

IEEE ICC 2019 workshop
5G-Trials – From 5G Experiments to Business Validation
20 May 2019, Oriental Riverside Hotel, Shanghai, China

Call for Papers

On 14 June 2018, 3GPP rolled out the standalone (SA) version of the 5G standard. 5G has now moved to the trial phase. In no later than two years from now, we expect to see first deployments of commercial 5G systems. While the 5G standard is in place, the challenge to bring the 5G into business remains huge. Particularly, 5G aims to natively support enhanced mobile broadband (eMBB), massive machine type communication (mMTC) and ultra-reliable low latency communication (URLLC) services over the same infrastructure. This brings enormous opportunities for many vertical sectors, just to list a few, automobile, industry automation, media, and health, to expand and renew their business models. To allow the coexistence of services of such very different nature, 5G has systematically introduced innovations from spectrum access, air interface, system architecture, network function virtualization in radio and core network, end-to-end network slicing, security, privacy, to service orchestration etc. All new features and functions need to be thoroughly tested and optimized before the commercial rollout of 5G networks. It is essential to test 5G features in realistic 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 support of vertical sector services will need new measurement and test methods. The deployment of densified 5G networks for multi-tenant services will need new network planning and network optimization methods. Due to the complexity of 5G systems, many practical and theoretical challenges will need to be verified and solved during 5G trials.

This workshop aims at providing a venue for industry, operators, verticals and academics to disseminate new findings regarding 5G trials and new business developments. The workshop accepts not only test results from trials, but also theoretical results based on realistic deployment schemes and new 5G business models. The targeted topics of the workshop include, but are not limited to:

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| • 5G trial development | Applications of mMTC | NFV/SDN implementation |
| 5G trial cases and results | Applications of URLLC | Network slicing |
| 5G testbed implementation | New / innovative services | D2D communications |
| New test technologies | enabled by 5G | Mobile edge computing |
| • Spectrum | • Measurement and evaluation | Test result analysis |
| 5G spectrum evaluation | 5G new radio | End-to-end performance optimization |
| Spectrum management | Radio access network | • Network deployment and optimization |
| (licensed/unlicensed) | Core network | 5G network planning |
| • Verticals and new services | Backhaul | Network deployment optimization |
| C-V2X | Fronthaul | |

Workshop Organizers

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|----------------------|--|
| Workshop Chairs: | Uwe Herzog, EURESCOM, Germany
Chih-Lin I, China Mobile, China
Latif Ladid, University of Luxemburg, Luxemburg |
| Workshop TPC Chairs: | Tao Chen, VTT, Finland
Wei Deng, China Mobile, China
Klaus Moessner, University of Surrey, UK
Huiling Zhu, University of Kent, UK |
| Publicity Chair: | Kai Zhang, Martel GmbH, Switzerland |

Important dates

- 15 January 2019: Paper submission deadline
- 16 February 2019: Paper acceptance notification
- 16 March 2019: Camera ready submitted

Website: <https://icc-trial.5g-drive.eu>

Submission Guideline

See <http://icc2019.ieee-icc.org/authors/call-submissions>