1G First Generation2G Second Generation3G Third Generation

3GPP Third Generation Partnership Project

4G Fourth Generation5G Fifth Generation

5G AKA Fifth Generation Authentication and Key Agreement

5GC Fifth Generation Core Network

5G-EIR Fifth Generation Equipment Identity Register 5GMM Fifth Generation Mobility Management

5GSM Fifth Generation Session5QI Fifth Generation QoS Identifier

AAA Authentication, Authorization and Accounting

AES Advanced Encryption System

AF Application Function

AKA Authentication and Key Agreement AMBR Aggregate Maximum Bit Rate

AMF Access and Mobility Management Function

AMFI Access and Mobility Management Function Identifier

API Application Programming Interface

APN Access Point Name

ARP Allocation and Retention Priority

ARPF Authentication Credential Repository and Processing Function

AS Access Stratum

ATM Asynchronous Transfer Mode AUSF Authentication Server Function

AUTN Authentication Token

BCCH Broadcast Control Channel
BSC Base Station Controller
BTS Base Transceiver Station

BWP Bandwidth Part

CA Carrier Aggregation
CCCH Common Control Channel

CK Cipher Key

CM Connection Management
CoMP Coordinated Multi Point
CORESET Control Resource Set
COTS Commercial Off The Shelf
CPRI Common Public Radio Interface

CQI Channel Quality Indicator

CS Circuit-Switched

CSI-RS Channel State Information-Reference Signal

CSFB Circuit Switched Fallback

CUPS Control and User Plane Separation

DC Dual Connectivity

DCI Downlink Control Information DEI Drop Eligibility Indicator DHCP Dynamic Host Configuration Protocol

DHCPv4 Dynamic Host Configuration Protocol version 4
DHCPv6 Dynamic Host Configuration Protocol version 6

DiffServ Differentiated Services

DL Downlink

DL-SCH Downlink Shared Channel
DM-RS Demodulation Reference Signal

DN Data Network

DNN Data Network Name
DNS Domain Name Server
DPI Deep Packet Inspection
DRB Data Radio Bearer
DRX Discontinuous Reception

DRX Discontinuous Reception
DTCH Dedicated Traffic Channel

E1-AP E1 Application Protocol

EAP-AKA Extensible Authentication Protocol-Authentication and Key Agreement

ECM EPS Connection Management

EDGE Enhanced Data rates for Global Evolution

EIR Equipment Identity Register eMBB Enhanced Mobile Broadband EMM EPS Mobility Management

eNB Evolved Universal Terrestrial Radio Access Network Node B

EN-DC Evolved Universal Terrestrial Radio Access – NR Dual Connectivity

EPC Evolved Packet Core EPS Evolved Packet System

ESM Evolved Packet System Session Management

ESP Encapsulating Security Payload

ETSI European Telecommunications Standards Institute

E-UTRA Evolved Universal Terrestrial Radio Access

E-UTRAN Evolved Universal Terrestrial Radio Access Network

eV2X Enhancement of Vehicle-to-Everything

F1-AP F1 Application Protocol

FDMA Frequency Division Multiple Access

FR1 Frequency Range 1

GBR Guaranteed Bit Rate

GERAN GSM/EDGE Radio Access Network

GFBR Guaranteed Flow Bit Rate gNB Next Generation NodeB

gNB-CU Next Generation NodeB Central Unit

gNB-CU-CP Next Generation NodeB Central Unit Control Plane gNB-CU-UP Next Generation NodeB Central Unit User Plane

gNB-DU Next Generation NodeB Distributed Unit GNSS Global Navigation Satellite System GPRS General Packet Radio Service GPS Global Positioning System

GSM Global System for Mobile communications

GTP GPRS Tunnelling Protocol

GTP-U GTP – User Plane

GTPv1-U GTP version 1 – User Plane

GTPv2-C GTP version 2 – Control Plane

GUAMI Globally Unique Access and Mobility Management

GUTI Globally Unique Temporary Identity

HARQ Hybrid Automatic Repeat Request
H-NSSF Home Network Slice Selection Function
H-PCF Home Policy and Charging Function
HPLMN Home Public Land Mobile Network
HSDPA High Speed Downlink Packet Access
H-SMF Home Session Management Function

HSPA High Speed Packet Access HSPA+ High Speed Packet Access+ HSS Home Subscriber Server

HSUPA High Speed Uplink Packet Access
HTML Hypertext Markup Language
HTTP Hypertext Transfer Protocol

HTTPS Hypertext Transfer Protocol Secure

H-UPF Home User Plane Function

IEEE Institute of Electrical and Electronics Engineers

IETF Internet Engineering Task Force

IK Integrity Key

IKEv2 Internet Key Exchange version 2

IMEI International Mobile Equipment Identity

IMS IP Multimedia Subsystem

IMSI International Mobile Subscriber Identity
IMT International Mobile Telecommunications
IMT-2020 International Mobile Telecommunications 2020

IP Internet Protocol IPsec IP Security

IPv4 Internet Protocol version 4
IPv6 Internet Protocol version 6

IPX Internet Protocol Packet Exchange

I-RNTI Inactive Radio Network Temporary Identifier

ITU-R International Telecommunication Union – Radiocommunications sector

I-UPF Intermediate User Plane Function

JPEG Joint Photographic Experts Group

JSON Javascript Object Notation

KDF Key Derivation Function

LDAP Lightweight Directory Access Protocol

LTE Long Term Evolution

LTE-A Long Term Evolution – Advanced

MAC Medium Access Control MAC Message Authentication code

MCC Mobile Country Code
MCG Master Cell Group
ME Mobile Equipment
MEC Mobile Edge Computer

MEC Mobile-Edge Computing

MeNB Master Evolved Universal Terrestrial Radio Access Network Node B

MFBR Maximum Flow Bit Rate

MgNB Master Next Generation NodeB

MGW Media Gateway

MIB Master Information Block
MIMO Multiple Input Multiple Output
mIoT Massive Internet of Things
MME Mobility Management Entity

mMTC Massive Machine Type Communications

MNC Mobile Network Code

MR-DC Multi-Radio Access Technology Dual Connectivity

MSC Mobile-services Switching Centre MTC Machine Type Communications MVNO Mobile Virtual Network Operator

N3IWF Non-3GPP Interworking Function

NAI Network Access Identifier

NAPT Network Address and Port Translation

NAS Non-Access Stratum

NAT Network Address Translation

NE-DC New Radio - Evolved Universal Terrestrial Radio Access Dual Connectivity

NEF Network Exposure Function

NF Network Function

NFV Network Functions Virtualization

NFVI Network Functions Virtualization Infrastructure

NFV-MANO Network Functions Virtualization Management and Orchestration

NG-AP Next Generation Application Protocol

NGEN-DC Next Generation Radio Access Network - Evolved Universal Terrestrial Radio

Access - New Radio Dual Connectivity

NG-RAN Next Generation Radio Access Network

NH Next Hop NR New Radio

NRF Network Repository Function NRF Network Resource Function

NSA Non Standalone

NSSAI Network Slice Selection Assistance Information

NSSF Network Slice Selection Function

OFDMA Orthogonal Frequency Division Multiple Access

PBCH Physical Broadcast Channel
PCC Policy and Charging Control
PCCH Paging control channel

PCI Physical cell ID PCell Primary Cell

PCF Policy and Charging Function

PCP Priority Code Point

PCRF Policy and Charging Rules Function P-CSCF Proxy Call Session Control Function

PCU Packet Control Unit

PDCP Packet Data Convergence Protocol

PDF Portable Document Format

PDN Packet Data Network

PDN-GW Packet Data Network Gateway
PDSCH Physical Downlink Shared Channel

PDU Packet Data Unit

PEI Permanent Equipment Identifier

PER Packet Error Rate

PFCP Packet Forwarding Control Protocol

PFD Packet Filter Description
PLMN Public Land Mobile Network

PLMN-ID Public Land Mobile Network Identity

PS Packet-Switched

PSCell Primary Secondary Cell

PSS Primary Synchronization Signal
PSTN Public Switched Telephone Network
PT-RS Phase Tracking Reference Signal

PtP Point-to-Point

PTP Precision Time Protocol

PUCCH Physical Uplink Control Channel PUSCH Physical Uplink Shared Channel

PWS Public Warning System

QCI Quality of Service Class Identifier QFI Quality of Service Flow Identifier

QoS Quality of Service

RAN Radio Access Network
RAND Random Number

RAT Radio Access Technology

RE Radio Element

REST REpresentational State Transfer

RF Radio Frequency
RFC Request for Comment

RFSP Radio Access Technology/Frequency Selection Priority

RLC Radio Link Control

RM Registration Management

RNA Radio Access Network-based Notification Area

RNC Radio Network Controller RPC Remote Procedure Call

RQA Reflective Quality of Service Attribute RQI Reflective Quality of Service Indicator

RRC Radio Resource Control RRH Remote Radio Head

RRM Radio Resource Management

S1-AP S1 Application Protocol

SA Standalone

SAE System Architecture Evolution

SCell Secondary Cell

SCG Secondary Cell Group

SCTP Stream Control Transmission Protocol

SD Slice Differentiator

SDAP Service Data Adaptation Protocol

SDF Service Data Flow

SDN Software Defined Networking
SDP Session Description Protocol
SDR Software Defined Radio
SEAF Security Anchor Function
SFN System Frame Number

SeNB Secondary Evolved Universal Terrestrial Radio Access Network Node B

SEPP Security Edge Protection Proxy SgNB Secondary Next Generation NodeB

SGSN Serving General Packet Radio Service Support Node

SGW Serving Gateway

SIB System Information Block
SIP Session Initiation Protocol
SMF Session Management Function

SMS Short Message Service SN Secondary Node SN Sequence Number

S-NSSAI Single Network Slice Selection Assistance Information

SOAP Simple Object Access Protocol SON Self Optimizing Network SPR Subscription Profile Repository

SRB Signalling Radio Bearer

SRS Signalling Radio Bearer
SRS Sounding Reference Signal

SRVCC Single Radio Voice Call Continuity
SSB Synchronization Signal Block
SSC Session and Service Continuity
SSS Secondary Synchronization Signal

SST Slice/Service Type

SUCI Subscription Concealed Identifier SUPI Subscriber Permanent Identifier

TA Tracking Area

TAC Tracking Area Code
TAI Tracking Area Identifier
TAU Tracking Area Update

TCP Transmission Control Protocol

TCP/IP Transmission Control Protocol/Internet Protocol

TDD Time Division Duplex
TDF Traffic Detection Function
TDM Time Division Multiplexing
TDMA Time Division Multiple Access
TEID Tunnel Endpoint Identifier

TMSI Temporary Mobile Subscriber Identity
TNLA Transport Network Layer Association

TS Technical Specification

UCI Uplink Control Information
UDM Unified Data Management
UDR Unified Data Repository
UDR User Data Repository

UDSF Unstructured Data Storage Function

UE User Equipment

UE-AMBR UE-specific Aggregate MBR

UHF Ultra High Frequency

UICC Universal Integrated Circuit Card

UL Uplink

UL CL Uplink Classifier

UMTS Universal Mobile Telecommunications System

UPF User Plane Function
URA UTRAN Registration Area
URI Uniform Resource Identifier

URLLC Ultra Reliable Low Latency Communication

USIM Universal Subscriber Identity Module

UTC Universal Coordinated Time

UTRAN UMTS Terrestrial Radio Access Network

UUID Universally Unique Identifier

V2X Vehicle-to-Everything

VID Virtual Local Area Network Identifier

VLAN Virtual Local Area Network

VN Virtual Network

VNF Virtualized Network Function

V-NSSF Visited Network Slice Selection Function

VoIP Voice over Internet Protocol
VoLTE Voice over Long Term Evolution
V-PCF Visited Policy and Charging Function
VPLMN Visited Public Land Mobile Network
V-SMF Visited Session Management Function

V-UPF Visited User Plane Function

WCDMA Wideband Code Division Multiple Access

Wi-Fi Wireless Fidelity

WiMAX Worldwide Interoperability for Microwave Access

X2-AP X2 Application Protocol Xn-AP Xn Application Protocol XRES Expected Response