

23rd International Conference on Telecommunications

ICT2016 "Expansion to Small"

May 16 - 18, 2016

Thessaloniki, Greece | Makedonia Palace Hotel

Technical Sponsorship



Workshop on

5G Cell-Less Architectures (5G-CeLArch)

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Call for Papers

The vision of future 5G networks encompasses a heterogeneous communication landscape in which existing Radio Access Technologies (RATs), such as 3G, 4G, WiFi, etc., will be integrated with evolving wireless technologies and systems, software-design network architectures and cloud-enabled services. The technical requirements set for 5G systems are breath-taking, including the support of up to 1000 times higher data volumes, end-user data rates up to 10 Gb/s, very low service-level latency below 5ms, ubiquitous communicating things and mass connectivity supporting 300,000 devices within a single cell, ultra-high reliability and reduced energy consumption. The ambition towards 5G systems is to provide a customized, advanced user-centric value at an affordable price, in an effort to strengthen key societal needs in domains such as transportation, health, environment, retail, sports, entertainment, etc.

The emerging 5G ecosystem is expected to be comprised by an ultra-dense, heterogeneous deployment of multiple RATs with a wide range of backhauling options (e.g. microwave, E-band, optical, etc.), owned and shared by multiple stakeholders and tenants and supporting highly diverse applications and services, from Over-The-Top (OTT) applications, to proximity services and Machine Type Communications (MTC). A user-centric approach will be adopted, leading to the emerging disruptive cell-less architecture that goes beyond the traditional single-cell user association, enabling the joint consideration of all network resources (spanning across different cells, networks and/or operators) as a common resource pool. Innovative service-oriented network architectures supporting edge-cloud technology will open the road for enhanced user Quality of Experience (QoE), social applications and proximity services. Finally, network virtualization and Software Defined Networking (SDN) will play a key role in supporting multi-tenancy and enabling the optimization and management of the network operation.

The workshop will address keynotes, panels and peer reviewed papers on 5G cell-less architectures, with the goal to report the latest advancements in the field. Network virtualization, 5G architectures and distributed cloud architectures must be central to all topics that include, but not limited to the following:

- Network orchestration and SDN control for cell-less architectures
- Support of multi-tenancy in emerging heterogeneous 5G networks
- Programmable MAC protocols for cell-less architectures
- Supporting cell-less connectivity via mmWave
- Scalable user centric cell-less access
- Ultra Dense Networks: performance gains, limitations and challenges
- Contain awareness and service continuity in edge cloud environments
- Service-oriented network tailoring mechanisms
- Support for vertical market players
- Edge-cloud Assisted Device Discovery and Programmable Proximity Services
- Efficient Multi-tenancy and Infrastructure Sharing Exploiting Edge-cloud Computing

Prospective authors are invited to submit high-quality original technical papers following the rules of the Main Track of ICT 2016 for presentation at the conference and **publication in the ICT 2016 Proceedings and IEEE Xplore**, via EDAS, using <https://edas.info/newPaper.php?c=21703&track=78913>.

Important Dates

Paper submission deadline

February 20, 2016

Notification of acceptance

March 5, 2016

Camera ready deadline

March 15, 2016

Information

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