Call for Contributions for

Special session EESE5G: Energy-Efficient and Spectral-Efficient Techniques for Next-Generation Wireless Communication Systems
Chair and Organizer: Assoc. Prof. Dr. Taufik Abrão, Londrina State University, Brazil
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along with

ICWMC 2016, The Twelfth International Conference on Wireless and Mobile Communications
http://www.iaria.org/conferences2016/ICWMC16.html
November 13 - 17, 2016 - Barcelona, Spain

Submissions deadlines
Submission deadline: September 15
Acceptance deadline: September 25
Registration deadline: October 5
Camera-ready deadline: October 5

Submission to: Prof. Dr. Taufik Abrão, Londrina State University, Brazil
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Contribution types
Regular papers [in the proceedings, digital library]
Short papers (work in progress) [in the proceedings, digital library]
Posters: two pages [in the proceedings, digital library]
Posters: slide only [slide-deck posted on www.iaria.org]
Presentations: slide only [slide-deck posted on www.iaria.org]
Demos: two pages [posted on www.iaria.org]

Paper Format
See: http://www.iaria.org/conferences2016/CfPICWMC16.html
Before submission, please check and comply with the editorial rules:
http://www.iaria.org/editorialrules.html

Publications
Extended versions of selected papers will be published in IARIA
Journals: http://www.iariajournals.org
Print proceedings will be available via Curran Associates, Inc.:
http://www.proceedings.com/9769.html
Articles will be archived in the free access ThinkMind Digital Library:
http://www.thinkmind.org

Registration
Each accepted paper needs at least one full registration, before the camera-ready

manuscript can be included in the proceedings.
Registration fees are available at http://www.iaria.org/registration.html

Content
It is predicted that a formidable 1000-fold mobile data traffic growth and a near-zero latency have to be met by the forthcoming fifth-generation (5G) mobile communication systems, which are expected to support bandwidth-thirsty delay-sensitive multimedia services, such as ultra high-definition (UHD) video streaming. Meanwhile, the economic, environmental and societal pressures require a significant reduction of the carbon footprint of the ubiquitous information and communication technologies (ICT), which will be responsible for 5% of the annual global greenhouse gas emissions by 2020, unless the energy-consumption-per- bit is sharply reduced. Conventional designs of wireless communication networks have been dominated by improving the attainable spectral efficiency (SE), which was achieved by degrading the 5G design objectives concerning the energy- efficiency (EE) and delay. Therefore, an important research challenge for sustainable future wireless communication systems has been how to achieve significantly higher throughput (bits/second), while simultaneously improving the energy-efficiency (EE) and the delay. Associated issues and challenges on EE-SE techniques for 5G include:

The topic suggested by the track can be discussed in term of concepts, state of the art, research, standards, implementations, running experiments, applications, and industrial case studies. Authors are invited to submit complete unpublished papers, which are not under review in any other conference or journal in the following, but not limited to, topic areas.

Mitigate energy consumption in light of a high data rate increasing;
Thousand times increasing the offered data rates and throughput on the current state-of-the-art technology;
Green network architectures;
Massive MIMO techniques in sub-6GHz and mmWave bands;
Challenges in mmWave 5G systems implementation;
Energy-efficient (green) designs for 5G wireless communication systems;
Energy-efficient and spectral-efficient multiple access/modulation schemes for green networks
Energy-aware design for small cells and HetNets (inc. WiFi integration)

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