

Special Issue on Advanced Wireless and Mobile Technologies and Services/Part II – Guest Editorial

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We have been witnessing a rapid development of wireless and mobile technologies and services during the past two decades. 4G mobile services are penetrating, mobile access is becoming an increasingly important way for accessing the Internet, and it is expected to become the dominant one. The progress continues as 5G mobile systems are underway. Although many of the new technologies have already been incorporated in practical systems, there is still enough room for research and experimentation, in particular in the areas of cognitive radio, self-organizing networks, M2M communications, or cross-layer optimization, just to name a few.

The 21th European Wireless (EW) Conference was held in Budapest, Hungary, on 22-25 May 2015 and has been organized by the Budapest University of Technology and Economics (BME). On the EW 2015 conference, there were more than **140 participants** from **30 different countries**. Among them 7 papers were selected for the European Wireless Special Issue which consists of two parts. The following 2 papers belong to Part II and are published in this issue while further 5 papers appeared in the 2015/3 issue as Part I.

The first paper focuses on Network Coding (NC) showing great potential in various communication scenarios through changing the packet forwarding principles of current networks. NC can improve not only throughput, latency, reliability and security but also alleviates the need of coordination in many cases. The paper explains how it can improve the performance of the network, provides how Software Defined Networking (SDN) can resolve the crucial problems of deployment and orchestration of NC elements, and finally presents a prototype architecture with measurement results on the performance.

Energy efficiency in wireless sensor networks is vital although there are several possibilities to achieve longer battery life in such devices. Our second paper investigates delaytolerant wireless sensor networks with battery-operated nodes and use data aggregation to lower the size of transmitted data overhead caused by packet headers. The presented results and graphs are based on the investigation of an existing system thus they can be applied to arbitrary packetbased wireless protocols and radio modules supporting wakeup signal listening.

We hope this careful selection will satisfy our readers' expectations and please have a look at Part I of this Special Issue in our No 3, 2015 Issue.



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