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# Call for Papers Fifth International Workshop on Cloud Technologies and Energy Efficiency in Mobile Communication Networks (CLEEN 2017)

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*How cloudy and green will mobile network and services be?*

22 June 2017, Turin, Italy

## Scope and Objectives:

This workshop explores novel concepts to allow for flexibly centralised radio access networks using cloud-processing based on open IT platforms, in coordination with network functions virtualization technologies and MEC (Multi-Access Edge Computing), that are recognized as key enablers for the definition of future 5G systems. The aim is to allow for a guaranteed high quality of experience for mobile access to cloud-processing resources and services, and to allow a future network evolution focused on energy efficiency and cost-effectiveness. In fact, all future innovative network solutions will be conceived and deployed with a long term perspective of sustainability, both in terms of energy consumption of mobile network (and related interoperability with terminals) and cost efficiency of the different deployment and management options. This requires new concepts for the design, operation, and optimization of radio access networks, backhaul networks, operation and management algorithms, and architectural elements, tightly integrating mobile networks and cloud-processing. This workshop will cover technologies across PHY, MAC, and network layers, technologies which translate the cloud-paradigm to the radio access and backhaul network, and will analyse the network evolution from the energy efficiency perspective. It will study the requirements, constraints, and implications for mobile communication networks, and also potential relationship with the offered service, both from the academic and the industrial point of view.

We solicit original submissions in the following areas:

- Centralized / decentralized PHY and MAC processing
- Flexible assignment of functionality in mobile networks
- Joint operation and optimization of radio access and backhaul networks for cloud-based mobile networks
- Integration of cloud-services into green heterogeneous wireless networks
- Management of cloud-based/cloud-operated heterogeneous networks providing access to cloud-services
- Energy efficiency vs. QoS vs cost-efficiency trade-offs
- Architectural evolution of mobile networks
- MEC and related enablers (e.g. new interfaces, protocols, node-to-node communication, D2D communication, ...)
- Cost effective deployment strategies for evolved heterogeneous wireless network
- Service and energy management aspects of cloud-based mobile networks
- Storage and computation capability of small cells
- Resource allocation techniques; interference analysis, avoidance, and mitigation for heterogeneous networks
- Testbeds and performance evaluation for cloud-based mobile communication networks

## Important Dates:

Paper Submission: ~~31/03/2017~~ **14/04/2017**

Acceptance Notification: 12/05/2017

Camera-Ready: 01/06/2017

Workshop: June 22, 2017

## Submission Guidelines:

Accepted papers should be presented for publication in IEEEExplore. A full version of each paper has to be submitted through the EDAS system under the workshop track. Guidelines for submission can be found in the CLEEN2017 website: [www.flex5gware.eu/cleen2017/submission](http://www.flex5gware.eu/cleen2017/submission)

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