



CALL FOR PAPERS

The continued development of microelectromechanical systems (MEMS) that continually record, process, and send information has brought about a considerable increase in the data traffic. In order to cover the increasing connectivity needs, the new sensor and mobile devices use multiple network infrastructures to send information (WiFi, 5G, LTE, WSN, and Bluetooth, among others). This new interconnected environment has led the origin of a new growing market scenario based on services and applications. However, the rigidity of actual network architectures, the dependency on a specific manufacturer or service provider, and the closed union between data and control planes in network infrastructures have limited the development applications in terms of scalability, mobility, security, energy efficiency, and Quality of Service (QoS).

In this context, the novel concept of software defined networking (SDN) can help solve these limitations. SDN allows the centralized control of the network behavior through external software, separating the data and the control plane in network devices. This new paradigm can be extended to other network infrastructures, decoupling the transmission and control plane in base stations, access points, and wireless sensor agents. This new vision of software defined heterogeneous network opens new opportunities to share infrastructures and standardize interfaces, on-demand services, network programmability, and optimization of resources, novel services, and enhanced mechanisms for dynamic resource management. The related advances are in preliminary state and require collaboration by the industry and research community. Hence, we encourage authors to submit original papers related to these fields.

Potential topics include, but are not limited to:

- ▶ Software defined heterogeneous networks
- ▶ Software defined sensor networks
- ▶ Software defined mobile networks
- ▶ Theoretical foundation of separation of control and data plane architectures
- ▶ Integration of software defined technologies with traditional network architectures
- ▶ Novel 5G-SDN architectures
- ▶ SDN and network function virtualization (NFV), monitoring, management, and security
- ▶ Use cases and simulations of mobile, sensor, and fixed networks with SDN
- ▶ Energy efficiency in software defined fixed, sensor, and mobile networks
- ▶ Standardization of SDN based interfaces
- ▶ SDN monitoring and management mechanisms
- ▶ Machine to machine applications (M2M) in SDN based networks
- ▶ New mechanism to self-organization in mobile and sensor networks

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/ijdsn/asds/>.

Lead Guest Editor

L. Javier García Villalba, Universidad Complutense de Madrid, Madrid, Spain
javiervg@fdi.ucm.es

Guest Editors

Jun Bi, Tsinghua University, Beijing, China
junbi@tsinghua.edu.cn

Anura P. Jayasumana, Colorado State University, Fort Collins, USA
anura.jayasumana@colostate.edu

Ana L. Sandoval Orozco, Universidad Complutense de Madrid, Madrid, Spain
asandoval@fdi.ucm.es

Manuscript Due

Friday, 13 November 2015

First Round of Reviews

Friday, 5 February 2016

Publication Date

Friday, 1 April 2016