

# 2<sup>nd</sup> IEEE INTERNATIONAL WORKSHOP ON SOFTWARE DEFINED 5G NETWORKS (SOFT5G)

Evolvable and dependable 5G networks: architectures, paradigms, and standards



http://www.soft5g.org/



#### **SCOPE**

The second IEEE International Workshop on Software Defined 5G Networks (Soft5G 2016) will be held on June 10<sup>th</sup>, 2016 in Seoul, Korea along with 2<sup>st</sup> IEEE International Conference on Network Softwarization (NetSoft 2015). Software defined networking (SDN) is undoubtedly one of the most popular topic in the wired and the wireless networking domains raising interested among the academic and the industrial communities alike. Additionally the evolution of Network Functions Virtualisation (NFV) brings the opportunity to implement network services in software on top of generic hardware architectures paving the way to a truly evolvable network. The mobile networks beyond LTE and LTE Advanced are required to cope with dramatic increases in data traffic and with a highly diverse devices, applications and services ecosystem. As a result, several research initiatives on 5G mobile networks have been launched worldwide targeting the definition of the next generation mobile networking ecosystem. In parallel, network related standardization activities are mushrooming at the most important SDOs. SDN brings the promise of enabling flexible, scalable, highly configurable and reliable mobile networks by leveraging on programmable control, management, *and* data planes. This workshop aims at bringing together research and industry partners to present and discuss preliminary research results, ongoing work and experiences on the topic of software based, programmable 5G networks and services.

#### TOPICS OF INTEREST

Authors are invited to submit papers that fall into the area of software-defined and virtualized mobile infrastructures. Topics of interest include, but are not limited to, the following:

- Convergence of heterogeneous wireless networks
- EPC evolution towards 5G Core
- NFV architectures for 5G
- Programming abstractions for 5G networks
- Software based PHY and MAC modelling
- End-to-end wireless software networks architecture
- Cloud computing and network virtualization technologies for RAN, backhaul and core
- · Distributed data-centres architectures for 5G
- QoS and QoE in software defined 5G networks
- Ditributed clouds technologies for future wireless networks
- Network services and applications life-cycle management
- Edge network support
- High availability in software wireless networks
- Software robustness for shared network environments

- Advances in wireless network management and orchestration
- End-to-end resource allocation in 5G networks
- Dynamic service placement & scalability strategies for 5G
- Programming abstractions for spectrum sharing
- Autonomous and self-backhauling
- Software programmed end-user devices
- Benchmarking of software defined networks
- Software networks evaluation and testbeds
- Open Source tools for 5G Prototyping
- Emerging 5G SDN architectures & standards
- Emerging 5G Applications and Architectures
- Service Function Chaining Approaches
- Cross Layer Application Programming
- M2M/IoT architectures in 5G
- Recursive mobile network architectures

### PAPER SUBMISSION

Authors are invited to submit only original papers not published or submitted for publication elsewhere. Papers can be up to 6 pages. Papers must be in IEEE 2-column US-Letter style using IEEE Conference templates (http://www.ieee.org/conferences events/conferences/publishing/templates.html) and submitted in PDF format via JEMS (https://submissoes.sbc.org.br/home.cgi?c=2439). Papers exceeding these limits, multiple submissions, and self-plagiarized papers will be rejected without further review. All submitted papers will be subject to peer-review. Accepted and presented papers will be published in the IEEE Soft5G Proceedings and submitted to IEEE Xplore®.

## IMPORTANT DATES

Paper Submission: January 31st, 2016 Notification of Acceptance: February 28<sup>th</sup>, 2016 Camera Ready Papers: March 15<sup>th</sup>, 2016 Workshop date: June 10<sup>th</sup>, 2016 WORKSHOP CO-CHAIRS

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