



**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@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 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.

Participants (15)

- Andrea Marotta, University of L'Aquila, Italy
- Dajana Cassioli, University of L'Aquila, Italy
- Daniel So, The University of Manchester, UK
- Eirini Eleni Tsiropoulou, University of New Mexico, United States
- Hussein Mouftah, University of Ottawa, Canada
- Imran Shafique Ansari, University of Glasgow, United Kingdom
- Mauro Biagi, University of Rome, La Sapienza, Italy
- Murat Yuksel, University of Central Florida, USA

- Nicola Andriolli, CNR-IEIT, Italy
- Nitin Gupta, National institute of technology Hamirpur, India
- Paulo Monteiro, Instituto of Telecomunications & University of Aveiro, Portugal
- Steve Hranilovic, McMaster University, Canada
- Taisir Elgorashi, King's College London, UK
- Tarek El-Bawab, IEEE Communications Society, USA
- Walter Cerroni, University of Bologna, Italy

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 ICC 2023 Meeting Agenda**

A motion was made by Steve Hranilovic to approve the agenda. The motion was seconded by Dajana Cassioli and the agenda was approved unanimously without further remarks.

3. **Approval of the Globecom 2022 Meeting Minutes (available online)**

A motion was made by Steve Hranilovic to approve the minutes of the previous meeting held online around Globecom 2022. 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 Mauro Biagi 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. In particular, the chair nominees of TAOS are identified for ICC 2024, there was no chair nominee for Globecom 2024, and the chair nominees for ICC 2025 are still pending. An analysis of the number of submissions and accepted papers 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 announced that he will organize a new workshop titled "Optical Wireless Communications and Networking (OWCN)", co-located with IEEE PIMRC 2023.

The Chair reminded that TAOS is open to endorsing other events and encouraged the audience to consider seeking TAOS endorsement for related events.

5. Election of TAOS TC Awards Subcommittee

The Chair summarized the regulations regarding the TAOS TC Awards Subcommittee and explained that he cannot continue as the chair of this subcommittee. The Chair explained that Vice Chair Mauro Biagi is nominated to chair the subcommittee while other members of the committee to be reappointed. There was no objection to the nomination and the subcommittee is formed 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)
- Ahmed Kamal (Iowa State University, USA)
- Daniel K. C. So (University of Manchester, UK)

Tarek El-Bawab and Hussein Mouftah recommended that the P&P of TAOS should include a rule that a sitting member of the award committee or the officers may not be eligible to receive awards. The Chair acknowledged that such rules will be considered when revising the P&P.

6. TC Campaign Video Project Call for Ideas

The Chair summarized a recent call for short video projects by the Technical and Educational Activities (TEA) Council and encouraged the audience to suggest ideas for a possible proposal submission to the call.

7. TC Innovation Support

The Chair announced a recent call for innovations in the TC activities. He listed the timeline for proposals and template for proposals. He encouraged the audience to suggest ideas and participate in preparing proposals to the call.

8. Discussion on TAOS Nomination and Election Subcommittee

The Chair explained that COMSOC P&P has been revised and cautioned that TAOS P&P must be revised to comply with the new regulations. In particular, he explained that COMSOC now requires a Nomination and Election Subcommittee for each TC. He further explained that the TAOS Steering Committee satisfies the new requirements from COMSOC, but also expressed the need to revise TAOS P&P so that it is entirely compliant. He suggested to appoint a task force to revise the TAOS P&P and prepare the revised

version for the TAOS TC Meeting at Globecom 2023. The participants suggested names to the Chair for possible appointment into the task force.

9. Any Other Business

No other matters were raised by the meeting attendees.

10. Adjourn

Imran Shafique Ansari moved to adjourn the meeting and Tarek El-Bawab seconded. The motion carried unanimously, and the meeting adjourned at 12:08pm.

Attachments: Meeting Slides

A background graphic featuring a network of interconnected nodes and lines, resembling a mesh or a complex web, set against a dark blue gradient. The nodes are represented by small circles, and the lines are thin, light blue or white, creating a geometric pattern that fills the left and bottom portions of the slide.

Transmission, Access and Optical Systems (TAOS) TC

Online TC Meeting before ICC 2023

April 26, 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

Agenda

- Welcome and Introductions
- Approval of the ICC 2023 Meeting Agenda
- Approval of the Globecom 2022 Meeting Minutes (available online)
- Conferences and Activities Update
- Election of TAOS TC Awards Subcommittee
- TC Campaign Video Project – Call for Ideas
- TC Innovation Support
- Discussion on TAOS Nomination and Election Subcommittee
- Any Other Business
- Adjourn

Approval of the Globecom 2022 Meeting Minutes

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



IEEE
COMMUNICATIONS
SOCIETY

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

Authors: Walter Cerroni, Mauro Biagi, and Murat Yuksel

Date/Time: Wednesday November 30th 2022 (9:00am-10:00pm EST)

Meeting Location: Before Globecom 2022 – Online meeting due to COVID-19 emergency

Officers: Steve Hranilovic, Chair, hranilovic@mcmaster.ca
Walter Cerroni, Vice-Chair, walter.cerroni@unibo.it
Mauro Biagi, Secretary, mauro.biagi@uniroma1.it

Meeting agenda:

1. Welcome and introductions
2. Approval of the ICC 2022 TAOS Meeting Minutes
3. Report on TC Restructuring
4. Conferences and Activities update
5. Election of TAOS Secretary
6. 2022 TAOS awards
7. Business arising from Members
8. Guest speaker
9. Adjourn

The meeting was called to order at 10:35am

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 Globecom 2022 (Rio de Janeiro, Brazil, 4–8 December 2022)
 - GCSN: Eirini Eleni Tsiropoulou (U. New Mexico, USA)
 - ONS: Anas Chaaban (U. British Columbia, Canada)
- IEEE ICC 2023 (Rome, Italy, 28 May – 01 June 2023)
 - GCSN: Taisir Elgorashi (U. Leeds, 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)

Conferences and Activities update

Sponsored ICC/Globecom Symposia – Chairs nominated by TAOS

- IEEE ICC 2024 (Denver, CO, USA)
 - GCSN: Hamed Ahmadi (U. York, UK)
 - ONS: Lutz Lampe (U. British Columbia, Canada)
- IEEE Globecom 2024 (Cape Town, South Africa)
 - No nominations sent
- IEEE ICC 2025 (Montreal, Canada)
 - Nominations due by April 28, 2023
 - GCSN:
 - ONS: *interest by Ali Khalighi (Fresnel Institute, France), Majid Safari (U. Edinburgh, UK)*

Conferences and Activities update

Sponsored ICC/Globecom Symposia – Report

- IEEE Globecom 2022 (Rio de Janeiro, Brazil, 4–8 December 2022)
- GCSN: Eirini Eleni Tsiropoulou (U. New Mexico, USA)
 - 121 submitted papers
 - 43 accepted papers (35.5%)
 - 2 oral sessions f2f
 - 9 total sessions
 - 3 papers nominated for Globecom 2022 Best Paper Award, 1 received it
- ONS: Anas Chaaban (U. British Columbia, Canada)
 - 64 submitted papers
 - 25 accepted papers (39%)
 - 2 oral sessions in person
 - 3 virtual sessions
 - 1 paper received the Globecom 2022 Best Paper Award

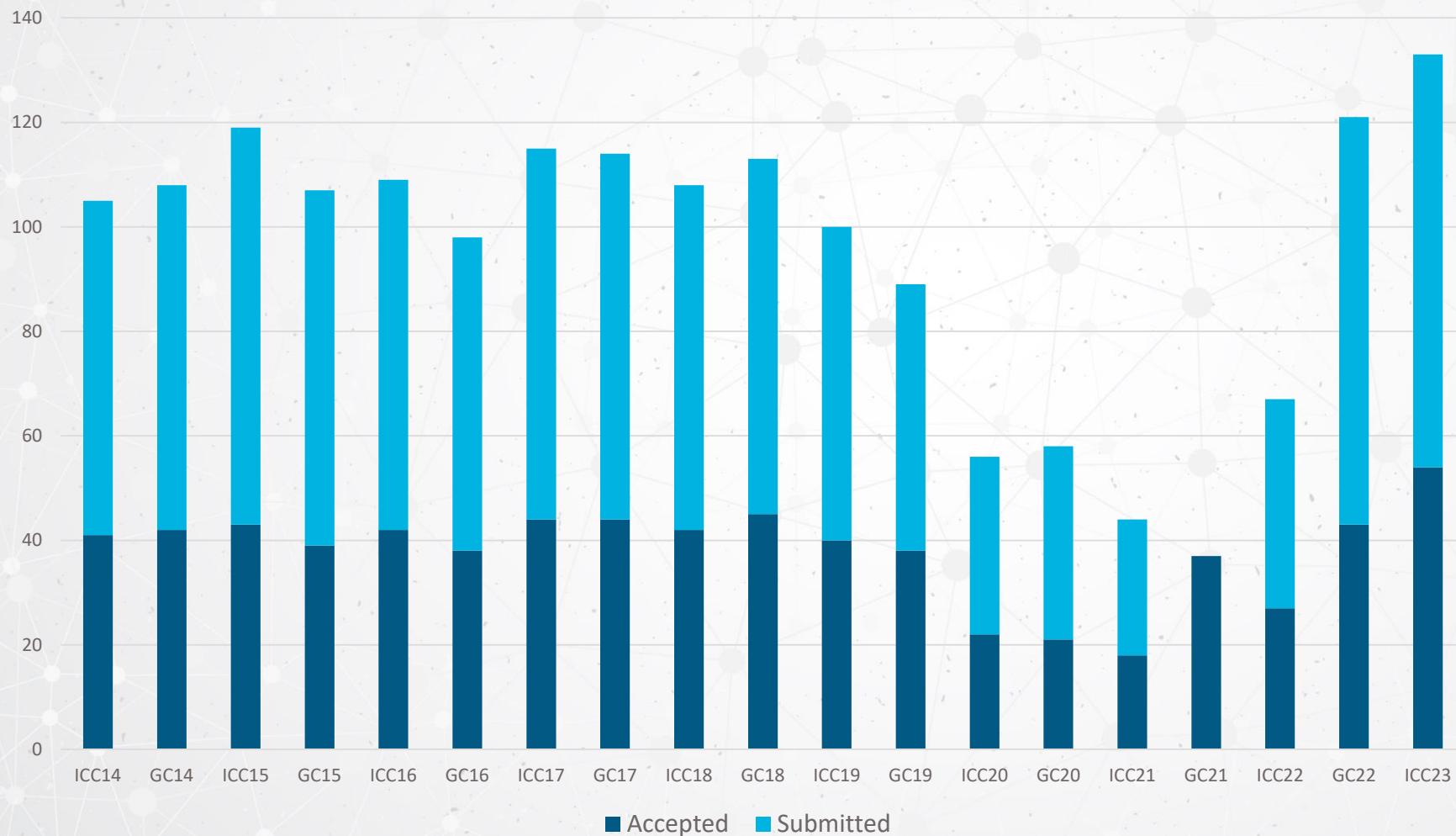
Conferences and Activities update

Sponsored ICC/Globecom Symposia – Report

- IEEE ICC 2023 (Rome, Italy, 28 May – 01 June 2023)
- GCSN: Taisir Elgorashi (U. Leeds, UK)
 - 133 submitted papers
 - 54 accepted papers (40%)
 - 7 oral sessions (35 papers):
 - Federated Learning for Energy efficient Networks and Systems, Wireless Power Transfer Systems, Energy Efficient Computations and Caching, Green Edge Computing, Green UAV Systems, Energy Efficient RIS-aided Systems, Green NOMA-Enabled Systems
 - 4 interactive sessions (19 papers):
 - Energy Efficient Networks and Systems, ML-Enabled Green Networks and Systems, Green Wireless Communication, Energy Efficient Computations
 - 2 papers nominated for ICC 2023 Best Paper Award
- ONS: Murat Yuksel (U. Central Florida, USA)
 - 55 submitted papers
 - 31 Networks, 24 Systems
 - 21 accepted papers (38%)
 - 11 Networks, 10 Systems
 - 3 oral sessions (15 papers):
 - ML-enabled optical fiber networks, Optical Wireless Communication and Networking, Optical transmission and access networks
 - 1 interactive session (6 papers):
 - Optical Systems and VLC
 - 2 papers nominated for ICC 2023 Best Paper Award

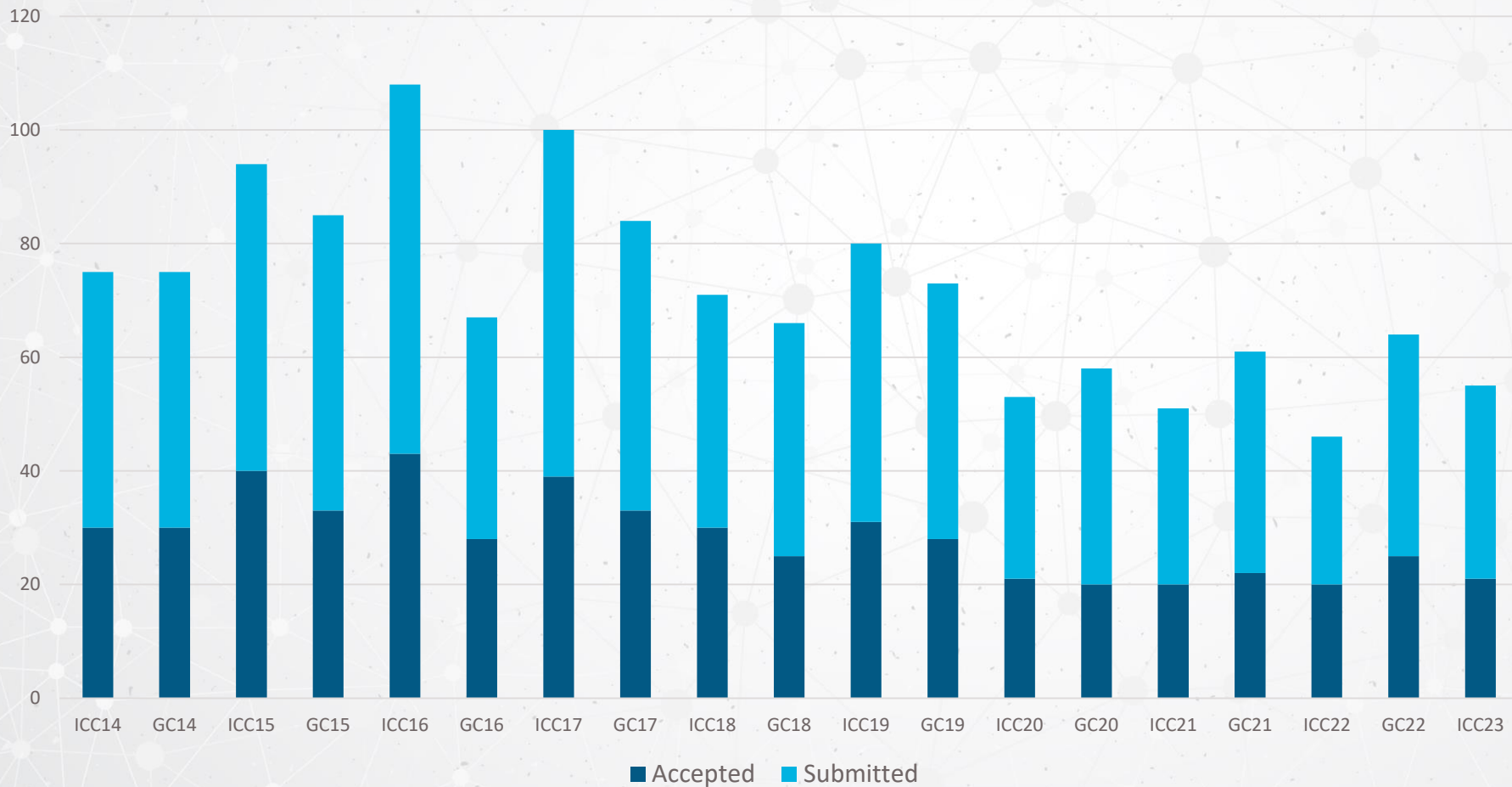
Conferences and Activities update

Sponsored ICC/Globecom Symposia – GCSN Statistics



Conferences and Activities update

Sponsored ICC/Globecom Symposia – ONS Statistics



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)
- ONS: Nicola Andriolli
(CNR, Italy)
- Paper submission deadline extended to **May 6th, 2023**

Conferences and Activities update

Sponsored ICC/Globecom Symposia – Report

- IEEE ICC 2024 (Denver, CO, USA)
- GCSN: Hamed Ahmadi
(U. York, UK)
- ONS: Lutz Lampe
(U. British Columbia, Canada)
- Conference dates: **9–13 June 2024**

Conferences and Activities update

Other Events

- 1st Workshop on Underwater Communication, Access and Networking (UCAN)
 - Co-located w/ IEEE ICC 2023, 28 May – 01 June 2023, Rome, Italy
 - Organizers
 - Mauro Biagi (U. Rome "La Sapienza")
 - Valeria Loscrì (INRIA, Lille, France)
 - Anna Maria Vegni (U. Roma Tre, Italy)
 - Workshop information
 - Date: 28 May 2023
 - Time: 14:30 – 18:00
 - Location: Room Q

Conferences and Activities update

Other Events

- 1st Workshop on Optical Wireless Communications and Networking (OWCN)
 - Co-located w/ IEEE PIMRC 2023, 5–8 September 2023, Toronto, ON, Canada
 - Organizer
 - Mauro Biagi (U. Rome "La Sapienza")
 - Important dates
 - Paper Submission Deadline: 19 May 2023
 - Acceptance Notification: 16 June 2023
 - Camera-Ready Due: 07 July 2023
 - Workshop Date: 05 September 2023

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/>

Election of TAOS TC Awards Subcommittee

- Purpose: To administer process for TAOS Awards
 - Best paper award for conferences and journals, outstanding service awards, etc.
 - Selection of best papers in ICC/Globecom sponsored symposia (GCSN, ONS)
 - Vote to the Technical Committees Director for approval
 - At most 1 TAOS TC officer + 4/6 members
 - Members shall not serve simultaneously on the Awards sub-committee of more than two TCs
 - Term limit is two years concurrent with the nominal term of the TC Chair, with reappointment to at most one additional two-year term
- More details available at:
https://taos.committees.comsoc.org/files/2021/06/TAOS_PP2020_v3.1.pdf

Election of TAOS TC Awards Subcommittee

- Subcommittee established in 2021 for the 2021-2022 term
 - Walter Cerroni (U. Bologna, Italy) - TAOS Vice-Chair
 - Abdelmoula Bekkali (TOYO Electric Corporation, Japan)
 - Melike Erol-Kantarci (U. Ottawa, Canada)
 - Ahmed Kamal (Iowa State U., USA)
 - Daniel K. C. So (U. Manchester, UK)
- Walter Cerroni cannot serve for the 2023-2024 term
 - From P&Ps: "At most one Subcommittee member can be chosen among the elected Technical Committee Officers, except the TC Chair"
 - Already served as Secretary in the award subcommittee for the 2019-2020 term

Election of TAOS TC Awards Subcommittee

- Reappointments for second term
 - Abdelmoula Bekkali (TOYO Electric Corporation, Japan)
 - Melike Erol-Kantarci (U. Ottawa, Canada)
 - Ahmed Kamal (Iowa State U., USA)
 - Daniel K. C. So (U. Manchester, UK)
- New nomination as TC Officer
 - Mauro Biagi (U. Rome "La Sapienza"), nominated by TAOS TC Officers
- Subcommittee to be elected by the TC
 - Subject to approval by the TEA Council

TC Campaign Video Project – Call for Ideas

- The TEA Council has launched a video campaign to promote the TC activities
 - Purpose: to make our members and the public aware of what our TCs are doing and how they guide the high-interest initiatives in communication technology
- Each TC has been invited to make a proposal for a short video of about 1-2 minutes
 - provide an enhanced experience and membership recruitment and retention opportunities
 - increase member recruitment and engagement
 - promote the TC and its research and innovations
- The estimated budget is \$30,000, about \$1,000 per TC

TC Campaign Video Project – Call for Ideas

- The TAOS TC Officers invite all Members to submit a possible idea for a short video that could help promoting our TC
 - If you have any good proposal for a promotional video and are willing to engage yourself in TAOS activities, please send a few sentences to the TAOS TC officers describing your idea
 - DEADLINE: April 30, 2023
 - The best ideas will be shortlisted and one will be selected by the TAOS TC officers and submitted to the TEA VP by May 15, 2023
 - Videos produced between June and October 2023 (with help from ieee.tv and IEEE Media Center)
 - 3 or 5 best videos will be selected among 26 TCs for the TC Video Award
- We are looking forward to hearing your great ideas on how to promote TAOS!

TC Innovation Support

- **Purpose**

- To incubate, nourish, and grow breakthrough innovations in communications technologies, this project aims to offer incentive fund to TCs, Special Interest Groups (SIGs), and Emerging Technologies Initiatives (ETIs) to provide original and revolutionary ideas, concepts, techniques, methods and solutions that may lead to the breakthrough in communications technologies

- **How**

- \$50,000 has been approved by the BoG
- A subcommittee will be appointed by VP TEA consisting of BoG & FinCom members, current or past TC Chairs
- Up to 10 proposals will be selected from TC/SIG/ETI submitted proposals, and each selected proposal will be funded by \$5,000
- Supported expenses include travel, support for organizing workshop, seminar, etc.

TC Innovation Support

- **Selection Criteria**
 - Technical challenge and breakthrough innovations your TC/SIG/ETC will address and provide
 - Related contributions and activities which your TC/SIG/ETI has already made and organized
 - Future plan and potential impact (e.g., technological impact and membership diversity)
 - Incubate and nourish the new and emerging technology
 - Help to recruit more members
- **Timeline**
 - 17 Feb. 2023: Call for submission of TC Innovation Project proposals
 - 15 May 2023: Deadline of proposal submission
 - 16 May - 30 June, 2023: Review and Selection Process
 - 1 July 2023: Notification of selection results

TC Innovation Support

- Proposal template outline – Combine everything into an up to 3-page PDF file, including the following items:
 - [1] TC information/Team/Point of Contact
 - [2] Objectives
 - [3] Technical approach or planned activities
 - [4] Expected outcomes and timeline/milestones
 - [5] Relevance to your TC and ComSoc, and potential impacts
 - [6] Budget details, including itemized (estimated) expenses (up to \$5,000 per proposal)
- Any interested Member can send a proposal to the TAOS Officers by May 10, 2023

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 TAOS TC Meeting @ Globecom 2023

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

The background of the slide is a dark blue gradient. On the left side, there is a complex network of light blue lines connecting small circular nodes, resembling a mesh or a molecular structure. This network is denser on the left and fades towards the right.

Adjourn

Thank you!