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Call for Papers

5G TRIALS ACROSS MULTIPLE VERTICAL INDUSTRIES - FROM EXPERIMENTS TO BUSINESS VALIDATION

SYMPOSIUM CO-CHAIRS

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SCOPE AND MOTIVATION

As Commercial rollout of 5G systems in 2020 is expected. While the 5G standard is in place, the gap to bring 5G into business remains huge. Currently 5G trials have been conducted intensively around the World. 5G aims to natively support enhanced mobile broadband (eMBB), massive machine type communication (mMTC) and ultra-reliable low latency communication (URLLC) services in a single infrastructure. It brings enormous opportunities for many vertical sectors, such as, automobile, industry automation, media, and health, just to list a few, to expand and renew their business, or make it more efficient. To allow the coexistence of services with a very different nature, 5G has introduced innovations from spectrum access, air interface, system architecture, network function virtualization in radio and core network, end-to-end network slicing, security, privacy, service orchestration etc. All new 5G features and functions need to be extensively verified and optimized before the commercial rollout of 5G networks. It is essential to test 5G features in complex deployed environments, identifying and solving coverage, interoperability, compatibility and service provisioning problems, and to ensure that 5G can meet the requirements of the various vertical sectors. In particular, the support to vertical sector services will need new measurement and test methods. Due to the complexity of 5G systems, many practical and theoretical challenges will need to be verified and solved during 5G trials.

TOPICS OF INTEREST

The workshop aims at providing a forum for industry and academics to disseminate new findings on 5G trials in vertical industries, and new business development. The workshop will call for papers presenting test results from trials as well as theoretical results based on realistic deployment schemes and new 5G business models. The target topics of the workshop include, but are not limited to:

5G research in multiple vertical industries

- Healthcare
- Energy
- Aquaculture
- Automotive / Transport
- Logistics
- Other sectors

Spectrum

- 5G spectrum evaluation
- Spectrum sharing

5G trial development

- 5G trial cases and results
- 5G testbed implementation
- New test technologies

Verticals and new services

- C-V2X
- Applications of mMTC
- Applications of URLLC
- New/innovative services enabled by 5G

Measurement and evaluation

- 5G new radio
- Radio access network
- Core network
- Backhaul
- Fronthaul
- NFV/SDN implementation
- Network slicing
- D2D communications
- Mobile edge computing
- Test result analysis

Network deployment and optimization

- 5G network planning
- Network deployment optimization
- End-to-end performance optimization

Security and privacy aspects

5G/6G business model evaluation

5G/6G (pre-)standards and implementation

IMPORTANT DATES

Paper Submission: **15 May 2022**

Notification: 30 July 2022

Camera Ready and Registration: 30 August 2022

HOW TO SUBMIT A PAPER

All papers for technical symposia should be submitted via [EDAS](#).

