

List of Acronyms

1xRTT	Single-channel (1x) Radio Transmission Technology
1xEV-DO	1xRTT Evolution - Data Only
2G	2nd Generation
3G	3rd Generation
3GPP	3rd Generation Partnership Project

A

ACK	Acknowledgement
ACK/NACK	Acknowledgement/Negative Acknowledgement
ACLR	Adjacent Channel Leakage Ratio
ACS	Adjacent Channel Selectivity
ADC	Analog-to-Digital Converter
ADS	Advanced Design System
AF	Authentication Framework
AGC	Automatic Gain Control
AICH	Acquisition Indicator Channel
AIPN	All Internet Protocol Network
AKA	Authentication and Key Agreement
ALC	Automatic Loop Control
AM	Acknowledge Mode Amplitude Modulation
AMBR	Aggregate Maximum Bit Rate
AMC	Adaptive Modulation and Coding
AMD	Acknowledged Mode Data
A-MPR	Additional Maximum Power Reduction
AMR	Adaptive Multi-Rate
AMR-WB	AMR-Wideband

AN	Access Network
ANR	Automatic Neighbour Relation
AoA	Angle of Arrival
AoD	Angle of Departure
AP	Application Part Application Protocol
API	Application Programming Interface
APN	Access Point Name
ARIB	Association of Radio Industries and Businesses (Japan)
ARP	Allocation and Retention Priority
ARQ	Automatic Repeat Request
AS	Access Stratum Application Server Azimuth Spread
ASIC	Application Specific Integrated Circuit
ASN.1	Abstract Syntax Notation number 1
AT	Attention
ATC	Air Traffic Control
ATIS	Alliance for Telecommunications Industry Solutions (USA)
ATS	Abstract Test Suite
AWGN	Additive White Gaussian Noise

B

BBIC	Baseband IC
BBIQ	Baseband IQ
BCCH	Broadcast Control Channel
BCH	Broadcast Channel

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BDM	Background Debug Mode	CPT	Control PDU Type
BER	Bit Error Ratio	CQI	Channel Quality Indicator
BERT	Bit Error Ratio Tester	CR	Change Request
BLER	Block Error Ratio	CRC	Cyclic Redundancy Check
BO	Buffer Occupancy	C-RNTI	Cell Radio Network Temporary Identity
BP	Bandwidth Parts	CS	Circuit Switched
BPSK	Binary Phase-Shift Keying	CSFB	Circuit Switched Fall Back
BS	Bearer Service	CSG	Closed Subscriber Group
BSIC	Base Station Identity Code	CSI	Channel State Information
BSC	Base Station Controller	CSI 2	Camera Serial Interface 2
BTS	Base Transceiver Station	CSN.1	Concrete Syntax Notation number 1
BW	Bandwidth	CW	Code Word
			Continuous Wave
C		D	
CBC	Cell Broadcast Center	DAC	Digital-to-Analog Converter
CCCH	Common Control Channel	DAS	Distributed Antenna System
CCDF	Complementary Cumulative Distribution Function	DC	Direct Current
CCE	Control Channel Element	DCCH	Dedicated Control Channel
CCF	CDMA Certification Forum	DCI	Downlink Control Information
CCSA	China Communications Standards Association	DCS	Display Command Set
CDD	Cyclic Delay Diversity	DFT	Discrete Fourier Transform
CDMA	Code Division Multiple Access	DFT-S-OFDM	Discrete Fourier Transform Spread OFDM
CFI	Control Format Indicator	DHCP	Dynamic Host Configuration Protocol
CFR	Crest Factor Reduction	DL	Downlink (base station to subscriber transmission)
CI	Codebook Index	DL-SCH	Downlink Shared Channel
CK	Ciphering Key	DMRS	Demodulation Reference Signal
CL-SM	Closed Loop Spatial Multiplexing	DNS	Directory Name Service
CMOS	Complementary Metal Oxide Semiconductor	D-PHY	500 Mbps Physical Layer
CN	Core Network	DRB	Data Radio Bearer
Co-MIMO	Cooperative MIMO	DRX	Discontinuous Reception
CoMP	Coordinated Multi-Point	DSI	Display Serial Interface
CP	Cyclic Prefix	DSIM	Digital Signal Interface Module
	Control Plane	DSL	Digital Subscriber Line
CPICH	Common Pilot Channel	DSP	Digital Signal Processing
CPRI	Common Public Radio Interface		

DT	Development Toolset	E-UTRAN	Evolved Universal Terrestrial Radio Access Network
DTCH	Dedicated Traffic Channel	EVA	Extended Vehicular A
DTM	Dual Transfer Mode	EVM	Error Vector Magnitude
DTX	Discontinuous Transmission		
DUT	Device Under Test		
DVB-T	Digital Video Broadcast-Terrestrial	F	
DVM	Digital Volt Meter	FCC	Federal Communications Commission
DwPTS	Downlink Pilot Time Slot	FDD	Frequency Division Duplex
		FEC	Forward Error Correction
E		FFT	Fast Fourier Transform
E	Extension	FI	Framing Indicator
ECGI	E-UTRAN Cell Global Id	FIR	Finite Impulse Response
ECM	EPS Connection Management	FPGA	Field Programmable Gate Array
ECTEL	European Conference on Technology-Enhanced Learning	FRC	Fixed Reference Channel
ED	Error Detecting	FS1	Frame structure type 1
EDA	Electronic Design Automation	FS2	Frame structure type 2
E-DCH	Enhanced Dedicated Channel	FTP	File Transfer Protocol
EDGE	Enhanced Data rates for GSM Evolution	G	
EMC	Electromagnetic Compatibility	GAN	Generic Access Network
EMM	EPS Mobility Management	GANC	GAN Controller
eNB	Evolved Node B	GbE	Gigabit Ethernet
EPA	Extended Pedestrian A	Gbps	Gigabit per second
EPC	Evolved Packet Core	GBR	Guaranteed Bit Rate
ePDG	Evolved Packet Data Gateway	GCF	Global Certification Forum
EPS	Evolved Packet System	GERAN	GSM Enhanced Radio Access Network
E-RAB	Evolved Radio Access Bearer	GP	Guard Period
ESM	EPS Session Management	G-PDU	GTP-U non-signalling PDU
ESP	Encapsulating Security Payload	GPRS	General Packet Radio Service
E-TM	E-UTRA Test Model	GRE	Generic Routing Encapsulation
ETSI	European Telecommunications Standards Institute	GSM	Global System for Mobile Communication
ETU	Extended Typical Urban	GSMA	GSM Association
ETWS	Earthquake and Tsunami Warning System	GTP	GPRS Tunneling Protocol
E-UTRA	Evolved Universal Terrestrial Radio Access	GTP-C	GTP Control
		GTP-U	GTP User

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GUI	Graphical User Interface	IMEI	International Mobile Equipment Identity
GUMMEI	Globally Unique MME Identity	IMS	IP Multimedia Subsystem
GUTI	Globally Unique Temporary Identity	IMN CN SS	IMS Core Network Subsystem
GW	Gateway	IMSI	International Mobile Subscriber Identity
H			
HARQ	Hybrid Automatic Repeat Request	IMT	International Mobile Telecommunications
HDL	Hardware Description Language	IODT	Interoperability Development Testing
HeNB	Home eNB	IOT	Interoperability Testing
HFN	Hyper Frame Number	IP	Internet Protocol
HI	HARQ Indicator	IPv4	Internet Protocol version 4
HLR	Home Location Register	IPv6	Internet Protocol version 6
HO	Handover	IQ	In-phase Quadrature
HPLMN	Home Public Land Mobile Network	IQoIP	IQ over Internet Protocol
HRPD	High Rate Packet Data	I-RAT	Inter-Radio Access Technology
HSDPA	High Speed Downlink Packet Access	ISD	Inter-Site Distance
HSPA	High Speed Packet Access	ISDN	Integrated Services Digital Network
HSS	Home Subscriber Server	ISI	Inter Symbol Interference
HSUPA	High Speed Uplink Packet Access	ISR	Idle-mode Signal Reduction
HTTP	Hypertext Transfer Protocol	ISUP	ISDN User Part
I			
IC	Integrated Circuit	ITU	International Telecommunications Union
ICE	In-Circuit Emulator	ITU-R	International Telecommunications Union Radiocommunication Sector
ICI	Inter-Carrier Interference	ITU-T	International Telecommunications Union Telecommunication Standardization Sect
ICIC	Inter-Cell Interference Coordination	IWS	Interworking Solution
ICS	Implementation Conformance Statement	K	
Id	Identity	KPI	Key Performance Indicator
IDE	Integrated Development Environment	KSI	Key Set Identifier
IDFT	Inverse Discrete Fourier Transform	L	
IE	Information Element	L1	Layer 1
IETF	Internet Engineering Task Force	L2	Layer 2
IF	Intermediate Frequency	L3	Layer 3
IFFT	Inverse FFT		
IM	IP Multimedia		
IMCS	Index Modulation and Coding Scheme		

LA	Location Area	MSC	Mobile Switching Center
LAI	Location Area Identity	MSD	Maximum Sensitivity Degradation
LAU	Location Area Update	MSE	Minimum Squared Error
LBI	Linked EPS Bearer Identity	Msp/s	Mega-samples per second
LCR	Low Chip Rate	MSS	Mobile Switching Center Server
LCS	Location Service	MT	Mobile Terminated
LI	Length Indicator	MU-MIMO	Multi-User MIMO
LMMSE	Linear Minimum Mean Square Error		
LO	Local Oscillator	N	
LSF	Last Segment Field	NACK	Negative Acknowledgement
LSTI	LTE/SAE Trial Initiative	NAS	Non-Access Stratum
LTE	Long Term Evolution	NB	Node B
LVDS	Low Voltage Differential Signalling	NDI	New Data Indication
		NDS	Network Domain Security
M		NE	Network Element
MAC	Medium Access Control	NEM	Network Equipment Manufacturer
MAC-I	Message Authentication Code	NGMN	Next Generation Mobile Networks
Mbps	Megabits per second	NNSF	NAS Node Selection Function
MBR	Maximum Bit Rate	NRT	Non-Real Time
MBSFN	Multicast/Broadcast over Single Frequency Network	O	
MCC	Mobile Country Code	O&M	Operations and Maintenance
M-commerce	Mobile-commerce	OBSAI	Open Base Station Architecture Interface
Mcps	Mega-chips per second	OBW	Occupied Bandwidth
MCE	MAC Control Element	OFDM	Orthogonal Frequency Division Multiplexing
MCH	Multicast Channel	OFDMA	Orthogonal Frequency Division Multiple Access
MCS	Modulation and Coding Scheme	OMC	Operation and Maintenance Center
MIB	Master Information Block	OTA	Over The Air
MIMO	Multiple Input Multiple Output	P	
MIPI	Mobile Industry Processor Interface	P	Polling
MISO	Multiple Input Single Output	PA	Power Amplifier
MME	Mobility Management Entity	PAPR	Peak-to-Average Power Ratio
MMSE	Minimum Mean Squared Error	PAR	Peak-to-Average Ratio
MNC	Mobile Network Code	PAS	Power Azimuth Spectrum
MO	Mobile Originated		
MOC	Mobile Originating Call		
MOP	Maximum Output Power		
MPR	Maximum Power Reduction		

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PBCH	Physical Broadcast Channel	PUSCH	Physical Uplink Shared Channel
PBR	Prioritized Bit Rate	PVT	Power Versus Time
PCC	Policy and Charging Control		
PCCC	Parallel Concatenated Convolutional Code	Q	
PCCH	Paging Control Channel	QAM	Quadrature Amplitude Modulation
P-CCPCH	Primary Common Control Physical Channel	QCI	QoS Class Identifier
PCFICH	Physical Control Format Indicator Channel	QoE	Quality of Experience
		QoS	Quality of Service
PCH	Paging Channel	QPSK	Quadrature Phase-Shift Keying
PCRF	Policy and Charging Rules Function		
PCS	Personal Communication System	R	
PDCCH	Physical Downlink Control Channel	R&TTE	Radio and Telecommunications Terminal Equipment
PDCP	Packet Data Control Plane	RA	Routing Area
	Packet Data Convergence Protocol	RAB	Radio Access Bearer
PDN	Packet Data Network	RACH	Random Access Channel
PDN-GW	Packet Data Network Gateway	RAD	Rapid Application Development
PDSCH	Physical Downlink Shared Channel	RAN	Radio Access Network
PDU	Protocol Data Unit	RA-RNTI	Random Access Radio Network Temporary Identity
PECF	Policy Enforcement and Charging Function	RAT	Radio Access Technology
PHICH	Physical Hybrid ARQ Indicator Channel	RAU	Routing Area Update
PHY	Physical layer	RB	Resource Block
PI	Paging Information	RBW	Resolution Bandwidth
PLMN	Public Land Mobile Network	RCLP	Relative Carrier Leakage Power
PMCH	Physical Multicast Channel	RCMI	Remote Control Management Interface
PM	Phase Modulation	RDX	Radio Digital Cross Domain
PMI	Precoding Matrix Indicator	RE	Resource Element
PMIP	Proxy Mobile Internet Protocol	RES	Response
PRACH	Physical Random Access Channel	RF	Radio Frequency
P-RNTI	Paging Radio Network Temporary Identity		Re-segmentation Flag
PS	Packet Switched	RI	Rank Indication
P-SS	Packet Switched Service	RIM	RAN Information Management
	Primary Synchronization Signal	RIT	Radio Interface Technology
PTCRB	PCS Type Certification Review Board	RLC	Radio Link Control
PUCCH	Physical Uplink Control Channel	RMC	Reference Measurement Channel
		RNC	Radio Network Controller

RNTI	Radio Network Temporary Identifier	SINR	Signal to Interference plus Noise Ratio
RoHC	Robust Header Compression	SIP	Session Initiation Protocol
ROI	Return on Investment	SI-RNTI	System Information Radio Network Temporary Identity
RR	Radio Resource	SISO	Single Input Single Output
RRC	Radio Resource Control	SMS	Short Message Service
	Root Raised Cosine	SN	Sequence Number
RRM	Radio Resource Management		Serving Network
RS	Reference Signal	SNid	Serving Network Identity
RSCP	Received Signal Code Power	SNR	Signal-to-Noise Ratio
RSRP	Reference Signal Received Power	SO	Segment Offset
RSRQ	Reference Signal Received Quality	SON	Self Optimizing Network
RSS	Root Sum Square	SPID	Subscriber Profile ID
RSSI	Received Signal Strength Indicator	SPMI	System Power Management Interface
RT	Real Time	SPS	Semi-Persistent Scheduling
RV	Redundancy Version	SR	Scheduling Request
RX	Receiver	SRB	Signalling Radio Bearer
		SRS	Sounding Reference Signal
S		SRVCC	Single Radio Voice Call Continuity
SAE	System Architecture Evolution	SS	Subsystem
SAES	System Architecture Evolution Specification		System Simulator
SAP	Service Access Point	S-SS	Secondary Synchronization Signal
SC-FDMA	Single Carrier Frequency Division Multiple Access	STBC	Space Time Block Coding
SCH	Synchronization Channel	SU-MIMO	Single User MIMO
SCTP	S Common Transport Protocol	SVD	Singular Value Decomposition
SDF	Service Data Flow		
SDO	Standards Development Organization	T	
SDU	Service Data Unit	TA	Timing Advance
SEM	Spectrum Emission Mask		Tracking Area
SFBC	Space-Frequency Block Coding	TAC	Tracking Area Code
SFN	Single Frequency Network	TAI	Tracking Area Identity
SG	Security Gateway	TAS	Time Accurate Strobe
SGSN	Serving GPRS Support Node	TAU	Tracking Area Update
S-GW	Serving Gateway	TCP	Transmission Control Protocol
SI	System Information	TDD	Time Division Duplex
SIB	System Information Block	TDMA	Time Division Multiple Access
SIMO	Single Input Multiple Output		

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TD-SCDMA	Time Domain Synchronous Code Division Multiple Access	UP	User Plane
TEI	Terminal Endpoint Identifier	UPE	User Plane Entity
TEID	Tunnel Endpoint Identifier	UpPTS	Uplink Pilot Time Slot
TF	Transport Format	USIM	Universal Subscriber Identity Module
TFT	Traffic Flow Template	UTRA	Universal Terrestrial Radio Access
TM	Transparent Mode	UTRAN	Universal Terrestrial Radio Access Network
TOI	Third Order Intercept		
TPC	Transmit Power Control	V	
TR	Technical Report	VLAN	Virtual Local Area Network
TrCH	Transport Channel	VLR	Visitor Location Register
TS	Technical Specification	VoIMS	Voice over IP Multimedia Subsystem
TSG	Technical Specification Group	VoIP	Voice over Internet Protocol
TTA	Telecommunications Technology Association (Korea)	VRB	Virtual Resource Block
TTC	Telecommunications Technology Committee (Japan)	VRC	Variable Reference Channel
TTCN-2	Tree and Tabular Combined Notation version 2	VSA	Vector Signal Analyzer
TTCN-3	Tree and Tabular Combined Notation version 3	W	
TTI	Transmission Time Interval	WAP	Wireless Application Protocol
TTL	Transistor to Transistor Logic	W-CDMA	Wideband Code Division Multiple Access
TX	Transmitter	WF	Weight Factor
U		WG	Working Group
UCI	Uplink Control Information	WLAN	Wireless Local Area Network
UDP	User Datagram Protocol	WSP	Wireless Service Provider
UE	User Equipment	X	
UE-AMBR	UE Aggregate Maximum Bit Rate	XOR	Exclusive Or
UL	Uplink (subscriber to base station transmission)	XPR	Cross Polarization Ratio
UL-SCH	Uplink Shared Channel		
UM	Unacknowledged Mode		
UMB	Ultra-Mobile Broadband		
UMD	Unacknowledged Mode Data		
UMTS	Universal Mobile Telecommunications System		