

1. Record Nr.	UNINA990000306010403321
Autore	Staudinger, Hermann
Titolo	Anleitung zur Organischen Qualitativen Analyse. / Von Hermann Staudinger, Werner Kern
Pubbl/distr/stampa	Berlin : Verlag von Springer, 1939
Descrizione fisica	XVI,157 p., 21 cm
Disciplina	545
Locazione	DINCH
Collocazione	04 081-144
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia
2. Record Nr.	UNISA996217944903316
Autore	Penttinen Jyrki T. J.
Titolo	The LTE/SAE deployment handbook / / Jyrki Penttinen
Pubbl/distr/stampa	Chichester, West Sussex ; , : , , 2012 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2012]
ISBN	1-119-96111-4 1-283-40485-0 9786613404855 1-119-95418-5 1-119-95417-7
Edizione	[1]
Descrizione fisica	1 online resource (447 p.)
Altri autori (Persone)	PenttinenJyrki T. J
Disciplina	621.3845/6
Soggetti	Long-Term Evolution (Telecommunications) System Architecture Evolution (Telecommunications)
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

List of Contributors xv -- Foreword xvii -- Preface xix -- Acknowledgments xxi -- Glossary xxiii -- 1 General 1 -- 1.1 Introduction 1 -- 1.2 The LTE Scene 1 -- 1.3 The Role of LTE in Mobile Communications 2 -- 1.4 LTE/SAE Deployment Process 3 -- 1.5 The Contents of the Book 7 -- References 9 -- 2 Drivers for LTE/SAE 11 -- 2.1 Introduction 11 -- 2.2 Mobile System Generations 11 -- 2.3 Data Service Evolution 14 -- 2.4 Reasons for the Deployment of LTE 19 -- 2.5 Next Steps of LTE/SAE 20 -- 2.6 Summary of the Benefits of LTE 21 -- References 21 -- 3 LTE/SAE Overview 23 -- 3.1 Introduction 23 -- 3.2 LTE/SAE Standards 24 -- 3.3 How to Find Information from Specs? 25 -- 3.4 Evolution Path Towards LTE 27 -- 3.5 Key Parameters of LTE 28 -- 3.6 LTE vs WiMAX 29 -- 3.7 Models for Roaming Architecture 29 -- 3.8 LTE/SAE Services 36 -- 3.9 LTE-Advanced -- Next Generation LTE 40 -- References 42 -- 4 Performance Requirements 45 -- 4.1 Introduction 45 -- 4.2 LTE Key Features 45 -- 4.3 Standards LTE Requirements 49 -- 4.4 Effects of the Requirements on the LTE/SAE Network Deployment 60 -- References 62 -- 5 LTE and SAE Architecture 63 -- 5.1 Introduction 63 -- 5.2 Elements 63 -- 5.3 Interfaces 70 -- 5.4 Protocol Stacks 71 -- 5.5 Layer 2 Structure 75 -- References 77 -- 6 Transport and Core Network 79 -- 6.1 Introduction 79 -- 6.2 Functionality of Transport Elements 79 -- 6.3 Transport Network 83 -- 6.4 Core Network 85 -- 6.5 IP Multimedia Subsystem 86 -- References 93 -- 7 LTE Radio Network 95 -- 7.1 Introduction 95 -- 7.2 LTE Radio Interface 95 -- 7.3 LTE Spectrum 96 -- 7.4 OFDM and OFDMA 96 -- 7.5 SC-FDM and SC-FDMA 107 -- 7.6 Reporting 108 -- 7.7 LTE Radio Resource Management 111 -- 7.8 RRM Principles and Algorithms Common to UL and DL 113 -- 7.9 Uplink RRM 123 -- 7.10 Downlink RRM 128 -- 7.11 Intra-LTE Handover 132 -- References 134 -- 8 Terminals and Applications 137 -- 8.1 Introduction 137 -- 8.2 Effect of Smartphones on LTE 137 -- 8.3 Interworking 139 -- 8.4 LTE Terminal Requirements 143. 8.5 LTE Applications 149 -- References 155 -- 9 Voice Over LTE 157 -- 9.1 Introduction 157 -- 9.2 CS Fallback for Evolved Packet System 158 -- 9.3 SMS Over SGs 159 -- 9.4 Voice and Other CS Services than SMS 164 -- 9.5 Voice and SMS Over IP 169 -- 9.6 Summary 186 -- References 187 -- 10 Functionality of LTE/SAE 189 -- 10.1 Introduction 189 -- 10.2 States 189 -- 10.3 End-to-End Functionality 199 -- 10.4 LTE/SAE Roaming 200 -- 10.5 Charging 216 -- References 219 -- 11 LTE/SAE Security 221 -- 11.1 Introduction 221 -- 11.2 LTE Security Risk Identification 222 -- 11.3 LTE/SAE Service Security -- Case Example 234 -- 11.4 Authentication and Authorization 238 -- 11.5 Customer Data Safety 239 -- 11.6 Lawful Interception 239 -- References 242 -- 12 Planning and Deployment of SAE 243 -- 12.1 Introduction 243 -- 12.2 Network Evolution from 2G/3G PS Core to EPC 243 -- 12.3 Entering Commercial Phase: Support for Multi-Mode LTE/3G/2G Terminals with Pre-Release 8 SGSN 245 -- 12.4 SGSN/MME Evolution 248 -- 12.5 Case Example: Commercial SGSN/MME Offering 249 -- 12.6 Mobile Gateway Evolution 250 -- 12.7 Case Example: Commercial GGSN/S-GW/P-GW Offering 251 -- 12.8 EPC Network Deployment and Topology Considerations 252 -- 12.9 LTE Access Dimensioning 254 -- 13 Radio Network Planning 257 -- 13.1 Introduction 257 -- 13.2 Radio Network Planning Process 257 -- 13.3 Nominal Network Planning 260 -- 13.4 Capacity Planning 263 -- 13.5 Coverage Planning 264 -- 13.6 Self-Optimizing Network 271 -- Reference 272 -- 14 LTE/SAE Measurements 273 -- 14.1 Introduction 273 -- 14.2 General 273 -- 14.3 Principles of Radio Interface Measurements 273 -- 14.4 LTE Field Measurements 282 -- 14.5

Evolution Changes the Rules of Testing 289 -- 14.6 General Test Requirements and Methods for the LTE Air Interface 292 -- 14.7 Test Requirements in SAE 298 -- 14.8 Throughput Testing 300 -- 14.9 Self-Organizing Network Techniques for Test and Measurement 306 -- 14.10 Field Testing 309 -- References 323 -- 15 Recommendations 325.  
15.1 Introduction 325 -- 15.2 Transition to LTE -- Use Cases 326 -- 15.3 Spectrum Aspects 327 -- 15.4 Effect of the Advanced GSM Features on the Fluent LTE Deployment 343 -- 15.5 Alternative Network Migration Path (Multi-Operator Case) 367 -- 15.6 Hardware Migration Path 376 -- 15.7 Mobile Backhaul -- Towards "All-IP" Transport 381 -- 15.8 LTE Interworking with Legacy Networks for the Optimal Voice and Data Services 384 -- References 405 -- Index 407.

---

### Sommario/riassunto

"Comprehensively covers the planning, rolling out and optimization of LTE/SAE networks. A hands-on description of the complete end-to-end functionality, network planning and physical construction of LTE networks, The LTE/SAE Deployment Handbook: The Functioning, Measurements and Planning of Evolved Packet System is unique in its practical approach to the topic. This book gives a complete picture of LTE systems, as well as providing many examples from the operational networks, in order to be used as a handbook and guide in the planning and operational phase of the networks. Describing the principles and details of LTE/SAE, with a complete view on the functioning, planning, construction, measurements and optimisation of the radio and core networks of the system, it also focuses on the practical description of LTE/SAE, how to de-mystify the LTE functionality and planning and carry out practical measurements of the system. The contents include a general view (the evolution path, network architecture and business models), technical functioning of the system (signalling, coding, different modes for channel delivery and security of core and radio system) and information on the in-depth planning of the core and radio networks (field test measurement guidelines, hands-on network planning advices and suggestions for the parameter adjustments). It also describes the next generation of LTE, LTE-Advanced, which represents the initial fourth generation of the mobile systems. The book contains a preliminary module that is suitable as an introduction to the more advanced level of the topic, including the initial studies and revisions of the technical and marketing aspects. The latter part of the book is designed for more experienced professionals who would benefit from the practical descriptions of the physical core and radio network planning, end-to-end performance measurements, physical network construction and optimisation of the system"--

"This book gives a complete picture of LTE systems, as well as providing many examples from the operational networks, in order to be used as a handbook and guide in the planning and operational phase of the networks"--

---

3. Record Nr.	UNINA9910493747003321
Autore	Domski Mary <1975->
Titolo	Newton's Third Rule and the Experimental Argument for Universal Gravity / / Mary Domski
Pubbl/distr/stampa	New York, NY : , : Routledge, , 2022
Descrizione fisica	1 online resource (116 pages)
Disciplina	531.14
Soggetti	Gravitation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The rules in the argument for universal gravity -- The two-set reading of rule 3 -- Universal qualities and explaining the phenomena.
Sommario/riassunto	"This book provides a reading of Newton's argument for universal gravity that is focused on the evidence-based, "experimental" reasoning that Newton associates with his program of experimental philosophy. It highlights the richness and complexity of the Principia and also draws important lessons about how to situate Newton in his natural philosophical context. The book has two primary objectives. First, it defends a novel interpretation of the third of Newton's four Rules for the Study of Natural Philosophy-what the author terms the Two-Set Reading of Rule 3. Second, it argues that this novel interpretation of Rule 3 sheds additional light on the differences between Newton's experimental philosophy and Descartes's "hypothetical philosophy," and that it also illuminates how the practice of experimental philosophy allowed Newton to make a universal force of gravity the centerpiece of his explanation of the system of the world. Newton's Third Rule and the Experimental Argument for Universal Gravity will be of interest to researchers and advanced students working on Newton's natural philosophy, early modern philosophy, and the history of science"-- Provided by publisher.