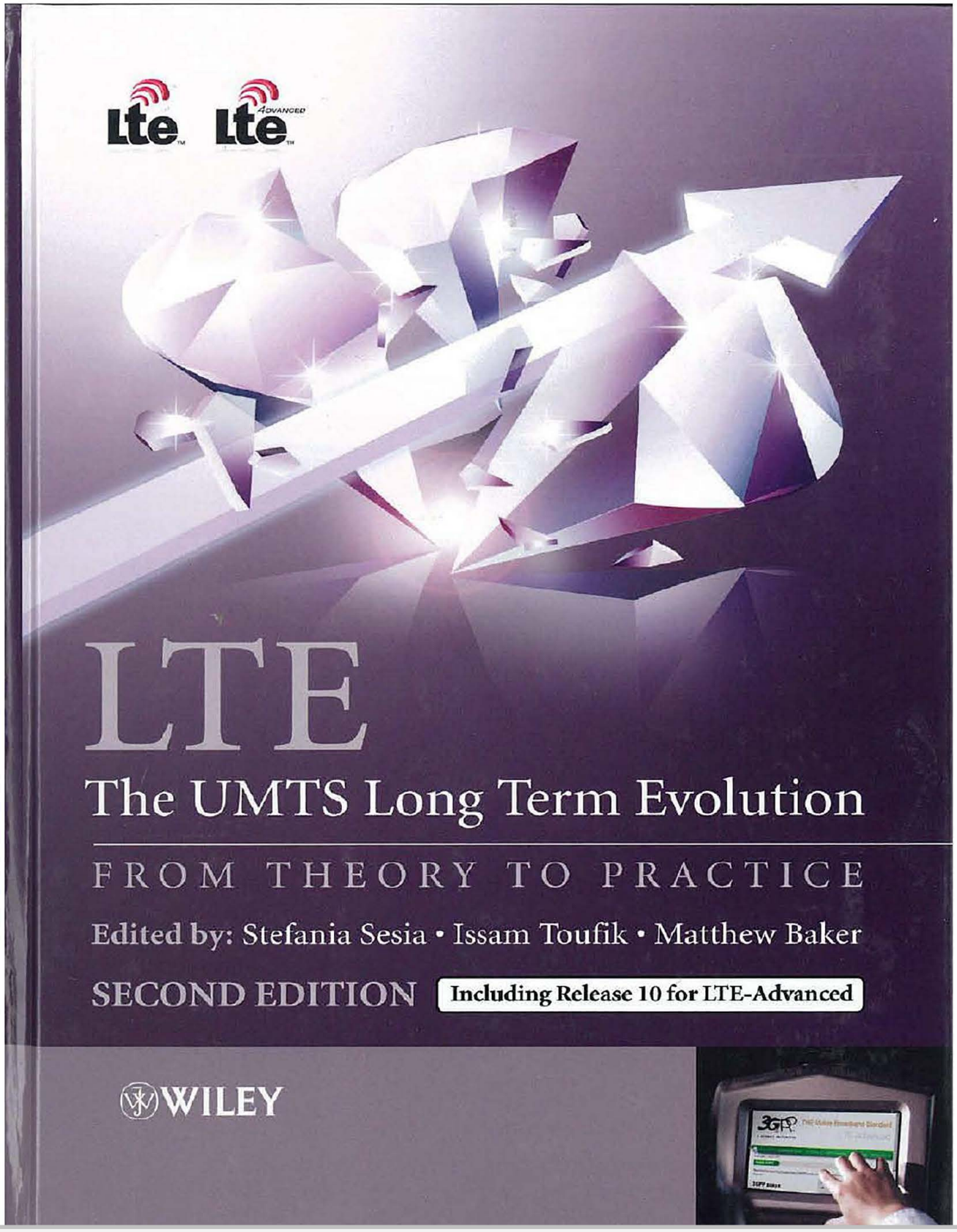

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LTE – The UMTS Long Term Evolution

From Theory to Practice

Second Edition

Stefania Sesia
ST-Ericsson, France

Issam Toufik
ETSI, France

Matthew Baker
Alcatel-Lucent, UK

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List of Acronyms

* An asterisk indicates that the acronym can have different meanings depending on the context. The meaning is clearly indicated in the text when used.

3GPP 3rd Generation Partnership Project

3GPP2 3rd Generation Partnership Project 2

ABS Almost Blank Subframe

AC Access Class

ACI Adjacent Channel Interference

ACIR Adjacent Channel Interference Ratio

ACK Acknowledgement

ACLR Adjacent Channel Leakage Ratio

ACS Adjacent Channel Selectivity

ADC Analogue to Digital Converter

ADSL Asymmetric Digital Subscriber Line

AGI Antenna Gain Imbalance

A-GNSS Assisted Global Navigation Satellite System

AM Acknowledged Mode

AMC Adaptive Modulation and Coding

AMPS Analogue Mobile Phone System

AMR Adaptive MultiRate

ANR Automatic Neighbour Relation

ANRF Automatic Neighbour Relation Function

AoA Angle-of-Arrival

AoD Angle-of-Departure

APN Access Point Name

APP A-Posteriori Probability

ARFCN Absolute Radio Frequency Channel Number

ARIB Association of Radio Industries and Businesses

ARP Almost Regular Permutation*

ARP Allocation and Retention Priority*

ARQ Automatic Repeat reQuest

AS Access Stratum*

AS Angular Spread*

A-SEM Additional SEM

ATDMA Advanced TDMA

ATIS Alliance for Telecommunications Industry Solutions

AuC Authentication Centre

AWGN Additive White Gaussian Noise

BCC Base station Colour Code

BCH Broadcast CHannel

BCCH Broadcast Control CHannel

BCJR Algorithm named after its inventors, Bahl, Cocke, Jelinek and Raviv

BER Bit Error Rate

BLER BLock Error Rate

BM-SC Broadcast-Multicast Service Centre

BP Belief Propagation

BPRE Bits Per Resource Element

bps bits per second

BPSK Binary Phase Shift Keying

BSIC Base Station Identification Code

BSR Buffer Status Reports

CAPEX CAPital EXpenditure

CAZAC Constant Amplitude Zero AutoCorrelation

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CB Circular Buffer
CBF Coordinated Beamforming
CC Component Carrier
CCCH Common Control CHannel
CCE Control Channel Element
CCI Co-Channel Interference
CCO Cell Change Order
CCSA China Communications Standards Association
CDD Cyclic Delay Diversity
CDF Cumulative Distribution Function
CDL Clustered Delay Line
CDM Code Division Multiplex(ed/ing)
CDMA Code Division Multiple Access
C/I Carrier-to-Interference ratio
CID Cell ID
CIF Carrier Indicator Field
CF Contention-Free
CFI Control Format Indicator
CFO Carrier Frequency Offset
CINR Carrier-to-Interference-and-Noise Ratio
CIR Channel Impulse Response
CM Cubic Metric
CMAS Commercial Mobile Alert Service
CMHH Constant Modulus HouseHolder
CN Core Network
CoMP Coordinated MultiPoint
CODIT UMTS Code DIvision Testbed
COFDM Coded OFDM
CP Cyclic Prefix
CPICH Common PIlot CHannel
CPR Common Phase Rotation
CPT Control PDU Type
CQI Channel Quality Indicator
CRC Cyclic Redundancy Check
CRE Cell Range Expansion
C-RNTI Cell Radio Network Temporary Identifier
CRS Common Reference Signal
CS Circuit-Switched*
CS Cyclic Shift*
CSA Common Subframe Allocation
CSG Closed Subscriber Group
CSI Channel State Information
CSI-RS Channel State Information RS
CSIT Channel State Information at the Transmitter
CTF Channel Transfer Function
CVA Circular Viterbi Algorithm
CVQ Channel Vector Quantization
CW Continuous-Wave
DAB Digital Audio Broadcasting
DAC Digital to Analogue Converter
DAI Downlink Assignment Index
dB deci-Bel
d.c. direct current
DCCH Dedicated Control CHannel
DCFB Direct Channel FeedBack
DCI Downlink Control Information
DFT Discrete Fourier Transform
DFT-S-OFDM DFT-Spread OFDM
Diffserv Differentiated Services
DL DownLink
DL-SCH DownLink Shared CHannel
DMB Digital Mobile Broadcasting
DM-RS DeModulation-RS
DOA Direction Of Arrival
DPC Dirty-Paper Coding
DRB Data Radio Bearer
DRX Discontinuous Reception
DS-CDMA Direct-Sequence Code Division Multiple Access
DSP Digital Signal Processor
DTCH Dedicated Traffic CHannel
DTX Discontinuous Transmission
DVB-H Digital Video Broadcasting – Handheld
DVB-T Digital Video Broadcasting – Terrestrial
DwPTS Downlink Pilot TimeSlot
ECGI E-UTRAN Cell Global Identifier

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