



Technical Committee on Transmission, Access, and Optical Systems (TAOS) Meeting Minutes

Authors: Walter Cerroni, Mauro Biagi, and Murat Yuksel
Date/Time: Tuesday, November 21, 2023 (7:30-9am EST)
Meeting Location: Before GLOBECOM 2023 – Online meeting
Officers: Walter Cerroni, Chair, walter.cerroni@unibo.it
Mauro Biagi, Vice Chair, Mauro.biagi@uniroma1.it
Murat Yuksel, Secretary, murat.yuksel@ucf.edu

Meeting agenda:

1. Welcome and Introductions
2. Approval of the GLOBECOM 2023 Meeting Agenda
3. Approval of the ICC 2023 Meeting Minutes (available online)
4. Conferences and Activities Update
5. Updates on the TAOS TC Awards Subcommittee
6. TAOS TC Recertification
7. TC Campaign Video Project
8. Discussion on TAOS Nomination and Election Subcommittee
9. Any Other Business
10. Adjourn

The meeting was called to order at 7:30am.

Participants (21)

- Hanaa Abumarshoud, University of Glasgow, United Kingdom
- Farhan Ali, Swinburne University of Technology, Australia
- Nicola Andriolli, Consiglio Nazionale delle Ricerche (CNR), Italy
- Imran Shafique Ansari, University of Glasgow, United Kingdom
- Abdelmoula Bekkali, TOYO Electric Corporation, Japan
- Chedlia Ben Naila, Nagoya University, Japan
- Mauro Biagi, University of Rome, La Sapienza, Italy
- Dajana Cassioli, University of L'Aquila, Italy

- Walter Cerroni, University of Bologna, Italy
- Alexis Dowhuszko, Aalto University, Finland
- Taisir Elgorashi, King's College London, UK
- Nitin Gupta, National Institute of Technology Hamirpur, India
- Steve Hranilovic, McMaster University, Canada
- Andrea Marotta, University of L'Aquila, Italy
- Saad Masood, Swinburne University of technology, Australia
- Hussein Mouftah, University of Ottawa, Canada
- Mubashir Husain Rehmani, Munster Technological University, Ireland
- Federico Tonini, NICT-CNIT, Italy
- Eirini Eleni Tsiropoulou, University of New Mexico, United States
- Muneeb Ul Hassan, Deakin University, Australia
- Murat Yuksel, University of Central Florida, USA

1. **Welcome and Introductions**

The meeting was held online. The Chair, Walter Cerroni, welcomed all connected participants and participants introduced themselves. The Chair presented the meeting agenda. The attached slides were presented by the Chair and discussed item-by-item throughout the meeting.

2. **Approval of the GLOBECOM 2023 Meeting Agenda**

A motion was made by Mauro Biagi to approve the agenda. The motion was seconded by Abdelmoula Bekkali and the agenda was approved unanimously without further remarks.

3. **Approval of the ICC 2023 Meeting Minutes (available online)**

A motion was made by Murat Yuksel to approve the minutes of the previous meeting held online around ICC 2023. The draft of the minutes was previously made available on the TAOS website (<http://taos.committees.comsoc.org/meetings>) and distributed to the TAOS members through the mailing list. The motion was seconded by Taisir Elgorashi and the minutes were approved unanimously without further remarks.

4. **Conferences and Activities Update**

A continued commitment of TAOS for the Optical Networks and Systems (ONS) and the Green Communication Systems and Networks (GCSN) symposia at ICC and GLOBECOM was affirmed. In coordination with other TCs, TAOS nominates chairs for these two symposia. The Chair reported the recent nominees for the two symposia and solicited interests and nominations for the upcoming symposia. There was no chair nominee for GLOBECOM 2024, the chair nominee for ICC GCSN 2025 was approved but the chair nominee for ICC ONS 2025 was not approved, and the chair nominees for GLOBECOM 2025 are submitted and pending. An analysis of the number of submissions, accepted

papers and best paper award winners and nominees at ONS and GCSN was presented by some of the symposia chairs.

Mauro Biagi reported about the Workshop on Underwater Communication, Access, and Networking (UCAN) at ICC 2023. The workshop had strong participation. He also reported on the workshop titled “Optical Wireless Communications and Networking (OWCN)”, co-located with IEEE PIMRC 2023.

The chair announced the International Conference on Optical Network Design and Modeling (ONDM) 2024 and reported that the organizers of the conference unofficially requested technical sponsorship from TAOS. The chair reminded that TAOS is open to endorsing other events and encouraged the audience to consider seeking TAOS endorsement for related events.

5. Updates on the TAOS TC Awards Subcommittee

Mauro Biagi stated that the subcommittee is formed as of the last TAOS meeting, and it is as follows:

- Mauro Biagi (University of Rome, La Sapienza, Italy) - Subcommittee Chair
- Abdelmoula Bekkali (TOYO Electric Corporation, Japan)
- Melike Erol-Kantarci (University of Ottawa, Canada)
- Chedlia Ben Naila (Nagoya University, Japan)
- Daniel K. C. So (University of Manchester, UK)

6. TAOS TC Recertification

The chair announced that TAOS must go through its periodic recertification from COMSOC. Its last recertification was in November 2020. He reported that, after collecting responses from the TAOS community, the questionnaire for recertification was submitted on 15 September 2023 and the outcome is pending. The chair presented various numbers of interest from the questionnaire.

7. TC Campaign Video Project

The chair reported that TAOS’ video project proposal to the Technical and Educational Activities (TEA) Council was granted \$1,000 for a 1-minute video. He encouraged the audience to suggest or submit content (images, short clips, or scripts) for possible use in this video.

8. Discussion on TAOS Nomination and Election Subcommittee

The chair reported that he could not follow up on this item but that the plan stays the same. A task force will be appointed to revise the TAOS P&P and the revised P&P will be up for voting in the earliest next meeting.

9. **Any Other Business**

Murat Yuksel announced that the submission deadline for IEEE International Symposium on Dynamic Spectrum Access Networks (DySPAN) is getting close and encouraged the audience to consider submitting papers. Mauro Biagi announced that the International Symposium on Communication Systems, Networks and Digital Signal Processing (CSNDSP) 2024 will take place and encouraged the audience to submit papers.

No other matters were raised by the meeting attendees.

10. **Adjourn**

Mauro Biagi moved to adjourn the meeting and Steve Hranilovic seconded. The motion carried unanimously, and the meeting adjourned at 8:36am.

Attachments: Meeting Slides

The background of the slide is a dark blue gradient with a white network diagram. The diagram consists of numerous small circular nodes connected by thin white lines, forming a complex, interconnected web that resembles a fiber optic network or a data mesh. The nodes are distributed across the entire slide, with a higher density in the lower-left and lower-right areas.

Transmission, Access and Optical Systems (TAOS) TC

Online TC Meeting before Globecom 2023

November 21, 2023

Walter Cerroni – TAOS TC Chair 2023-2024

Attendance and TC Mailing List

- Please register your attendance at this meeting
 - Link to attendance form will be pasted periodically in the chat during the meeting
- If you are interested in getting involved in TAOS TC activities, please subscribe to the mailing list (if you have not done so already)
 - <https://taos.committees.comsoc.org/contact-us/>
 - or give your consensus in the attendance form

Welcome and Introductions

TAOS TC Officers for the 2023-2024 Term

**Chair**

Walter Cerroni
Department of Electrical, Electronic and Information Engineering "G. Marconi"
University of Bologna
via Venezia, 52
47521 Cesena (FC) - Italy
Tel. +39 0547-339209
e-mail: wcerroni@ieee.org

**Vice Chair**

Mauro Biagi
Department of Information Engineering, Electronics and Telecommunications
University of Rome "Sapienza"
Via Eudossiana, 18
00184 Rome - Italy
Tel. +39 06-44585856
e-mail: mauro.biagi@uniroma1.it

**Secretary**

Murat Yuksel
Department of Electrical and Computer Engineering
University of Central Florida
4328 Scorpius Street,
Orlando, FL 32816-2362, USA
Tel. +1 407-8234181
e-mail: murat.yuksel@ucf.edu

**Standards Liaison**

Jaafar Elmirghani
Department of Engineering
King's College London
Strand, London, WC2R 2LS, United Kingdom
e-mail: Jaafar.Elmirghani@kcl.ac.uk

Agenda

1. Welcome and Introductions
2. Approval of the Globecom 2023 Meeting Agenda
3. Approval of the ICC 2023 Meeting Minutes (available online)
4. Conferences and Activities Update
5. Updates on the TAOS TC Awards Subcommittee
6. TAOS TC Recertification
7. TC Campaign Video Project
8. Discussion on TAOS Nomination and Election Subcommittee
9. Any Other Business
10. Adjourn

Approval of the ICC 2023 Meeting Minutes

- Available on the TAOS TC website
 - <https://taos.committees.comsoc.org/meetings/>



**Technical Committee on
Transmission, Access, and Optical Systems (TAOS)
Meeting Minutes**

Authors: Walter Cerroni, Mauro Biagi, and Murat Yuksel
Date/Time: Wednesday, April 26, 2023 (11:00am-12:00pm EST)
Meeting Location: Before ICC 2023 – Online meeting
Officers: Walter Cerroni, Chair, walter.cerroni@uniibo.it
Mauro Biagi, Vice Chair, Mauro.biagi@uniroma1.it
Murat Yuksel, Secretary, murat.yuksel@ucf.edu

Meeting agenda:

1. Welcome and Introductions
2. Approval of the ICC 2023 Meeting Agenda
3. Approval of the Globecom 2022 Meeting Minutes (available online)
4. Conferences and Activities Update
5. Election of TAOS TC Awards Subcommittee
6. TC Campaign Video Project Call for Ideas
7. TC Innovation Support
8. Discussion on TAOS Nomination and Election Subcommittee
9. Any Other Business
10. Adjourn

The meeting was called to order at 11:00a.m.

Conferences and Activities update

Sponsored ICC/Globecom Symposia

- TAOS TC has consistently sponsored two symposia:
 - Symposium on Green Communications Systems and Networks (GCSN)
 - Symposium on Optical Networks and Systems (ONS)
- Our TC always seeks to coordinate with Symposium TPC Co-Chairs
 - Track hot and emerging topics relevant to GCSN and ONS
 - Help writing the CfP
 - Help finding TPC members
 - Stimulate new ideas

Conferences and Activities update

Sponsored ICC/Globecom Symposia – Chairs nominated by TAOS

- IEEE ICC 2023 (Rome, Italy, 28 May – 01 June 2023)
 - GCSN: Taisir Elgorashi (King's College London, UK)
 - ONS: Murat Yuksel (U. Central Florida, USA)
- IEEE Globecom 2023 (Kuala Lumpur, Malaysia, 4–8 December 2023)
 - GCSN: Emad Alsusa (U. Manchester, UK)
 - ONS: Nicola Andriolli (National Research Council (CNR), Italy)
- IEEE ICC 2024 (Denver, CO, USA, 9–13 June 2024)
 - GCSN: Hamed Ahmadi (U. York, UK)
 - ONS: Lutz Lampe (U. British Columbia, Canada)

Conferences and Activities update

Sponsored ICC/Globecom Symposia – Chairs nominated by TAOS

- IEEE Globecom 2024 (Cape Town, South Africa)
 - No nominations sent
- IEEE ICC 2025 (Montreal, Canada)
 - GCSN: Daniel K. C. So (U. Manchester, UK) --> **approved**
 - ONS: Ali Khalighi (Fresnel Institute, France), Majid Safari (U. Edinburgh, UK) --> **not approved**
- IEEE Globecom 2025 (Taipei, Taiwan)
 - GCSN: Antonio Cianfrani (U. Rome “La Sapienza”, Italy) --> nominated
 - ONS: Ali Khalighi (Fresnel Institute, France) --> nominated

Conferences and Activities update

Sponsored ICC/Globecom Symposia – Report

- IEEE ICC 2023 (Rome, Italy, 28 May – 01 June 2023)
- GCSN: Taisir Elgorashi (King's College London, UK)
 - 133 submitted papers
 - 54 accepted papers (40%)
 - 7 oral sessions (35 papers)
 - 4 interactive sessions (19 papers)
 - 2 papers nominated for ICC 2023 Best Paper Award
 - 1 paper won one of the ICC 2023 BPAs:
Energy-Efficient and Privacy-Preserved Incentive Mechanism for Federated Learning in Mobile Edge Computing
Jingyuan Liu; Zheng Chang; Geyong Min; Yan Zhang
- ONS: Murat Yuksel (U. Central Florida, USA)
 - 55 submitted papers (31 Networks, 24 Systems)
 - 21 accepted papers (38%) (11 Net., 10 Sys.)
 - 3 oral sessions (15 papers)
 - 1 interactive session (6 papers)
 - 2 papers nominated for ICC 2023 Best Paper Award
 - 1 paper won one of the ICC 2023 BPAs:
Laser-Based Indoor Wireless Communication for Mobile Devices Aided by Stabiliser: Mobility and Outage Analysis
Juncheng Li; Mohammad Dehghani Soltani; Harald Haas; Majid Safari

Conferences and Activities update

Sponsored ICC/Globecom Symposia – Report

- IEEE Globecom 2023 (Kuala Lumpur, Malaysia, 4–8 December 2023)
- GCSN: Emad Alsusa (U. Manchester, UK)
 - 102 submitted papers
 - 42 accepted papers (41%)
 - 6 oral sessions (30 papers):
 - Green Federated Learning, Energy Harvesting Wireless Networks, Green UAV Networks, Advanced Green Networks, Battery-free Communications, Learning for Energy Efficiency
 - 3 interactive sessions (12 papers)
 - 2 papers nominated for Globecom 2023 BPA
 - 1 paper won one of the Globecom 2023 BPAs:
 - *Waste Factor: A New Metric for Evaluating Power Efficiency in any Cascade*
Mingjun Ying, Dipankar Shakya, Hitesh Poddar, Theodore S. Rappaport
- ONS: Nicola Andriolli (CNR, Italy)
 - 61 submitted papers (24 Networks, 37 Systems)
 - 24 accepted papers (39%) (9 Net., 15 Sys.)
 - 3 oral sessions (15 papers):
 - Optical Network Design and Recovery; Underwater and Visible Light Communications; Optical Wireless Communications
 - 3 interactive sessions (9 papers)
 - 2 papers nominated for Globecom 2023 BPA
 - 1 paper won one of the Globecom 2023 BPAs:
 - *Efficient Routing Method for Reducing Significant Outages in Optical Networks*
Katsuaki Higashimori, Takafumi Tanaka, Takeru Inoue

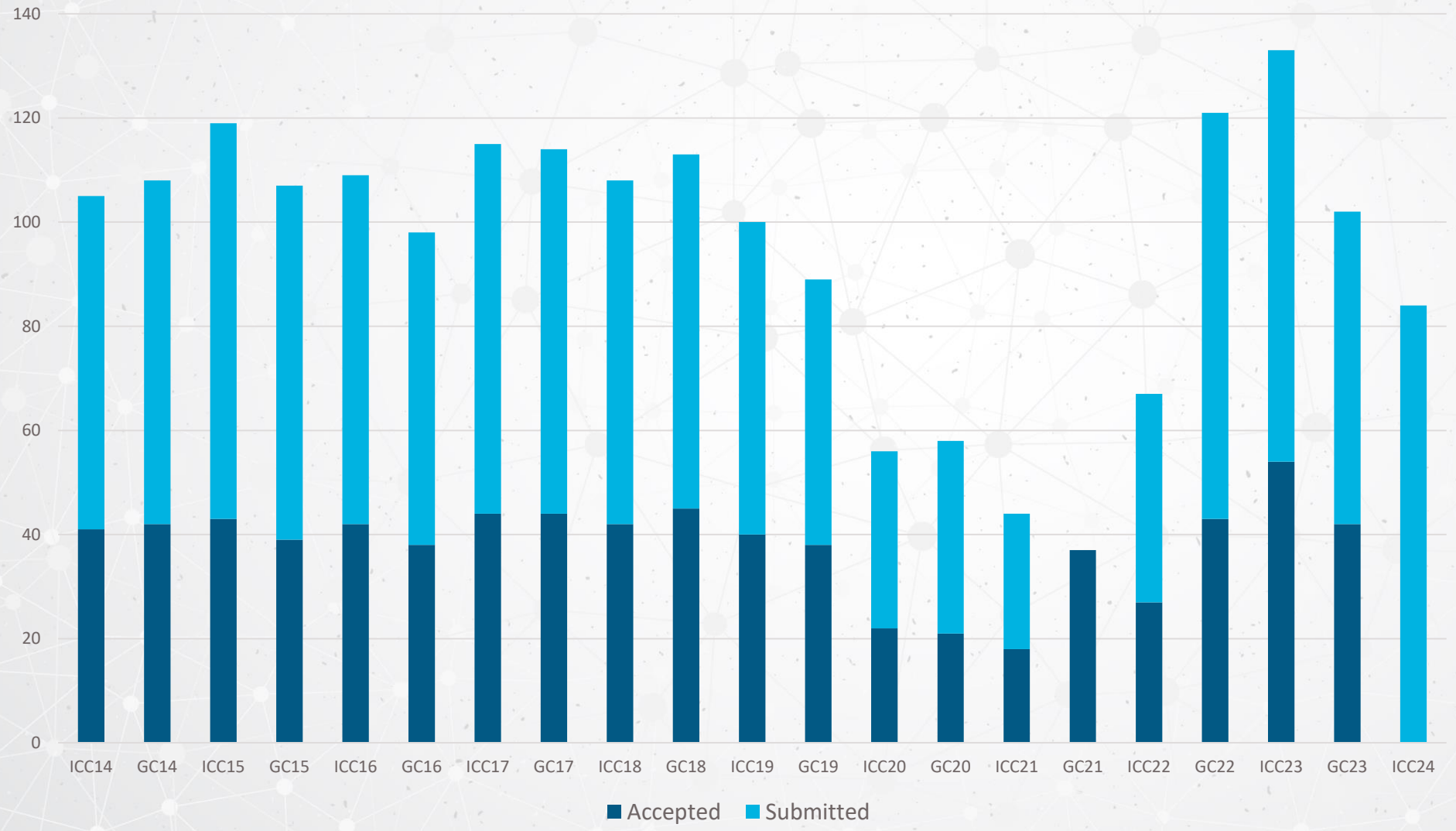
Conferences and Activities update

Sponsored ICC/Globecom Symposia – Report

- IEEE ICC 2024 (Denver, CO, USA, 9–13 June 2024)
- Paper submission deadline expired on **Nov. 12th, 2023**
- GCSN: Hamed Ahmadi (U. York, UK)
 - 84 papers submitted
- ONS: Lutz Lampe (U. British Columbia, Canada)
 - 53 papers submitted
 - 61 confirmed TPC members

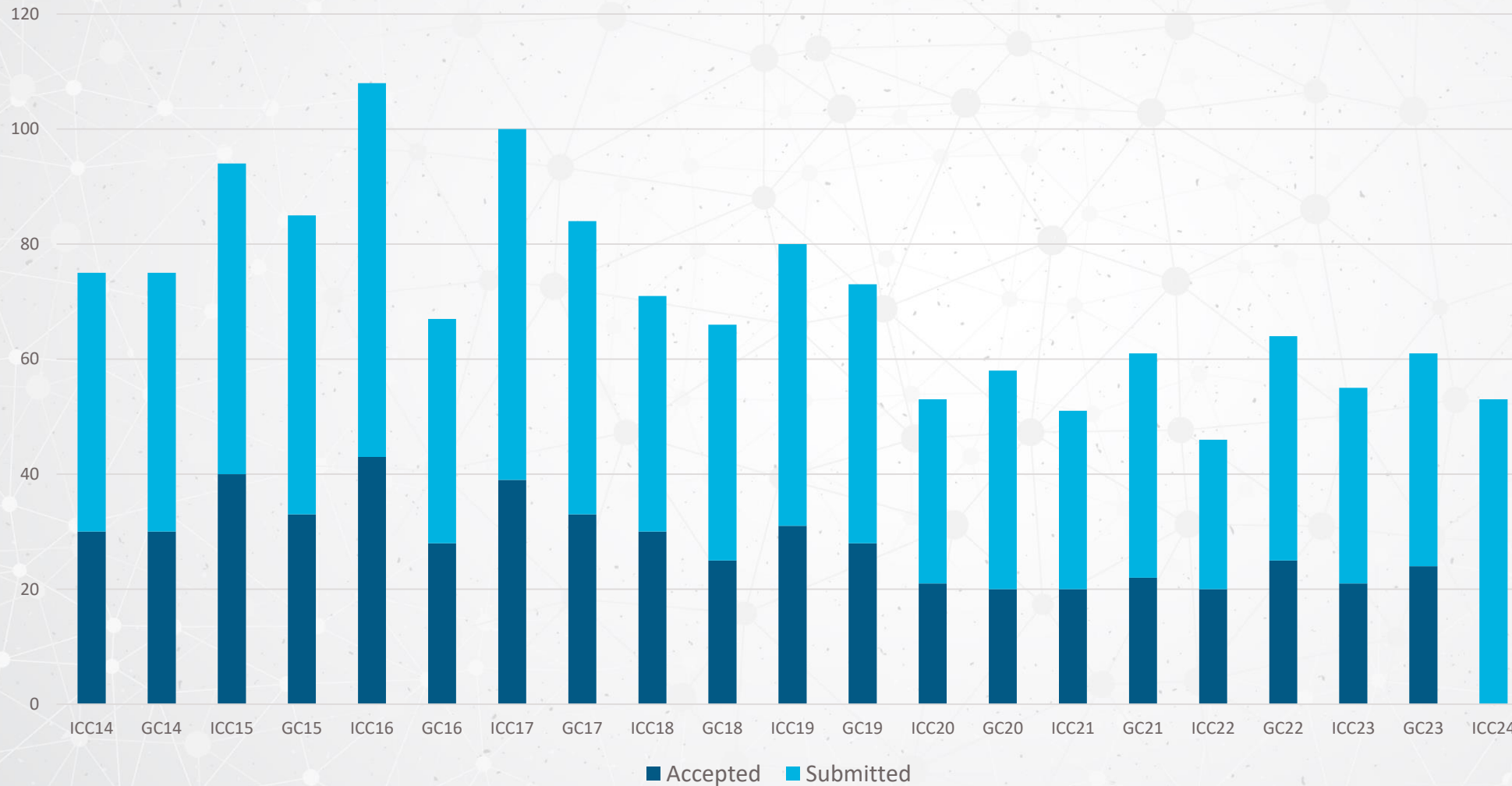
Conferences and Activities update

Sponsored ICC/Globecom Symposia – GCSN Statistics



Conferences and Activities update

Sponsored ICC/Globecom Symposia – ONS Statistics



Conferences and Activities update

Other Events

- 1st Workshop on Underwater Communication, Access and Networking (UCAN)
 - Co-located w/ IEEE ICC 2023, 28 May 2023, Rome, Italy
 - Organizers: Mauro Biagi (U. Rome "La Sapienza"), Valeria Loscrì (INRIA, Lille, France), Anna Maria Vegni (U. Roma Tre, Italy)
- 1st Workshop on Optical Wireless Communications and Networking (OWCN)
 - Co-located w/ IEEE PIMRC 2023, 5 September 2023, Toronto, ON, Canada
 - Organizer: Mauro Biagi (U. Rome "La Sapienza")

Conferences and Activities update

Other Events

- 28th International Conference on Optical Network Design and Modelling (ONDM 2024)
 - 6–9 May 2024, Madrid, Spain <https://ondm2024.uc3m.es/>
 - General Chair: David Larrabeiti-López, University Carlos III de Madrid (UC3M), Madrid, Spain
 - TPC Co-Chairs:
 - Luca Valcarengi, Scuola Superiore Sant'Anna, Pisa, Italy
 - Carmen Mas-Machuca, University of the Bundeswehr Munich (UniBW), Munich, Germany
 - José A. Hernández-Gutiérrez, University Carlos III de Madrid (UC3M), Madrid, Spain
 - Submission deadline: 10 January 2024
 - Acceptance notification: 20 March 2024
 - David Larrabeiti contacted TAOS TC to obtain the endorsement for ComSoc Technical Sponsorship
 - Waiting to receive notification from ComSoc

Conferences and Activities update

Other Events

- TAOS TC technically endorses other events
 - Either co-located w/ ICC and Globecom, or stand-alone
 - Support for IEEE ComSoc Technical Co-sponsorship
- For event endorsement requests, please contact the TAOS officers
 - <https://taos.committees.comsoc.org/activities/endorsement/>

Updates on the TAOS TC Awards Subcommittee

- Subcommittee renewed in ICC 2023 meeting for the 2023-2024 term
 - Mauro Biagi (U. Rome "La Sapienza") - TAOS Vice-Chair
 - Abdelmoula Bekkali (TOYO Electric Corporation, Japan)
 - Melike Erol-Kantarci (U. Ottawa, Canada)
 - Chedlia Ben Naila (Nagoya University, Japan)
 - Daniel K. C. So (U. Manchester, UK)
- Chedlia Ben Naila (Nagoya University, Japan) replaces the late Ahmed Kamal (Iowa State U., USA)

TAOS TC Recertification

- Each TC must go through a periodic review process and obtain the required recertification from ComSoc
- Last TAOS TC recertification was in November 2020
- We had to fill in a recertification questionnaire for the period 2021-2023
- Questionnaire submitted on September 15, 2023
 - Demographics
 - Relevant activities
 - Achievements / challenges
 - New areas
- Still waiting for the outcome of the recertification process

TC Campaign Video Project

- The TEA Council has launched a video campaign to promote the TC activities
- TAOS TC submitted a proposal for a short video
- The proposal was accepted and a budget of \$1,000 was granted
- We contacted IEEEtv for support
- The budget allows for a 1-minute video with images and text descriptions
- We must provide a script and images or short clips specific to TAOS TC activities

TC Campaign Video Project

- **We need your help!**
- If you have any captivating image or short clip showing technical activities relevant to TAOS TC (e.g., a piece of equipment, results of an experiment, etc.) that you are **entitled** and **willing to share** with us, please let us know

Discussion on TAOS Nomination and Election Subcommittee

- ComSoc P&Ps have been revised, also in sections concerning TCs
- We must verify compliance of TAOS TC P&Ps with ComSoc P&Ps
- In particular, we should check whether we need to update our definition of Nomination and Election Subcommittee
- From ComSoc P&Ps:
 - *TC P&Ps shall specify how the subcommittee members are appointed*
 - *Oversees the election procedure as per TC P&Ps*
 - *At least two candidates on the ballot for each position, or identify additional candidates if needed (only TC voting members are eligible)*
 - *Elected officers: no more than six consecutive years within the same TC*
 - *A TC chair is ineligible to serve concurrently as Chair for more than one TC*

Discussion on TAOS Nomination and Election Subcommittee

- From TAOS TC P&Ps
 - *Candidates are nominated by the TAOS Steering Committee and elected by TAOS voting members*
 - *The TAOS Steering Committee includes the current Chair and past chairs who are available and/or still active TAOS members*
 - *Other ComSoc members with outstanding record in supporting TAOS' activities may be also included in this committee if the majority of the committee agrees to do so*
 - *The TAOS Steering Committee is also the TC's Nomination and Elections (N&E) Subcommittee*
 - *The Steering Committee nominates and recommends officers for elections*
 - *Nominations are proposed ahead of election times, and presented for voting/approval at the next TAOS meeting*
 - *At the meeting, the floor maybe open for other nomination(s) among active TAOS members provided that such nomination is supported by at least three other active TAOS members who are attending the meeting*

Discussion on TAOS Nomination and Election Subcommittee

- Appoint a task force to revise TAOS TC P&Ps
- Revised P&Ps to be approved in the next TAOS TC Meeting

Any Other Business

- Please feel free to raise any questions on discussion points from this meeting or other topic/issues
- Feel free to follow up with any comments at any time via email to the TAOS TC Officers
 - wcerroni@ieee.org
 - mauro.biagi@uniroma1.it
 - murat.yuksel@ucf.edu



Adjourn

Thank you!