IEEE GLOBECOM 2019 Workshop on Emerging Technologies of Open Networks for 5G/B5G

I. CALL FOR PAPERS

Three key application scenarios (i.e., enhanced mobile broadband (eMBB), massive machine type communications (mMTC), and ultra-reliable low latency communications (URLLC)) in 5G break the boundaries of communications between human beings in traditional mobile communications, forcing 5G to support communication of human-to-machine, and machine-to-machine. However, it is difficult to implement a network that can simultaneously meet all kinds of requirements from both mobile Internet and Internet of Things (IoT). On the one hand, the ubiquitous terminal nodes (TNs) with sensing and communication capabilities propel diverse applications and increasingly multifarious requirements in various scenarios (e.g., dense residential areas, office, factories, and hospitals). On the other hand, diverse scenarios shall be satisfied by a wide range of communication technologies, such as cellular communications, WiFi, Bluetooth, and Zigbee. These force 5G/B5G network to be customized to meet the differentiation and diversity of application requirements, thereby improving the openness of 5G/B5G networks. The proposed workshop aims to provide a forum for authors to present, discuss and exploit early research results on the enabling technologies for the openness of 5G/B5G networks. Topics of interest include (but not limited to) the following:

- Advanced network architecture design for open 5G/B5G networks to facilitate openness of network capabilities.
- Modeling, performance analysis, and agile instantiation methods of network slicing.
- Modeling and performance analysis of software defined networks, including control plane and user plane separation.
- Design of architecture, interfaces for white-box radio access networks.
- Integrated allocation of communication, computing and storage resources.
- Multi-access edge computing and fog computing in open 5G/B5G networks.
- Open source based hardware design in open 5G/B5G networks.
- Design of air interface in open 5G/B5G networks, including unified frame structure, coding and modulation, multi-carrier waveforms, duplexing modes, etc.
- Architecture design of TNs to enable TN capability exposure.
- Use cases, testbeds, experimental measurements, performance evaluation of open 5G/B5G networks.

II. IMPORTANT DATES

Workshop paper submission deadline: July 5, 2019

Workshop paper decision date: August 15, 2019

Camera-ready due: September 15, 2019