



The 2nd Workshop on Spectrum Sharing Technology for Next Generation Communications



General Co-chairs

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Important Dates

- ❖ Paper submission deadline:
January 20, 2022
- ❖ Notification of acceptance:
March 06, 2022
- ❖ Camera-ready papers:
March 15, 2022

Submission link

<https://edas.info/N28800>

Webpage link

TBD

Scope

Due to the ever-increasing demands on wireless communications and limited radio spectrum resources, dynamic spectrum sharing (DSS) is a key solution to improve the ability of next generation (NG) wireless communications systems to monitor, access, use, and share spectrum. DSS requires new design, optimization and measurement processes as compared to current methods. There is an urgent need to develop standards and techniques for efficient DSS among heterogeneous systems and networks operating in licensed, unlicensed, license-assisted, or tiered-access bands, and to develop algorithms and hardware to conduct accurate sensing and measurement of spectrum use.

Topics

We seek original completed and unpublished work not currently under review by any other journal/magazine/conference. Topics of interest include, but are not limited to:

- Recent policy and standardization progress on spectrum allocation and unlicensed spectrum sharing.
- Intra- and inter-system DSS for pre-6G, 5G NR-U, 4G, IoT, WLAN (e.g., IEEE 802.11ay/11ax/11be), WPAN, and other wireless communication systems.
- DSS in Open Radio Access Network (O-RAN) or Public Safety communication systems.
- DSS and Radio Astronomy in Non-Terrestrial Network related to 5G and pre-6G systems.
- New DSS techniques and applications on multi-RAT coexistence systems in the 3.5 GHz Citizens Broadband Radio Service (CBRS) band, the 6 GHz band, mmWave bands, ISM bands, and other bands.
- DSS between radar systems and communication systems.
- Explainable and efficient Artificial Intelligence/Machine Learning (AI/ML) techniques for DSS analysis, design, and measurement.
- Coexistence system modeling, analysis, and evaluation, such as stochastic geometry, aggregate interference, and traffic models for system planning and optimization.
- New DSS spectrum sensing techniques and signal classification methods.
- Experimental methods and metrology for DSS, such as adaptive measurement and uncertainty evaluation, and DSS testing results using procedures given by 3GPP, IEEE, ANSI, ETSI, and other standards development organizations.
- Evaluation and mitigation of hardware imperfections, receiver susceptibility, interference, and noise.

Paper Submission

The workshop accepts only novel, previously unpublished papers. The page length limit for all initial submissions for review is SIX (6) printed pages (10-point font) and it must be written in English. All final submissions of accepted papers must be written in English with a maximum paper length of SIX (6) printed pages (10-point font), including figures. No more than ONE (1) additional printed page (10-point font) may be included in final submissions and the extra page (7th page) will incur an over length page charge of USD 100. For more information, please see the IEEE ICC 2022 official website: <https://icc2022.ieee-icc.org/authors>