

1. Record Nr.	UNINA9910824327703321
Autore	Iniewski Krzysztof
Titolo	Convergence of mobile and stationary next-generation networks / / edited by Krzysztof Iniewski
Pubbl/distr/stampa	Hoboken, N.J., : John Wiley & Sons, c2010
ISBN	1-118-09779-3 1-282-75597-8 9786612755972 0-470-63097-3 0-470-63096-5
Edizione	[1st ed.]
Descrizione fisica	1 online resource (806 p.)
Disciplina	004.6/8
Soggetti	Wireless LANs Optical fiber communication Internetworking (Telecommunication)
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 and index.
Nota di contenuto	Preface -- Contributors -- Part I Access and Backhaul Networks -- 1 Roadmap for Next Generation Communications Networks (María Callejo Rodríguez and José Enrique Gabeiras) -- 2 Wide-Area Ubiquitous Network: An Infrastructure for Sensor and Actuator Networking (Hiroshi Saito, Masato Matsuo, Osamu Kagami, Shigeru Kuwano, Daisei Uchida, and Yuichi Kado) -- 3 Wireline Access Networks (Scott Reynolds) -- 4 Fiber-Wireless (FIWI) Networks: Technologies, Architectures, and Future Challenges (Navid Ghazisaidi and Martin Maier) -- 5 Packet Backhaul Network (Hao Long) -- 6 Microwave Backhaul Networks (Ron Nadiv) -- Part II Wireline Technologies -- 7 Paving the Road to Gbit/s Broadband Access with Copper (Thomas Magesacher, Per Ödling, Miguel Berg, Stefan Hst, Enrique Areizaga, Per Ola Brjesson and Eduardo Jacob) -- 8 Dynamic Bandwidth Allocation in EPON and GPON (Björn Skubic, Jiajia Chen, Jawwad Ahmed, Biao Chen and Lena Wosinska) -- 9 Next-Generation Ethernet Passive Optical Networks: 10G-EPON (Marek Hajduczenia and Henrique J. A. da Silva)

-- 10 Broadband Powerline Communications (Lars Torsten Berger) -- 11 Power Line Communications and Smart Grids (Tae Eung Sung and Adam Bojanczyk) -- Part III Wireless Technologies and Spectrum Management -- 12 Signaling for Multimedia Conferencing in 4G: Architecture, Evaluation and Issues (Chunyan Fu, Ferhat Khendek and Roch Glitho) -- 13 Self-Coexistence and Security in Cognitive Radio Networks (Shamik Sengupta, Santhanakrishnan Anand, and Rajarathnam Chandramouli) -- 14 Mobile WIMAX (Aryan Sad) -- 15 Ultra-Wideband Personal Area Networks: MIMO Extensions (Cheran Vithanage, Magnus Sandell, Justin P. Coon and Yue Wang) -- Part IV Metropolitan, Core, and Storage Area Networks -- 16 Next-Generation Integrated Metropolitan-Access Network: Technology Integration and Wireless Convergence (Shing-Wa Wong, Divanilson R. Campelo, and Leonid G. Kazovsky) -- 17 Resilient Burst Ring: A Novel Technology for Next-Generation Metropolitan Area Networks (Yuefeng Ji and Xin Liu). 18 Multiprotocol Label Switching (Mario Baldi) -- 19 Overview of Storage Networking and Storage Networks (Eugene Ortenberg and Christian van den Branden) -- Part V Photonic and Electronic Component Technology -- 20 ROADM architectures and WSS Implementation Technologies (Neo Antoniades, George Ellinas, Jonathan Homa and Krishna Bala) -- 21 Integrated Circuits for Dispersion Compensation in Optical Communication Links (Anthony Chan Carusone, Faisal A. Musa, Jonathan Sewter, and George Ng) -- 22 High-End Silicon Photodiode Integrated Circuits (Bernhard Goll, Robert Swoboda and Horst Zimmermann) -- 23 MIMO Wireless Transceiver Design Incorporating Hybrid ARQ (Dimitris Toumpakaris, Jungwon Lee, Edward W. Jang, Hui-Ling Lou, and John M. Cioffi) -- 24 Radio-Frequency Transmitters (Alireza Zolfaghari, Hooman Darabi and Henrik Jensen) -- Index.

Sommario/riassunto

"Filled with illustrations and practical examples from industry, this book provides a brief but comprehensive introduction to the next-generation wireless networks that will soon replace more traditional wired technologies. Written by a mixture of top industrial experts and key academic professors, it is the only book available that covers both wireless networks (such as wireless local area and personal area networks) and optical networks (such as long-haul and metropolitan networks) in one volume. It gives engineers and engineering students the necessary knowledge to meet challenges of next-gen network development and deployment"--

"This book covers wireless networks such as wireless local area networks (WLAN), wireless personal area networks (WPAN), wireless access, 3G/4G cellular, and RF transmission, as well as optical networks like long-haul and metropolitan networks, optical fiber, photonic devices, VLSI chips"--
