# 5th International Workshop on Self-Organizing Networks **IWSON**





# **Call for Papers**

In recent years, there has been an increasing interest in the Self-Organizing Network (SON) paradigm applied to wireless communications networks. Approaching the challenges in radio network SON is a focus area in both industry and academia research. Currently, we note rising interest in SON for future radio access technologies beyond LTE and LTE-Advanced, but also for field experience from LTE SON deployments, SON coordination approaches and techniques, SON features tailored to the needs of multi-radio access technology, multi-layer and multi-vendor networks, end-to-end SON solutions, impact of SDN/NFV advancements on SON, and enhancement of SON with cognition and learning capabilities.

With the success of the first four IWSON events in Budapest, Paris, Dresden and Barcelona, and the progressive focus on SON as the means to improve the performance and operability of mobile radio networks, it is timely and important to continue this workshop series bringing together people with SON interests. The scope of IWSON is intended to attract both industry and academia, primarily with a focus on 3GPP technologies such as LTE and beyond, but other systems can be considered as well.

The program will include oral presentations and a poster & demonstration session to enable lively discussions. The workshop welcomes submissions from both researchers and practitioners, either closely related to currently standardized systems or considering future systems.

Areas of interest include but are not limited to

#### SON use cases and functions in future radio networks

- SON in evolved radio networks, such as 5G concepts and LTE beyond Rel. 12
- Broad view of heterogeneous networks (3GPP and non-3GPP): multi-layer, vendor, -tech. (incl. WiFi), and small cell scenarios
- Load balancing, traffic steering, end-to-end traffic steering, mobility management
- Interference and spectrum management
- Energy Saving Management (ESM) in heterogeneous networks
- RAN / network / user equipment support for SON
- SON for adaptive antenna systems

# SON management and coordination

- SON workflow definition and management
- Policy and objective driven SON deployment, management and enforcement
- Coordination between network layers, vendors, technologies, RAN and backhaul
- Different coordination approaches, e.g., design vs. runtime, distributed vs. centralized, layered vs. monolithic, implicit vs. explicit, etc.
- Monitoring stability and performance of SON operation
- End-to-End SON solutions, e.g. RAN and backhaul, RAN and CN, RAN and CDN
- SDN and NFV evolutions for managing SON

#### SON in the field

- Test bed activities and experience from field trials
- Experiences and field performance of SON features implemented in LTE deployments

### SON evolution and cognitive networking

- Automation techniques and technologies beyond SON
- Cognitive and self-learning mechanisms
- Context-based and scenario and application-specific SON, e.g., smart cities, telematics applications, disaster handling, car-to-machine communications

Keep yourself updated by joining the group IWSON at Linked in ...







## **Important Dates**

Submission of papers and demo proposals:

**17 December 2014** 

Notification

26 January 2015 Camera Ready

**16 February 2015** 

#### **Submission Info**

5-page full paper for presentation; accepted papers will appear on the CD and on IEEE Xplore

2-page demonstator proposals proposals with a reasonable description of background, assumptions and technical details for demonstrator sessions; will be peer-reviewed, but will NEITHER appear on the CD nor in IEEE Xplore

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# **Organizing** Committee

Zwi Altman. Orange Labs, France

Markus Gruber, Alcatel-Lucent Bell Labs, Germany

Fredrik Gunnarsson, Ericsson Research, Sweden

Thomas Kürner, Technische Universität Braunschweig, Germany

Lars Christoph Schmelz, Nokia Networks, Germany

Kostas Tsagkaris University of Piraeus, Greece