

**IEEE Communications Society**  
**Satellite and Space Communications (SSC) Technical Committee**

IEEE ICC 2024, Denver, CO, USA

Date: Wednesday, June 12<sup>th</sup>, 2024, 7:30 am – 9:00 am MDT

Location: Beverly Room, Sheraton Denver Downtown Hotel  
(In-person and also available on Zoom)

**1) Approval of the Proposed Agenda (Chair, Gunes Karabulut Kurt)**

The proposed agenda of the meeting is shown below:

1. Introduction and Welcome to New Members
2. Approval of the Proposed Agenda
3. Approval of the Minutes of ICC 2023 SSC TC Meeting
4. SSC TC Officers
5. SSC Award Subcommittee
6. SSC Technical Recognition Award
7. Special Interest Groups (SIGs) Reports
8. Standardization Report
9. Conference and Workshop Reports
  - a) ICC 2024@Denver, USA
  - b) Other conferences/workshops
10. 2024 ComSoc TC Innovation Project - SSC
11. SSC Newsletter
12. CFPs (TC Journal/Magazine Special Issues/Conferences)
13. Web Site, Membership Status, and Email List
14. Time and Place of Next Meeting
15. AoB
16. Adjourn

**2) Welcome & Agenda/Minutes Approval**

- Introduction and Welcome to New Members
- Approval of the Proposed Agenda
- Approval of the Minutes of ICC 2023 SSC TC Meeting:  
<https://site.ieee.org/com-ssc/files/2023/07/sscmin20230516.pdf>

**3) SSC TC Officers**

- Term: 2024-2025



**Chair:**  
**Gunes Karabulut Kurt**  
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**Vice Chair:**  
**Giovanni Giambene**  
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**Secretary:**  
**Peng Hu**  
University of Manitoba  
peng.hu@umanitoba.ca



**Advisor:**  
Prof. Halim Yanikomeroglu  
Carleton University



**TC Standard Liaison:**  
Prof. Wael Jaafar  
École de Technologie Supérieure (ÉTS)

#### 4) SSC Award Subcommittee & Awards

The award call was emailed to the SSC community (through [ssc@comsoc.org](mailto:ssc@comsoc.org)) on April 6, 2024, with the nomination deadline of May 10, 2024 (indicated as the strict deadline).

The evaluation board for the award assigned in the year 2024 is composed of:

- Chair: Pascal Lorenz (Past Chair of SSCTC)
- Member: Gunes Karabulut Kurt (Chair of SSCTC)
- Member: Giovanni Giambene (Vice-Chair of SSCTC)
- Member: Peng Hu (Secretary of SSCTC)

- Member: Tomaso de Cola (Past Chair of SSCTC)

SSC has two awards:

- Satellite & Space Communications Technical Recognition Award
- Satellite & Space Communications Distinguished Service Award

The IEEE Communications SSC 2024 Technical Recognition Award is awarded to:

- Prof. Andreas Knopp, University of the Bundeswehr Munich, Germany

For the outstanding technical contributions to satellite communications and the great support to overall SSC TC activities.



The award was presented in person to Andreas Knopp by Gunes Kurt.

## 5) Special Interest Groups (SIGs) Reports

SIG tries to focus on technical areas. Currently, SSC TC has two SIGs. If you are interested in proposing new SIGs, we will welcome your suggestions.

Two current SIGs are: one is Orthogonal Time Frequency Space (OTFS-SIG) (chaired by Prof. Weijie Yuan), and the other is on Satellite Mega-Constellations: Communications and Networking (chaired by Prof. Gunes Karabulut Kurt, and Prof. Ángeles Vázquez-Castro and Prof. Tomaso de Cola are Vice Chairs).

- OTFS-SIG report (by Shuangyang Li)
  - A list of activities is maintained, and the information is on the SSC TC website. New waveforms are coming along and we are excited to explore potentials in

satellite communications. So far, several things have been planned and researchers are invited to share insights and views in the field.

- Satellite Mega-Constellations Communications and Networking report (by Gunes Kurt):
  - Last year (2023), two presentations, “Mega Constellations - Trends, Technologies and Vision” and “Open challenges in TT&C: The control of mega-constellations and IoT for Earth Observation,” were given by Prof. Symeon Chatzinotas and Dr. Andrea Modenini of European Space Agency (ESA), respectively, through IEEE vTools.
  - An upcoming CCSDS talk by Dr. Tomaso de Cola on the fundamentals of the Consultative Committee for Space Data Systems (CCSDS) will be given on June 19th, 2024.

## 6) Standardization Report

This is the first time we have this on the SSC agenda. This is an update from a month ago and is a very dynamic field.

**Updates on standardization** (Wael Jaafar): IEEE SA Awards nomination deadline is on July 31st, 2024, and call for candidates for IEEE SA Governance was on May 1st, 2024.

- ComSoc standardization board: there are 8 or 9 standardization committees; each one is oriented on one field, and no committee is specialized in space or satellite communications. Probably for our activities, we have to fit as a technical committee into one of the standardization committees.
- There is a standardization committee specifically looking into efficient and green communication chaired by Prof. Jaafar Elmirghani that has potential for contributions and will provide more information next time.
- These standardization committees create projects. The projects we see starting with “B19” are the projects they build and the tasks of these subcommittees or working groups are to prepare reports as standardization documents for the future, which are their main contributions. For them to do that, they will be calling for contributions from different technical committees depending on the field they are in.

(Andreas Knopp) There is a standardization activity we are part of, which is more about security. Is it a separate activity? (Gunes Kurt): Yes, it is a general umbrella of standardization. (Wael Jaafar): ComSoc standardization board is under IEEE SA. Regulations from the IEEE SA still apply.

(Nadjib Aitsnad) Is there any activity or initiative concerning the computation not in space but the HAP and the terrestrial for the telco point of view? (Wael Jaafar): Currently within the standardization committee, there is no specific mentioning of terrestrial, non-terrestrial, or anything about it. We have to have more details of the standardization committee. To give an example, the chair of the Standards Development Board (SDB) is also chairing a standardization committee, NetSoft, and they had many projects such as quantum, communications, and other things. We as SSC TC have to check the standardization opportunities for our committee.

(Murat Uysal): I am trying to explain that we are trying to fit into one of those groups. I agree since I have my experience in IEEE 802.11. Basically, If you want to create a new group, it is possible. First, you need to explain to IEEE there is an interest, not only from academia but from industry. Then we can create an interest group. After the interest group is formed, after one or two years, and then you ask for a project authorization. And there is a working process, if there are IEEE members voting for us, then we can create a standardization committee. But the main problem is some of those committees are formed from the academia. In this case, it can result in some standards but nobody is interested in it. What we need to do hopefully with all committee members here is we can invite industry members with our industry networks. If industry is showing potential interest, we can have a group and our own standard. Perhaps no need to go to green communication or something but have some standards for space communications. This is what we need to do.

(Bassel Beidas) Are we looking for IEEE standardization for space communication or how does it fit into 3GPP standardization activities? (Murat Uysal) In 3GPP it is very hard to survive, but IEEE is much flexible.

(Gunes Kurt) Would like to mention there is a standardization activity led by Prof. Gregory Falco from Cornell University about cybersecurity of space systems.

- (Gregory Falco) Chair of IEEE SA P3349 which is the working group for the international technical standard for space system cybersecurity. This activity started in June 2023 at ICC'23 to develop security by design space system cybersecurity standards by 2025. The intention is to work across five different segments of the space systems: space segment, link segment, ground segment, user segment, and integration segment. For sub-groups, there are chairs are working to design a process and a series of security requirements toward components to use when you do systems engineering to compile in a space system. We are on the way to standards to be delivered in 2025. A series of papers were published recently. There are almost 200 working group members where industry, academia, and government bodies are part of the activity. Everyone is welcome to participate in this activity.

## 7) Conference and Workshop Reports

### a) ICC 2024 (Denver, USA)

- SAC Chair: Lin Gu

There are 83 submissions with 33 papers accepted.

Acceptance ratio is 39.8%

6 lecture-style SSC sessions (5 papers for each session), and 3 papers are presented in an interactive session with other SAC papers

Prof. Halim Yanikomeroglu and Prof. Gunes Kurt organized the full-day workshop on Satellite Mega-Constellations in the 6G era tomorrow. (Pablo Madoery) This workshop is combining

the latest research in mega-constellation and combination with the new types of nodes, like HAPS.

(Bassel Beidas) I will chair a session today on satellite and space communications with the emphasis on LEO systems. Everyone is welcome to attend.

**b) GLOBECOM 2024 (Cape Town, South Africa)**

- SAC Co-Chairs: Prof. Feng Lyu and Prof. Peng Hu  
(Peng Hu) There are 80 submissions and the paper reviews are in progress.

**8) 2024 ComSoc TC Innovation Project – SSC**

ComSoc has the TC Innovation Project program and our SSC has proposed a project, Challenge on “Future 6G NTN Systems”, led by Prof. Giovanni Giambene, supported by Gunes and Peng.

- (Giovanni Giambene) We organize this as a group opportunity, and we are already getting some similar schemes of challenges. This competition is hosted at a conference, so accepted papers will be published in the conference, and the best five papers can get prizes that can cover their travel according to IEEE rules. It is a good opportunity to stimulate the interest of young researchers to enter this field and get publications based on the novelty of the field. At the moment, there is no more information as the deadline has not been reached.
- (Gunes Kurt) We got support from ComSoc. It will be hosted at the sixth International Conference on Communications, Signal Processing, and their Applications (ICCSPA'24), which will be held in Istanbul from July 8<sup>th</sup> to 11<sup>th</sup>, and the submission deadline is June 14<sup>th</sup>. The first five papers will get some travel reimbursement. Conference organizers have helped with the competition, and the accepted papers will be published in IEEE Xplore. Conference organizers have helped us set up the EDAS, and we would like to thank them.

**9) SSC Newsletter**

The newsletter was published on SSC TC website on June 11th, 2024. The newsletter URL is: <http://site.ieee.org/com-ssc/files/2024/06/sscnlv34n1.pdf> We will make an announcement for the newsletter.

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# SATELLITE AND SPACE COMMUNICATIONS

<http://committees.comsoc.org/ssc/>



IEEE  
COMMUNICATIONS  
SOCIETY



SSC

SSC Newsletter

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The Satellite and Space Communications (SSC) Committee is a volunteer group actively involved in advancing satellite and space communication technologies within the IEEE. This committee is approved by the IEEE Communications Society and is governed by the constitution and bylaws of the IEEE as well as the other twenty-three Technical Committees in the Society. The committee belongs to the Technical Committee Clusters of Communication/Signal Processing (C/SP).

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# SATELLITE & SPACE

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## 10) CFPs

### Sponsored CFPs:

(Gunes Kurt) This year, we try to be selective for the sponsored conferences by SSC TC.

- One conference we sponsored is the *2024 International Conference on Information and Communication Technologies for Disaster Management (ICT-DM 2024)* (deadline June 23<sup>rd</sup>, 2024). URL: <https://ict-dm2024.univ-setif.dz>
- The second one is *IEEE Future Networks World Forum - Symposium on Non-Terrestrial Communications in Future Networks 2024* (Deadline: in June 16<sup>th</sup>, 2024). URL: <https://fnwf2024.ieee.org/symposium-non-terrestrial-communications-future-networks>

(Gunes Kurt) If you plan any special issues, conferences, special sessions, or workshops, please let us know and we (SSC TC) can support and/or advertise the activities.

(Andreas Knopp) For ICC 2025, the ICC'25 deadline is in October, and as SSC SAC Co-Chair we welcome paper submission. (Gunes Kurt) CFP will be sent through the mailing list.

(Chia-Han Lee) As the TPC Co-Chair for GLOBECOM 2025 in Taiwan, please consider submit papers. If you are interested in workshops or industry panels, please let me know.

(Shuangyang Li) We would like to advertise the OTFS call for papers and special issue from OJVT. We have some workshop proposals in ICC'24. A list of events will be sent to SSC TC mailing list and posted on the SSC TC website.

## 11) Web Site, Membership Status, and Email List

The forthcoming IEEE ComSoc Technical Committee Meeting on Satellite and Space Communications (SSC) will be co-located in IEEE ICC 2024, Denver, CO, USA, on Wednesday, June 12th 2024, 7:30am - 9:00am MDT in-person. A virtual session will be accessible via Zoom for remote participants.

**Call for Submissions:** Student Challenge on "Future 6G NTN Systems" with the IEEE ComSoc Support - Innovation Project, hosted by the Sixth International Conference on Communications, Signal Processing, and their Applications (ICCSPA'24). **Submission Deadline: June 14th, 2024 (extended).** Please see <https://2024.iccspa.org/comsoc-challenge/> for more details.

<< JOIN US >>

<< SSC TC Call-for-Papers >>

- Web site: <http://ssc.committees.comsoc.org/>
- Membership Status: 460+ members
- Mailing-list: [ssc@comsoc.org](mailto:ssc@comsoc.org)

(Gunes Kurt) we have had a significant increase in the number of members this year, and we will check the member list to avoid duplicate records. (Peng Hu) briefly talks about his passion for promoting activities to raise the awareness of our TC.

## 12) Time and Place of the Next Meeting

The next meeting will be held at IEEE GLOBECOM 2024, Cape Town, South Africa.

## 13) AoB and Adjournment

No other business is raised and the meeting is adjourned.

### Attendee List

No	Name	Affiliation	Email Address
1	Alberto Gotta	ISTI-CNR, Italy	alberto.gotta@isti.cnr.it
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