

Call for Papers
International Software Defined Wireless Networks Workshop
(SDWN 2014)

The 10th International Wireless Communications & Mobile Computing Conference

IWCMC 2014 Website: <http://iwcmc.org/2014/>

SUBMISSION LINK: <https://edas.info/newPaper.php?c=14357>

Hilton Nicosia, Cyprus, August 4-8, 2014

Technically sponsored by IEEE, IEEE Cyprus Section

Local sponsor: Frederick University, Cyprus

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Scope:

The growing popularity of smart phones and tablet computers places an increasing strain on wireless networks. Yet, despite tremendous innovation in mobile applications, the cellular network infrastructure is remarkably brittle. Software defined networking (SDN) is defined as a control framework that supports the programmability of network functions and protocols by decoupling the data plane and the control plane, which are currently integrated vertically in most network equipment. The SDN technology allows network operators to manipulate logical map of the network and create multiple co-existing network slices independent of the underlying transportation technology and network protocols. Furthermore, the separation of control plane and data plane makes the SDN a suitable candidate for end-to-end network service delivery. Enabling SDN at the wireless network can potentially simplify network management, while enabling new services. However, supporting many subscribers, frequent mobility, fine-grained measurement and control, and real-time adaptation introduces scalability challenges that should be addressed by future SDN architectures.

SDN for future wireless communication systems will introduce new services, inter-operate with other wireless network technologies and other operator networks. The main objective of this workshop is to explore various design considerations and challenges for SDN focusing on wireless technologies and application scenarios. The workshop will provide a platform for contributors and participants, from both industry and academia, to share their views and thoughts on different aspects of SDN for future wireless systems.

Accepted papers will be published in the IEEE IWCMC 2014 proceedings and will be included in the IEEE digital library (IEEE Xplore).

Topics of interest include, but are not limited to:

- Architecture of SDN for future wireless networks, including fundamental concept, control plane and data plane.
- Development of SDN for future wireless networks, including programming languages and models, trouble shooting tools, performance measurements, and simulator.
- Use cases of SDN in future wireless networks, including network management, policy control and charging, security and privacy, QoS control and mobility management, traffic engineering, and virtual cellular operator management.
- Deployment of SDN in future wireless networks, including 5G mobile network, wireless sensor network, wireless mesh network and wireless heterogeneous network.
- Incremental deployment of SDN to existing wireless networks.
- SDN-enabled centralized control for efficient resource allocation and inter-cell interference management.
- Software-defined converged wireless networks, potentially of multi-technology heterogeneous convergence, such as broadcasting, cellular, wireless sensor networks, WiFi, etc.
- Hybrid SDN approaches, i.e., integration with other control planes such as cloud virtual machine (VM) control, big data control, etc.
- Progress in standardization (including ITU, 3GPP, ETSI, ONF and etc.), experiments and field trials of wireless SDN and network function virtualization techniques, including northbound interface, southbound interface, east-west interface, evolved packet core (EPC) virtualization, baseband virtualization, and cloud radio access network (C-RAN).
- Techno-economic analysis and market expectations of wireless SDN including operators' view.

Submission Guidelines:

Prospective authors are invited to submit original technical papers—up to 6 pages of length, using the EDAS link <https://edas.info/newPaper.php?c=14357> for possible publication in the IWCMC 2014 Conference Proceedings, which will be included in the IEEE Xplore. Selected papers will further be considered for possible publication in three special issues in the following Journals. For more information, visit: <http://iwcmc.org/2014>

1. Wiley Journal of Wireless Communications and Mobile Computing (WCMC)
<http://www3.interscience.wiley.com/journal/76507157/home>
2. The International Journal of Sensor Networks (IJSNet)
<http://www.inderscience.com/browse/index.php?journalCODE=ijsnet>
3. The International Journal of Autonomous and Adaptive Communications Systems (IJAACS): www.inderscience.com/ijaacs

Note: There will be best paper award, best Symposium award and best Workshop award.

Important Dates:

Submission:	December 15, 2013
Acceptance notification:	March 15, 2014
Camera-ready paper submissions:	April 15, 2014
Registration deadline for authors:	April 15, 2014