

Intelligent Future Wireless Networks for Energy Efficiency

Overall Analysis and Standardization Activities

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Abstract

This chapter addresses a number of issues related to standardization and regulatory policies aiming at promoting energy-efficient communications and networking, highlighting the need of synergic approach. It encompasses the analysis of various solutions supporting sophisticated energy management within each layer of the OSI stack model in the context of wireless networking, as well as the overview of cross-layer energy-efficient applications. All parts of the chapter have adequate references to the corresponding standardization activities on European and global level collected in the separate section. Finally, the steps towards implementation of energy-efficient networking solutions by means of cognitive radio technologies are presented.