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Nota di contenuto	Preface xxv -- Acknowledgements xxvii -- Abbreviations xxix -- List of Contributors xlv -- 1 Introduction 1 /Jyrki T. J. Penttinen -- 1.1 General 1 -- 1.2 Short History of Telecommunications 2 -- 1.3 The Telecommunications Scene 5 -- 1.4 The Focus of the Book 15 -- 1.5 Instructions for Reading the Book Contents 16 -- References 20 -- 2 Standardization and Regulation 23 /Jyrki T. J. Penttinen -- 2.1 Introduction 23 -- 2.2 Standardization Bodies 23 -- 2.3 Industry Forums 38 -- 2.4 Other Entities 44 -- 2.5 Frequency Regulation 45 -- 2.6 National Regulators 46 -- 2.7 Guideline for Finding and Interpreting Standards 47 -- References 47 -- 3 Telecommunications Principles 49 /Jyrki T. J. Penttinen -- 3.1 Introduction 49 -- 3.2 Terminology and Planning Principles 49 -- 3.3 Evolution 58 -- 3.4 Spectrum Allocations 64 -- 3.5 Physical Aspects 64 -- References 71 -- 4 Protocols 73 /Jyrki T. J. Penttinen -- 4.1 Introduction 73 -- 4.2 OSI 74 -- 4.3 Fixed Networks 82 -- 4.4 Mobile Networks 89 -- 4.5 Data Networks 90 -- 4.6 Error Recovery 93 -- 4.7 LAP Protocol Family 96 -- 4.8 Cross-Layer Protocol Principles 98 -- References 99 -- 5 Connectivity and Payment 101 /Jyrki T. J. Penttinen -- 5.1 Connectivity 101 -- 5.2 Definitions 101 -- 5.3 IP Connectivity 102 -- 5.4 Wired Connectivity 105 -- 5.5 Radio Connectivity in the Near Field 114 -- 5.6

NFC and Secure Payment 115 -- 5.7 Secure Payment 120 -- 5.8
 Bluetooth 125 -- 5.9 Hearing Aid Compatibility 129 -- 5.10 Other
 Connectivity Technologies 131 -- References 132 -- 6 Fixed
 Telecommunications Networks 135 /Jyrki T. J. Penttinen -- 6.1
 Introduction 135 -- 6.2 Network Topologies 135 -- 6.3 Redundancy
 138 -- 6.4 Telephone Network 139 -- 6.5 User Devices 140 -- 6.6
 Plain Old Public Telephone System (POTS) 145 -- 6.7 Integrated
 Services Digital Network (ISDN) 149 -- 6.8 Intelligent Network (IN) 153
 -- 6.9 SIP 155 -- 6.10 Telephony Solutions for Companies 159 -- 6.11
 Transport 161 -- 6.12 Cloud Computing 161 -- References 163 -- 7
 Data Networks 165 /Jyrki T. J. Penttinen, Tero Jalkanen and Ilkka
 Keisala.
 7.1 Introduction 165 -- 7.2 IPv4 165 -- 7.3 IPv6 169 -- 7.4 Routing
 172 -- 7.5 ATM 174 -- 7.6 Frame Relay 176 -- 7.7 LAN and MAN 177
 -- 7.8 Wi-Fi 189 -- 7.9 Inter-Operator Networks 202 -- References
 204 -- 8 Telecommunications Network Services and Applications 207
 /Jyrki T. J. Penttinen -- 8.1 Introduction 207 -- 8.2 Voice 207 -- 8.3
 Messaging 208 -- 8.4 Audio and Video 210 -- 8.5 Health Care 212 --
 8.6 Education 212 -- 8.7 CSTA 213 -- 8.8 Advanced
 Telecommunications Functionalities 214 -- 8.9 Business Exchange 218
 -- 8.10 Public IP Network Develops to NGN 218 -- 8.11 Voice Service
 Access Points 222 -- 8.12 Mobile Services 224 -- References 236 -- 9
 Transmission Networks 237 /Jyrki T. J. Penttinen and Juha Kallio -- 9.1
 Introduction 237 -- 9.2 Physical Transmission Systems 237 -- 9.3
 Coding Techniques 238 -- 9.4 PCM 241 -- 9.5 Coding Techniques 243
 -- 9.6 PDH 245 -- 9.7 SDH 245 -- 9.8 WDM 246 -- 9.9 Carrier
 Ethernet Transport 247 -- 9.10 IP Multimedia Subsystem 250 -- 9.11
 Case Example: LTE Transport 257 -- 9.12 Cloud Computing and
 Transport 257 -- References 259 -- 10 Modulation and Demodulation
 261 /Patrick Marsch and Jyrki Penttinen -- 10.1 Introduction 261 --
 10.2 General 261 -- 10.3 Analog Modulation Methods 262 -- 10.4
 Digital Modulation and Demodulation 264 -- References 280 -- 11
 3GPP Mobile Communications: GSM 281 /Jyrki T. J. Penttinen -- 11.1
 Introduction 281 -- 11.2 Development of GSM 281 -- 11.3
 Specification of GSM 285 -- 11.4 Architecture of GSM 286 -- 11.5
 Functionality of GSM 294 -- 11.6 Numbering of GSM 303 -- 11.7 GSM
 Data 308 -- 11.8 Dual Half Rate 317 -- 11.9 DFCA 341 -- 11.10 EDGE
 349 -- 11.11 DLDC 354 -- 11.12 EDGE2 366 -- References 367 -- 12
 3GPP Mobile Communications: WCDMA and HSPA 371 /Patrick Marsch,
 Michat Maternia, Michal Panek, Ali Yaver, Ryszard Dokuczat and
 Rybakowski Marcin -- 12.1 Network Architecture 371 -- 12.2 Physical
 Layer Aspects 376 -- 12.3 Radio Interface Procedures 387 -- 12.4
 WCDMA/HSPA Evolution since Release 5 402 -- 12.5 Planning and
 Dimensioning of WCDMA/HSPA Networks 410.
 References 415 -- 13 3GPP Mobile Communications: LTE/SAE and LTE-
 A 417 /Jacek Gƒora, Krystian Safjan, Jarostaw Lachowski,
 Agnieszka Szufarska, Stanislaw Strzyyz, Szymon Stefanski, Damian
 Kolmas, Jyrki T. J. Penttinen, Francesco D. Calabrese, Guillaume
 Monghal, Mohammad Anas, Luis Maestro, Juha Kallio and Olli Ramula
 -- 13.1 Introduction 417 -- 13.2 Architecture 418 -- 13.3 Elements
 419 -- 13.4 Evolved Universal Terrestrial Radio Access Network 422 --
 13.5 Interfaces 428 -- 13.6 Protocol Stacks 430 -- 13.7 Layer 2
 Structure 434 -- 13.8 LTE Radio Network 435 -- 13.9 LTE Spectrum
 436 -- 13.10 Physical Layer 438 -- 13.11 SC-FDM and SC-FDMA 448
 -- 13.12 Frame Structure and Physical Channels 449 -- 13.13 Physical
 Layer Procedures 453 -- 13.14 User Mobility 455 -- 13.15 Radio
 Resource Management Procedures 457 -- 13.16 Link Adaptation 458
 -- 13.17 ICIC 459 -- 13.18 Reporting 463 -- 13.19 LTE Radio

Resource Management 466 -- 13.20 RRM Principles and Algorithms
Common to UL and DL 467 -- 13.21 Uplink RRM 477 -- 13.22
Downlink RRM 482 -- 13.23 Intra-LTE Handover 485 -- 13.24 LTE
Release 8/9 Features 487 -- 13.25 LTE-Advanced Features (Rel. 10)
496 -- 13.26 LTE Transport and Core Network 504 -- 13.27 Transport
Network 506 -- 13.28 Core Network 509 -- 13.29 Charging 510 --
References 513 -- 14 Wireless LAN and Evolution 515 /Jyrki T. J.
Penttinen -- 14.1 Introduction 515 -- 14.2 WLAN Standards 515 --
14.3 IEEE 802.11 (Wi-Fi) 515 -- 14.4 IEEE 802.16 (WiMAX) 524 -- 14.5
Evolved IEEE 802.16 (4G) 529 -- 14.6 Comparison of Wireless
Technologies 534 -- References 536 -- 15 Terrestrial Broadcast
Networks 537 /Jyrki T. J. Penttinen -- 15.1 Introduction 537 -- 15.2
Analog Systems 537 -- 15.3 Digital Radio 539 -- 15.4 Digital
Television 540 -- References 552 -- 16 Satellite Systems:
Communications 555 /Jyrki T. J. Penttinen -- 16.1 Introduction 555 --
16.2 Principles of Satellite Systems 556 -- 16.3 Voice and Data Services
569 -- 16.4 Broadcast Satellite Systems 571 -- 16.5 Standardization
574.
16.6 Commercial Satellite Systems 577 -- 16.7 Radio Link Budget 595
-- References 601 -- 17 Satellite Systems: Location Services and
Telemetry 603 /Jyrki T. J. Penttinen -- 17.1 General 603 -- 17.2 GPS
604 -- 17.3 GALILEO 608 -- 17.4 Positioning Systems: Other Initiatives
614 -- 17.5 Space Research 616 -- 17.6 Weather and Meteorological
Satellites 616 -- 17.7 Military Systems 617 -- References 619 -- 18
Other and Special Networks 621 /Pertti Virtanen and Jyrki T. J.
Penttinen -- 18.1 IS-95 621 -- 18.2 CDMA2000 624 -- 18.3 TETRA
625 -- References 640 -- 19 Security Aspects of Telecommunications:
3GPP Mobile Networks 641 /Jyrki T. J. Penttinen -- 19.1 Introduction
641 -- 19.2 Basic Principles of Protection 641 -- 19.3 GSM Security
642 -- 19.4 UMTS Security 647 -- 19.5 LTE Security 649 -- 19.6
LTE/SAE Service Security: Case Example 659 -- 19.7 Authentication and
Authorization 663 -- 19.8 Customer Data Safety 665 -- 19.9 Lawful
Interception 665 -- References 668 -- 20 Planning of 2G Networks 669
/Jyrki T. J. Penttinen -- 20.1 General Planning Guidelines for Fixed
Networks 669 -- 20.2 Capacity Planning 672 -- 20.3 Coverage
Planning 675 -- 20.4 Frequency Planning 679 -- 20.5 Parameter
Planning 681 -- 20.6 Network Measurements 683 -- 20.7 Effects of
Data Services on GSM Planning 684 -- 20.8 Other Planning
Considerations 714 -- 20.9 GSM/GPRS Measurement and Simulation
Techniques 722 -- 20.10 Simulations 729 -- References 741 -- 21
Planning of Advanced 3G Networks 743 /Jyrki T. J. Penttinen -- 21.1
Introduction 743 -- 21.2 Radio Network Planning Process 743 -- 21.3
Nominal Network Planning 746 -- 21.4 Capacity Planning 749 -- 21.5
Coverage Planning 750 -- 21.6 Self-Optimizing Network 757 -- 21.7
Parameter Planning 759 -- References 776 -- 22 Planning of Mobile TV
Networks 777 /Jyrki T. J. Penttinen -- 22.1 Introduction 777 -- 22.2
High-Level Network Dimensioning Process 777 -- 22.3 Detailed Radio
Network Design 795 -- 22.4 Radiation Limitations 818 -- 22.5 Cost
Prediction and Optimization 819.
References 830 -- 23 Planning of Core Networks 835 /Jyrki T. J.
Penttinen and Jukka Hongisto -- 23.1 Introduction 835 -- 23.2 General
Planning Guidelines for Fixed Networks 835 -- 23.3 Planning of the
Networks 836 -- 23.4 Capacity Planning 838 -- 23.5 Network
Evolution from 2G/3G PS Core to EPC 840 -- 23.6 Entering Commercial
Phase: Support for Multimode LTE/3G/2G Terminals with Pre-Release 8
SGSN 841 -- 23.7 SGSN/MME Evolution 845 -- 23.8 Case Example:
Commercial SGSN/MME Offering 846 -- 23.9 Mobile Gateway Evolution
847 -- 23.10 Case Example: Commercial GGSN/S-GW/P-GW Offering

847 -- 23.11 EPC Network Deployment and Topology Considerations
848 -- 23.12 LTE Access Dimensioning 850 -- Reference 851 -- 24
EMF / Radiation Safety and Health Aspects 853 /Jouko Rautio and Jyrki
T. J. Penttinen -- 24.1 Introduction 853 -- 24.2 The EMF Question 856
-- 24.3 The Scientific Principle and Process: The Precautionary Principle
856 -- 24.4 The Expert Organizations and Regulation 858 -- 24.5
Some Topics of the EMF Debate 860 -- 24.6 SAR 864 -- 24.7 The
Safety Distance and Installation 866 -- 24.8 Summing Up 869 -- 24.9
High-Power Network Planning 870 -- References 880 -- 25
Deployment and Transition of Telecommunication Systems 883 /Michat
Maternia -- 25.1 Introduction 883 -- 25.2 Why to Deploy Wireless
Systems 883 -- 25.3 Transition of Telecommunication Systems 885 --
25.4 Network Deployments 886 -- 25.5 Spectrum Considerations for
Network Transition 900 -- 25.6 Terminals Support for the Network
Transition 904 -- 25.7 Evolution of Macro Sites and Deployment of
Small Cells 906 -- 25.8 Beyond 4G Systems: 5G 910 -- 25.9
Challenges and Possibilities 911 -- References 913 -- 26 Wireless
Network Measurements 915 /Jyrki T. J. Penttinen -- 26.1 Introduction
915 -- 26.2 Principles of Radio Interface Measurements 915 -- 26.3
GSM/GPRS 915 -- 26.4 LTE 921 -- 26.5 LTE Field Measurements 928
-- References 934 -- Index 935.

Sommario/riassunto

Taking a practical approach, The Telecommunications Handbook examines the principles and details of all the major and modern telecommunications systems currently available to industry and to end-users. It gives essential information about usage, architectures, functioning, planning, construction, measurements and optimization. The structure of the book is modular, giving both overall descriptions of the architectures and functionality of typical use cases, as well as deeper and practical guidelines for telecom professionals. The focus of the book is on current and future networks, and the most up-to-date functionalities of each network are described in sufficient detail for deployment purposes. The contents include an introduction to each technology, its evolution path, feasibility and utilization, solution and network architecture, and technical functioning of the systems (signaling, coding, different modes for channel delivery and security of core and radio system). The planning of the core and radio networks (system-specific field test measurement guidelines, hands-on network planning advices and suggestions for parameter adjustments) and future systems are also described. With contributions from specialists in both industry and academia, the book bridges the gap between communications in the academic context and the practical knowledge and skills needed to work in the telecommunications industry.
