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Sommario/riassunto

Provides an in-depth coverage of TV White Space Technology (TVWS) and the various challenges of its new innovations. This book covers the full spectrum of TVWS technology including regulations, technology, standardizations, and worldwide deployments. It begins with an introduction to cognitive radio and TVWS. The regulation activities in TVWS throughout North America, Europe, and Asia Pacific are covered in depth. After a discussion of regulations, the authors examine the standardizations developed to specify the enabling technologies of TVWS systems. The following chapter focuses on the key technologies that differentiate TVWS from a conventional wireless communication system. Describes various worldwide use cases and deployments based on the needs of the consumers. Covers IEEE 802.19.1, IEEE 802.22, IEEE 802.11af, IEEE 802.15.4m, and IETF protocol for Accessing White Spaces. Studies the market and commercial potential of TVWS and other spectrum sharing technologies. Discusses technological trends in spectrum sharing and additional applications that could leverage on TVWS and other spectrum sharing technologies. TV White Space: The First Step Towards Better Utilization of Frequency Spectrum is written for telecommunications/networks operators, researchers, engineers, government regulators, technical managers, and network equipment manufacturers. Ser Wah Oh is the Head of the White Space Communications Department at the Institute for Infocomm Research (I2R), Singapore. He is also the co-founder and co-chair of the Singapore White Spaces Pilot Group, co-chair of Singapore TVWS Task Force, and member of Singapore Telecom Standards Advisory Committee. He previously led a team to contribute to the Federal Communications Commission (FCC) TVWS field trial in 2008 that helped to shape the TVWS landscape today.
