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4.4.1 Introduction; 4.4.2 Overview of the Standards for Short-range Devices; 4.4.3 Ultra Wideband (UWB); 4.4.4 Wireless LANs [5]; 4.4.5 BlueTooth [6]; 4.4.6 DECT; 4.4.7 Zigbee; 4.4.8 RFIDs; 4.4.9 The Prognosis for Short-range Devices; 4.5 Core Networks; 4.6 Broadcasting; 4.6.1 Conventional Broadcasting; 4.6.2 Mobile Broadcasting; 4.7 Industry Structure; 4.8 Summary; 4.9 Appendix: The Role for OFDM; OFDM is Increasingly in Favour; A Quick Introduction to OFDM; Multipath: the Key Difference between OFDM and SCM; Equalisers may become too Complex to be Realisable
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Specific Applications; So is OFDM the New 'Technology of Choice'?; References; 5 End User Demand; 5.1 Why What the User Wants is Critical; 5.2 How People React to New Concepts; 5.3 Changing Patterns of Spending; 5.4 What they have Today; 5.5 What they want Now; 5.6 Security, Privacy and Health Concerns; 5.7 The Handset Subsidy Problem; 5.8 In Summary; 6 Technology Progress; 6.1 Technology is a Critical Input to any Forecast; 6.2 Key Technical Fundamentals: The 'True' Laws; 6.3 Key Technical Observations: The 'Empirical' Laws; 6.3.1 Moore's Law; 6.3.2 Metcalfe's Law 6.3.3 Gilder's Law 6.3.4 Cooper's Law; 6.3.5 Edholm's Law; 6.3.6 Growth in Disk Size; 6.3.7 Goodhart's Law; 6.3.8 Laws or Trends?; 6.4 Technologies on the 'Radar Screen'; 6.4.1 Technologies Enhancing the Efficiency of Transmission; Software-defined Radio; Smart Antennas; Wireless Mesh Networking; Interference Cancellation; Cognitive Radio; 6.4.2 Technologies Lowering Cost: Backhaul; 6.4.3 Technologies Enhancing Interaction with Terminals; 6.4.4 Technologies Leading to 'Artificial Intelligence'; 6.4.5 Compression Technologies; 6.5 Technology Prognosis: No Key Breakthroughs
6.6 Implications for the Future

Sommario/riassunto

The definitive assessment of how wireless communications will evolve over the next 20 years. Predicting the future is an essential element for almost everyone involved in the wireless industry. Manufacturers predict the future when they decide on product lines to develop or research to undertake, operators when they buy licences and deploy networks, and academics when they set PhD topics. Wireless Communications: The Future provides a solid, clear and well-argued basis on which to make these predictions. Starting with a description of the current situation and a look a
