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Glossary

3GPP	Third Generation Partnership Project
3GPP2	Third Generation Partnership Project 2
A-MIMO	Adaptive multiple input multiple output
AA	Anchor authenticator
AAA	Authentication, authorization, and accounting
AAS	Adaptive antenna system (also advanced antenna system)
AASN	Anchor ASN
AC	Admission control
ACK	Acknowledge
ADPF	anchor data path function
AES	Advanced encryption standard
AF	Application function
AG	Absolute grant
aGW	E-UTRAN access gateway
AK	Authorization key
AK SN	Derivation from PMK and PMK2 SN
AKA	Authentiction and key agreement
AM	Authorization module
AMC	Adaptive modulation and coding
AMS	Adaptive MIMO switching
APC	Anchor paging controller
APCF	Anchor paging controller function
API	Application program interface
AR	Access router
ARIB	Association of radio industries and businesses
ARQ	Automatic repeat request
AS	Authentication server or access stratum
ASN	Access service network
ASP	Application service provider
BCE	Binding cache entry
BE	Best effort

BGCF	Breakout gateway control function
BRAS	Broadband remote access server
BS	Base station
BSID	Base station identifier
BU	Binding update
CAC	Connection admission control
CC	Chase combining (also convolutional code)
CCI	Co-channel interference
CCM	Counter with cipher-block chaining message authentication code
CCoA	Collocated care of address
CDF	Charging distribution function
CDF	Cumulative distribution function
CDM	Code division multiplex
CDMA	Code division multiple access
CDMA2000	Third generation code division multiple access radio technology
CID	Connection identifier
CINR	Carrier to interference + noise ratio
CMAC	Cipher-based message authentication code
CMIP	Client mobile IP
CoA	Care of address
COA	Change of authority
COS	Class of service
CP	Control plane or cyclic prefix
CQI	Channel quality indicator
CS	Convergence sublayer
CSN	Connectivity service network
CSTD	Cyclic shift transmit diversity
CTC	Convolutional turbo code
CUI	Chargeable user identity
CWTS	China wireless telecommunication standard group
DAD	Duplicate address detection
DECT	European digital enhanced cordless telecommunications
DHCP	Dynamic host configuration protocol
diffserv	Differentiated services
DL	Down link
DNS	Domain name service
DOCSIS	Data over cable service interface specification
DoS	Denial of service
DP	Decision point or data path
DPCCH	Downlink physical control channel
DRC	Data rate control
DSC	Data source control
DSL	Digital subscriber line
DSLAM	Digital subscriber link access multiplexer
DVB	Digital video broadcast

E-AGCH	E-DCH absolute grant channel
E-DCH	Enhanced data channel
E-DPDCH	E-DCH dedicated physical data control channel
E-HICH	E DCH HARQ acknowledgement indicator channel
E-RGCH	E-DCH relative grant channel
E-UTRA	Evolved universal terrestrial radio access
E-UTRAN	Evolved universal terrestrial radio access network
E2E	End-to-end
E911	US emergency services
EAP	Extensible authentication protocol
EAP-AKA	EAP authentication and key agreement
EAP-MD5	EAP – message digest 5
EAP-PSK	EAP – pre-shared key
EAP-SIM	EAP subscriber identity module
EAP-TLS	EAP with TLS
EESM	Exponential effective SIR mapping
EIRP	Effective isotropic radiated power
EMSK	Extended master session key
eNB	E-UTRAN nodeB
ERT-VR	Extended real-time variable rate
ertPS	Extended real-time polling service
ETSI	European Telecommunications Standards Institute
EUI-64	Extended unique identifier (64-bit)
EVDO	Evolution data optimized or evolution data only
EVDV	Evolution data-voice
FA	Foreign agent
FBSS	Fast base station switching
FCAPS	Fault configuration accounting performance and security
FCH	Frame control header
FDD	Frequency division duplex
FFT	Fast Fourier transform
FQDN	Fully qualified domain name
FRD	Fast router discovery
FTP	File transfer protocol
FUSC	Fully used subcarrier
FWA	Fixed wireless access
GF	Galois field
GPRS	General packet radio services
GRE	Generic routing encapsulation
GSA	Group Security Association
GSM	Global system for mobile communication
GW	Gateway
HA	Home agent
HARQ	Hybrid automatic repeat request
HHO	Hard hand-off

HLA	Hot-line application
HLD	Hot-line device
HMAC	Keyed-hashing for message authentication code
HO	Hand-off or hand over
HO ID	Hand-off identifier
HoA	MS home address
Hotspot	Public location where WLAN services have been deployed
HRPD	High-rate packet data
HS-DPCCH	High-speed dedicated physical control channel
HS-DSCH	High-speed downlink shared channel
HS-SCCH	High-speed shared control channel
HSDPA	High-speed downlink data packet access
HSPA	High-speed packet access
HSUPA	High-speed uplink data packet access
HTTP	Hyper-text transfer protocol
I-WLAN	Interworking with wireless LANs
IANA	Internet assigned numbers authority
IBS	Integrated base stations
ICMPv6	Internet control message protocol for IPv6
IE	Information elements
IEEE	Institute of Electrical and Electronics Engineers
IEEE 802.3	IEEE standard specification for Ethernet
IEFT	Internet Engineering Task Force
IFFT	Inverse fast Fourier transform
IID	Interface identifier
IK	Integrity key
IKEv2	Internet key exchange protocol version 2
IMS	IP multimedia subsystem
IMSI	International mobile subscriber identity
IP	Internet protocol
IPsec	IP security
IPv4	Internet protocol version 4
IPv6	Internet protocol version 6
IR	Incremental redundancy
ISF	Initial service flow
ISI	Intersymbol interference
ISM	Industrial, scientific, and medical bands
IWF	Internetworking function
IWG	Interworking gateway
IWU	Internetworking Unit
L1	Layer 1 (physical layer)
L2	Layer 2 (data link layer)
L3	Layer 3 (network layer)
LBS	Location-based services
LDPC	Low-density parity check

LE	License-exempt deployments
LMDS	Local multipoint distribution system
LOS	Line of sight
LPF	Local policy function
LR	Location register MSID, BSID
LSB	Least-significant byte
LTE	Long-term evolution
MAC	Medium access control
MAI	Multiple access interference
MAN	Metropolitan area network
MAP	Media access protocol
MBMS	Multimedia broadcast/multicast service
MBS	Multicast and broadcast service
MCC	Mobile country code
MDHO	Macrodiversity hand over
MIMO	Multiple input multiple output
MIP	Mobile IP
MIP6	Mobile IP version 6
MLD	Maximum likelihood symbol detection
MM	Mobility management
MMS	Multimedia message service
MMSE	Minimum mean-squared error
MNC	Mobile network operator code
MN_HOA	Allow-MN-HA assignment
MPLS	Multi protocol label switching
MS	Mobile station
MSID	Mobile station identifier
MSK	Master session key
MSO	Multiservices operator
NA	Neighbor advertisements
NACK	Not acknowledge
NAI	Network access identifier
NAP	Network access provider
NAPT	Network address port translation
NAS	Network access server or Nonaccess stratum
NAT	Network address translation
NLOS	Non–line-of-sight
NMS	Network management system
NRM	Network reference model
NRT-VR	Non–real-time variable rate
nrtPS	Non–real-time polling service
NS	Neighbor solicitation
NSP	Network service provider
NUD	Neighbor unreachability detection
OAM	Operations and maintenance

OFDM	Orthogonal frequency division multiplex
OFDMA	Orthogonal frequency division multiple access
OTA	Over-the-air
OUI	Organization unique identifier
P-CSCF	Proxy-call session control function
PA	Paging agent
PBX	Private branch exchange
PC	Paging controller
PDCP	Packet data convergence protocol
PDFID	Packet data flow ID
PDG	Packet data gateway
PDU	Packet data unit
PEAP	Protected EAP
PER	Packet error rate
PF	Policy function
PF	Proportional fair (scheduler)
PG	Paging group
PG ID	Paging group identifier
PHS	Packet header suppression (PHS)
PKM	Public key management
PMIP	Proxy-mobile IP
PMK	Pairwise master key
PMK2	Pairwise master key
PMN	Proxy mobile node
PoA	Point of attachment
PPAC	Prepaid accounting capability
PPC	Prepaid client
PPS	Prepaid server
Proxy-ARP	Proxy address resolution protocol
PS	Physical slot
PSK	Preshared key or phase shift keying
PSTN	Public switched telephone network
PtP	Peer to peer
PUSC	Partially used subcarrier
QAM	Quadrature amplitude modulation
QoS	Quality of service
QPSK	Quadrature phase shift keying
RA	Router advertisement or reverse activity
RAB	Reverse-link activity bit
RADIUS	Remote access dial in user service
RG	Relative grant
RLC	Radio link control
RNC	Radio network controller
RO	Route optimization
RP	Reference point

RPC	Reverse power control
RR	Resource-reservation or round Robin
RRA	Radio resource agent
RRC	Radio resource controller
RRI	Reverse rate indicator
RRM	Radio resource management
RS	Router solicitation
RS	Reed-Solomon coding
RSVP	Resource reservation protocol
RT-VR	Real-time variable rate
RTG	Receive/transmit transition gap
rtPS	Real-time polling service
RUIM	Removable user identity module
S-CSCF	Serving-call session control function
S-OFDMA	Scalable orthogonal frequency division multiple access
SA	Security association
SAE	System architecture evolution
SCI	Spare capacity indicator
SDFID	Service data flow ID
SDMA	Space (or spatial) division (or diversity) multiple access
SDU	Service data unit
SF	Spreading factor
SFA	Service flow authorization
SFID	Service flow ID
SFM	Service flow management
SFN	Single frequency network
SGSN	Serving GPRS support node
SHO	Soft hand-off
SI	Subscriber identity
SII	System information identity or service identity information
SIM	Subscriber identity module
SIMO	Single input multiple output (antenna)
SINR	Signal to interference + noise ratio
SISO	Single input single output (antenna)
SLA	Service-level agreement
SM	Spatial multiplexing
SMS	Short message service
SMTP	Simple mail transport protocol
SNIR	Signal to noise + interference ratio
SNMP	Simple network management protocol
SNR	Signal to noise ratio
SS	Subscriber station
SS7	Signaling system 7
SSL	Secure sockets layer
STBC	Space–time block code

STC	Space–time coding
SUBC	Subscriber credentials
T1	Committee T1
TBS	Target BS
TCH	Traffic channel
TCP	Transmission control protocol
TD-CDMA	Time division code division multiple access
TD-SCDMA	Time division synchronous code division multiple access
TDD	Time division duplex
TDM	Time division multiplex
TE	Terminal equipment
TEK	Traffic encryption key
TFRI	Transport format-related information
TIA	Telecommunications Industry Association
TLS	Transport layer security
TLV	Type length value
TTA	Telecommunications Technology Association
TTC	Telecommunication Technology Committee
TTG	Transmit/receive transition gap
TTI	Transmission time interval
TTLS	Tunneled TLS
TU	Typical urban (as in channel model)
U-NII	Unlicensed national information infrastructure
UDP	User datagram protocol
UDR	Usage data record
UE	User equipment
UGS	Unsolicited grant service
UICC	Universal integrated circuit card
UID	User identity
UL	Uplink
UMTS	Universal mobile telecommunications system
UP	User plane
USIM	Universal subscriber identity module
UTRAN LTE	UMTS terrestrial radio access network long-term evolution
V-AAA	Visited AAA proxy
V-MIMO	Virtual multiple input multiple output (antenna)
VLAN	Virtual LAN
VoIP	Voice over Internet protocol
VPN	Virtual private network
VSA	Vendor-specific attributes
VSF	Variable spreading factor
VSM	Vertical spatial multiplexing
WAG	WLAN access gateway
WAP	Wireless application protocol
WATSP	WiMAX ASN transport signaling protocols

WCDMA	Wideband code division multiple access
WEP	Wired equivalent privacy
Wi-Fi	Wireless fidelity
WiBro	Wireless broadband (service)
WiMAX	Worldwide interoperability for microwave access
WLAN	Wireless local area network
WPA	Wi-Fi protected access
WWAN	Wireless wide area network
X.509	ITU standard for digital public-key certificate issued by a CA

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