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Altri autori (Persone)	MatherPaul M CoopeSebastian
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Nota di contenuto	Convergence Technologies for 3G Networks; Contents; About the Authors; 1 Introduction; 1.1 Background to Convergence; 1.2 Third Generation (3G); 1.3 Why UMTS?; 1.4 IMT2000 Process; 1.5 Organization of the Book; 2 Principles of Communications; 2.1 Circuit- and Packet Switched Data; 2.1.1 Datagram Approach; 2.1.2 Virtual Circuits; 2.2 Analogue and Digital Communications; 2.2.1 Representing Analogue Signals in Digital Format; 2.3 Voice and Video Transmission; 2.3.1 Sampling; 2.3.2 Coding and CODECs; 2.3.3 Pulse Code Modulation; 2.3.4 Compression 2.3.5 Comfort Noise Generation and Activity Detection2.3.6 Packetization Delay; 2.3.7 Erlang and Network Capacity; 2.3.8 Voice over IP (VoIP); 2.3.9 Quality of Service; 2.4 Multiple Access; 2.5 Frequency Division Multiple Access (FDMA); 2.6 Time Division Multiple Access (TDMA); 2.7 Code Division Multiple Access (CDMA); 2.7.1 DS-CDMA Signal Spreading; 2.7.2 Orthogonal Codes and Signal Separation;

2.7.3 PN Sequences; 2.8 Multipath Propagation and Diversity; 2.8.1 Soft Handover; 2.8.2 Fading and Power Control; 2.9 Protecting the Data; 2.9.1 Convolution Coding; 2.9.2 Interleaving; 2.10 Summary
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Sommario/riassunto

The merging of voice and data on a single network opens powerful new possibilities in communications. Only a fundamental understanding of both technologies will ensure you are equipped to maximise their full potential. Convergence Technologies for 3G Networks describes the evolution from cellular to a converged network that integrates traditional telecommunications and the technology of the Internet. In particular, the authors address the application of both IP and ATM technologies to a cellular environment, including IP telephony protocols, the use of ATM/AAL2 and the new AAL2 sign