

## CALL FOR PAPER Special Session Workshop

### Economics and Adoption of Millimeter Wave Technology in Future Networks

#### Special Session Organizer

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#### Topics

- Socio-cultural hurdles for a broad adoption of mmWave links
- Return on Investment of mmWave deployment for backhaul and access networks
- New technologies that can synergize and facilitate the adoption of mmWave technology
- Business innovation needed for a new technology adoption
- Breakthrough innovation in the mmWave areas
- Wigig, WiFi and cellular mmWave access: synergies and differences
- Standardization status of mmWave technologies
- Regulatory aspects of mmWave technologies
- EMF for mmWave devices
- New business cases for mmWave adoptions

#### Submission Information

Authors are invited to submit original papers of no more than 6 pages (standard IEEE proceedings, two-column, 10 pt. font, etc.), including figures, tables, and references, in PDF format. Accepted papers will be published in the WCNC 2018 conference proceedings, which will be submitted to the IEEEExplore database. Submission implies that at least one of the authors will register and present the paper at the conference.

Paper submission is accepted through the EDAS web site:  
<https://edas.info/newPaper.php?c=24168&track=87758>

#### Key dates

**Nov 2, 2017** Submission of papers

**Dec 15, 2017** Notification of acceptance

**Jan 12, 2018** Camera-ready version of accepted papers

Dear colleagues,

you are cordially invited to submit your latest results to the **IEEE WCNC 2018** (Wireless Communications and Networking Conference) **Special Session Workshop** on Economics and Adoption of Millimeter Wave Technology in Future Networks, to be held in Barcelona, Spain on April 15-18.2018. The Workshops is co-organized by the funded projects 5G-MiEdge, TWEETHER and ULTRAWAVE.

#### Motivation and scope

Future rentable 5G network deployments are tightly linked to the affordable availability of a set of new technology enablers. Among the most important ones, Millimeter Wave technology is for sure a pillar of future wireless networks, both for access and for backhaul connections.

Backhaul enhancements are desperately needed to cope with the management of a skyrocketing number of devices (order of tens of billion according to the IoT paradigm) that will connect to future smart networks and grids, within bigger and bigger (smart) city conglomerates. Backhaul advancements are also needed to handle the huge amount of additional data exchanged by new wireless moving sources, e.g. the booming self- and automated-driving vehicles, each one expected to create gigabyte/Km of data.

Access enhancements are needed as well, as the forthcoming 5G system, and its successors, will have to provide users at the same time with smooth, reliable and high bandwidth connections, leveraging on a set of different access technologies. Legacy system will be enhanced via aggressive carrier aggregation schemes, meanwhile new radio technologies will leverage the advanced multi-connectivity capabilities and the consistent additional new spectrum bands, mainly in the mmWave regions, being allocated for wireless access.

The Special Session Workshop on Economics and Adoption of Millimeter Wave Technology in Future Network aims at extending and enlarging the ecosystem discussion to aspects also related to non-technical topics, impacting in a broad sense the economics of the society, and that will play a big role in the effective adoption of Millimetre Wave technology.

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