

5G is envisioned as the next generation of mobile networks. Several initiatives are taking place in Asia, America and Europe, such as the MOST (Ministry of Science & Technology) 5G project in China, the 5G forum formed in South Korea, the “2020 and beyond” Ad Hoc group in Japan, the 5G Infrastructure Public Private Partnership (5G PPP) in Europe, in addition to several standardization related activities. The emerging common features/requirements from these worldwide activities could be summarized as the following: faster data transfer rates, shorter latency, availability, security, lower costs and power consumption and high performance in fast mobility situations. Thus, 5G will be the place to deploy many new technologies. In particular, 5G networks are expected to rely massively on the most recent advances in Software-Defined Networking (SDN) and Network Function Virtualization (NFV), hence offering the opportunity to build an open and innovative platform for communications and a novel brand gathering current and future network architectures, technologies and usage. Besides the need for an innovative 5G network architecture, effective and advanced network management architectures and techniques are also cornerstones to fulfil these requirements. The main goal of this workshop is to present state-of-the-art research results and experience reports in the area of management of 5G networks, addressing topics such as management of SDN and NFV-based networks and services, advances in the management of cloud platforms, programmatic languages and abstractions applied to resources and service management, big data and analytics applied to management.

The second IFIP/IEEE International Workshop on Management of 5G networks (5GMan 2017, 2nd edition) will be held in conjunction with the IEEE/IFIP Integrated Management, Lisbon, 8-12 May 2017.

TOPICS OF INTEREST

Authors are invited to submit papers that fall into or are related to one or multiple topic areas listed below:

- Analytics and big data approaches for managing 5G networks
- Cognitive and autonomic management & orchestration/choreography
- Metadata, data and information models and semantics
- Programming abstractions for 5G networks
- Policy-based management, including imperative, declarative (intent), and other paradigms
- End-to-end mobile software networks architecture
- Cloud Management, software-defined infrastructure, and NFV
- Management architecture, building blocks, protocols and APIs for 5G networks, layers and systems
- Operating system for networking in 5G
- Cloud computing and network virtualization technologies for RAN, backhaul and core
- NFV architectures for 5G networks
- Dynamic service placement and management
- Dynamic Service Function Chaining
- QoS and QoE new metrics in software-defined 5G networks
- Recursive mobile network architectures
- Advances in mobile network management and orchestration
- Fronthaul and backhaul integration
- Spectrum sharing
- Emerging 5G standards
- Economic drivers for the deployment of 5G Networks technologies
- Evaluation, testbeds and management
- Open Source tools for 5G Prototyping
- Feedback on 5G experimental testbed

PAPER SUBMISSION

Paper submissions must present original, unpublished research or experiences. Only original papers that have not been published or submitted for publication elsewhere can be submitted. Each submission must be written in English, accompanied by a 75 to 200 words abstract that clearly outlines the scope and contributions of the paper. There is a length limitation of 6 pages (including title, abstract, all figures, tables, and references) for regular conference papers, and 4 pages for short papers describing work in progress. Submissions must be in IEEE 2-column style. Self-plagiarized papers will be rejected without further review. Authors should submit their papers via JEMS: (<https://jems.sbc.org.br/Paper.cgi?c=2685&track=6206>).

The best papers will be invited to submit to the Special Issue of the International Journal on Network Management (IJNM) titled: "*Management and Orchestration of 5G Networks: from Theory to Testbed*", [link to be added].

PROCEEDINGS

Papers accepted for 5GMan2017, will be included in the conference proceedings, IEEE Xplore, IFIP database and EI Index. IFIP and IEEE reserve the right to remove any paper from the IFIP database and IEEE Xplore if the paper is not presented at the workshop. Awards will be presented to the best paper.

WORKSHOP ORGANIZERS AND CO-CHAIRS

- Imen Grida Ben Yahia, Orange Labs, France
- Roberto Riggio, CREATE-NET, Italy

WORKSHOP STEERING COMMITTEE

- Imen Grida Ben Yahia, Orange Labs, France
- Roberto Riggio, CREATE-NET, Italy
- John Strassner, Huawei Technologies, USA
- Younghan Kim, Soongsil University, Korea
- Christian Esteve Rothenberg, University of Campinas, Brasil

IMPORTANT DATES

- Abstract registration deadline: January 9th, 2017
- Paper submission: January 9th, 2017
- Notification of acceptance: January 30, 2017
- Final version of papers due: February 15, 2017
- Workshop date: May 8-12, 2017