

# Call for Papers

## The 2nd International Workshop on 5G Mobile and Wireless Communication System for 2020 and Beyond (MWC2020 '14)

18 May 2014

in conjunction with IEEE VTC 2014 Spring, Seoul, Korea, 18-21 May 2014

The purpose of the workshop is to bring researchers and industry together to share their views on needs, possibilities and challenges in 5G communication systems. Participants are expected to share their views on which new technology enablers are going to be the pillars of the coming 5G mobile and wireless system. Those enablers may be components of the protocol stack (PHY, MAC or upper layers) or new architectural models.

It is widely viewed that the future mobile infrastructure will have to cope not only with a quantitative growth of the requirements that we are facing today (higher capacity, data rate, number of connected devices) but also with qualitatively new requirements (higher reliability, larger versatility, application-domain specific topologies) resulting from a broader scope of applications over 5G networks.

In 2020, mobile and wireless traffic volume is expected to increase thousand-fold over 2010 figures. Moreover, an increase in the number of wirelessly connected

devices in the tens of billions will have a profound impact on society. Massive machine communication, forming the basis for the Internet of Things, will make our everyday life more efficient, comfortable and safer, through a wide range of applications including traffic safety and medical services. The variety of applications and traffic types originating from or reaching mobile, WLAN, and sensor networks, will be significantly larger than today, and will result in more diverse requirements on services, devices and networks.

To meet the demands beyond 2020, a system that broadens the use of today's wireless networks is needed. Fundamentally new concepts and design approaches are needed, and these must be integrated into systems that provide the necessary flexibility, versatility and scalability at low cost and low energy consumption. This workshop presents a forum for exchange of ideas between all stakeholders.

We invite researchers to submit original papers in the following areas:

D2D communication

Machine-type communication/massive machine communication

Ultra-reliable networks and NSPS communication

Moving networks and vehicular-to-anything communication

Ultra-dense deployments

Radio network architectures including beyond cellular

Self-organizing networks and distributed features

Energy efficient networks

Network and massive MIMO

Network coding

Efficient air interfaces (low signaling overhead, energy consumption)

Optimizing radio access

Interference metrics, measurements and management

Millimeter-wave communication

Spectrum measurement and models

Spectrum use and new spectrum sharing models

Cognitive radio networks

QoS provisioning and MAC protocol

Trust and security

Experimental prototypes and results related with the above topics

**Paper Submission: 23 February 2014**

**Author Notification: 14 March 2014**

**Final paper submission: 24 March 2014**

Papers should follow the 2-column IEEE conference template and not exceed 5 pages (2 additional pages are possible for an overlength fee of \$100 due upon paper acceptance), and be submitted through TrackChair at <http://vtc2014spring-wk.trackchair.com/track/1242/submit>. Accepted papers will be published in IEEEXplore. At least one author per accepted paper must register at the full workshop rate.