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Nota di contenuto	UMTS Networks; Contents; Preface; Acknowledgements; PART ONE; 1 Introduction; 1.1 Specification Process for 3G; 1.2 Introduction to the 3G Network Architecture; 1.2.1 Conceptual Network Model; 1.2.2 Structural Network Architecture; 1.2.3 Resource Management Architecture; 1.2.4 Bearer Architecture; 2 Evolution from GSM to UMTS Multi-access; 2.1 From Analogue to Digital; 2.2 From Digital to Reachability; 2.3 Jump to Packet World and Higher Speeds; 2.4 3GPP Release 99; 2.5 3GPP Release 4; 2.6 3GPP Release 5; 2.7 Trends beyond 3GPP Release 5; PART TWO 3 The Key Challenges Facing the Mobile Network Architecture 3.1 Radio Communication Constraints; 3.2 Cellular Radio Communication Principles; 3.3 Multi-access Techniques; 3.4 Device Mobility; 3.5 Network Transport; 3.6 Transport Alternatives for UMTS; 3.6.1 Asynchronous Transfer Mode in UMTS; 3.6.2 IP Transport; 3.7 Network Management; 3.7.1 High-level Architecture of a Network Management System; 3.8 Spectrum and Regulatory; 3.8.1 UMTS Spectrum Allocation;

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5 UMTS Radio Access Network 5.1 UTRAN Architecture; 5.2 Base Station (BS, Node B); 5.2.1 Base Station Structure; 5.2.2 Modulation Method; 5.2.3 Receiver Technique; 5.2.4 Cell Capacity; 5.2.5 Control Functions in BS; 5.3 Radio Network Controller (RNC); 5.3.1 Radio Resource Management (RRM); 5.3.2 UTRAN Control Functions; 6 UMTS Core Network; 6.1 UMTS Core Network Architecture; 6.1.1 Core Network Entities that Are Common to All Domains and Subsystems; 6.1.2 CS Domain; 6.1.3 PS Domain; 6.2 CN Management Tasks and Control Duties; 6.2.1 Mobility Management (MM); 6.2.2 Communication Management (CM)

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Sommario/riassunto

Building on the success of the first edition, UMTS Networks second edition allows readers to continue their journey through UMTS up to the latest 3GPP standardization phase, Release 5. Containing revised, updated and brand new material, it provides a comprehensive view on the UMTS network architecture and its latest developments. Accompanied by numerous illustrations, the practical approach of the book benefits from the authors' pioneering research and training in this field. Provides a broad yet detailed overview of the latest worldwide developments in UMTS technology.<l
