Call for Papers: IFIP/IEEE International Workshop on Management of 5G Networks

5GMan 2019 4th edition

"…Coping with Network Intelligence"

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, slicing, advances in the management of cloud platforms**, programmatic languages and abstractions applied to resources, service and slicing , big data and analytics applied to management.

The fourth IFIP/IEEE International Workshop on Management of 5G networks (5GMan 2019, 4th edition) will be held in conjunction with the **IFIP/IEEE International Symposium on Integrated Network Management 8-12 April 2019 // Washington DC // USA**

***5G Man workshop is endorsed by the IEEE Network Intelligence Initiative, bringing NI members to work together towards greater scientific advancement on this Network Intelligence in the context of 5G*. More info here: https://www.comsoc.org/committees/emerging-technologies-initiatives/network-intelligence.**

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 (resources, services, slices)
- Policy-based management, including imperative, declarative (intent), and other paradigms
- Code mining, NLP for Networks
- 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
- Management of Cloud computing and network virtualization technologies for RAN, backhaul and core
- Dynamic service placement and management
- Dynamic Service Function Chaining
- Managing QoS and QoE new metrics in software-defined 5G networks
- Advances in mobile network management and orchestration
- Fronthaul and backhaul integration
- Spectrum sharing
- Emerging 5G management standards
- Economic drivers for the deployment of 5G Networks technologies
- Evaluation, testbeds and management
- Open Source tools for 5G management Prototyping
- Feedback on managing 5G: experimental testbed
- Network virtualization and software-defined networking techniques for 5G networks
- *Supporting heterogeneous verticals on the same 5G Sliced networks*

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. Submissions should be made using the JEMS conference submission system. Papers for the Experience Sessions must be written in English and adhere to one of the following two format options:

• **Option 1**: long paper should be in IEEE 2-column format, the paper submissions must not exceed 6 pages, in PDF only. Examples can be found here: https://www.ieee.org/conferences/publishing/templates.html.

• **Option 2**: short paper should be in IEEE 2-column format. It is the same format as long papers. Short papers must not exceed 4 pages, in PDF only.

Self-plagiarized papers will be rejected without further review.

PROCEEDINGS

Papers accepted for 5GMan2019, 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 Networks, France
- Roberto Riggio, Fondazione Bruno Kessler, Italy

WORKSHOP STEERING COMMITTEE

Mohamed Faten Zhani, École de Technologie Supérieure, Canada
Noura Limam, University of Waterloo, Canada
Laurent Ciavaglia, Nokia, France
Weverton Cordeiro, UFRGS, Brazil

IMPORTANT DATES

Paper submission: January 5th (Firm), 2019

Notification of acceptance: January 25, 2019

Camera-ready papers: February 15, 2019

Workshop date: April 12, 2019

PREVIOUS EDITIONS:

- 3rd edition of 5G Man 2018 http://www.5gman.org/
- 2nd edition 5G MAN 2017 http://www.5gman.org/cfp.html
- 1st edition 5G MAN 2016

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