#### Call for Papers



### IEEE International Workshop on

## Software Defined 5G Networks (Soft5G 2015)

Architectures and Programming Paradigms for emerging 5G Networks

LONDON, U.K. - APRIL 13-17, 2015

http://www.soft5g.org/





#### SCOPE

The IEEE International Workshop on Software Defined 5G Networks (Soft5G 2015) will be held between April 13-17, 2015 in London, U.K. at the Cruciform Building of University College London (UCL) along with 1st IEEE International Conference on Network Softwarization (NetSoft 2015). Software defined networking (SDN) is undoubtedly one of the 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 functions in software on top of generic hardware architectures. In parallel, network related standardization activities are mushrooming across the most important SDOs. The mobile networks beyond LTE/EPC are currently 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 this next generation mobile networking ecosystem. SDN brings the promise of enabling flexible, scalable, highly configurable and reliable network functions and complete solutions for future 5G mobile networks, by leveraging the programmability advantages in the network control and management 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 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
- Data-center 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

- Software based 5G networks resilience
- 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

## PAPER SUBMISSION

Authors are invited to submit only original papers not published or submitted for publication elsewhere. Papers can be up to 6 pages. IEEE 2-column US-Letter **Papers** should be in style usina IÉEE (http://www.ieee.org/conferences events/conferences/publishing/templates.html) templates and submitted in PDF format via EDAS at: http://edas.info/N19311. 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 Soft5G Proceedings and submitted to IEEE Xplore®.

# **IMPORTANT DATES**

Paper Submission: **February 16<sup>th</sup>**, **2015** Notification of Acceptance: **March 6<sup>th</sup>**, **2015** 

## **WORKSHOP CO-CHAIRS**

Thomas Magedanz, TU Berlin/Fraunhofer Institute FOKUS, Germany Roberto Riggio, CREATE-NET, Italy

# **NETSOFT GENERAL CO-CHAIRS**

Prosper Chemouil, Orange Labs, France George Pavlou, University College London, UK Camera Ready Papers: March 13<sup>th</sup>, 2015

Workshop date: t.b.c.

# **NETSOFT WORKSHOP CO-CHAIRS**

Amitava Biswas, Cisco Systems, US Noura Limam, University of Waterloo, Canada

#### **IEEE SDN Initiative Chair**

SOFTWARE Antonio Manzalini, Telecom Italia, Italy NETWORKS

# **TECHNICAL SPONSORS**

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