

1. Record Nr.	UNINA9911019113903321
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Titolo	Umts: the fundamentals
Pubbl/distr/stampa	[Place of publication not identified], : John Wiley & Sons Incorporated, 2003
ISBN	9786610554164 0-470-01414-8 1-280-55416-9
Edizione	[1st ed.]
Descrizione fisica	1 online resource (313 pages)
Disciplina	621.382
Soggetti	Telecommunications Electrical & Computer Engineering Engineering & Applied Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Sommario/riassunto	UMTS (Universal Mobile Telecommunication System) is the third generation telecommunications system based on WCDMA. WCDMA (Wideband Code Division Multiple Access) is the radio interface for UMTS. WCDMA is characterised by use of a wider band than CDMA. It has additional advantages of high transfer rate, and increased system capacity and communication quality by statistical multiplexing, etc. WCDMA efficiently utilises the radio spectrum to provide a maximum data rate of 2 Mbit/s. UMTS (Universal Mobile Telecommunication System) will offer a consistent set of services to mobile computer and phone users no matter where they are located in the world. Based on the GSM (Global System for Mobile communication) communication standard, UMTS, endorsed by major standards bodies and manufacturers, is the planned standard for mobile users around the world by 2002. Today's cellular telephone systems are mainly circuit-switched, with connections always dependent on circuit availability. Packet-switched connection, using the Internet Protocol (IP), means that a virtual connection is always available to any other end point in the network. It will also make it possible to provide new services, such

as alternative billing methods (pay-per-bit, pay-per-session, flat rate, asymmetric bandwidth, and others). The higher bandwidth of UMTS also promises new services, such as video conferencing and promises to realise the Virtual Home Environment (VHE) in which a roaming user can have the same services to which the user is accustomed when at home or in the office, through a combination of transparent terrestrial and satellite connections.\* Provides an introduction to cellular networks and digital communications\* Covers the air interface, radio access network and core network\* Explains the Release '99 specifications clearly and effectively\* Discusses UMTS services and future services beyond 3G\* Features numerous problems and solutions in order to aid understandingIdeal for Academics and students on telecommunications, electronics and computer science courses, research and development engineers working in mobile/wireless communications and Cellular operators and technical consultants.

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