

5G for non-telco experts

Abbreviations



2G to 5G - Abbreviations list

Abbreviation	
2G	Second generation
3G	Third generation
4G	Fourth generation
5G	Fifth generation
GSM	Global system for mobile communications
CDMA IS-95	Code division multiple access Interim standard 1995
PDC	Personal digital cellular
UMTS	Universal mobile telecommunications system
CDMA-2000	Code division multiple access - 2000
WCDMA	Wideband CDMA

Abbreviation	
TD-SCDMA	Time division – Synchronous CDMA
LTE	Long term evolution
LTE-A	LTE Advanced
ITU	International telecommunication union
IMT	International mobile telecommunications
ETSI	European telecommunications standards institute
3GPP	Third generation partnership project
GPRS	General packet radio service
EDGE	Enhanced data rates for GSM evolution
HSPA	High speed packet access
FR	Full rate GSM voice codec
EFR	Enhanced full rate GSM voice codec

2G to 5G - Abbreviations list

Abbreviation	
RTT	Round trip time
NSA	Non-standalone
SA	Standalone
AMR	Adaptive multi-rate voice CODEC
SMS	Short message service
BTS	Base transceiver station
BSC	Base station controller
MSC	Mobile switching centre
SGSN	Serving GPRS support node
GGSN	Gateway GPRS support node
HLR	Home location register
VLR	Visitor location register
MS	Mobile station

Abbreviation	
AuC	Authentication centre
PLMN	Public land mobile network
PSTN	Public switched telephone network
EIR	Equipment identity register
CS	Circuit switched
PS	Packet switched
GMSC	Gateway MSC
BSS	Base station sub-system
NSS	Network switching sub-system
NMS	Network management sub-system
OSS	Operations support system
HSCSD	High-speed circuit switched data
UE	User equipment

2G to 5G - Abbreviations list

Abbreviation	
ARIB	Association of radio industries and businesses (Japan)
ATIS	Alliance for telecommunications industry solutions (USA)
CCSA	China communications standards association
ETSI	European telecommunications standards institute
TSDSI	Telecommunications standards development society (India)
TTA	Telecommunications technology association (Korea)
TTC	Telecommunication technology committee (Japan)

Abbreviation	
RAN	Radio access network
UTRAN	UMTS terrestrial radio access network
GERAN	GSM EDGE radio access network
RNC	Radio network controller
NB	Node B
RNS	Radio network system
RAS	Radio access system
HSDPA	High-speed downlink packet access
HSUPA	High-speed uplink packet access
HSPA	High-speed packet access
HSPA+	Evolution of HSPA
LTE	Long term evolution

2G to 5G - Abbreviations list

Abbreviation	
FDD	Frequency division duplex
TDD	Time division duplex
VoIP	Voice over IP
VoLTE	Voice over LTE
RF	Radio frequency
eNB	Evolved node B
EPC	Evolved packet core
MME	Mobility management entity
eUTRAN	Evolved universal terrestrial radio access network
HSS	Home subscriber server
IMS	IP multimedia system
CA	Carrier aggregation

Abbreviation	
S-GW	Serving gateway
P-GW	Packet data network (PDN) gateway
OFDMA	Orthogonal
MIMO	Multiple input, multiple output
AF	Application function
AMF	Access and mobility function
AUSF	Authentication server function
DN	Data network
NSSF	Network slice selection function
PCF	Policy control function
SMF	Session management function
UDM	Unified data management
UPF	User plane function

2G to 5G - Abbreviations list

Abbreviation	
MEC	Multi-access edge computing
QoS	Quality of service
NR	New radio
CU	Central unit
DU	Distributed unit
ng-RAN	Next generation RAN
gNB	Next generation NB with NR
ng-eNB	Next generation eNB supporting LTE air interface
ISDN	Integrated services digital network
NMT	Nordic mobile telephone
AMPS	Advance mobile phone system
TACS	Total access communications system

Abbreviation	
C-450	C network – 450 MHz band
TMA	Telefonía móvil automática (automated mobile telephony)
RTMI	Radio telefono mobile integrato
TZ-80n	Japanese analog cellular technologies
JTACS	Japan total access communications system
PCRF	Policy and charging rules function

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