Call for Workshop Papers

PIMRC 2018 Workshop W4
4th International Workshop on CorNer: Communications for Networked Smart Cities
Date: Sunday, September 9. Time: 9.00 – 17.30

Workshop Organiser(s): **Dushantha Nalin K Jayakody**, National Research Tomsk Polytechnic University, Russia
Syed Ali Hassan, National University of Sciences and Technology, Pakistan
Symeon Chatzinotas, University of Luxembourg, Luxembourg
Rui Dinis, Universidade Nova de Lisboa (UNL), Portugal

Motivation and Background

The demands for high data rates and ultra-reliable coverage become demanding issues due to increae number of population in the world by 2020. The huge demand for high quality life makes the administrator and the governments to put carefully planning in cities in a smarter way. As a premier agent for stimulating a quality of life compatible with a resource efficient economy, the smart city phenomenon has recently seized the imagination of the academia and the industry significantly. As the **Internet of things (IoT)** and **Tactile Internet** are predictable to be a primary driving force for future cities, advanced communication methods will play a crucial role in assisting real-time data acquisition and utilization from distributed sensors.

However, smart cities will also have to function within the limitations of the national economy and available resources. Consequently, the challenges in the realization of smart cities are many and varied. In general, low energy consumption, constrained bandwidth, latency and budgetary limitations are predominate. In order to overcome these hurdles, it is essential that new ideas and theories for optimizing the network in energy, spectral, latency and monetary terms are presented to achieve a robust environment monitoring and sustainable transportation network, among other provisions. This led the researchers to pave the way for future wireless networks under the umbrella of 5G communications as well. This is an amalgamation of a multitude of technologies ranging from device-level algorithms such as low power transmissions to system-level architectures such as software-defined networking (SDN), the challenges posed by each of these techniques are critical. The smart city idea is also known to work at the intersection of various techniques such as device-to-device (D2D) communications, massive multiple-input multiple-output (MIMO), millimeter wave (mmWave) communications, full-duplex transmissions and Internet of Things (IoT) to name a few.

The aim of this workshop is to bring together a group of experts with interest in emerging smart cities related areas. The recent advancement in smart cities has boosted the development of a new generation of highly-efficient mobile networks. This workshop will highlight the recent developments in this evolving area. It will provide a platform for exchanging new ideas and research collaboration. Topic are not limited to the following areas:

5G oriented smart cities
•Big data and cloud computing in smart cities
•Internet of things and automation in smart cities
•Cognitive radio in smart cities, and ultra-dense network
•Energy harvesting technologies and communications
•Communication in smart grid and green communications and computing
•Novel network architecture design
•Resource-efficient cross-layer optimization
•Cooperative communications, mmWave and Massive MIMO Design for transmissions
•Energy-efficiency and spectral-efficiency
•Antennas design and channel modeling
•Machine-to-machine communications and Smart Drones Communications
•Safety, security, and privacy for smart Cities
•Smart transportation systems and infrastructure (V2V, V2I)
•Applications, deployments, test-beds and experimental experience for communications in smart cities

Submission Guidelines

Prospective authors are invited to submit technical papers of their previously unpublished work. Accepted workshop papers will be part of the Conference Proceedings and will be uploaded to IEEE Xplore. Papers should be submitted via EDAS; the links are available at http://pimrc2018.ieee-pimrc.org under "Authors". Papers should follow the same Author guidelines of the general symposium, which are available at http://pimrc2018.ieee-pimrc.org/authors/submission-guidelines/.

Key Dates

Paper submission:	**May 18, 2018**
Acceptance notification:	**June 15, 2018**
Final paper due:	**June 29, 2018**