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Soggetti	Wireless communication systems Mobile communication systems Computer networks
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	WIRELESS AND MOBILE DATA NETWORKS; CONTENTS; PREFACE; ACKNOWLEDGMENTS; 1. WIRELESS DATA-INTRODUCTION; 1.1. Wireless Voice; 1.1.1. Fixed Minimum Bandwidth; 1.1.2. Vague Definition of Service Quality; 1.1.3. Delay Requirements; 1.2. Wireless Local Area Networks (WLANS); 1.2.1. Ad Hoc WLAN; 1.2.2. Infrastructure WLAN; 1.3. Wide Area Cellular Networks; 1.4. Fixed Wireless Networks; 1.5. Personal Area Networks; 1.6. Satellite-Based Data Networks; 1.7. Mobile IP; 1.8. The Wireless Spectrum; 1.8.1. Licensed and License-Free Bands; 1.8.2. Low-Power Wireless Data Systems; 1.8.3. Ultra-Wide Band (UWB) 1.8.4. The ISM Band1.8.5. U-NII Spectrum; 1.8.6. Cellular Systems' Spectrum; 1.8.7. Fixed Wireless Systems; 1.8.8. Wireless Metropolitan

Area Networks (WMAN); 1.8.9. Satellite Data Communications; References; 2. REFERENCE ARCHITECTURES FOR WIRELESS DATA NETWORKS; 2.1. Bluetooth™; 2.1.1. Bluetooth Radio; 2.1.2. Baseband Layer; 2.1.3. Link Management Protocol (LMP); 2.1.4. Logical Link Control and Adaptation Protocol Layer (L2CAP); 2.1.5. Bluetooth Profiles; 2.1.5.1. Generic Access Profile (GAP); 2.1.5.2. Service Discovery Application Profile (SDAP); 2.2. IEEE 802.11
2.2.1. Physical Layer (PHY) 2.2.1.1. Physical Medium Dependent (PMD) Sublayer; 2.2.1.2. Physical Layer Convergence Protocol (PLCP); 2.2.2. Medium Access Control (MAC) Sublayer; 2.2.2.1. Contention Windows; 2.2.3. Layer and Station Management Planes; 2.3. HIPERLAN/2; 2.3.1. Physical Layer; 2.3.1.1. Link Adaptation; 2.3.2. Data Link Control Layer; 2.3.2.1. MAC; 2.3.2.2. Radio Link Control (RLC); 2.3.2.3. Dynamic Frequency Selection (DFS); 2.3.2.4. Error Control (EC); 2.3.3. Convergence Layer (CL); 2.4. Broadband Wireless Access Networks; 2.4.1. The User Plane; 2.4.2. MAC Layer
2.4.2.1. Convergence Sublayer (CS) 2.4.2.2. MAC Common Part Sublayer (CPS); 2.4.2.3. Privacy Sublayer; 2.4.3. PHY; 2.4.4. IEEE 802.16a; 2.4.5. Mobile Broadband Wireless Access (MBWA) Network; 2.5. Cellular Data Networks; 2.5.1. North American and European Cellular Networks; 2.5.2. Voice-Grade Modems; 2.5.3. Relative Look at Cellular Network Generations; 2.5.4. Core Network; 2.6. Summary; References; 3. COMPONENTS OF A WIRELESS LAN; 3.1. Local Area Networks (LANs); 3.1.1. LAN Interconnection (Topology); 3.1.2. Addressing Mechanisms; 3.1.3. Medium Specification; 3.1.4. Physical Layer Mechanisms 3.1.5. Data Link Control Layer 3.1.6. Traffic Differentiation; 3.1.7. WAN/LAN Connection; 3.2. Wireless LAN Components; 3.2.1. Physical Layer Components; 3.2.1.1. Station Types; 3.2.1.2. Channel Media; 3.2.1.3. Physical Link; 3.2.1.4. Signal Conditioning; 3.2.1.5. Interference-Reduction Mechanisms; 3.2.1.6. Modulation of Signals; 3.2.1.7. Data Transmission; 3.2.1.8. Convergence Procedures; 3.2.1.9. Rate Selection Capability; 3.2.1.10. Synchronization, Flow and Error-Control Capabilities; 3.2.1.11. Physical Layer Management; 3.2.2. Medium Access Control (MAC) Layer Components
3.2.2.1. Network Configurations

Sommario/riassunto

Wireless and Mobile Data Networks provides a single point of knowledge about wireless data technologies, including:
 Comprehensive easy-to understand resource on wireless data technologies
 Includes wireless media, data transmission via cellular networks, and network security
 Provides a single point of knowledge about wireless data
 Focuses on wireless data networks, wireless channels, wireless local networks, wide area cellular networks and wireless network security
 An Instructor Support FTP site is available from the Wiley editorial department.
