\*)
- Filippo Cugini, CNIT, Italy (\*)
- Franco Callegati, University of Bologna, Italy (\*)

(\*) online participation

## **2. Introduction**

The Chair Ahmed Kamal welcomed all participants and outlined the agenda. First, the attendees were self-introduced. Then, the attached slides were presented by the Chair and discussed item-by-item.

## **3. Approval of the Globecom 2014 Minutes**

Mauro Biagi proposed a modification to the minutes (to substitute his name in place of “Paolo Monti”. A motion was made by Fabrizio Granelli to approve the minutes, the draft of which is posted on TAOS website ([www.comsoc.org/~taos](http://www.comsoc.org/~taos)), amended with such modification. The motion was seconded by Jean Armstrong and the minutes were approved without further remarks.

## **4. Highlights and Trends**

Ahmed informed the attendees about a number of developments and in particular:

- The new TAOS website which has been fully functional since January 2015
- The third issue of TAOS' Newsletter which was released in May 31, 2015
- The four-year-old successful themes, associated with two GC/ICC SAC Tracks:
  - Broadband Access (Access Networks and Systems, ASN)
  - Green Communications Systems and Networks (GCSN)
- The Green Communication Systems and Networks Track which has been elevated to a separate Symposium starting IEEE ICC 2016 in Kuala Lumpur, Malaysia
- The continuation of GC/ICC's ONS sponsorship

Additional information is reported in Slide # 3.

## 5. Conference updates

Main GC/ICC submission trends have not significantly changed. ONS continues to be at the lower end of symposia submissions. On the other hand, the SAC Track on Green Communication Systems and Networks has the largest number of submissions in SAC and was elevated to a symposium during last GITC meeting in GC'2014. In ICC 2015 TAOS sponsored additional events:

- The 1<sup>st</sup> IEEE Workshop on Visible Light Communications and Networking (VLCN), Chaired by Mauro Biagi, Anna Maria Vegni, and Zabih Ghassemlooy (around 50 attendees)
- 2 Tutorials: "Greening Cloud Networks", By Jaafar Elmirghani (30+ attendees) and "Optical Wireless" by Maite Brandt-Pearce, Zhengyuan (Daniel) Xu and Steve Hranilovic (23 registered attendees)

More information is provided in Slides # 4 to # 12.

## 6. Other Activities/Updates

Contributions of TAOS members to current ComSoc leadership have been stated as follows:

- Stefano Bregni, Tarek El-Bawab, and Steve Gorshe serve in ComSoc Board of Governors
- Stefano Bregni is Vice President, Members Relations
- Tarek El-Bawab is Director, Conference Operations
- Steve Gorshe is Director of Magazines
- Michael Devetsikiotis is Chair of GITC, Fabrizio Granelli is MAL for 2014-15
- Tarek El-Bawab, Michael Devetsikiotis, and Fabrizio Granelli are Board Members, Education and Training Board (ETB)

The ComSoc Green ICT initiative was successful in Phase I funding (by IEEE). The initiative is now with Comsoc and Co-Chaired by Jaafar Elmirghani. Furthermore, Tarek El-Bawab represents TAOS in this activity. More information is provided in the following website: <http://greenict.ieee.org>

In addition, TAOS is contributing to the Distinguished Lecturers (DL) program, with Jaafar Elmirghani, Fabrizio Granelli (2nd term) and Anura Jayasumana.

Fabrizio Granelli represents TAOS in ComSoc Rapid standardization activity, and Chairs the Research Group on Software Defined and Virtualized Wireless Access. Stefano Bregni serves in Ad Hoc Committee on Smart Grid Communications and Michael Devetsikiotis serves in Ad Hoc Committee on Cloud Communications and Networking.

Emphasis has been given, once again, on the TC's continuing policy to look for new volunteers and activists to contribute and lead ComSoc activities.

For more information, please see Slides # 13 to # 16.

## 7 Awards

The Best Paper Award in the ICC 2015's Access Networks and Systems (ANS) Track, Symposium on Selected Areas in Communications (SAC) was presented to the paper: "*Mitigating Disorderly Leaving Events in G.fast*", authored by:

Yezi Huang, Lund University, Sweden  
Thomas Magesacher, Lund University, Sweden  
Eduardo Medeiros, Lund University, Sweden  
Chenguang Lu, Ericsson Research, Sweden  
Per-Erik Eriksson, Ericsson Research, Sweden  
Per Ödling, Lund University, Sweden

The TAOS Best Paper Award in the ICC 2015's Green Communication Systems and Networks (GCSN) Track, Symposium on Selected Areas in Communications (SAC) was presented to the paper: "*On the Impact of Correlated Sampling Processes in WSNs with Energy-neutral Operation*", authored by:

Javier Matamoros, Centre Tecnologic de Telecomunicacions de Catalunya, Spain  
Miguel Calvo-Fullana, Centre Tecnologic de Telecomunicacions de Catalunya, Spain  
Carles Antón-Haro, Centre Tecnologic de Telecomunicacions de Catalunya, Spain

The TAOS Service Award was presented to Jaafar Elmirghani, in recognition of his leadership and contribution to the area of green communications.

The meeting was adjourned at 1:45 pm

Attachments: Meeting Slides

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

ICC 2015 TC meeting,  
London, UK  
Wednesday June 10, 2015  
Excel Convention Center  
Capital Lounge 5 & 6, Second Floor  
13:00 – 14:30

Ahmed E. Kamal  
Chair, TAOS

## Agenda

- ◆ Welcome and Introductions
- ◆ Approval of the Globecom 2014 minutes of meeting (Austin)
- ◆ Highlights and Trends
- ◆ Conferences update (sponsorships and statistics)
  - Globecom 2014, ICC 2015, and Globecom 2015
  - ICC/Globecom statistics (2010-2015)
  - ICC and Globecom conferences in the works
    - ◆ Globecom 2015
    - ◆ ICC 2016
    - ◆ Globecom 2016
    - ◆ ICC 2017
    - ◆ Beyond ICC 2017
  - Other Conferences (Including TCS)
- ◆ Other Activities/Updates
- ◆ TAOS Best Paper Awards
- ◆ TAOS Service Award

## Highlights and Trends

- ◆ **New TAOS website has been fully functional starting 2015**
- ◆ **Third issue of TAOS' Newsletter released on May 31, 2015**
- ◆ **Four-year-old successful themes, associated with two GC/ICC SAC Tracks:**
  - **Broadband Access (Access Networks and Systems, ASN)**
  - **Green Communication Systems and Networks (GCSN)**
    - ◆ **GCSN has been elevated to a separate Symposium starting ICC 2016 in Kuala Lumpur, Malaysia**
- ◆ **Sponsorship of GC/ICC's ONS continues**

## Conferences Update (1/9) GC 2014 (Austin, Texas)

- ◆ **SAC Symposium:** Access Track, chaired by Frank Effenberger, received 13 papers, the distribution of which here below.
- ◆ **SAC Symposium:** GCSN, co-chaired by Fabrizio Granelli, received 108 papers, 42 accepted (38.8%).
  - 7 Sessions plus contribution to an Interactive Session – topics: Green wireless and cellular networks, green optical networks, green clouds, smart grid communications.
- ◆ **ONS received 75 papers, and 30 were accepted**

<u>SAC ANS Track Statistics</u>	Optical	Wireless	Optical/ Wireless Integration	xDSL	Cable (HFC & IPTV)	Others	Total
Submitted	1	8	1	3	0	0	13
Accepted	1	3	1	1	0	0	6

## Conferences Update (2/9)

### ICC 2015 (London, UK)

- ◆ ICC 2015 (London), N. Gomes and A. Manikas are Technical Program Co-Chairs.
  - **SAC Symposium:** Green Communication Track Chaired by Jaafar Elmirghani, received 119 papers, avg. 4.36 reviews per paper, accepted 43 papers (36.1%)
  - **SAC Symposium:** ANS Track, chaired by Jochen Maes, received 36 papers, 26 TPC members, 5 reviews/paper. Track statistics are below. In-Home Networking new theme with 3 papers (PLC & mgnt)
  - **ONS Symposium:** co-chaired by Luca Valcarenghi: **94 + 2 (moved to general track because co-authors are chairs) Papers submitted, 50 % in systems and 50 % in networks. Accepted 40 papers (41.7% papers accepted); avg. 4.3 reviews/paper**

<u>SAC ANS Track Statistics</u>	Optical	Wireless	Optical/Wireless Integration	xDSL	Cable (HFC & IPTV)	PLC	Others	Total
Submitted	9	7	3	9	1	3	4	36
Accepted	4	2	2	6	0	1	2	17

## Conferences Update (3/9)

### ICC 2015 (London, UK)

- ◆ 27 workshops and 20 tutorials; 18 industry panels
  - 1<sup>st</sup> IEEE Workshop on Visible Light Communications and Networking (VLCN), Chaired by Mauro Biagi, Anna Maria Vegni, and Zabih Ghassemlooy:
    - 52 papers submitted, 20 accepted organized in 5 Regular sessions plus 2 keynotes
    - Attendants: 50 (equivalent to 250% of the expected speakers)
  - Tutorial: Greening Cloud Networks, By Jaafar Elmirghani
  - Tutorial: Optical Wireless by Maite Brandt-Pearce, Zhengyuan (Daniel) Xu and Steve Hranilovic

## Conferences Update (4/9)

### Globecom 2015 (San Diego, CA)

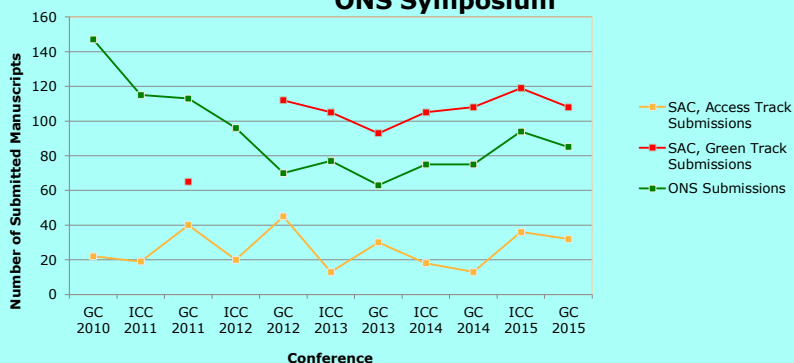
- ◆ Globecom 2015 (San Diego), Ramesh Rao: Technical Program Chair
  - **SAC Symposium:** Green Communication Track co-chaired by Abdallah Shami, received 108 papers.
  - **SAC Symposium:** ANS Track, chaired by Hakki Cankaya, received 32 papers. Track statistics are below.
  - **ONS Symposium:** co-chaired by Jean Armstrong and Maite Brandt-Pearce : received 85 papers

<b>SAC ANS Track Statistics</b>	<b>Optical</b>	<b>Wireless</b>	<b>Optical/Wireless Integration</b>	<b>xDSL</b>	<b>Cable (HFC &amp; IPTV)</b>	<b>PLC</b>	<b>Others</b>	<b>Total</b>
<b>Submitted</b>	5	12	4	7	---	---	4	32
<b>Accepted</b>	---	---	---	---	---	---	---	---

## Conferences Update (5/9)

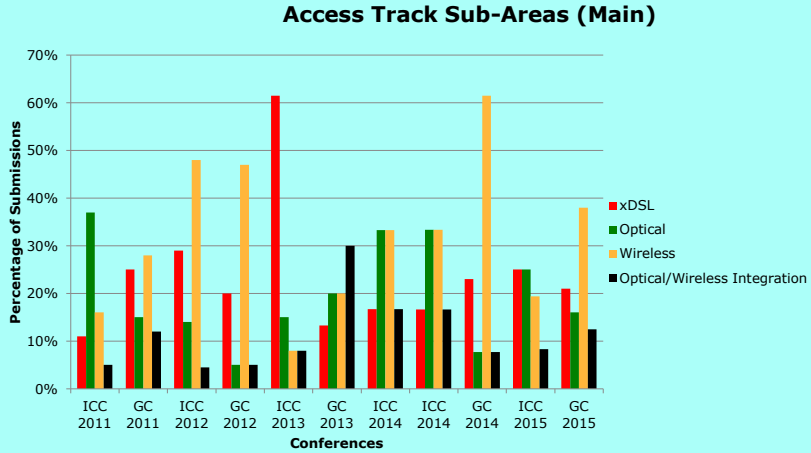
### SAC & ONS Trends, 2010 thru 2015

**Submissions to TAOS-Sponsored SAC Tracks and ONS Symposium**





## Conferences Update (6/9) SAC Access Track (Main Areas): 2011 thru 2015

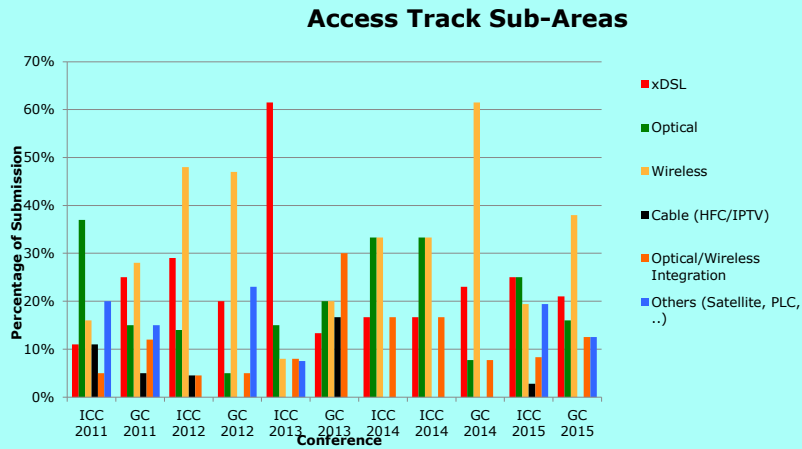


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## Conferences Update (7/9) SAC Access Track (All areas): 2011 thru 2015



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## Conferences Update (8/9)

### ICC & GC in the works

- ◆ **ICC 2016 (Kuala Lumpur), Stefano Bregni TPC Chair; Tarek El-Bawab & Fabrizio Granelli Workshops Co-Chairs; TAOS approved:**
  - Ahmed Kamal as chair for SAC ANS
  - Anura Jayasumana as co-chair for SAC GCSN
  - Walter Cerroni as co-chair for ONS
- ◆ **GC 2016 (Washington DC), TAOS nominated**
  - Luca Valcarengi as chair for SAC ANS
  - Taisir Elgorashi as co-chair for SAC GCSN
  - Filippo Cugini as co-chair for ONS
- ◆ **ICC 2017 (Paris), TAOS nominated**
  - Steve Hranilovic as chair for SAC ANS
  - Cicek Cavdar as co-chair for SAC GCSN
  - George Rouskas as co-chair for ONS
- ◆ **GC 2017 (Singapore)**
- ◆ **ICC 2018 (Kansas City)**
- ◆ **GC 2018 (Abu Dhabi)**
- ◆ **ICC 2019 (Shanghai)**

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## Conferences Update (9/9)

### Other Conferences (Including TCS)

- ◆ **ITU-K 2015**
  - F. Granelli, R. Subrahmanyam and M. Guenach
- ◆ **ONDM 2015**
  - F. Cugini, A. Manikas and A. Kamal
- ◆ **EuCNC 2015**
  - S. Bregni and T. El-Bawab TPC co-Chairs, and F. Cugini TPC member
- ◆ **NIST-ATIS-Telcordia Synchronization Workshop 2015**
  - R. Subrahmanyam and S. Bregni are steering group members

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## Other Activities/Updates (1/3)

### ◆ TAOS' members contributions to ComSoc leadership:

- Stefano Bregni, Tarek El-Bawab, and Steve Gorshe serve in ComSoc Board of Governors
- Stefano Bregni is VP, Members Relations
- Tarek El-Bawab is Director, Conference Operation
- Steve Gorshe is Director of Magazines
- Michael Devetsikiotis is Chair of GITC
- Tarek El-Bawab, Michael Devetsikiotis, and Fabrizio Granelli are Board Member, Education and Training Board (ETB)

## Other Activities/Updates (2/3)

### ◆ IEEE/ComSoc Green ICT initiative successful in Phase I funding (by IEEE). Initiative now in ComSoc and Co-Chaired by Jaafar Elmirghani.

- Tarek El-Bawab represents TAOS in this activity

### ◆ Distinguished Lecturers (DLs):

- Jaafar Elmirghani, Fabrizio Granelli (2nd term) and Anura Jayasumana

## Other Activities/Updates (3/3)

### ◆ Editorship

- George Rouskas is Editor-in-Chief of Elsevier's Journal of Optical Switching and Networking (OSN)
- Tarek El-Bawab, Frank Effenberger, and Ravi Subrahmanyam, IEEE Communications Magazine
- Filippo Cugini and Ahmed Kamal, Elsevier's Journal of Optical Switching and Networking (OSN)
- Fabrizio Granelli and Ahmed Kamal, IEEE Communications Surveys and Tutorials

### ◆ Other Activities and Updates:

- Fabrizio Granelli represents TAOS in ComSoc Rapid standardization activity, and Chairs the Research Group on Software Defined and Virtualized Wireless Access
- Stefano Bregni serves in Ad Hoc Committee on Smart Grid Communications and Michael Devetsikiotis serves in Ad Hoc Committee on Cloud Communications and Networking

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### ◆ TAOS is always seeking new volunteers to participate and enrich our scope of technical activities

- From industry and academia
- From all over the world
- Workshops, Tutorials, Panels, and special issues, with industrial contributions in particular

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## TAOS AWARDS ICC 2015 - London

- ❑ Two Best Paper Awards
- ❑ One Service Award



## TAOS' Best Paper Awards (1/2)

- ◆ **The TAOS Best Paper Award in the ICC 2015's Access Networks and Systems (ANS) Track, Symposium on Selected Areas in Communications (SAC) is presented to the paper:**
  - **"Mitigating Disorderly Leaving Events in G.fast "**
    - ◆ Yezi Huang, Department of Electrical and Information Technology, Lund University, Sweden
    - ◆ Thomas Magesacher, Department of Electrical and Information Technology, Lund University, Sweden
    - ◆ Eduardo Medeiros, Department of Electrical and Information Technology, Lund University, Sweden
    - ◆ Chenguang Lu, Ericsson Research, Sweden
    - ◆ Per-Erik Eriksson, Ericsson Research, Sweden
    - ◆ Per Ödling, Department of Electrical and Information Technology, Lund University, Sweden

## TAOS' Best Paper Awards (2/2)

- ◆ **The TAOS Best Paper Award in the ICC 2015's Green Communication Systems and Networks (GCSN) Track, Symposium on Selected Areas in Communications (SAC) is presented to the paper:**
  - ***"On the Impact of Correlated Sampling Processes in WSNs with Energy-neutral Operation "***
    - ◆ Javier Matamoros, Centre Tecnologic de Telecomunicacions de Catalunya, Spain
    - ◆ Miguel Calvo-Fullana, Centre Tecnologic de Telecomunicacions de Catalunya, Spain
    - ◆ Carles Antón-Haro, Centre Tecnologic de Telecomunicacions de Catalunya, Spain

## TAOS' Outstanding Service Award

- ◆ **Jaafar Elmirghani**



***in recognition of his leadership and contribution to the area of green communications***

**Questions?  
Other Business?**



***Meeting Adjourned!***

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