IEEE ISAC Technical Working Group Meeting
Online, Apr 15, 2022

Meeting minutes

Attending TWG members: Tsung-Hui Chang (Chair), Christos Masouros (Vice Chair), Visa Koivunen, Fan Liu, Rodrigo C. de Lamare, Pu (Perry) Wang, Xiangrong Wang, Xin Wang, Feng Yin, Yiming Zhang.

TWG Members not present: Itsik Bergel, Maria Sabrina Greco, Tony Xiao Han, Jonathan Manton, Nuria González Prelcic, Osvaldo Simeone

Non-TWG Members attending: Alle-Jan van der Veen (SPS Vice President-Technical Directions)

Minutes written by Tsung-Hui Chang

1. Attending Members made self-introductions.
2. Tsung-Hui presented introduction of the TWG
   a. TWG Life span: 6 years. All members term starts from Jan 1, 2022 to Dec 31, 2024 (3-year term).
   b. 16 Members from different technical committees including SPCOM, SAM, SPTM and MLSP.
   c. Tasks including proposing special tracks, workshops, and international conferences, special issues in top-tier IEEE journals, tutorials, invited talks; working in industry panels to promote standardization and education; introducing new EDICS; promoting and proposing public dataset, competitions, and reproducible research; building research library and best readings.
   d. MoU made to closely work between ISAC TWG and ComSoc ISAC ETI.
   e. Different SWG were built to focus on different tasks including Publication SWG, Event SWG, Education SWG, EDICS SWG, Content SWG and Industry SWG.
3. Fan presented Activity report of ComSoc ETI in year 2021 and future.
   a. Review of ISAC publications status, ISAC project status, ISAC Standardization status.
   b. Introduce ISAC-ETI Organization: Team and Working Groups, 2021 and 2022 Highlights.
4. Rodrigo presented SPS EDICS proposal for ISAC.
   a. Motivation: No SPS EDICS dedicated to ISAC which causes difficulties in paper submission, editor allocation and reviewer selection.
   b. Survey and Observations:
      - Most of the SPCOM topics covered by the EDICS SPC are not tailored to ISAC.
      - Many of the Radar and Sonar topics covered by the EDICS RAS are not tailored to ISAC.
      - Various adhoc and emerging topics also appear in recent publications.
   c. Propose to add two EDICS items:

- **SPC-ISC** representing *Integrated Sensing and Communications.*
- **RAS-IRC** representing *Integrated Radar and Communications.*

d. Propose two extra items under the category **CNS** (*communications, networking, and sensing*):
- **CNS-APISC** representing *Architectures and Protocols for ISAC*
- **CNS-SPISC** representing *Signal Processing for ISAC*

5. Comments and Discussions

a. Discussion and clarification on the EDICS proposal:
- Alle-Jan introduced the process of adopting new EDICS and asked whether the four proposed EDICS are complementary and do we need all four of them.
- Rodrigo explained that the first two SPC-ISC and RAS-IRC are tailored to TSP and the other two CNS-APISC and CNS-SPISC are for the unified EDICS of the SPS. He agrees that the last two overlap with the first two.
- Tsung-Hui suggested to send the proposal to all members to see any comments and get consensus, then further submit to upper levels according to the procedures.
- Christos asked whether the EDICS change can be dynamic as in the future same issue may arise again since there could emerge new topics within ISAC; Alle-Jan explained that it depends on the number of submissions and reviewers because it is used to assign reviews, and probably it can be changed once for a year.

b. Relation with ComSoc: Alle-Jan asked the relation between SPS and ComSoc on the ISAC activities and Tsung-Hui Chang explained that we had an MoU to encourage collaborations of both SPS ISAC TWG and ComSoc ISAC ETI in many aspects.

c. Visa suggested to reach out and make more collaboration with AES society and radar community. Fan Liu introduced some ongoing activities that are closely related with radar community and proposed to hold special sessions, tutorials, workshops, etc in radar conferences. Christos and Visa added to that involving radar people is important and pointed out many common research interests between radar community and SPS.

d. Tsung-Hui suggested to consider tutorials/special sessions in SAM, SSP, SPAWC, MLSP; special issues in TSIPN, OJSP. Xin mentioned SPAWC 2023 will be held in Shanghai and welcome any tutorials and special issues proposals about ISAC.

e. Discussion on best reading list:
- Rodrigo suggested to contribute a complementary best reading list on SP aspects and radar aspects.
- Tsung-Hui suggested to contribute to a supplementary reading list from SPS perspective in TWG website first and in the future to contribute to a joint list with other societies.
- Fan suggested to contribute to Github webpage as currently there is no best reading list for SPS. He also suggested to organize dedicated season of Webinar series: to assign each season with specific topics to involve different communities.
- Tsung-Hui suggested that the reading list on Github website needs more detailed selection and recommendation, and Perry suggested to better use enterprise account for the Github website.

f. Tsung-Hui introduced future ISAC related database collection work:
- Identify/collect open dataset from different sources and provide them in a specific webpage.
- Generate our own dataset.

g. Discussion on standardization:
- Alle-Jan asked on asking how SPS could host new standardization or support standardization activities under the umbrella of SPS
- Perry mentioned that he is not aware how, but SPS could support new standardization on sensing or radar, particularly for commercial applications.
- Alle-Jan mentioned that there is a technical working group which is active in discussing standardization of calibration strategies for sensor arrays.
- Visa commented that standardization for sensing may not be straightforward as communication systems.