





Scope and Objectives:

This workshop explores novel concepts to allow for flexibly centralised radio access networks using cloud-processing based on open IT platforms, to allow for a 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 layer, it covers technologies which translate the cloud-paradigm to the radio access and backhaul network, and analyse all the network evolutions 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 an academic and 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

Important Dates:

Paper Submission: May 27, 2013 June 7, 2013 Acceptance Notification: June 1, 2013 June 10, 2013 Camera-Ready: June 10, 2013 June 17, 2013 Workshop: September 2-5, 2013

Submission Guidelines:

Papers need to be uploaded to the <u>TrackChair page</u> (*), should be in English, not exceeding 5 two-column A4 pages, and should follow standard IEEE conference templates available <u>here</u> (**). Accepted papers will be published in IEEE Xplore. They will be presented either orally or by means of a poster.

Organising Committee:

General Chairs

Dario Sabella (Telecom Italia, Italy) Emilio Calvanese Strinati (CEA LETI, France) Thomas Michael Bohnert (Zurich University of Applied Sciences)

Technical co-chairs

Peter Rost (NEC Labs Europe, Germany) Armin Dekorsy (University of Bremen) Georgios Karagiannis (University of Twente)

Publicity chair

Carlos Bernardos, University Carlos III Madrid

- 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

Technical Programme Committee:

Ivano Guardini, Telecom Italia Marco Di Girolamo, HP Italy Innovation Center Massinissa Lalam, Sagem Communications Andreas Maeder, NEC Labs Europe Henning Paul. University of Bremen Umer Salim, Intel Mobile Communications Emmanouil Pateromichelakis, University of Surrey Giovanni Stea, University of Pisa Mauro Boldi, Telecom Italia Pal Frenger, Ericsson Carla Fabiana Chiasserini, Politecnico di Torino Claudio Cicconetti, Intecs Marcus Mueck, Intel Mobile Communication Hans-Peter Mayer, Bell-Labs Stuttgart, Alcatel-Lucent Loreto Pescosolido, Univ. La Sapienza, Roma Antonio De Domenico, CEA-LETI, Grenoble Joseph Vidal, UPC, Spain Sergio Barbarossa, Univ. La Sapienza, Roma Artur Hecker, Huawei, Munich Kei Sakaguchi, Tokyo Institute of Technology, Tokyo Merouane Debbah, SUPELEC, Paris Zdenek Becvar, CTU, Prague Seshaiah Ponnekanti, Amrita University, India

(*) http://vtc2013fall-wksp.trackchair.com/track/1152

(**) http://www.ieee.org/conferences_events/conferences/publishing/templates.html