1. Record Nr. UNINA9910785584803321 Autore Dahlman Erik **Titolo** 4G LTE/LTE-advanced for mobile broadband [[electronic resource] /] / Erik Dahlman, Stefan Parkvall, and Johan Skold Pubbl/distr/stampa Oxford [U.K.]; Burlington, Mass., : Academic Press, an imprint of Elsevier, 2011 **ISBN** 1-283-17124-4 9786613171245 0-12-385490-3 Edizione [1st edition] Descrizione fisica 1 online resource (456 p.) Altri autori (Persone) ParkvallStefan SkoldJohan Disciplina 384.5 621.38456 Soggetti Long-Term Evolution (Telecommunications) Broadband communication systems Mobile communication systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front Cover: 4G LTE/LTE-Advanced for Mobile Broadband; Copyright Page; Contents; Preface; Acknowledgements; Abbreviations and Acronyms; CHAPTER 1 Background of LTE; 1.1 Introduction; 1.2 Evolution of Mobile Systems Before LTE; 1.3 ITU Activities; 1.4 Drivers for LTE; 1.5 Standardization of LTE; CHAPTER 2 High Data Rates in Mobile Communication; 2.1 High Data Rates: Fundamental Constraints; 2.2 Higher Data Rates Within a Limited Bandwidth: Higher-Order Modulation; 2.3 Wider Bandwidth Including Multi-Carrier Transmission; CHAPTER 3 OFDM Transmission: 3.1 Basic Principles of OFDM 3.2 OFDM Demodulation 3.3 OFDM Implementation Using IFFT/FFT Processing; 3.4 Cyclic-Prefix Insertion; 3.5 Frequency-Domain Model of OFDM Transmission: 3.6 Channel Estimation and Reference Symbols: 3.7 Frequency Diversity with OFDM: Importance of Channel Coding: 3.8 Selection of Basic OFDM Parameters; 3.9 Variations in Instantaneous

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Sommario/riassunto

LTE (Long Term Evolution) is the 3GPP's (3rd Generation Partnership Project) new standard and accompanying technologies that mobile network operators such as ATT, Verizon and TeliaSonera are adopting for their networks. To move to higher-speed networks that can cater to customer demand for mobile broadband multimedia applications, the 3GPP has developed the latest LTE-Advanced (LTE Release 10) standard, which will be fixed in December 2010. This book focuses on LTE and LTE-Advanced, and provides engineers with real insight and understanding into the why and how of the standard and