1. Record Nr. UNISA996200194403316 Autore Sanchez Javier Titolo UMTS [[electronic resource] /] / Javier Sanchez, Mamadou Thioune Newport Brach, CA, : ISTE Ltd., c2007 Pubbl/distr/stampa **ISBN** 1-280-84784-0 9786610847846 0-470-61227-4 0-470-39492-7 1-84704-621-5 Descrizione fisica 1 online resource (438 p.) Collana ISTE;; v.122 Altri autori (Persone) ThiouneMamadou 621.3845 Disciplina 621.3845/6 621.38456 Soggetti Universal Mobile Telecommunications System 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 (p. [395]-397) and index. Nota di contenuto UMTS; Table of Contents; Preface; Chapter 1. Evolution of Cellular Mobile Systems: 1.1. Multiple-access techniques used in mobile telephony; 1.1.1. Frequency division duplex (FDD) and time division duplex (TDD); 1.1.2. Frequency division multiple access (FDMA); 1.1.3. Time division multiple access (TDMA); 1.1.4. Code division multiple access (CDMA); 1.1.5. Space division multiple access (SDMA); 1.1.6. Orthogonal frequency division multiplexing (OFDM); 1.2. Evolution from 1G to 2.5G: 1.2.1. From 1G to 2G: 1.2.2. Enhancements to 2G radio technologies: 2.5G; 1.3. 3G systems in IMT-2000 framework 1.3.1. IMT-2000 radio interfaces 1.3.2. Core network approaches in 3G systems; 1.4. Standardization process in 3G systems; 1.5. Worldwide spectrum allocation for IMT-2000 systems; 1.5.1. WARC-92; 1.5.2. WARC-2000; Chapter 2. Network Evolution from GSM to UMTS; 2.1. Introduction; 2.2. UMTS definition and history; 2.3. Overall description of a UMTS network architecture; 2.4. Network architecture evolution from GSM to UMTS; 2.4.1. GSM network architecture of Phases 1 and 2; 2.4.2. GSM network architecture of Phase 2+; 2.4.3. Architecture of

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Sommario/riassunto

During the first decade of this new millennium, it is estimated that more than €100 billion will be invested in the third generation (3G) Universal Mobile Telecommunications System (UMTS) in Europe. This fact represents an amazing challenge from both a technical and commercial perspective. Written by experts in the field, this book gives a detailed description of the elements in the UMTS network architecture: the User Equipment (UE), the UMTS Radio Access Network (UTRAN) and the core network. The completely new protocols based on the needs of the new Wideband Code Division Multiple Access (WCD