A timely publication providing coverage of radio resource management, mobility management and standardization in heterogeneous cellular networks

The topic of heterogeneous cellular networks has gained momentum in industry and the research community, attracting the attention of standardization bodies such as 3GPP LTE and IEEE 802.16j, whose objectives are looking into increasing the capacity and coverage of the cellular networks. This book focuses on recent progresses, covering the related topics including scenarios of heterogeneous network deployment, interference management in the heterogeneous network deployment, carrier aggregation in a heterogeneous network, cognitive radio, cell selection/reselection and load balancing, mobility and handover management, capacity and coverage optimization for heterogeneous networks, traffic management and congestion control.

This book enables readers to better understand the technical details and performance gains that are made possible by this state-of-the-art technology. It contains the information necessary for researchers and engineers wishing to build and deploy highly efficient wireless networks themselves. To enhance this practical understanding, the book is structured to systematically lead the reader through a series of case-studies of real world scenarios.

Key features:

• Presents this new paradigm in cellular network domain: a heterogeneous network containing network nodes with different characteristics such as transmission power and RF coverage area
• Provides a clear approach by containing tables, illustrations, industry case studies, tutorials and examples to cover the related topics

• Includes new research results and state-of-the-art technological developments and implementation issues

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About the Author

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