# **Spirent Automated Test & Assurance**

## **Glossary of Acronyms & Terms**

## Glossary

#### # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

#	
1XRTT	1x (x equals the number of 1.25 MHz channels) Radio Transmission Technology; the operating mode of CDMA 2000
2G	2 <sup>nd</sup> Generation
3GPP	3 <sup>rd</sup> Generation Partnership Project ( <u>www.3gpp.org</u> ) is the joint standardization partnership responsible for standardizing UMTS, HSPA and LTE.
3GPP2	3 <sup>rd</sup> Generation Partnership Project 2 ( <u>www.3gpp3.org</u> ) is the joint standardization partnership responsible for standardizing CDMA 2000 and its derivatives.
4G	4 <sup>th</sup> Generation Mobile Network
4G-GUTI	4G Globally Unique Temporary Identifier
5G	5 <sup>th</sup> Generation Mobile Network: Referred to as 5th generation mobile networks or 5th generation wireless systems
5G-AN	5G Access Network: An access network comprising a NG-RAN and/or non-3GPP AN connecting to a 5G Core Network
5G AV	5G Authentication Vector
5GC or 5GCN	5G Core Network
5G-EIR	5G Equipment Identity Register
5GEx	5G Exchange: A project aimed at enabling cross-domain orchestration of services over multiple administrations or over multi-domain single administrations
5G-GUTI	5G Globally Unique Temporary Identifier
5G HE AV	5G Home Environment Authentication Vector
5GIC	5G Innovation Centre: Housed at the University of Surrey, dedicated to working on 5G
5GMF	Fifth Generation Mobile Communications Promotion Forum: A Japanese group created to conduct research and development on 5G

#### # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



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5G-NR	5G New Radio
5G PPP	5G Infrastructure Public Private Partnership: A partnership between industry manufacturers, telecommunications operators, service providers and researchers aimed at delivering technologies and standards for 5G
5GS	5G System
5QI	5G QoS (Quality of Service) Identifier: Used as a reference to a specific QoS forwarding behavior (e.g., packet loss rate, packet delay budget) to be provided to a 5G QoS Flow. This may be implemented in the access network by the 5QI (5G Quality of Service Indicator) referencing node specific parameters that control the QoS forwarding treatment (e.g., scheduling weights, admission thresholds, queue management thresholds, link layer protocol configuration, etc.).
5G QoS Flow	5G Quality of Service Flow: The finest granularity for QoS forwarding treatment in the 5G System. All traffic mapped to the same 5G QoS Flow receive the same forwarding treatment (e.g., scheduling policy, queue management policy, rate shaping policy, RLC (Radio Link Control) configuration, etc.). Providing different QoS forwarding treatment requires separate 5G QoS Flow.
5G RAN	5G Radio Access Network
5GS	5G System, which has three main components - 5G-AN (Access Network, 5GC (Core Network), and UE (User Equipment)
5G SE AV	5G Serving Environment Authentication Vector
5G-S-TMSI	Temporary Mobile Subscription Identifier: Generated by the AMF (Access and Mobility Function) during the generation of the subscriber's 5G-GUTI (Globally Unique Temporary Identifier). The 5G-TMSI uniquely identifies the UE within the AMF, across all allocated 5G-GUTIs.
5G System	3GPP system consisting of 5G Access Network (AN), 5G Core Network and UE
5GU	Conference on 5G for Ubiquitous Connectivity: Focused on bringing together researchers and developers as well as regulators and policy makers in presenting their latest views on 5G
5QI	5G QoS (Quality of Service) Indicator (3GPP TS 23.501)
Α	
A2DP	Advanced Audio Distribution Profile
A3	Algorithm 3 Authentication Algorithm
A5	Algorithm 3 Cipher Algorithm
A8	Algorithm 8 Cipher Key Generator
AAA	Authentication, Authorization, and Accounting
AAAA RR	IPv6 Address Resource Record
AAS	Active Antenna System
AAV	Alternative Access Vendor; provide high bandwidth connections to service providers.
μ Λ	

# A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



AB	Access Barring
ABM	Asynchronous Balanced Mode (3GPP TS44.064)
ABNF	Augmented Backus-Naur Form
ABQP	Aggregate Base Station Subsystem Quality of Service Profile (3GPP TS48.018)
AC	Access Condition
ACA	Alternative Client Authentication
ACDC	Application specific Congestion control for Data Communication
ACI	Azure Container Instances
ACK	Acknowledgement
ACL	APN (Access Point Name) Control List or Access Control List
ACM	Accumulated Call Meter
AC	Access Class (3GPP TS22.011)
ACB	Access Class Barring
ACD	Automatic Call Distribution
ACDC	Application specific Congestion control for Data Communication
ACI	Adjacent Channel Interface
ACIR	Adjacent Channel Interface Ratio
ACK	Acknowledgement
ACL	Access Control List
ACLR	Adjacent Channel Leakage Ratio
ACP	Automatic Cell Planning
ACRR	Adjacent Channel Rejection Ratio
ACS	Adjacent Channel Selectivity or Automated Channel Selection (OCTOBOX)
A-CSI	Aperiodic CSI (Channel State Information)
ADB	Android Debugging
ADC	Application Detection and Control or Application delivery Controller
ADF	Application Dedicated File
ADM	Asynchronous Disconnected Mode (3GPP TS44.064)
ADN	Abbreviated Dialing Number
ADR	Accumulated Delta-Range
ADSL	Asymmetric Digital Subscriber Line

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



AES	Advanced Encryption Standard
AF	Application Function
Affinity	A set of rules that give hints to the scheduler about where to place pods (Kubernetes)
AFH	Adaptive Frequency Hopping
AGF	Access Gateway Function
A-GNSS	Assisted GNSS (Global Navigation Satellite System)
A-GPS	Assisted GPS (Global Positioning System)
AGW	Application Gateway or Access Gateway
AHAG	Ad-Hoc Authentication Group
AI	Air-Interface
AID	Application Identifier or Association Identifier
AIF	Auto-Integration Function
AILC	Assistance Information bit for Local Cache
AIR	Automated Integration of RBS (Radio Base Station)
AISG	Antenna Interface Standards Group; creates and maintains standards for the control and monitoring interface between a base station and a variety of tower-top equipment.
AK	Anonymity Key
AKA	Authentication and Key Agreement
A-KID	AKMA (Authentication and Key Management for Applications) Key Identifier
A-Key	Authentication Key
AKMA	Authentication and Key Management for Applications
AKS	Azure Kubernetes Service
ALG	Application Level Gateway
ALS	Application Layer Security
ALSA	Advanced Linux Sound Architecture
AM	Acknowledgement Mode
AMBR	Aggregate Maximum Bit Rate
AMC	Adaptive Modulation and Coding
AMD	Acknowledged Mode Data
AMF	Access and mobility Management Function (5G Network Element that serves much the same function as the MME (Mobility Management Entity) in LTE) <i>or</i> Authentication Management Field

# A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



AMF Region	An AMF Region consists of one or multiple AMF Sets
AMF Set	An AMF Set consists of some AMFs that serve a given area and Network Slice(s). AMF Set is unique within an AMF Region, and it comprises of AMFs that support the same Network Slice(s). Multiple AMF Sets may be defined per AMF Region.
AMI	Alternate Mark Inversion or Amazon Machine Image
A-MPR	Additional Maximum Power Reduction
AMPS	Analog Mobile Phone System
AMR	Adaptive Multi-Rate
AMR-WB	Adaptive Multi-Rate Wide Band
AMT	Active Management Technology
AN	Access Network or Access Node
ANDS	Access Network Discovery and Selection
ANDSF	Access Network Discovery and Selection Function
ANDSP	Access network Discovery and Selection Policy
ANI	Automatic Number Identification
Annotation	A key-value pair used to attach arbitrary non-identifying metadata to objects (Kubernetes)
ANR	Automatic Neighbor Relation
ANSI	American National Standards Industry: ANSI is a nonprofit, nongovernmental organization that develops and distributes national standards for a wide range of commercial products.
AoA	Angle of Arrival
AoC	Advice of Charge
AoD	Angle of Departure
AP	Application Protocol or Antenna Port or Access Point
APAC	Asia Pacific
APDU	Application Protocol Data Unit
ΑΡΙ	Application Program Interface: A set of routines, protocols, and tools for building software applications
API Gateway	Application that sits in front of an application programming interface (API) and acts as a single point of entry for a defined group of microservices
API Group	A set of related paths in Kubernetes API (Application Program Interface)
API Server	Also known as :kube-apiserver, the front-end for the Kubernetes control plane.
APN	Access Point Name

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APN-NI	Access Point Name Network Identifier
APN-OI	Access Point Name Operator Identifier
APT	Automation Platform Technologies or Advanced Package Tool (Linux)
AR	Augmented Reality
ARFCN	Absolute Radio-Frequency Channel Number
ARIB	Association of Radio Industries and Businesses; a Japanese standard development organization in 3GPP
ARJ	Admission Reject (H.323)
ARN	Active Remote Node
ARP	Allocation and Retention Priority – indicates a priority level for the allocation and retention of bearers <i>or</i> Address Resolution Protocol – internet protocol used to map and IP address to a MAC (Medium Access Control) Address <i>or</i> Antenna Reference Point
ARPF	Authentication credential Repository and Processing Function
ARQ	Automatic Repeat Request or Admission Request (H.323)
ARR	Ipv4 Address Resource Record
ARW	Add RBS (Radio Base Station) Wizard
AS	Access Stratum or Application Server or Angular Spread
A-SBG	Access SBG (Session Border Gateway)
ASC	Antenna System Controller
ASD	Automatic SW (Software) Download
ASEM	Additional Spectrum Emission Mask
ASM	Automatic Storage Management
ASME	Access Security Management Entity or Access Stratum Management Entity
ASN.1	Abstract Syntax Notation One
ASSL	Adjacent Subcarrier Set Leakage
ASSR	Adjacent Subcarrier Set Rejection
ATIS	Alliance for Telecommunications Industry Solutions: Allows ITC (information and communications technology) companies to convene to find solutions to their shared challenges. One of its current priorities is advancing the 5G network.
ATR	Answer To Reset
ATT	Attenuator or Attenuation
AuC	Authentication Center
AUL	Autonomous Uplink

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



AUSF	Authentication Server Function (5G Services Node that serves much the same function as AAA (Authentication, authorization, and accounting))
AUSF Group ID	One or more AUSF instances managing a specific set of SUPIs (Subscription Permanent Identifier)
AUTN	Authentication Token
AUTS	Authentication Token for Resynchronization
AV	Authentication Vector
AVB	Audio Video Bridging
AVP	Attribute Value Pair
AWGN	Additive White Gaussian Noise
AWS	Advanced Wireless Service or Amazon Web Services
В	
B3ZS	Bipolar 3 Zero Substitution
B8ZS	Bipolar 8 Zero Substitution
BA	Bandwidth Adaptation
BaaS	Backend as a Service
BAP	Backhaul Adaptation Protocol
BAR	Buffering Action Rule
BBF	Bearer Binding Function or Broadband Forum
BBU	Baseband Unit
BCC	Bearer Channel Connection
BCCH	Broadcast Channel Control
BCD	Binary Coded Decimal
BCH	Broadcast Channel
BCM	Bearer Control Mode
BCSM	Basic Call State Model
BD	Blind Detection
BDN	Barred Dialing Number
BDS	BeiDou Navigation Satellite System: A Satellite based radio navigation system owned and operated by the China National Space Administration
BE	Best Effort (Priority)
BEM	Block Edge Masks

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



BER	Bit Error Rate
BERT	Bit Error Rate Test
BER-TLV	Basic Encoding Rule – TLV (Tag Length Value)
BFD	Beam Failure Detection
B Frames	Bi-directional or Bi-predictive frames: One of the three types of major frames found in video compression designs. This frame requires a prior decoding of other frames to be decoded itself. This frame may contain both image data and motion picture displacements.
BG	Border Gateway
BGCF	Breakout Gateway Control Function
BGP	Border Gateway Protocol
BH	Backhaul
BHCA	Busy Hour Call Attempts
BH RLC	Backhaul Radio Link Control
BI	Business Intelligence or Back-off Indicator
BIPM	Bureau International des Poids et Mesures (International Bureau of Weights and Measures)
BK	Background (Priority)
BL	Bandwidth reduced Low complexity
BLE	Bluetooth Low Energy
BLER	Block Error Rate
BM-SC	Broadcast-Multicast Service Center
BNG	Border Network Gateway
BOM	Bill of Materials
BP	Bandwidth Part (3GPP TS36.213)
BPR	Beam Pair Link
BPSK	Binary Phase Shift Keying
BR	Bandwidth Reduced
BRAS	Broadband Remote Access Server
BR-BCCH	Bandwidth Reduced Broadcast Control Channel
BRI	Basic Rate Interface
BRITE	Basic Rate Interface Transmission Extension

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



BS	Base Station or Bearer Service
BSF	Binding Support Function <i>or</i> Bootstrapping Function <i>or</i> Bootstrapping Server Functionality
BSIC	Base Station Identification Code
BSP	Business Service Plane
BSR	Buffer Status Report
BSS	Business Support System
BSSID	Basic Service Set Identifier
BT	Bluetooth
B-TID	Bootstrapping Transaction Identifier
BTS	Base Transceiver Station in a GSM (Global System for Mobile communications) system
BU	Business Unit
BW	Bandwidth
BWP	Bandwidth Part
BYOC	Bring Your Own Cloud
BYOD	Bring Your Own Device
С	
CA	Carrier Aggregation or Certificate Authority
CaaS	Container as a Service
CAC	Call Admission Control
CAG	Closed Access Group
CAG-ID	Closed Access Group Identifier
CAMEL	Customized Application Mobile Enhanced Logic
CAMP	Cloud Application Management for Platforms
CAN	Controller Area Network
CAP	CAMEL (Customized Application Mobile Enhanced Logic) Application Part
CAPC	Channel Access Priority Class
CAPEX	Capital Expense or Capital Expenditure
CAPIF	Common API (Application Program Interface) Framework for 3GPP Northbound API's
CAS	Channel Associated Signaling or Cell Acquisition Subframes
CAZAC	Constant Amplitude Zero Autocorrelation

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



СВ	Circular Buffer or Cell Broadcast
CBC	Cell Broadcast Center or Cypher Block Chaining
CBCF	Cell Broadcast Center Function
CBE	Cell Broadcast Entity
CBMI	Cell Broadcast Message Identifier
CBP	Coverage-Based Paging
CBR	Channel Busy Radio
CBRA	Contention Based Random Access
CBS	Cell Broadcast Service
CC	Component Carrier or Convolutional Code; a type of FEC (Forward Error Correction)
СССН	Common Control Channel
CCE	Control Channel Element
CCIS	Common Channel Interoffice Signaling
CCITT	International Telegraph and Telephone Consultative Committee (Now ITU-T (International Telecommunication Union Telecommunications Standardization sector)
CCNF	Common Control Network Function
CCO	Cell Change Order
CCP	Capability Configuration Parameter
CC-RNTI	Common Control RNTI (Radio Network Temporary Identifier)
CCS	Common Channel Signaling
CCSA	China Communications Standard Association is the Chinese standards development organization in 3GPP
CD	Continuous Deployment
CDD	Cyclic Delay Diversity
CDF	Charging Data Function or Cumulative Distribution Function
CDL	Clustered Delay Line
CDM	Code Division Multiplexing
CDMA	Code Division Multiple Access
CDMI	Content Data Management Interface
CDN	Content Distribution Network or Content Delivery Network or Coupling/Decoupling Network
CDPI	Control to Data-Plane Interface

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



CDR	Charging Data Record
CDS	Certification Development Subgroup
CD-SSB	Cell Defining SSB (SS/PBCH (Synchronization Signal/Physical Broadcast Channel) Block)
CE	Carrier Ethernet or Coverage Enhancement
Cell-ID	Cell Identity (TS 38.331)
CENC	Common Encryption
CentOS	Community ENTerprise Operating System
CEPT	European Conference of Postal and Telecommunications Administration
Cfdisk	Curses fdisk (Linux)
CFI	Control format Indicator
CFR	Channel Feedback Report
CFRA	Contention Free Random Access
CG	Cell Group
CGI	Cell Global Identifier
cgroup	Control Group: A list of Linux processes with optional resource isolation, accounting, and limits (Kubernetes)
CHAP	Challenge Handshake Authentication Protocol
CHF	Charging Function
СНО	Conditional Handover
CHV	Card Holder Verification information
C/I	Carrier-to-Interference Power Ratio
CI	Cell Identity or Continuous Integration
CIC	Carrier Identification Code or Circuit Identification Code
CI/CD	An integrated set of practices covering both Continuous Integration and Continuous Deployment
CID	Caller Identity or Cell Identifier (Positioning Method) or Context Identifier
CIF	Carrier Indicator Field
CINR	Carrier to Interference and Noise Ratio
CloT	Cellular IoT (Internet of Things)
CIPA	Child Internet Protection Act
cIPX	Consumer's IPX (IP Exchange Service)

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



CIR	Committed Information Rate
СК	Confidentiality Key <i>or</i> Cipher Key
CKSN	Ciphering Key Sequence Number
CL	Call Length
CLASS	Custom Local Area Signaling Services
CLEC	Competitive Local Exchange Carrier
CLF	Connectivity session Location and repository Function
CLI	Command Line Interface or Cross Link Interference or Calling Line Identifier
CLID	Calling Line Identification
CLLI	Common Language Location Identifier
Cluster	A set of worker machines, called nodes that run containerized applications (Kubernetes)
СМ	Configuration Management
CMAS	Commercial Mobile Alert Service
CMC	Connection Mobility Control
CMDB	Configuration Management Data Base
C-MSISDN	Correlation Mobile Station International Subscriber Directory Number
CMSP	Commercial Mobile Service Provider
CN	Core Network
CNAV	Civil Navigation
CNE	Cloud Native Environment
CNF	Conjunctive Normal Form: JSON (JavaScript Object Notation) complex-query, 3GPP TS 29.571 <i>or</i> Cloud Native network Function
CNL	Cooperative Network List
СО	Central Office
COA	Cloud Oriented Architecture
Codec	COder/DECoder; a device or program that compresses data to enable faster transmission and decompresses received data
COFDM	Coded Orthogonal Frequency Division Multiplexing
COLO	CoLocation
СОМ	Component Object Model
COMINF	Common O&M (Operation and Maintenance) Infrastructure
CoMP	Coordinated Multipoint

# A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

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Container	A standard unit of software that packages up code and all its dependencies, so the application runs quickly and reliably from one computing environment to another
COOP	Continuity of Operation
CORBA	Common Object Request Broker Architecture
CORESET	Control Resource Set
COT	Central Office Terminate or Continuity Check Message
COTS	Commercial-off-the-Shelf
СР	Control Plane or Cyclic Prefix or Communication Pattern
СРА	Conditional PSCell (Primary Secondary Cell) Addition
CPBCCH	Compact Packet BCCH (Broadcast Channel Control)
CPC	Continuous Packet Connectivity <i>or</i> Conditional PSCell (Primary or Secondary Cell) Change
CP-CIoT	Control Plane Cellular Internet of Things
CPD	Call Progress Detection
CPE	Customer Premise Equipment
CP-EDT	Control Plane EDT (Early Data Transmission)
CPRI	Common Public Radio Interface
CPU	Central Processing Unit
CQI	Cell Quality Indicator (5G) or Channel Quality Indicator (LTE)
CQRS	Command and Query Responsibility Segregation
CR	Change Request
C-RAN	Cloud Radio Access Network
CRC	Cyclic Redundancy Check
CRE	Cell Range Extension
CRI	Container Runtime Interface: An API (Application Programming Interface) for container runtimes to integrate with kubelet on a node (Kubernetes)
C-RNTI	Cell RNTI (Radio Network Temporary Identifier)
CRS	Cell-Specific Reference Signal
CRV	Call Reference Value
CS	Circuit Switched
CSA	Common Subframe Allocation
CSCF	Call Session Control Function

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



CSD	Circuit Switched Data
CSE	Camel (Customized Application Mobile Enhanced Logic) Service Environment
cSEPP	Consumer's SEPP (Security Edge Protection Proxy)
CSFB	Circuit Switched Fall Back
CSG	Closed Subscriber Group
CSG ID	Closed Subscriber Group Identity
C-SGN	CIoT (Cellular Internet of Things) Serving Gateway Node
CSI	Channel State Information
CSIT	Channel State Information at the Transmitter
CSP	Communication Service Provider
CSS	Closed Subscriber Group Subscriber Server
CSU	Channel Service Unit
CSV	Comma Separated Values (*.csv)
СТ	Continuous Testing
CTR	Counter (mode)
CU	Centralized Unit or Control Unit
CW	Codeword <i>or</i> Continuous Wave
D	
DaaS	Desktop as a Service
DAC	Digital to Analog Converter
DAG	Directed Acyclic Graph
DAI	Downlink Assignment Index
DAPS	Dual Active Protocol Stacks
DBaaS	Database as a Service
DC	Dual Connectivity or Data Center or Direct Current
DCB	Data Center Bridging
DCCH	Dedicated Control Channel
DCE	Data Communication Equipment
DCH	Dedicated Channel
DCI	Downlink Control Information
DCK	Depersonalization Control Keys

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



DCME	Digital Circuit Multiplication Equipment
DCN	Dedicated Core Network (also DECOR) or Data Communication Network
DCNR	Dual Connectivity with NR (New Radio) for 4G 5G
DCP	DCI (Downlink Control Information) with CRC (Cyclic Redundancy Check) scrambled by PS-RNTI (Power Saving Radio Network Temporary Identifier)
DCQR	Downlink Channel Quality Report
DCS	Digital Cellular System
DDDS	Dynamic Delegation Discovery Service
DDN	Downlink Data Notification
DDNS	Dynamic Domain Name System
DDoS	Distributed Denial of Service
DDS	Digital Data System or Dedicated Digital Service
DECOR	Dedicated Core Network (DCN or DECOR)
DEI	Drop Eligible Indicator
DEN	Directory Enabled Networking
DeNB	Donor eNodeB
DER	Distinguished Encoding Rules
DES	Data Encryption Standard
DevOps	A set of practices that combines software development (Dev) and IT operations (Ops): It aims to shorten the systems development life cycle and provide continuous delivery with high software quality.
df	Disk free (Linux)
DF	Dedicated File or Data Field
DFE	Decision Feedback Equalizer: A technique used to mitigate ISI (Inter-Symbol Interference) without amplifying the noise by removing the ISI from a previous bit, allowing the following bits to be correctly sampled.
DFN	Direct Frame Number
DFS	Dynamic Frequency Selection
DFT	Discreet Fourier Transform
DFTS	DFT (Discrete Fourier Transform) Spread OFDM (Orthogonal Frequency Division Multiplexing)
DHCP	Dynamic Host Control Protocol
DHS S&T	Department of Homeland Security Science and Technology Directorate

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



DID	Direct Inward Dialing
DiffServ	Differentiated Services
DL	Downlink
DL-AoD	Downlink Angle of Departure
DLC	Digital Loop Carrier
DL-PRS	Downlink Positioning Reference Signal
DL-SCH	Downlink Shared Channel
DL-TDOA	Downlink Time Difference of Arrival
DL TFT	Downlink Traffic Flow Template
DMRS	Demodulation Reference Signal
DMTC	Discovery Signal Measurement Timing Configuration
DMZ	Demilitarized Zone
DN	Data network, e.g., operator services, Internet access or 3rd party services
DNAI	DN (Data Network) Access Identifier: Identifier of a user plane access to one or more DN(s) where applications are deployed.
DNF	Disjunctive Normal Form: JSON (JavaScript Object Notation) complex-query, 3GPP TS 29.571 <i>or</i> Dandified yum (Linux Command)
DNN	Data Network Name
DNS	Domain Name Server or Domain Name System
DO	Data Object
Docker	A set of PaaS (Platform as a Service) products that uses OS-level virtualization to deliver software in packages called containers, which are isolated from one another and bundle their own software, libraries, and configuration files, and who can communicate with each other through well-defined channels
DoS	Denial of Service attack
Dot1q	IEEE 802.1Q: A way to allow multiple bridged networks to transparently share the same physical link without having leakage between networks.
DPDK	Data Plane Development Kit: The DPDK is software technology that can be implemented on a network host to improve packet management abilities and increase throughput. It operates by offloading TCP packet processing from the OS kernel to processes running in the user space, therefore allowing an improvement in efficiency.
DPI	Deep Packet Inspection
DRA	Diameter Routing Agent: 4G functionality being performed in the 5G network by SCP (Service Communication Proxy)
DRaaS	Disaster Recovery as a Service

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



DRB	Data Radio Bearer
DRMP	Diameter Routing Message Priority
DRS	Discovery Reference Signal
DRVCC	Dual Radio Voice Call Continuity
DRX	Discontinuous Reception: Employed in cellular systems to prolong the mobile's battery life. The mobile station listens only to the paging channels within its DRX group. The network will only page the mobile in that group of paging channels, and the UE does not have to continuously monitor the paging channels.
DSCP	Differentiated Services Code Point
DSL	Digital Subscriber Line
D-SLP	Discovered SUPL (Secure User Plane Location) Location Platform
DSP	Digital Signal Processor
DSU	Data Service Unit
DTA	Device Test Agent
DTCH	Dedicated Traffic Channel
DTLS	Datagram Transport Layer Security
DTMF	Dual Tone Multi Frequency
DTX	Discontinuous Transmission
DU	Distributed Unit <i>or</i> Disk Usage (Linux)
DUCK	Discovery User Confidentiality Key
DUIK	Discovery User Integrity Key
DUSK	Discovery User Scrambling Key
DUT	Device Under Test
DWDM	Dense Wavelength-Division Multiplexing
DWPTS	Downlink Pilot Time Slot
Е	
E.164	An international numbering plan for public telephone systems in which each assigned number contains a country code (CC), a national destination code (NDC), and a subscriber number (SN). There can be up to 15 digits in an E.164 number
E2	Interface between near-RT (Real Time) RIC (Radio Intelligent Controller) for LRF (Location Retrieval Function) and CU (Control Unit) / DU (Distributed Unit) stack; tested with Landslide PSAP (Public Safety Answering Point) Node
E2E	End to End

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



eAN	evolved Access Network
EAB	Extended Access Barring
EAP	Extensible Authentication Protocol
EAP-AKA'	Improved Extensible Authentication Protocol method for 3rd generation Authentication and Key Agreement
EARFCN	E-UTRA (Evolved Universal Terrestrial Radio Access Network) Absolute Radio Frequency Channel Number
EATF	Emergency Access Transfer Function
EBI	EPS (Evolved Packet System) Bearer Identity
EBS	Event Based Statistics or Elastic Block Store
EC2	Amazon Elastic Compute Cloud
ECC	Emergency Call Code <i>or</i> Electronic Communications Committee: the committee of CEPT (the European Conference of Postal and Telecommunications) that deals with electronic communications.
ECDH	Elliptic-curve Diffie-Hellman
ECEF	Earth-Centered, Earth-Fixed
ECGI	E-UTRAN (Evolved-UMTS Terrestrial Radio Access Network) Cell Global Identifier
EC-GSM-IOT	Extended Coverage in GSM (Global System for Mobile telecommunications) for IoT (Internet of Things)
ECI	Earth-Centered-Inertial
E-CID	Enhanced Cell-ID (Positioning Method)
ECM	EPS (Evolved Packet System) Connection management
ECN	Explicit Congestion Notification
ECO	Engineering Change Order
eCPRI	enhanced Common Public Radio Interface
ECS	Emergency Call Server
E-CSCF	Emergency-CSCF (Call Session Control Function)
ECU	Automotive Electronic Control Unit
E-DCH	Enhanced DCH (Dedicated Channel)
eDRX	Extended idle-mode DRX (Discontinuous Reception) cycle
EDT	Early Data Transmission
EFS	Elastic File System
EGNOS	European Geostationary Navigation Overlay Service

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



EHC	Ethernet Header Compression
EHPLMN	Equivalent Home PLMN (Public Land Mobile Network)
eHRPD	Evolved High-Rate Packet Data
EIA	Electronics Industries Alliance (North America)
eIMTA	Enhanced Interference Management and Traffic Adaptation
eIMTA-RNTI	Enhanced Interference Management and Traffic Adaptation Radio Network Temporary Identifier
EIR	Equipment Identity Register
eKSI	Key Set Identifier for E-UTRAN (Evolved-UMTS Terrestrial Radio Access Network)
eLTE eNB	Evolved Long Term Evolution eNodeB that can support connectivity to EPC (Evolved Packet Core) as well as NG-CN (Next Generation Core Network)
ELWA	Enhanced LTE wireless LAN aggregation
EM	Element Manager
eMBB	enhanced Mobile Broadband
EME	Encrypted Media Extension
EMEA	Europe, Middle East, and Africa
eMLPP	Enhanced Multi-Level Precedence and Preemption Service
EMM	EPS (Evolved Packet System) Mobility Management
eMPS	Enhanced Multimedia Priority Service
EMSK	Extended Master Key Session
eNB	eNodeB; E-UTRAN (UMTS Terrestrial Radio Access Network) Node B, also known as Evolved Node B, an element of the LTE Radio Access Network
EN-DC	E-UTRA (LTE) to NR Dual Connectivity: An architecture where both LTE eNodeB and NR gNB will be co-deployed, allowing the user equipment to simultaneously establish two radio bearers, each to the respective NodeBs
EN-gNB	Node providing NR (New Radio) user plane and control plane protocol termination towards the UE, and acting as Secondary Node in EN-DC
ENI	Elastic network Interface
eNode B	E-UTRAN (UMTS Terrestrial Radio Access Network) Node B, also known as Evolved Node B, an element of the LTE Radio Access Network; also called eNB
ENUM	E.164 Number Mapping
EOC	Embedded Operations Channel (GR-303) or Emergency Operations Center
EOP	Earth Orientation Parameters
EPC	Evolved Packet Core

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



EPD	Extended Protocol Discriminator
EPDCCH	Enhanced Physical Downlink Control Channel
ePDG	Evolved Packet Data Gateway
EPDU	External Protocol Data Unit
EPS	Evolved Packet System or Encapsulated PostScript – a graphics file format from Adobe
E-RAB	E-RAB (E-UTRAN Radio Access Bearer) refers to the concatenation of an S1 bearer and the corresponding radio bearer. When an E-RAB exists, there is a one-to-one mapping between this E-RAB and an EPS bearer of the NAS (Non-Access Stratum).
ESF	Extended Superframe
ESLP	Emergency SLP (SUPL (Secure User Plane Location) Location Platform)
ESM	EPS (Evolved Packet System) Session Management or EPS Subscription Manager
E-SMLC	Enhanced Serving Mobile Location Center
ESP	Encapsulating Security Payload
ESQK	Emergency Service Query Key
ESRK	Emergency Service Routing Key
ESRN	Emergency Service Routing Number
Ethernet	Ethernet, standardized as IEEE (Institute of Electrical and Electronics Engineers) 802.3, is a large and diverse family of frame-based computer networking technologies for LANs (Local Area Networks).
ETL	Extract / Transform / Load: VisionWorks Analytics ETLs Extract, transforms, and enriches the raw data into useable KPIs (Key Performance Indicators).
ETSI	European Telecommunications Standards Institute: Independent standardization organization founded by CEPT (European Conference of Postal and Telecommunications Administration), supports the development and testing of global technical standards for ICT (Information and Communications Technology) enabled systems, applications, and services
etu	elementary time unit
ETWS	Earthquake and Tsunami Warning System
EUI	Extended Unique Identifier; IEEE (Institute of Electrical and Electronics Engineers) guidelines for use of Extended Unique Identifier (EUI), Organizationally Unique Identifier (OUI), and Company ID (CID)
E-UTRA	Evolved UTRA (UMTS Terrestrial Radio Access)
E-UTRAN	Evolved-UTRAN (UMTS Terrestrial Radio Access Network): The air interface in an LTE cellular network
EV-DO	Evolution – Data Optimized
EVM	Error Vector Magnitude

# A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



#### F

F1	Interface between gNB-CU (Control Unit) and gNB-DU (Distributed Unit)
FaaS	Function as a Service
FAPI	Functional Application Platform Interface
FAR	Forwarding Action Rule
FCAPS	Fault, Configuration, Account, Performance & Security
FCC	Federal Communications Commission: independent agency of the United States government that regulates communications by radio, television, wire, satellite, and cable across the United States
FCP	File Control Parameters
FDD	Frequency Division Duplex
FDN	Fixed Dialing Number
fdisk	Fixed disk <i>or</i> Format disk (Linux)
FDM	Frequency Division Multiplexing
FDMA	Frequency Division Multiple Access
FEC	Forward Error Correction
FEMA	Federal Emergency Management Agency;
FFS	For Further Study
FFT	Fast Fourier Transform
FIPS	Federal Information Processing Standard: A series of nine computer system security standards for the United States Government, created by the National Institute of Standards and Technology (NIST) in accordance with the Federal Information Security Management Act (FISMA)
FISMA	Federal Information Security Management Act (US 2002) <i>or</i> Federal Information Security Modernization Act (US 2014)
FKP	(German) Flächen-Korrektur-Parameter (area correction parameter)
FM	Fault Management
FN-RG	Fixed Network Residential Gateway
FPS	Frames Per Second
FQDN	Fully Qualified Domain Name
fs	File System (Linux)
FS	Frame Structure
fsck	File System Consistency Check (Linux)

#### # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



F-SEID	Fully Qualified SEID (Session Endpoint Identifier)
FSK	Phase Shift Keying
fstab	File System Table (Linux)
FTA	Fine Time Assistance
F-TEID	Fully Qualified TEID (Tunnel Endpoint Identifier)
FTP	File Transfer Protocol
FTTH	Fiber to the Home
FTTP	Fiber to the Premises
G	
GAA	Generic Authentication Architecture
GAD	Geographical Area Description
GAGAN	GPS Aided Geo Augmented Navigation
GANSS	Galileo and Additional Navigation Satellite Systems
GBA	Generic Bootstrapping Architecture
GBA_ME	ME (Mobile Equipment) based GBA (Generic Bootstrapping Architecture)
GBA_U	GBA (Generic Bootstrapping Architecture) with UICC (Universal Integrated Circuit Card) enhancements
GBIC	Gigabit Interface Converter
Gbps	Gigabits per second; a measurement of data speed. 5G is expected to travel at many gigabits per second.
GBR	Guaranteed Bit Rate
GBR QoS Flow	Guaranteed Bit Rate Quality of Service Flow: A QoS Flow using GBR resource type or the Delay-critical GBR resource type and requiring guaranteed flow bit rate.
GCI	Global Cable Identifier
GCP	Google Cloud computing Platform
G-CS-RNTI	Group Configured Scheduling RNTI (Radio Network Temporary Identifier)
GERAN	GSM (Global System for Mobile Communications) Edge Radio Access Network
GETS	Government Emergency Telecommunications Service
G.fast	Transmission technology for telephone lines up to 1 Gbit/s
GFBR	Guaranteed Flow Bit Rate
GGSN	Gateway GPRS (General packet Radio Service) Support Node
GHz	Gigahertz; 5G is likely to rely heavily on GHz frequencies.

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



GIN	Group ID for Network selection
GINR	Gain to Interference Noise Ratio
Git	A distributed version control system: Software for tracking changes in any set of files; its goals include speed, data integrity, and support for distributed, non-linear workflows.
GitOps	A set of practices to manage infrastructure and application configurations using Git, an open-source version control system. GitOps works by using Git as a single source of truth for declarative infrastructure and applications.
GLI	Global Line Identifier
GLMS	Group and List Management Server
GLONASS	GLObal'naya NAvigatsionnaya Sputnikovaya Sistema (Engl.: Global Navigation Satellite System): A global GNSS (Global Navigation Satellite System) owned and operated by the Russian Federation
GM	Automotive Electronic Control Unit
GMLC	Gateway Mobile Location Center
GMPLS	Generalized Multi-Protocol Label Switching
gNB	Next Generation NodeB; New Radio (NR) Base stations which have capability to interface with 5G Core named as NG-CN over NG-C/U (NG2/NG3 Control & User) interface as well as 4G Core known as Evolved Packet Core (EPC) over S1-C/U interface.
GNSS	Global Navigation Satellite System
GP	Guard Period
GPDU	GTP-U (GPRS (General Packet Radio Services) Tunneling Protocol User Plane non- signaling PDU (Protocol Data Unit)
GPI	GBA (Generic Bootstrapping Architecture) Push Info
GPRS	General Packet Radio Services
GPS	Global Positioning System
GPSI	Generic Public Subscription Identifier
gPTP	Generalized Precision Time Protocol
GRE	Generic Routing Encapsulation
G-RNTI	Group RNTI (Radio Network Temporary Identifier)
GRUU	Globally Routable User Agent URI (Uniform Resource Indicator)
GSM	Global System for Mobile communication
GSMA	Groupe Speciale Mobile Association; the GSMA represents the interests of mobile operators worldwide, uniting nearly 800 operators with more than 250 companies in the broader mobile ecosystem

# A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



GSO	Geosynchronous Orbit
GTP	GPRS (General Packet Radio Services) Tunneling Protocol
GUAMI	Globally Unique AMF (Access and mobility Management Function) Identifier. GUAMI = <mcc> <mnc> <amf id="" region=""> <amf id="" set=""> <amf pointer=""></amf></amf></amf></mnc></mcc>
GUI	Graphical User Interface
GUMMEI	Globally Unique MME (Mobility Management Entity) Identifier
GUP	Generic User Profile: The 3GPP GUP is the collection of data, which is stored and managed by different entities such as the UE, the Home Environment, the Visited Network and Value-Added Service Provider, which affects the way in which an individual user experiences services
GUSS	GBA (Generic Bootstrapping Architecture) User Security Settings
GUTI	Globally Unique Temporary Identifier
GW	Gateway
GWCN	Gateway Core Network
GWUS	Group Wake Up Signal
GZIP	GNU Zip: GNU software is an extensive collection of wholly free software
Н	
HaaS	Hardware as a Service
HaaS HA GNSS	Hardware as a Service High Accuracy GNSS (Global Navigation Satellite System)
HA GNSS	High Accuracy GNSS (Global Navigation Satellite System)
HA GNSS HAL	High Accuracy GNSS (Global Navigation Satellite System) Hypertext Application Language (3GPP TS 29.571) or Hardware Abstraction Layer
HA GNSS HAL HARQ	High Accuracy GNSS (Global Navigation Satellite System) Hypertext Application Language (3GPP TS 29.571) or Hardware Abstraction Layer Hybrid ARQ (Automatic Repeat Request)
HA GNSS HAL HARQ HDB3	High Accuracy GNSS (Global Navigation Satellite System) Hypertext Application Language (3GPP TS 29.571) or Hardware Abstraction Layer Hybrid ARQ (Automatic Repeat Request) High Density Bipolar 3
HA GNSS HAL HARQ HDB3 HE	High Accuracy GNSS (Global Navigation Satellite System) Hypertext Application Language (3GPP TS 29.571) or Hardware Abstraction Layer Hybrid ARQ (Automatic Repeat Request) High Density Bipolar 3 Home Environment <i>or</i> High Efficiency
HA GNSS HAL HARQ HDB3 HE HE AV	<ul> <li>High Accuracy GNSS (Global Navigation Satellite System)</li> <li>Hypertext Application Language (3GPP TS 29.571) or Hardware Abstraction Layer</li> <li>Hybrid ARQ (Automatic Repeat Request)</li> <li>High Density Bipolar 3</li> <li>Home Environment <i>or</i> High Efficiency</li> <li>Home Environment Authentication Vector</li> </ul>
HA GNSS HAL HARQ HDB3 HE HE AV HELD	<ul> <li>High Accuracy GNSS (Global Navigation Satellite System)</li> <li>Hypertext Application Language (3GPP TS 29.571) or Hardware Abstraction Layer</li> <li>Hybrid ARQ (Automatic Repeat Request)</li> <li>High Density Bipolar 3</li> <li>Home Environment <i>or</i> High Efficiency</li> <li>Home Environment Authentication Vector</li> <li>HTTP-Enabled Location Delivery</li> </ul>
HA GNSS HAL HARQ HDB3 HE HE AV HELD HeNB	<ul> <li>High Accuracy GNSS (Global Navigation Satellite System)</li> <li>Hypertext Application Language (3GPP TS 29.571) or Hardware Abstraction Layer</li> <li>Hybrid ARQ (Automatic Repeat Request)</li> <li>High Density Bipolar 3</li> <li>Home Environment <i>or</i> High Efficiency</li> <li>Home Environment Authentication Vector</li> <li>HTTP-Enabled Location Delivery</li> <li>Home eNodeB</li> <li>Heterogeneous Network: A network connecting computers or other devices with different</li> </ul>
HA GNSS HAL HARQ HDB3 HE HE AV HELD HeNB HetNet	<ul> <li>High Accuracy GNSS (Global Navigation Satellite System)</li> <li>Hypertext Application Language (3GPP TS 29.571) or Hardware Abstraction Layer</li> <li>Hybrid ARQ (Automatic Repeat Request)</li> <li>High Density Bipolar 3</li> <li>Home Environment <i>or</i> High Efficiency</li> <li>Home Environment Authentication Vector</li> <li>HTTP-Enabled Location Delivery</li> <li>Home eNodeB</li> <li>Heterogeneous Network: A network connecting computers or other devices with different operating systems or protocols</li> </ul>
HA GNSS HAL HARQ HDB3 HE HE AV HELD HeNB HetNet	<ul> <li>High Accuracy GNSS (Global Navigation Satellite System)</li> <li>Hypertext Application Language (3GPP TS 29.571) or Hardware Abstraction Layer</li> <li>Hybrid ARQ (Automatic Repeat Request)</li> <li>High Density Bipolar 3</li> <li>Home Environment <i>or</i> High Efficiency</li> <li>Home Environment Authentication Vector</li> <li>HTTP-Enabled Location Delivery</li> <li>Home eNodeB</li> <li>Heterogeneous Network: A network connecting computers or other devices with different operating systems or protocols</li> <li>Hybrid Fiber Coax</li> </ul>
HA GNSS HAL HARQ HDB3 HE HE AV HELD HENB HetNet HFC HFN	<ul> <li>High Accuracy GNSS (Global Navigation Satellite System)</li> <li>Hypertext Application Language (3GPP TS 29.571) or Hardware Abstraction Layer</li> <li>Hybrid ARQ (Automatic Repeat Request)</li> <li>High Density Bipolar 3</li> <li>Home Environment <i>or</i> High Efficiency</li> <li>Home Environment Authentication Vector</li> <li>HTTP-Enabled Location Delivery</li> <li>Home eNodeB</li> <li>Heterogeneous Network: A network connecting computers or other devices with different operating systems or protocols</li> <li>Hybrid Fiber Coax</li> <li>Hyper Frame Number</li> </ul>

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



HNB	Home NodeB
НО	Handover
НОМ	High Order Modulation
HOP	High Order Path
HPC	High Performance Computing
H-PCF	A PCF (Policy Control Function) in the HPLMN (Home Public Land Mobile Network)
HPL	Horizontal Protection Level
HPLMN	Home PLMN (Public Land Mobile Network)
HR	Home Routed (Roaming)
HRES	Hash Response
HRNN	Human-Readable Network Name
HRPD	High-Rate Packet Data
HSDN	High Speed Dedicated Network
HSDPA	High Speed Downlink Packet Access
HS-DSCH	High Speed Downlink Shared Channel
H-SFN	Hyper SFN (System Frame Number)
HSGW	eHRPD (evolved High-Rate Packet Data) Serving Gateway
H-SLP	Home SUPL (Secure User Plane Location) Location Platform
HSM	Hardware Security Module
HSPA	High Speed Packet Access
HSS	Home Subscriber Service
HTML	Hypertext Markup Language
HTTP	Hypertext Transfer Protocol
HTTPS	Hypertext Transfer Protocol Secured
H-UDR	A UDR (Unified Data Repository) in the HPLMN (Home Public Land Mobile Network)
HVM	Hardware Virtual Machine
HW	Hardware
HXRES	Hash Expected Response
I	
IA	Information Assurance
laaS	Infrastructure as a Service

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



IAB	Integrated Access and Backhaul
IAB-DU	IAB (Integrated Access and Backhaul) DU (Distributed Unit)
IAM-MT	IAB (Integrated Access and Backhaul) Mobile Termination
IA/CND	Information Assurance / Computer Network defense
IAM	Identity Access Management or Initial Address Message
IANA	Internet Assigned Number Authority
IARI	IMS (IP Multimedia Subsystem) Application Reference Identifier
IASA	Inter-Access Anchor
IBCF	Interconnection Border Control Function
IC	Intercarrier or Integrated Circuit
ICD	Interface Control Document
ICE	In Case of Emergency
ICI	Incoming Call Information
ICIC	Inter-Cell Interference Coordination
ICMP	Internet Control Message Protocol
I-CSCF	Interrogating CSCF (Call Session Control Function)
ICT	Information and Communication Technology or Incoming Call Timer
ID	Identifier or Identity
IDC	In-Device Coexistence
IDE	Integrated Development Environment: IDE is a broad term for an application that facilitates software development, with tools to author, visualize, organize, and test software code.
ldi	Identity of the initiator
ldr	Identity of the responder
IDS	Intrusion Detection System
IDT	Integrated Digital Terminal
IE	Information Element
IEC	Inter-Exchange Carrier or International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers: Objectives are the educational and technical advancement of electrical and electronic engineering, telecommunications, computer engineering and allied disciplines.
IEI	Information Element Identifier

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

IETF	Internet Engineering Task Force: The principal technical development and standards- setting bodies for the Internet
IFFT	Inverse FFT (Fast Fourier Transform)
IFG	Inter-Frame Gap
I Frame	Intra frames: One of three types of major frames found in video compression designs. An I Frame is a frame that is coded without any reference to any other frames besides itself. This type of frame usually requires more bits than other type of frames.
IGMP	Internet Group Management Protocol: Used by IP hosts and multicast routers to establish group memberships.
IGS	International GNSS (Global Navigation Satellite System) Service
IGW	Internet Gateway
II-NNI	Inter-IMS (IP Multimedia Subsystem) Network to Network Interface
IK	Integrity Key
IKE	Internet Key Exchange
ILEC	Incumbent Local Exchange Carrier
IM	Instant Messaging or IP Multimedia
IMAP	Internet Message Access Protocol
IMC	IMS (IP Multimedia Subsystem) Credentials
IMEI	International Mobile station Equipment Identity
IMEISV	International Mobile station Equipment Identity and Software Version number
IMPI	IP Multimedia Private Identity
IMPU	IP Multimedia Public Identity
IMS	IP Multimedia Subsystem
IMSI	International Mobile Subscriber Identity
IMT-2020	International Mobile Telecommunications – Year 2020: The official name for 5G as decided by the ITU (International Telecommunication Union) as the goal is to finalize 5G standards by 2020
IMUX	Inverse Multiplexing
IN	Intelligent Network
IntOps	A derivation of the DevOps and GitOps approaches. Refers to a set of practices that combine solution integration (Int) with solution operations (Ops).
INT-RNTI	Interruption RNTI (Radio Network Temporary Identifier)
IO	Input / Output
IOD	Issue of Data

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



IoE	IoE: the 'Internet of Everything' and refers to the whole world of the internet, including all the people and things connected to it, the process used for making those connections and the data that passes between people and devices.
IOPS	Isolated E-UTRAN (Evolved-UMTS Terrestrial Radio Access Network) Operation for Public Safety <i>or</i> Input/Output Operations Per Second
ΙοΤ	Internet of Things; refers to connected devices beyond smartphones and computers i.e., lights, roads, cars and more
IP	Internet Protocol: IP is part of the suite of protocols for transmitting data over the Internet. It uses connectionless technology to route messages in discrete packets over any available route to recreate the original data stream at the destination.
IPaaS	Integration Platform as a Service
IP-CAN	IP Connectivity Access Network
IPS	Intrusion Prevention System
IPSec	Internet Protocol Security
IP-SM-GW	Internet Protocol Short Message Gateway
IPTV	Internet Protocol Television: Digital television is delivered to subscribing customers using IP over broadband connection. IPTV is often provided with VoD (Video on Demand) and can also include Triple Play.
IPV	Internet Protocol Version
IPv4	Internet Protocol Version 4
IPv6	Internet Protocol Version 6
IPX	IP Exchange Service
IQ	In-band and in-Quadrature
IRAT	Inter-Radio Access
IRNSS	Indian Regional Navigation Satellite System
I-RNTI	Interactive RNTI (Radio Network Temporary Identifier)
IS	Interface Specification
ISA	Intel Software Architecture i.e., AVX2, AVX256, AVX512
ISDN	Integrated Services Digital Network
ISG	Industry Specific Group or Incoming Service Grouping (also called a Hunt Group)
ISI	Inter-Symbol Interference
ISIM	IMS (IP Multimedia System) SIM (Subscriber Identity Module)
IS-IS	Intermediate System to Intermediate System
ISM	Industrial, Scientific, and Medical or IMS Subscription Manager

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



ISO	International Organization for Standardization
ISP	Internet Service Provider
ISR	Idle Mode Signaling Reduction
ISUP	ISDN (Integrated Services Digital Network) User Part
IT	Information Technology
iTest	A Spirent product focused on network test automation; iTest was created to simplify the complexities presented by heterogeneous networks by allowing development and operations teams to rapidly create portable automation within an agnostic network automation development framework.
ITU	International Telecommunication Union: The United Nations specialized agency for information and communication technologies, playing a large role in the development of 5G.
ITU-R	Radiocommunication sector of the ITU (International Telecommunication Union)
ITU-T	Telecommunication Standardization Sector of the ITU (International Telecommunications Union)
IV	Initialization Vector
IVR	Interactive Voice Response
IWF	Interworking Function
IWK-SCEF	Interworking Service Capability Exposure Function
IWK-SCEF IWS	Interworking Service Capability Exposure Function Integrated Web Service
IWS	
IWS J	Integrated Web Service
IWS J JMOS	Integrated Web Service Japanese variation of R-Factor, a QoS (Quality of Service) measurement JavaScript Object Notation: An open-standard file format or data interchange format that uses human-readable text to transmit data objects consisting of attribute–value pairs
IWS J JMOS JSON	Integrated Web Service Japanese variation of R-Factor, a QoS (Quality of Service) measurement JavaScript Object Notation: An open-standard file format or data interchange format that uses human-readable text to transmit data objects consisting of attribute–value pairs and array data types.
IWS J JMOS JSON JSR	Integrated Web Service Japanese variation of R-Factor, a QoS (Quality of Service) measurement JavaScript Object Notation: An open-standard file format or data interchange format that uses human-readable text to transmit data objects consisting of attribute–value pairs and array data types. Java Specific Request
IWS J JMOS JSON JSR JWT	Integrated Web Service Japanese variation of R-Factor, a QoS (Quality of Service) measurement JavaScript Object Notation: An open-standard file format or data interchange format that uses human-readable text to transmit data objects consisting of attribute–value pairs and array data types. Java Specific Request
IWS J JMOS JSON JSR JWT K	Integrated Web Service Japanese variation of R-Factor, a QoS (Quality of Service) measurement JavaScript Object Notation: An open-standard file format or data interchange format that uses human-readable text to transmit data objects consisting of attribute–value pairs and array data types. Java Specific Request JSON (JavaScript Object Notation) Web Token
IWS J JMOS JSON JSR JWT K K	Integrated Web Service Japanese variation of R-Factor, a QoS (Quality of Service) measurement JavaScript Object Notation: An open-standard file format or data interchange format that uses human-readable text to transmit data objects consisting of attribute–value pairs and array data types. Java Specific Request JSON (JavaScript Object Notation) Web Token USIM (Universal Subscriber Identity Module) Individual Key
IWS J JMOS JSON JSR JWT K K KB	Integrated Web Service Japanese variation of R-Factor, a QoS (Quality of Service) measurement JavaScript Object Notation: An open-standard file format or data interchange format that uses human-readable text to transmit data objects consisting of attribute–value pairs and array data types. Java Specific Request JSON (JavaScript Object Notation) Web Token USIM (Universal Subscriber Identity Module) Individual Key Kilobytes <i>or</i> Knowledge Base
IWS J JMOS JSON JSR JWT K K K K B Kbps	Integrated Web Service Japanese variation of R-Factor, a QoS (Quality of Service) measurement JavaScript Object Notation: An open-standard file format or data interchange format that uses human-readable text to transmit data objects consisting of attribute–value pairs and array data types. Java Specific Request JSON (JavaScript Object Notation) Web Token USIM (Universal Subscriber Identity Module) Individual Key Kilobytes <i>or</i> Knowledge Base Kilobits per second

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



KFI	Key Failure Indicator
Ki	Subscriber Authentication Cryptographic Key
KPAS	Korean Public Alarm System
KPI	Key Performance Indicator
Ks	Key material
Ks_ext_NAF	Derived Key in GBA_U (Generic Bootstrapping Architecture with UICC (Universal Integrated Circuit Card))
KSI	Key Set Identifier
Ks_int_NAF	Derived Key in GBA_U (Generic Bootstrapping Architecture with UICC (Universal Integrated Circuit Card)) which remains on UICC
Ks_NAF	NAF (Network Application Function) specific key material
Kubectl	Command line tool for communicating with a Kubernetes cluster's control plane, using the Kubernetes API (Application Programming Interface)
Kubernetes	An open-source container-orchestration system for automating computer application deployment, scaling, and management. It was originally designed by Google and is now maintained by the Cloud Native Computing Foundation
KVM	Kernel-based Virtual Machine
	Remei-based viitual Machine
L	
-	Layer 2 Tunneling Protocol
L	
<b>L</b> L2TP	Layer 2 Tunneling Protocol
<b>L</b> L2TP LAA	Layer 2 Tunneling Protocol Licensed Assisted Access
<b>L</b> L2TP LAA LAC	Layer 2 Tunneling Protocol Licensed Assisted Access Location Area Code
L L2TP LAA LAC LADN	Layer 2 Tunneling Protocol Licensed Assisted Access Location Area Code Local Area Data Network
L L2TP LAA LAC LADN LAI	Layer 2 Tunneling Protocol Licensed Assisted Access Location Area Code Local Area Data Network Location Area Information Linux, Apache, MySQL (Structured Query Language), and PHP (Hypertext
L L2TP LAA LAC LADN LAI LAMP	Layer 2 Tunneling Protocol Licensed Assisted Access Location Area Code Local Area Data Network Location Area Information Linux, Apache, MySQL (Structured Query Language), and PHP (Hypertext Preprocessor) Local Area Network: A generic name to describe a private local network that may interface with a WAN (Wide Area Network) through a gateway router. In the context of telecommunication providers, often a private customer network is considered the LAN
L L2TP LAA LAC LADN LAI LAMP	Layer 2 Tunneling Protocol Licensed Assisted Access Location Area Code Local Area Data Network Location Area Information Linux, Apache, MySQL (Structured Query Language), and PHP (Hypertext Preprocessor) Local Area Network: A generic name to describe a private local network that may interface with a WAN (Wide Area Network) through a gateway router. In the context of telecommunication providers, often a private customer network is considered the LAN and the provider access network is considered a WAN. Low Access Priority Indicator: Set using RRC between UE and eNodeB to indicate a low
L L2TP LAA LAC LADN LAI LAMP LAN	Layer 2 Tunneling Protocol Licensed Assisted Access Location Area Code Local Area Data Network Location Area Information Linux, Apache, MySQL (Structured Query Language), and PHP (Hypertext Preprocessor) Local Area Network: A generic name to describe a private local network that may interface with a WAN (Wide Area Network) through a gateway router. In the context of telecommunication providers, often a private customer network is considered the LAN and the provider access network is considered a WAN. Low Access Priority Indicator: Set using RRC between UE and eNodeB to indicate a low priority subscriber

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



LBO	Local Break Out: Roaming scenario for a PDU (Packet Data Unit) Session where the PDU Session Anchor and its controlling SMF (Session Management Function) are located in the serving PLMN/vPLMN ((virtual)Public Land Mobile Network).
LBT	Listen Before Talk
LCG	Logical Channel Group
LC-H	Load Control Based on LCI (Load Control Information) Header
LCI	Load Control Information
LCID	Logical Channel Identifier
LCM	LifeCycle Management of resources and services
LCR	Low Chip Rate
LCS	Location Service
LDAP	Lightweight Directory Access Protocol
LDC	Linear Dispersion Code
LDN	Listed Directory Number
LDP	Label Distribution Protocol
LDPC	Low-Density Parity-Check Code
Le	Reference point between a GMLC (Gateway Mobile Location Center) and LCS (Location Services) Client; tested with Landslide Service Based Nodal and emulated with Service Based Node
LE	Local Exchange
LEAP	Lightweight Extensible Authentication Protocol
LEC	Local Exchange Carrier
LED	Light Emitting Diode
LGW	Local PDN (Packet Data Network) Gateway
LHN	Local Home Network
LHN ID	Local Home Network Identifier
LI	Lawful Intercept or Language Indication
LID	Location ID
LIPA	Local IP Access
LLA	Latitude Longitude Altitude
LMF	Location Management Function
LMISF	LI (Lawful Intercept) Mirror IMS (IP Multimedia Services) State Function

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



LMS	Learning Management System
LMU	Location Measurement Unit
LND	Last Number Dialed
LOS	Line-of-Sight
LPP	LTE (Long Term Evolution) Positioning Protocol
LPPa	LTE (Long Term Evolution) Positioning Protocol annex
LPPe	LTE (Long Term Evolution Positioning Protocol extensions
LRF	Location Retrieval Function
LRO	Last Routing Option
LS	Liaison Statement (Diameter) or Location Server
LSA	Localized Service Area or Lifecycle Service Assurance (Spirent Business Unit)
LSA ID	Localized Service Area Identity
LSB	Least Significant Bit
lsblk	List Block Devices (Linux)
LSR	Label Switched Router
LTE	Long Term Evolution
LTE-A	LTE-Advanced, also called 4G
LTE Bearer	In an LTE network, a bearer is a packet flow between the access equipment and the PGW (Packet Data Network Gateway) with defined QoS (quality of service) characteristics
LTE-LAA	Licensed Assisted Access LTE
LVM	Logical Volume Interface
LWA	LTE and Wi-Fi (WLAN) Aggregation
LWAAP	LWA (LTE and Wi-Fi (WLAN) Aggregation) Adaptation Protocol
LWIP	LTE / WLAN Radio Level Integration with IPsec Tunnel
LXC	Linux Containers
М	
M & O	Management and Orchestration (Also "MANO")
M2M	Machine to Machine
MaaS	Monitoring as a Service

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

MAC	Media Access Control; a hardware devices 6-byte IEEE (Institute of Electrical and Electronics Engineers) identifier <i>or</i> Message Authentication Code <i>or</i> Master Auxiliary Concept (Positioning)
MAC-A	MAC (Message Authentication Code) for Authentication and key agreement
MAC-I	MAC (Message Authentication Code) for data Integrity of signaling messages
MAD	MAN (Metropolitan Area Network) Access Device
MANO	Management and Orchestration (Also "M & O")
MAP	Mobile Application Part
MBA	Management Based Activation
MBMS	Multimedia Broadcast Multicast Service
Mbps	Megabits per second
MBR	Maximum Bit Rate
MBS	Multicast/Broadcast Service or Metropolitan Beacon System
MBSFN	Multimedia Broadcast Service Single Frequency Network
MBS FSAI	Multicast/Broadcast Service Frequency Selection Area Identity
MCC	Mobile Country Code
MCCH	Multicast Control Channel
MCData	Mission Critical data
MCE	Multi-cell Multicast Coordination Entity
MCG	Master Cell Group: A group of cells associated with the Master Node
MCG Bearer	Bearer using Master Node radio resources only
MCH	Multicast Channel
MCOT	Maximum Channel Occupancy Time
MCPTT	Mission Critical Push To Talk
MCS	Modulation and Coding Scheme or Mission Critical Services
MCVideo	Mission Critical Video
MCX	Mission Critical Service
MD5	Message Digest 5; IP Security (IPSec)
MDBV	Maximum Data Burst Volume
MDM	Mobile Device Management
MDN	Mobile Directory Number
MDT	Minimization of Drive Tests

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ME	Mobile Equipment
MEC	Mobile Edge Computing
MEF	Metro Ethernet Forum or Mobile Entertainment Forum
MEGACO	Media Gateway Control
MEI	Mobile Equipment Identity
MeNB	Master eNodeB
METIS	Mobile and wireless communications Enablers for Twenty-twenty (2020) Information Society
MexE	Mobile Execution Environment
MF	Multi-Frequency or Master File
MFBR	Maximum Flow Bit Rate
MG	Measurement Gap
MGC	Media Gateway Controller
MGCF	Media Gateway Control Function
MGCP	Media Gateway Control Protocol
MGF	Media Gateway Function
MGV-F	MTK (MBMS (Multimedia Broadcast/Multicast Service)) Traffic Key
MGW	Media Gateway
MIB	Master Information Block or Management Information Base
MICO	Mobile Initiated Connection Only
MiD	Multi-Identity
MIKEY	Multimedia Internet Keying
MIMO	Multiple Input Multiple Output: Uses multiple spectrum bands at once to increase mobile data speeds
MIoT	Massive IoT (Internet of Things)
mkfs	Make Filesystem (Linux)
ML	Machine Learning
MLD	Multicast Listener Discovery
MLP	Mobile Location Protocol
MLPPP	Multi-Link Point to Point Protocol
MM	Multi-Mode or Multi Mediation
MME	Mobility Management Entity

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MMEC	MME (Mobility Management Entity) Code
MMI	Man-Machine Interface
mmMagic	Millimeter-Wave Based Mobile Radio Access Network for Fifth Generation Integrated Communications; a project which is focused on testing millimeter-wave frequency bands.
MMS	Multimedia Messaging Service
MMSC	Multimedia Messaging Service Center
MMSS	Multimode System Selection
MMTEL	Multimedia Telephony
MN	Master Node (LTE eNodeB for X2)
MNC	Mobile Network Code
MNO	Mobile Network Operator
МО	Mobile Originate
MOCI	Managed Object Configuration Interface
MO-LR	Mobile Originated Location Request
MongoDB	A cross-platform document-oriented database program. Classified as a NoSQL (Structured Query Language) database program, Uses JSON-like (JavaScript Object Notation) documents with optional schemas developed by MongoDB Inc. and licensed under the Server-Side Public License
MOP	Maximum Output Power or Modify Operating Procedures
MOS	Mean Opinion Score
MP2MP	Multi-Point to Multi-Point (traffic generator)
MPC	Mobile Positioning Center
MPDCCH	MTC (Machine-Type Communication) Physical Downlink Control Channel
MPE	Maximum Permissible Exposure: This is the minimum irradiance or radiant exposure that may be incident upon the eye or skin without causing biological damage. The MPE varies by wavelength and duration of exposure and is documented in tables published in ANSI z136.1 standard
MPLS	Multiprotocol Label Switching
MPR	Maximum Power Reduction
MPS	Multimedia Priority Service or Messages Per Second
MRB	Multicast/Broadcast Radio Bearer or Media Resource Broker
MRD	Marketing Requirements Document
MR-DC	Multi-RAT (Radio Access Technology) Dual Connectivity

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MRF	Media Resource Function
MRFC	Multimedia Resource Function Controller
MRFP	Multimedia Resource Function Processor
M-RNTI	MBMS (Multimedia Broadcast Multicast Service) RNTI (Radio Network Temporary Identifier)
MRO	Mobility Robustness Optimization
MRQ	Marketing Requirement
MS	Mobile Station
MSA	Mobility Service Assurance (VisionWorks) <i>or</i> MCH (Multicast Channel) Subframe Allocation
MSAP	MCH (Multicast Channel) Subframe Allocation Pattern
MSAS	Multi-functional Satellite Augmentation System
MSB	Most Significant Bit
msd	mean solar day
MSD	Minimum Set of emergency related Data
MSI	MCH (Multicast Channel) Scheduling Information
MSIN	Mobile Subscription Identification Number
MSISDN	Mobile Station International Subscriber Directory Number
MSK	Master Session Key or MBMS (Multimedia Broadcast/Multicast Service) Service Key
MSMP	Multi-Service Management Plane
MSN	Mobile Switching Node
MSP	MCH (Multicast Channel) Scheduling Period
MSU	Message Signal Unit for SS7 (Signaling System Number 7)
MT	Mobile Terminate
MTAS	Multimedia Telephony Application Server
MTC	Machine-Type Communication
MTCH	Multicast Traffic Channel
MTC-IWF	Machine Type Communications Interworking Function
MTK	MBMS (Multimedia Broadcast/Multicast Service) Traffic Key
MT-LR	Mobile Terminated Location Request
mTLS	Mutual TLS (Transport Layer Security)
M-TMSI	M-Temporary Mobile Subscriber Identity

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

⊖spirent<sup>™</sup>

MTP	Message Transfer Part for SS7 (Signaling System Number 7)
MTSI	Multimedia Telephony Service for IMS (IP Multimedia Subsystem)
MTSO	Mobile Telephone Switching Office
MTTR	Mean Time To Repair
MTU	Maximum Transmission Unit: The largest packet or frame size, specified in octets (eight- bit bytes) that can be sent in a packet- or frame-based network
MU	Multi-User
MUK	MBMS (Multimedia Broadcast/Multicast Service) User Key
MU MIMO	Multiuser MIMO: A set of multiple-input and multiple-output technologies for wireless communication
Multi-RAT	Multiple Radio Access Technology
Multi-RTT	Multiple-Round Trip Time
MUSIM	Multi-Universal Subscriber Identity Module
MUST	MultiUser Superposition Transmission
MWC	MWC Barcelona (formerly Mobile World Congress) convenes the industry to share innovation, explore trends and hear from today's leaders and influencers.
mUPE	MBMS (Multimedia Broadcast Multicast Service) UPE (User Plane Entity)
Ν	
N1	Reference point between the UE and AMF (Access and Mobility Management function); tested with Landslide using AMF Nodal.
N10	Reference point between UDM (Unified Data Management Function) and SMF (Session Management Function); tested with Landslide using Service Based Nodal and Service Based Node, and SMF Node
N11	Reference point between AMF (Access and Mobility Function) and SMF (Session Management Function); tested with Landslide using AMF Node, SMF Nodal, and SMF Node
N12	Reference point between AMF (Access and Mobility Function) and AUSF (Authentication Server Function); tested with Landslide using Service Based Nodal and Service Based Node
N13	Reference point between the UDM (Unified Data Management Function) and AUSF (Authentication Server Function); tested with Landslide using Service Based Nodal and Service Based Node
N14	Reference point between two AMF's (Access and Mobility Function); tested with Landslide using AMF Nodal and AMF Node
N15	For non-roaming scenarios, reference point between the PCF (Policy Control Function) and AMF (Access and Mobility Function) / for roaming scenarios, reference point

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between V-PCF and AMF; tested with Landslide using Service Based Nodal and Service Based Node

- N16 Reference point between two SMFs (Session Management Functions) for roaming scenarios between SMF in the visited network and the SMF in the home network); tested with Landslide using SMF Nodal and SMF Node
- N17 Reference point between AMF (Access and Mobility Function) and 5G-EIR (Equipment Identity Register check); tested with Landslide using Service Based Nodal and Service Based Node
- N18 Reference point between any NF and UDSF (Unstructured Data Storage Function); tested with Landslide using Service Based Nodal and Service Based Node
- N2 Reference point between the RAN (Radio Access Network, 5G gNB) and the AMF (Access and Mobility Management Function); tested with Landslide using AMF Node, AMF Nodal, and N3IWF (Non-3GP Interworking Function) Node
- N20 Reference point for SMS transfer between AMF (Access and Mobility Function) and SMS Function; tested with Landslide Service Based Nodal and Service Based Node
- N21 Reference point between UDM (Unified Data Management function) and the SMSF (Short Message Service function); tested with Landslide Service Based Nodal and Service Based Node
- N22 Reference point between AMF (Access and Mobility Function) and the NSSF (Network Slice Selection Function); tested with Landslide Service Based Nodal and Service Based Node
- N23 Reference point between PCF (Policy Control Function) and NWDAF (Network Data Analytics Function); tested with Landslide Service Based Nodal and Service Based Node
- N24 Reference point between PCF (Policy Control Function) Home and PCF Visited; tested with Landslide Service Based Nodal and Service Based Node
- N26 Reference point between AMF (Access and Mobility Function 5G) and MME (Mobility Management Entity LTE); tested with Landslide AMF Nodal, AMF Node, and MME Node
- N27 Reference point between NRF (Network Repository Function) Home and NRF Visited; tested with Landslide Service Based Nodal and Service Based Node
- N28 Reference point between CHF (Charging Function) and PCF (Policy Control Function); tested with Landslide Service Based Nodal
- N29 Reference point between NEF (Network Exposure Function) and SMF (Session Management Function); tested with Landslide Service Based Nodal and Service Based Node
- N3 Reference point between the RAN (Radio Access Network, 5G gNB) and the UPF (User Plane Function); tested with Landslide using AMF Nodal, UPF Node, and N3IWF Node
- N30 Reference point between NEF (Network Exposure Function) and PCF (Policy Control Function); tested with Landslide Service Based Nodal and Service Based Node
- N31 Reference point between NSSF (Network Slice Selection Function) Home and NSSF Visited; tested with Landslide Service Based Nodal and Service Based Node

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N32 Reference point between SEPP (Security Edge Protection Proxy) Home and SEPP Visited: tested with Landslide Service Based Nodal and Service Based Node N33 Reference point between NEF (Network Exposure Function) and AF (Application Function); tested with Landslide Service Based Nodal and Service Based Node N34 Reference point between NSSF (Network Slice Selection Function) and NWDAF (Network Data Analytics Function); tested with Landslide Service Based Nodal and Service Based Node N35 Reference point between UDM (Unified Data Management) and UDR (Unified Data Repository); tested with Landslide Service Based Nodal and Service Based Node Reference point between PCF (Policy Control Function) and UDR (Unified Data N36 Repository); tested with Landslide Service Based Nodal and Service Based Node N37 Reference point between NEF (Network Exposure Function) and UDR (Unified Data Repository); tested with Landslide Service Based Nodal and Service Based Node N3AN Non-3GPP Access Network N3IWF Non-3GPP Interworking Function N4 Reference point between the SMF (Session Management Function) and UPF (User Plane Function); tested with Landslide using SMF Node, UPF Node, UPF Nodal, and AMF Node N40 Reference point between SMF (Session Management Function) and CHF (Charging Function); tested with Landslide Service Based Nodal and Service Based Node N5 Reference point between the PCF (Policy Control Function) and AF (Application Function); tested with Landslide using Service Based Nodal and Service Based Node N50 Reference point between AMF (Access and Mobility Function) and CBCF (Cell Broadcast Center Function); tested with Landslide Service Based Nodal and Service **Based Node** N51 Reference point between NEF (Network Exposure Function) and AMF (Access and Mobility Management Function): tested with Landslide Service Based Nodal and Service Based Node N52 Reference point between NEF (Network Exposure Function) and UDM (Unified Data Management Function): tested with Landslide Service Based Nodal and Service Based Node N5GC Non-5G Capable N5G-EIR Service based interface for 5G-EIR (Equipment Identity Register); tested with Landslide Service Based Nodal and emulated with Service Based Node Reference point between the UPF (User Plane Function) and DN (Data Network); tested N6 with Landslide using UPF Node and UPF Nodal N7 Reference point between the SMF (Session Management Function) and PCF (Policy Control Function); tested with Landslide using Service Based Nodal and Service Based Node, and SMF Node

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N8	Reference point between UDM (Unified Data Management Function) and AMF (Access and Mobility Management Function; tested with Landslide using Service Based Nodal and Service Based Node
N9	Reference point between two core UPFs (User Plane Functions); tested with Landslide using UPF Nodal and UPF Node
NACC	Network Assisted Cell Change
NACK	Negative Acknowledgement
NAF	Network Application Function
NAF_ID	NAF (Network Application Function) Identifier
NAI	Network Access Identifier
NAICS	Network Assisted Interference Cancellation/Suppression
NAM	Numeric Assignment Module
NAPT	Network Address Port Translation
NA(P)T-PT	Network Address (Port-Multiplexing) Translation-Protocol Translation
NAS	Non-Access Stratum; a functional layer in the UMTS and LTE wireless telecom protocol stacks between the core network and user equipment.
NAT	Network Address Translation
Nausf	Service based interface for AUSF (Authentication User Service Function); tested with Landslide Service Based Nodal and emulated with Service Based Node
NAV	Navigation
NavIC	Navigation with Indian Constellation
NB	Narrowband; Audio bandwidth: 4 kHz, effective sample rate: 8 kHz
NBI	Network Business Intelligence or Network Based Intelligence (SDN (Software Defined Networking))
NBIFOM	Network Based IP Flow Mobility
NB-IoT	Narrowband IoT (Internet of Things)
NBRP	Name Based Routing Protocol
Nbsf	Service based interface for BSF (Binding Support Function); tested with Landslide Service Based Nodal and emulated with Service Based Node
NCC	Next Hop Chaining Counter or Network Color Code
NCGI	NR (New Radio) Cell Global Identifier
Nchf	Service based interface for CHF (Charging Function); tested with Landslide Service Based Nodal and emulated with Service Based Node
NCL	Neighbor Cell List

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NCR **Neighbor Cell Relation** NCRT Neighbor Cell Relation Table NCTE Network Channel Terminating Equipment NDO NetDevOps: A culture, movement, or practice that emphasizes the collaboration and communication of both network architects and operators while automating the process of network design and changes. The intent is to reduce the time required to maintain and upgrade network facilities through constant development, deployment, and automation for rapid testing. NDO Agent A Spirent product that runs iTest scripts. With its ability to rapidly execute custom test cases, it can be used as a core component in an NDO architecture that requires test automation and rapid deployment validation. NDS Network Domain Security NE Network Element NEA NR (New Radio) Encryption Algorithm NE-DC NR (New Radio) E-UTRA (Evolved Universal Terrestrial Radio Access) Dual Connectivity NEF **Network Exposure Function** NEM Network Element Manager or Network Equipment Manufacturer New RAN A Radio Access Network which can supports either NR/E-UTRA or both and have capabilities to interface with Next Generation Core Network (NG-CN). NG-C/U is the Control/User Plane interface toward NG-CN NF Network Function; A functional building block within a network infrastructure, which has well defined external interfaces and well-defined functional behavior. nFAPI Network FAPI (Functional Application Platform Interface) NFAS Non-Facility Associated Signaling NFS Network File System NFV Network Function Virtualization or Network Function Virtualized: A network architecture concept that uses the technologies of IT virtualization to virtualize entire classes of network node functions into building blocks that may connect, or chain together, to create communication services NFVI Network Function Virtualization Infrastructure **NFVIaaS** NFVI (Network Function Virtualization Infrastructure) as a Service **NFVPaaS** NFV (Network Function Virtualized) Platform as a Service NG **Next Generation** NGAP NG (Next Generation) Application Protocol NG-C Next Generation Control Plane Interface

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NGC	Next Generation Core
NG-CN	Next Generation Core Network
NGEN-DC	Next Generation RAN (Radio Access Network) E-UTRA (Evolved Universal Terrestrial Radio Access) NR (New Radio) Dual Connectivity
NGFI	Next Generation Radio Interface
ngKSI	Key Set Identifier in 5G
NGMN	Next Generation Mobile Networks
NG-PON2	Next Generation PON (Passive Optical Network) Technology based on WDM (Wavelength-Division Multiplexing) and TDMA (Time-Division Multiplexing)
NG-RAN	Next Generation Radio Access Network
NGSA	Next Generation Service Assurance
NGSO	Non-Geosynchronous Orbit
NG-U	Next Generation User Plane Interface
NH	Next Hop <i>or</i> Next Hop Key <i>or</i> Network Host (Landslide)
NIA	NR (New Radio) Integrity Algorithm
NIC	Network Interface Card <i>or</i> Network Interface Controller: A computer hardware component that connects a computer to a network.
NICT	National Institute of Information and Communications Technology
NID	Network Interface Device or Network Identifier
NIDD	Non-IP Data Delivery
NI-LR	Network Induced Location Request
NIST	National Institute of Standards and Technology (US)
NLg	Reference point between GMLC (Gateway Mobile Location Center) and AMF (Access and Mobility Function); tested with Landslide Service Based Nodal and Service Based Node
NLh	Reference point between GMLC (Gateway Mobile Location Center) and UDM (Unified Data Management); tested with Landslide using Service Based Nodal and Service Based Node
NImf	Service based interface for LMF (Location Management Function; tested with Landslide Service Based Nodal and emulated with Service Based Node
NLOS	Non-Line-of-Sight
NLs	Reference point between AMF (Access and Mobility Function) and LMF (Location Management Function); tested with Landslide using Service Based Nodal and Service Based Node
NM	Network Management

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NMS	Network Management System
Nnef	Service based interface for NEF (Network Exposure Function); tested with Landslide Service Based Nodal and emulated with Service Based Node
Nnrf	Service based interface for NRF (Network Repository Function); tested with Landslide Service Based Nodal and emulated with Service Based Node
NNSF	NAS (Non-Access Stratum) Node Selection Function
Nnssf	Service based interface for NSSF (Network Slice Selection Function); tested with Landslide Service Based Nodal and emulated with Service Based Node
Nnwdaf	Service based interface for NWDAF (Network Data Analytics Function); tested with Landslide Service Based Nodal and emulated with Service Based Node
NOC	Network Operations Center
NOCKT	No Circuit (Lumos and VisionWorks Controller)
Non- standalone E- UTRA	It is a 5G Network deployment configuration where the LTE eNB requires a gNB as anchor for control plane connectivity to NG-CN (Next Generation Core Network)
Non- standalone NR	5G New Radio, where a gNB needs an LTE eNodeB as an anchor for control plane connectivity to 4G EPC or eLTE eNB as anchor for control plane connectivity to NG-CN (Next Generation Core Network)
NP	Number Portability
NPBCH	Narrowband Physical Broadcast Channel
Npcf	Service based interface for PCF (Policy Control Function; tested with Landslide Service Based Nodal and emulated with Service Based Node
NPDCCH	Narrowband Physical Downlink Control Channel
NPDSCH	Narrowband Physical Downlink Shared Channel
NPI	Numbering Plan Identifier
NPN	Non-Public Network
N-PoP	Network Point of Presence
NPRACH	Narrowband Physical Random Access Control Channel
NPRS	Narrowband Positioning Reference Signals
NPSS	Narrowband Primary Synchronization Signal
NPUSCH	Narrowband Physical Uplink Shared Channel
NR	New Radio or Neighbor cell Relation
NR-DC	New Radio Dual Connectivity

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Natural's Depository Function
Network Repository Function
New Radio Positioning Protocol Annex
Narrowband Reference Signal
Narrowband Reference Signal Received Power
Narrowband Reference Signal Received Quality
Non-Real Time <i>or</i> Neighbor Relation Table <i>or</i> Near Real Time (O-RAN (Open Radio Access Network))
Network Slicing is a key mechanism for 5G networks to serve vertical industries with widely different service needs
Non-Standalone
Network Session Border Gateway
New Security Context Indicator
Network Service Descriptor
Network Specific Identifier
Network Slice Instance Identifier
Service based interface for SMS (Short Message Service) Function; tested with Landslide Service Based Nodal and Service Based Node
Number of Streams
Network Slice-Specific Authentication and Authorization
Network Slice Selection Assistance Information
Network Slice Selection Function
Network Slice Selection Policy
Narrowband Secondary Synchronization Signal
Non-Seamless WLAN (Wireless Local Area Network) Offload
Network Terminating Equipment
Non-Terrestrial Network
Network Time Protocol: a method of automatically setting and synchronizing the clocks of devices over a network, using requests to remote NTP servers and a calibration process to precisely determine the latency to those servers.
National Time Service Center of Chinese Academy of Sciences
Service based interface for UDM (Unified Data Management) Function; tested with Landslide Service Based Nodal and Service Based Node
Service based interface for UDR (Unified Data Repository) Function; tested with Landslide Service Based Nodal and Service Based Node

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NUMA	Non-Uniform Memory Access
NV	Network Virtualization
NVFO	NFV (Network Function Virtualized) Orchestrator
NWDAF	Network Data Analytics Function
NWS	National Weather Service
NWu	Reference point between UE and N3IWF (Non-3GPP Interworking Function); tested with Landslide AMF Nodal and N3IWF Node
0	
O & M	Operations and Maintenance
OAM	Operations, Administration and Maintenance
OAuth	Open Authentication: Open standard for access delegation, a way to get access to protected data from an application. OAuth 2.0 focuses on client developer simplicity providing specific authorization flows for web applications, desktop applications, mobile phones, etc.
OBSAI	Open Base Station Architecture Initiative
OCI	Overload Control Information or Outgoing Call Information
O-Cloud	A cloud computing platform made up of the physical infrastructure nodes using O-RAN (Open Radio Access Network) architecture
OCS	Online Charging System
OCT	Outgoing Call Timer
O-CU	ORAN (Open Radio Access Network) Central Unit: Consists of UP (User Plane) and CP (Control Plane).
O-DU	ORAN (Open Radio Access Network) Distributed Unit: A logical node hosting RLC (Radio Link Control), MAC (Media Access Control) /High-PHY (Physical) layers based on a lower layer functional split.
Ofcom	The UK's Office of Communications. A government-approved regulatory and competition authority for the telecommunications industry.
OFCS	Offline Charging System
OFDM	Orthogonal Frequency-Division Multiplexing
OFDMA	Orthogonal Frequency Division Multiple Access
OFH	Open Fronthaul
OFM	Operational Feature Monitor
OLC-H	Overload Control based on OCI (Overload Control Information) Header
OLT	Optical Line Terminal

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



OMA	Open Mobile Alliance
OMC	Operations and Maintenance Center
OMC-ID	Operations and Maintenance Center Identity
OMNA	Open Mobile Naming Authority
ONF	Open Networking Foundation
On.Lab	Open Networking Lab
ONOS	Open Networking Operating System
ONU	Optical Network Unit
OOB	Out of Band <i>or</i> Out of the Box
OOS	Out of Service
OPC	Origination Point Code
OpenRAN	A project group launched by the Telecom Infra Project (TIP) in 2017 with the stated objective of defining and building 2G, 3G, and 4G RAN solutions based on general purpose, vendor neutral hardware and software defined technology
OPEX	Operations Expenses or Operating Expenditures
OPI	Offload Preference Indicator
OPLMN	Operator Controlled PLMN (Public Land Mobile Network)
OPNFV	Open Platform for NFV (Network Function Virtualization)
OPP	Object Push Profile
O-RAN	Open Radio Access Network: Represents the O-RAN ALLIANCE responsible for the publication of Open RAN architecture specifications, O-RAN ALLIANCE initiatives have focused on incorporating artificial intelligence (AI), specifying interfaces and APIs to drive appropriate standardization, and establishing the requisite supply chain infrastructure. These challenging endeavors provide additional ballast for the underlying O-RAN pillars of openness and intelligence.
ORAN	Open Radio Access Network
ORI	Open Radio Interface
O-RU	ORAN Radio Unit: a logical node hosting Low-PHY (Physical) layer and RF (Radio Frequency) processing based on a lower layer functional split.
OS	Operating System or OFDM (Orthogonal Frequency-Division Multiplexing) Symbol
OSA	Open System Architecture
OSI	Open Systems Interconnection: A conceptual model that characterizes and standardizes the communication functions of a telecommunication or computing system without regard to its underlying internal structure

and technology

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OSPF	Open Shortest Path First
OSR	Observation Space Representation
OSS	Open-Source Software <i>or</i> Operations Support System: Typically, an OSS is a computerized system that centralizes the management of many disparate entities that are all contributing to some overall objective. For example, Spirent OSSs typically provide a centralized system for testing and monitoring telecommunications networks, by overseeing a variety of hardware and software processes operating in different locations.
OSS-RC	Operation and Support System Radio and Core
ΟΤΑ	Over the Air
OTDOA	Observed Time Difference of Arrival
ΟΤΤ	Over the top (OTT) application and services, any app or service that provides a product over the Internet and bypasses traditional distribution.
OVA	Open Virtualization Archive: A single file distribution of an OVF (Open Virtualization Format) package, stored in TAR (Tape Archive) format
OVF	Open Virtualization Format: An open standard for packaging and distributing software to be run in virtual machines. An OVF package consists of several files placed in one directory.
OWD	One Way Delay
Р	
P2P	Peer to Peer
P2X	Pedestrian-to-Everything
PA	Power Amplifier
PAA	PDN (Packet Data Network) Address Allocation
PaaS	Platform as a Service
PANI	P-Access-Network-Info (SIP Header)
PAP	Password Authentication Protocol or OMA (Open Mobile Alliance) Push Access Protocol
PAPR	Peak-to-Average Power Ratio
PAR	Peak to Average Ratio
PARC	Per Antenna Rate Control
Parted	Partition and Editor (Linux)
PBC	Power and Battery Cabinet
PBCH	Physical Broadcast Channel
PBFS	Packet Based per Flow State

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PBID	Phonebook Identifier
PBN	Packet Backbone Network
PBR	Prioritized Bit Rate
PBX	Private Branch Exchange
PCAP	Packet Capture
PCC	Policy and Charging Control or Primary Component Carrier
PCCH	Paging Control Channel
PCE	Path Computation Element
PCEF	Policy and Charging Enforcement Function
PCell	Primary Cell
PCF	Policy Control function (5G Network Element that serves much the same function as the PCRF (Policy and Charging Rules Function) in LTE)
PCFICH	Physical Control Format Indicator Channel
PCH	Paging Channel
PCI	Physical Cell Identifier
PCM	Pulse Code Modulation
PCO	Protocol Configuration Options
PCP	Priority Code Point
PCRF	Policy and Charging Rules Function
PCS	Physical Coding Sublayer
P-CSCF	Proxy-Call Session Control Function
PD	Protocol Discriminator
PDC	Personal Digital Communications
PDCCH	Physical Downlink Control Channel
PDCP	Packet Data Convergence Protocol
PDCSH	Physical Downlink Shared Channel
PDI	Packet Detection Information
PDN	Packet Data Network
PDP	Packet Data Protocol
PDR	Packet Detection Rule
PDS	Packet Data Subsystem

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PDSCH	Physical Downlink Shared Channel
PDSN	Packet Data Serving Node (CDMA2000)
PDU	Protocol Data Unit. 5G PDU Session serves the same purpose as the LTE Default Bearer.
PE	Provider Edge / Provider Edge Router
PEI	Permanent Equipment Identifier
PER	Packet Error Rate
PESQ	Perceptual Evaluation of Speech Quality (ITU Recommendation P.862)
PESQ-LQ	Perceptual Evaluation of Speech Quality Listening Quality
PFCP	Packet Forwarding Control Protocol
PFD	Packet Flow Description
P Frames	Predicted frames: One of the three major types of frames found in video compression designs. P Frames require previously decoding of frames to be decoded. P Frames may contain both image data and motion vector displacements or a combination of both. P Frames are also able to reference previous frames in decoding order.
PGK	ProSe (Proximity Services) Group Key
P-GRUU	Public Globally Routable User Agent URI (Uniform Resource Indicator)
PGW	PDN (Packet Data Network) Gateway
PGW-C	PDN (Packet Data Network) Gateway Control Function
PGW-U	PDN (Packet Data Network) Gateway User Function
pIPX	Producer's IPX (IP Exchange Service)
PHICH	Physical Hybrid ARQ (Automatic Repeat Request) Indicator Channel
PHR	Power Headroom Report
PHY	Physical Layer processing
PII	Personally Identifiable Information
PIN	Personal Identification Number
PKCS	Public-Key Cryptography Standards
PKI	Public Key Infrastructure
PL	Preferred Languages or Protection Level
PLAN	Personal Localized Alerting Network
PLL	Phase Locked Loop
PLMN	Public Land Mobile Network

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

PLMN-ID PLMN (Public Land Mobile Network) Identity PM Performance Management or Performance Monitoring: Typically used to describe longterm, low bandwidth testing to monitor a service for general performance and SLA term compliance. PM testing uses the same technologies and protocols as on-demand testing, but typically involves automation to keep testing running for long periods and to retrieve results at regular intervals. PMCH **Physical Multicast Channel** PMD Poll Mode Driver PMI Precoding Matrix Indicator PMIP Proxy Mobile IP PMK Pairwise Master Key P-MPR **Power Management Maximum Power Reduction** PNCCH Paging and Notification Control Channel PNF **Physical Network Function** PNI-NPN Public Network Integrated Non-Public Network PnP Plug and Play PO Paging Occasion POC Proof of Concept Pod The smallest and simplest Kubernetes object; represents a set of running containers on a cluster POLQA Perceptual Objective Listening Quality Analysis PoP Point of Presence posSIB Positioning System Information Block POTAP OMA (Open Mobile Alliance) Push Over the Air Protocol POTS Plain Old Telephone Service: A general acronym for voice delivered through the traditional PSTN (Public Switched Telephone Network), using 64 kbps dedicated circuits and analog telephones. PPD Paging Policy Differentiation PPF Paging Proceed Flag PPI Paging Policy Indicator PPM Parts per Million PPP Point to Point Protocol or Precise Point Positioning PPPP ProSe (Proximity Services) Per Packet Priority PPS Protocol and Parameter Select or Packets Per Second

### # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



PPW	PRS (Positioning Reference Signals) Processing Window
PRA	Presence Reporting Area
PRACH	Physical Random-Access Channel
PRB	Physical Resource Block
PRBS	Pseudo Random Bit Sequence
PRC	Pseudo-Range Correction
PRG	Precoding Resource block Group
P-RNTI	Paging RNTI (Radio Network Temporary Identifier)
PROCS	Procedures: Test PROCS are the test results generated for any test case, from the Landslide TAS (Test Administration Server), a Spirent proprietary file for data analysis and enables integration into any third-party analytics framework.
ProSe	Proximity Services
PRP	Product Realization Process
PRS	Positioning Reference Signals
PS	Packet Switched
PSA	PDU (Packet Data Unit) Session Anchor
PSAP	Public Safety Answering Point
PSBCH	Physical Side-link Broadcast Channel
PSC	Packet Scheduling
PSCCH	Physical Side-link Control Channel
PSCell	Primary and SCG (Secondary Cell Group)
PSCH	Primary Synchronization Channel
PSD	Power Spectrum Density
PSDCH	Physical Side-link Discover Channel
PSDK	Public Safety Discovery Key
PS_DO	PIN (Personal Identification Number) Status Data Object
pSEPP	Producer's SEPP (Security Edge Protection Proxy)
PSK	Pre-Shared Key or Pre-Shared Secret
PSM	Power Saving Mode
PSQM	Perceptual Speech Quality Measurement (ITU Recommendation P.861)
PSQM+	Enhanced PSQM (Perceptual Speech Quality Measurement)
PS-RNTI	Power Saving RNTI (Radio Network Temporary Identifier)
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# A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

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PSS	Primary Synchronization Signal
PSSCH	Physical Side-link Shared Channel
PSTN	Public Switched Telephone Network: This is the traditional direct distance dialing telephone network that is available for public use. The network is an integrated system of transmission and switching facilities, signaling processors, and associated operations support systems that is shared by customers.
PTAG	Primary Timing Advance Group
PTI	Procedure Transaction ID or Precoding Type Indicator
PTK	ProSe (Proximity Services) Traffic Key
PTM	Point to Multipoint
PTP	Precision Time Protocol or Point to Point
PTT	Push to Talk
PUCCH	Physical Uplink Control Channel
PUR	Preconfigured Uplink Resource
PUSCH	Physical Uplink Shared Channel
PWS	Public Warning System
Q	
QAM	Quadrature Amplitude Modulation
QCAT	Qualcomm Log Analysis Tool
QCI	QoS (Quality of Service) Class Identifier
QCOW	QEMU (Quick Emulator) Copy on Write: A popular file format used to package VM (Virtual Machine) images.
QEMU	Quick Emulator: An open-source platform for running VMs (virtual machines) ( <u>https://www.qemu.org</u> )
QER	QoS (Quality of Service) Enforcement Rule
QFI	QoS (Quality of Service) Flow Identifier
QoE	Quality of Experience
QoM	Quality of Media
QoP	Quality of Position
QoS	Quality of Service
QoS Class	Quality of Service Class provides a way for Kubernetes to classify Pods within the cluster and make decisions about scheduling.
QPP	Quadrature Amplitude Modulation

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QPSK	Quadrature Phase Shift Keying
QRI	QoS (Quality of Service) Rule Identifier
QZS	Quasi Zenith Satellite
QZSS	Quasi-Zenith Satellite System
QZST	Quasi-Zenith System Time
R	
RA	Random Access
RAC	Radio Admission Control
RACH	Radio Access Channel
RACI	Responsible, Accountable, Consulted, and Informed: A matrix used to define project roles and responsibilities.
RAI	Routing Area Identity or Release Assistance Indication
RAID	Redundant Array of Independent Disks
RAN	Radio Access Network
RANAC	RAN-based Notification Area Code
RANAP	RAN (Radio Access Network) Application Part
RAND	Random challenge
RAND <sub>MS</sub>	Random challenge stored in the USIM (Universal Subscriber Identity Module)
RA-RNTI	Random Access RNTI (Radio Network Temporary Identifier)
RAS	Registration, Access, and Signaling
RAT	Radio Access Technology
RB	Radio Bearer or Resource Block
RBAC	Role-Based Access Control
RBC	Radio Bearer Control
RBG	Radio Bearer Group
RBS	Radio Base Station
RCAF	RAN (Radio Access Network) Congestion Awareness Function
RCS	Revision Control System
RCLWI	Radio Controlled LTE-WAN Interworking
RD	Receive Data
RDF	Routing Determination Factor

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



RDS	Relational Database Services
RE	Radio Element or Resource Element
REC	Radio Equipment Control
REG	Resource Element Group
RES	Authentication Response
REST	Representational State Transfer: A software architectural style that defines a set of constraints to be used for creating Web services that conform to the REST architectural style, called RESTful Web services, provide interoperability between computer systems on the internet
RF	Radio Frequency
RFC	Request for Comment: A publication from the IETF (Internet Engineering Task Force), the principal technical development and standards-setting bodies for the Internet
RFSP	RAT (Radio Access Technology)/Frequency Selection Priority
RFU	Reserved for Future Use
RHCK	Red Hat Compatible Kernel (Oracle)
RI	Rank Indicator
RIBS	Radio-Interface Based Synchronization
RIC	RAN (Radio Access Network) Intelligent Controller
RIM	RAN (Radio Access Network) information Management <i>or</i> Remote Interference Management
RIP	Routing Internet Protocol
RF	Radio Frequency
RFP	Request For Proposal
RLC	Radio Link Control
RLM	Radio Link Monitoring
RLOS	Restricted Local Operator Services
RLP	Roaming Location Protocol
RMSI	Remaining Minimum SI (System Information)
RMTC	RSSI (Received Signal Strength) Measurement Timing Configuration
RN	Relay Node
RNA	RAN (Radio Access Network) based Notification Area
RNAU	RAN (Radio Access Network) based Notification Area Update
RNC	Radio Network Controller

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

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RNL	Radio Network Layer
RNTI	Radio Network Temporary Identifier
R-PDCCH	Relay Physical Downlink Control Channel
ROE	Radio over Ethernet
ROHC	Robust Header Compression
ROP	Recording Output Periods
RP	Reception Point
RPLMN	Registered PLMN (Public Land Mobile Network)
RPM	Red Hat Package Manager
RQA	Reflective QoS (Quality of Service) Attribute
RQI	Reflective QoS (Quality of Service) Indication
RQoS	Reflective QoS (Quality of Service)
RRC	Radio Resource Control protocol; controls radio resources on a wireless network <i>or</i> Range-Rate Correction
RRH	Remote Radio Head
RRM	Radio Resource Management
RRS	Reduced Redundancy Storage
RRU	Radio Remote Unit
RS	Reference Signal or Reference Symbols
RSCP	Received Signal Code Power
RSN	Retransmission Sequence Number or Redundancy Sequence Number
RSRP	Reference Signal Received Power; the average power of resource elements that carry cell-specific reference signals over the entire bandwidth. It is only measured in the symbols carrying the reference signal.
RSRPP	Reference Signal Received Path Power
RSRQ	Reference Signal Received Quality: The Received Signal Strength Indicator (RSSI) quality value along with the number of used resource blocks (N) RSRQ = (N $*$ RSRP) / RSSI measured over the same bandwidth
RSS	Resynchronization Signal
RSSI	Received Signal Strength Indicator; parameter which provides information about total received wide-band power (measure in all symbols) including all interference and thermal noise
RST	Reset
RSTD	Reference Signal Time Difference

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RSTP	Rapid Spanning Tree Protocol (802.1w)
RT	Real-Time
RTCP	Real-Time Control Protocol
RTD	Round Trip Delay
RTF	Rich Text Format
RTK	Real-Time Kinematic
RTP	Real-Time Transport Protocol
RTSP	Real-Time Streaming Protocol
RTT	Round Trip Time
RU	Radio Unit or Resource Unit or Rack Unit
RUCI	RAN (Radio Access Network) User Plane Congestion Information
RvR	Rate vs. Range
RvRvO	Rate vs. Range vs. Orientation
RvOvR	Rate vs. Orientation vs. Range
Rx	Receive or Receiver
S	
S1-AP	S1 Application Protocol. Provides transport function between UE and MME by offering NAS (Non-Access Stratum) signaling transport.
S1-MME	S1 for Control Plane (LTE)
S1-U	S1 for User Plane (LTE)
S101-AP	S101 Application Protocol. S10 reference point enables interactions between EPS and HRPD access to allow for pre-registration and handover signaling with the target system
S2b	An IPSec based interface between an ePDG (Evolved Packet Data Gateway) and an untrusted WLAN (Wireless Local Area Network) access
S3	Amazon Simple Storage Service
S8HR	S8 Home Routed
SA	Security Association
SaaS	Software as a Service
SABME	Set Asynchronous Balance Mode Extended for ISDN (Integrated Services Digital Network)
SA NR	Standalone New Radio
SAE	System Architecture Evolution

# # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



SAE Bearer	System Architecture Evolution is the core network architecture of 3GPP's LTE wireless communication standard
SAN	Storage Area Network
SAP	Service Access Point
SAT	Service Activation Test
SB	Scheduling Block
SBA	Service-Based Architecture
SBAS	Space/Satellite Based Augmentation System
SBC	Session Border Controller
SBG	Session Border Gateway
SBI	Service-Based Interface
SC	Sidelink Control
SCCH	Shared Control Channel
SCCP	Signaling Connection Control Part or Skinny Client Control Protocol
SCEF	Service Capability Exposure Function
SCell	Secondary Cell
SCF	Small Cell Forum
SC-FDM	Single Carrier – Frequency Division Multiplexing
SCFDMA	Single Carrier – Frequency Division Multiple Access
SCG	Secondary Cell Group; the node providing additional radio resources for UE
SCG Bearer	Bearer using the Secondary Node radio resources only
SCH	Synchronization Channel
SCI	Sidelink Control Information
SCM	Source Control Management
SC-MCCH	Single Cell Multicast Control Channel
SC-MRB	Single Cell MBMS (Multimedia Broadcast Multicast Service) Point to Multipoint Radio Bearer
SC-MTCH	Single Cell Multicast Transport Channel
SC-N-RNTI	Single Cell Notification RNTI (Radio Network Temporary Identifier)
SCP	Service Communication Proxy; NF (Network Function) like DRA (Diameter Routing Agent) in 4G or Service Control Point in SS7
SC-PTM	Single Cell Point to Multipoint

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SC-RNTI	Single Cell RNTI (Radio Network Temporary Identifier)
SCS	Subcarrier Spacing or Services Capability Server
S-CSCF	Serving Call Session Control Function
scsi	Small Computer Standard Interface
SCTP	Stream Control Transport Protocol
SD	Slice Differentiator
SDAP	Service Data Adaptation Protocol
SDF	Service Data Flow
SDH	Synchronous Digital Hierarchy
SD-LAN	Software Defines Local Area Network
SDMA	Spatial Division Multiple Access
SDMN	Software Defined Mobile Network
SDN	Service Dialing Number <i>or</i> Software Defined Network: An architecture where network functions such as routing and switching are performed by VMs (virtual machines), rather than using dedicated/fixed hardware platforms. By using virtual functions, the network architecture can be reconfigured through software changes rather than hardware platform changes.
SDN CDPI	Software Defined Network Control to Data-Plane Interface
SDO	Standards Development Organization
SDO SDP	Standards Development Organization Session Description Protocol
SDP	Session Description Protocol
SDP SD-RSRP	Session Description Protocol Sidelink Discovery Reference Signal Received Power
SDP SD-RSRP SDSF	Session Description Protocol Sidelink Discovery Reference Signal Received Power Structured Data Storage network function
SDP SD-RSRP SDSF SDT	Session Description Protocol Sidelink Discovery Reference Signal Received Power Structured Data Storage network function Small Data Transmission
SDP SD-RSRP SDSF SDT SDU	Session Description Protocol Sidelink Discovery Reference Signal Received Power Structured Data Storage network function Small Data Transmission Service Data Unit
SDP SD-RSRP SDSF SDT SDU SD-WAN	Session Description Protocol Sidelink Discovery Reference Signal Received Power Structured Data Storage network function Small Data Transmission Service Data Unit Software Defined Wide Area Network
SDP SD-RSRP SDSF SDT SDU SD-WAN SE	Session Description Protocol Sidelink Discovery Reference Signal Received Power Structured Data Storage network function Small Data Transmission Service Data Unit Software Defined Wide Area Network Security Environment
SDP SD-RSRP SDSF SDT SDU SD-WAN SE SEAF	Session Description Protocol Sidelink Discovery Reference Signal Received Power Structured Data Storage network function Small Data Transmission Service Data Unit Software Defined Wide Area Network Security Environment Security Anchor Functionality
SDP SD-RSRP SDSF SDT SDU SD-WAN SE SEAF SEAF SE AV	Session Description Protocol Sidelink Discovery Reference Signal Received Power Structured Data Storage network function Small Data Transmission Service Data Unit Software Defined Wide Area Network Security Environment Security Anchor Functionality Serving Environment Authentication Vector
SDP SD-RSRP SDSF SDT SDU SD-WAN SE SEAF SEAF SE AV SEER	Session Description Protocol Sidelink Discovery Reference Signal Received Power Structured Data Storage network function Small Data Transmission Service Data Unit Software Defined Wide Area Network Security Environment Security Anchor Functionality Serving Environment Authentication Vector Session Establishment Effective Ration (SIP (Session Initiation Protocol))

# # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



SELinux	Secure Linux
SEM	Spectrum Emission Mask
SEPP	Security Edge Protection Proxy
SEQp	Sequence number for MGV-F (MTK (MBMS (Multimedia Broadcast/Multicast Service)) Traffic Key) Generation and Validation Function) stored in the USIM (Universal Subscriber Identity Module)
SERA	Security Engineering Risk Analysis
SET	SUPL (Secure User Plane for Location) enabled Terminal
SFI	Short EF (Elementary File) Identifier
SFN	System Frame Number
SFP	Small Form Factor Pluggable
SFI-RNTI	Slot Format Indication RNTI (Radio Network Temporary Identifier)
SFTD	System Frame Number and Frame Timing Difference
SFTP	Secure File Transfer Protocol
SgNB	Secondary gNB
SGSN	Serving GPRS (General Packet Radio Services) Support Node
SGW	Serving Gateway
SGW-C	Serving Gateway Control Plane Function
SGW-U	Serving Gateway User Plane Function
SHA-1	Secure Hash Algorithm 1
SI	Stateful Inspection or System Information
SIAD	Smart Integrated Access Device
SIB	System Information Block
SID	System Identity or Site Identifier: Typically refers to the name configured on a hardware test set/probe (VisionWorks).
SIDF	Subscription Identifier De-Concealing Function
SIM	Subscriber Identity Module
SINR	Signal to Interference and Noise Ratio
SIP	Session Initiation Protocol (RFC 2543)
SIPTO	Selected IP Traffic Offload
SIPTO@LN	Selected IP Traffic Offload at the Local Network
SI-RNTI	System Information RNTI (Radio Network Temporary Identifier)

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SISO	Single Input Single Output
SL	Sidelink
SLA	Service Level Agreement: In VisionWorks, a group of KPIs (Key Performance Indicators) associated with a set of rules.
SLB	Server Load Balancing
SL-BCH	Side-link Broadcast Channel
SLC	SUPL (Secure User Plane for Location) Location Center
SL-DCH	Side-link Discovery Channel
SLF	Subscriber Location Function or Subscription Location Function
SLN	SUPL (Secure User Plane for Location) Location Platform
SLO	Service Level Objectives
SLP	SUPL (Secure User Plane for Location) Location Platform
SL-RNTI	Sidelink RNTI (Radio Network Temporary Identifier)
SL-SCH	Sidelink Shared Channel
SLSS	Sidelink Synchronization Channel
SL-V-RNTI	Sidelink V2X (Vehicle to Everything) RNTI (Radio Network Temporary Identifier)
SM	Session Management or Short Message
SMC	Security Mode Command
SME	Short Message Entities
SMF	Session Management Function (5G Network Element that serves the same function as SGW-C + PGW-C in the LTE)
SM-NSSAI	Session Management NSSAI (Network Slice Selection Assistance Information)
SMO	Service Management and Orchestration framework
SMP	SBI (Service Based Interface) Priority
SMRS	Software Management Repository
SMS	Short Message Service
SMSC	Short Message Service Center (Also SMS-SC)
SMSF	Short Message Service Function
SMS-SC	Short Message Service – Service Center (Also SMSC)
SMTC	SS/PBCH (Synchronization Signal/Physical Broadcast Channel) Block Measurement Timing Configuration
SMTP	Simple Mail Transfer Protocol

# # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



SN	Secondary Node (5G gNodeB for X2) or Sequence Number
SNF	Service Network Framework
S-NG-RAN	Secondary Next Generation Radio Access Node
SN ID	Serving Network Identifier
SNMP	Simple Network Management Protocol
SNN	Serving Network Name
SNPN	Standalone Non-Public-Network: An NPN that does not rely on network functions provided by a PLMN (Public Land Mobile Network)
SNPN ID	Standalone Non-Public-Network Identity (Also SNPN NID)
SNPN NID	Standalone Non-Public-Network Network Identifier (Also SNPN ID)
SNPP	Simple Network Paging Protocol
SNR	Signal to Noise Ratio
SNS	Social Networking Service or Amazon Simple Notification Service
S-NSSAI	Single NSSAI (Network Slice Selection Assistance Information)
SOA	Service-Oriented Architecture
SOAP	Simple Object Access Protocol
SoD	Separation of Duties
SoLSA	Support of Localized Service Areas
SOR-CMCI	Steering of roaming connected mode control information
SOX	Simple Outline XML (Extensible Markup Language)
SPA	Service Preference Architecture
S-PARC	Selective Per Antenna Rate Control
SPC	SUPL (Secure User Plane for Location) Positioning Center
SpCell	Special Cell
SPI	Security Parameter Index
SPID	Subscriber Profile ID for RAT (Radio Access Technology) Frequency Priority <i>or</i> Service Point Identifier for SS7
S-Plane	Synchronization Plane (ORAN); Data flow for synchronization and timing information between nodes.
Split Bearer	Bearer using both Master Node and Secondary Node Radio Resources
SPS	Semi-Persistent Scheduling
SQL	Structured Query Language

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SQN	Sequence Number
SQS	Amazon Simple Queue Service
SR	Scheduling Request
SRAP	Sidelink Relay Adaptation Protocol
SRB	Signaling Radio Bearer
SRES	Signed Response calculated by a SIM (Subscriber Identity Module)
SRI	Send Routing Information
SR-IOV	Single Root IO (Input/Output) Virtualization: Allows isolation of PCI Express resources for manageability and performance
SRP	Secure Remote Password <i>or</i> Service Relay Protocol or Service Request Processor <i>or</i> Service Requestor Processor
SRS	Sounding Reference Symbols
S-RSRP	Sidelink Reference Signal Power Received
SRS-TPC- RNTI	Sounding Reference Symbols – Transmit Power Control – Radio Network Temporary Identifier
SRTT	Smoothed RTT (Round Trip Time)
SRVCC	Single Radio Voice Call Continuity: Handover between a packet call in LTE and a circuit call in a legacy system.
SS	Synchronization Signal
SS7	Signaling System 7
SSAC	Service Specific Access Control
SSB	SS/PBCH (Synchronization Signal/Physical Broadcast Channel) Block
SSC	Session and Service Continuity or Supplementary Service Control string
S-SCH	Secondary Synchronization Channel
SSCMSP	Session and Service Continuity Mode Selection Policy
SSD	Solid State Drive
SSF	Service Switching Function
SSH	Secure Shell: A technology for creating a secure communication tunnel over a non- secure network path. In an SSH architecture, both endpoints must possess matching keys to encrypt and decrypt the data.
SSID	Service Set Identifier
SSL	Secure Socket Layer
SSP	Service Switching Point for SS7

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SSR	State Space Representation
SSS	Secondary Synchronization Signal
SST	Slice Service Type
SSTD	SFN (System Frame Number) and Subframe Timing Difference
ST	Speed Test
STA	Station
STAG	Secondary Timing Advance Group
Standalone E- UTRA	It is typical 4G network deployment where a 4G LTE eNB connects to EPC
Standalone NR	5G New Radio configuration where gNB does not need any assistance for connectivity to core Network, it can connect by its own to NG-CN (Next Generation Core Network) over NG2 and NG3 interfaces
Stateful	Computer or program keeps track of the state of interaction, usually by setting values in a storage field designated for that purpose
Stateless	A communications protocol in which no session information is retained by the receiver, relevant session data is sent to the receiver by the client in such a way that every packet of information transferred can be understood in isolation, without context information from previous packets in the session
STCH	Side-link Traffic Channel
STEC	Slant TEC (Total Electron Content)
STM	State Transition Model; defines how to manage the lifecycle of a service or resource
S-TMSI	Serving Temporary Mobile Subscriber Identity
STN-SR	Session Transfer Number for SRVCC (Single Radio Voice Call Continuity)
STP	Spanning Tree Protocol (802.1d)
STTI	Short TTI (Transmission Time Interval)
SU	Scheduling Unit
SUA	Signaling Connection Control Part User Adaptation Layer
SUCI	Subscription Concealed Identifier
SUL	Supplementary Uplink
SU-MIMO	Single-User MIMO (Multiple Input Multiple Output)
SUPI	Subscription Permanent Identifier (Corresponds to IMSI in earlier generations of networks)
SUPL	Secure User Plane for Location
SUT	System Under Test

# # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



SVD	Simultaneous Voice and Data
SW	Software or Status Word
SWF	Amazon Simple Workflow Service
SWT	Simple Web Token
SX3LIF	Split X3 LI Interworking Function
т	
T&D	Test and Diagnostics: VisionWorks T&D is a full-featured system that drives network testing and results management associated with a variety of network elements and test models.
ТА	Test Agent (a Spirent Landslide Test Server) <i>or</i> Test Association (a Spirent VisionWorks Controller UI feature) <i>or</i> Tracking Area <i>or</i> Timing Advance
TAC	Tracking Area Code
TAD	Traffic Aggregate Description
TAG	Timing Advance Group
ΤΑΙ	Tracking Area Identity
TAR	Tape Archive: A format for compressing and distributing collections of files as a single package. The name is a legacy reference to its origins as a method to write data to sequential I/O devices.
TAS	Test Administration Server (Landslide system manager) or Telephony Application Server
TAU	Tracking Area Update
ТВ	Transport Block
TBD	To Be Determined or To Be Decided
Tbps	Terabits per second
тС	Test Controller: The service assurance controller component of VisionWorks NDO (NetDevOps) consisting of microservices built for service activation test, performance management, and fault triage; also called VisionWorks Virtual
Tcl	Tool Command Language
ТСР	Transmission Control Protocol
TDD	Time Division Duplex
TDF	Traffic Detection Function (in PFCP (Packet Forwarding Control Protocol)) or Test Data File (in Landslide)
TDF-C	Traffic Detection Function Control Plane
TDF-U	Traffic Detection Function User Plane
TDM	Time Division Multiplexing

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TD-SCDMA	Time Division-Synchronous Code Division Multiple Access
TE	Time Error
TEG	Timing Error Group
TEID	Tunnel Endpoint Identifier
Telcordia	Telcordia Technologies, Inc., a subsidiary of the Swedish telecommunications company Ericsson. Among other products and solutions, the company coordinates standards between competing telecommunications carriers. It was formerly known as Bell Communications Research, Inc. or Bellcore, a research and development company created as part of the break-up of AT&T.
TETRA	Terrestrial Trunk Radio
TF	Transport Format
TFCI	Transport Format Combination Indicator
TFP	Traffic Forwarding Policy
TFT	Traffic Flow Template
TFTP	Trivial File Transport Protocol
T-GRUU	Temporary Globally Routable User Agent URI (Uniform Resource Indicator)
THIG	Topology Hiding Internetwork Gateway
ТІ	Transaction Identifier
TIA	Telecommunications Industry Association (North America)
TIN	Temporary Identifier used in next update
TL1	Transaction Language 1: A legacy language developed by Telcordia and based on the syntax of ITU-T Human-Machine Language. Spirent probes continue to use TL1 for management.
TLIV	Type Length Instance Value
TLM	Telemetry
TLS	Transport Layer Security
TLV	Type Length Value <i>or</i> Tag Length Value
ТМ	Transparent Mode
TMA	Tower Mounted Amplifier
TMGI	Temporary Mobile Group Identity
TMPI	Temporary IP Multimedia Private identity
TMSI	Temporary Mobile Subscriber Identity
TN	Terrestrial Network

## # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



TNAP	Trusted Non-3GPP Access Point
TNGF	Trusted Non-3GPP Gateway Function
TNL	Transport Network Layer
TNLA	Transport Network Layer Association
ТОА	Time of Arrival
TON	Type of Number
ToS	Type of Service (Priority) or Top of the Second (RAN)
ТР	Transmission Point
TPC	Transmit Power Control
TPC-PUCCH- RNTI	Transmit Power Control – Physical Uplink Control Channel – Radio Network Temporary Identifier
TPC-PUSCH- RNTI	Transmit Power Control – Physical Uplink Shared Channel – Radio Network Temporary Identifier
TPC-RNTI	Transmit Power Control – Radio Network Temporary Identifier
TPDU	Transfer Protocol Data Unit
ТРМ	Trusted Platform Module
TRAM	Test Results Analysis Module: Within a virtualized network testing architecture, the TRAM component receives and stores test results from test agents elsewhere in the architecture (VisionWorks).
TRGW	Transition Gateway
TRP	Transmission Reception Point
TRS	Telecommunications Relay Services
TS	Test Server (Landslide), also called a Probe, TA (Test Agent) or vTA (virtual Test Agent) <i>or</i> Technical Specification
TSA	Transport Service Assurance (VisionWorks)
TSP	Traffic Steering Policy
TSSF	Traffic Steering Support Function
TTFB	Time to First Byte
ТТІ	Transmission Time Interval
TTL	Time to Live
ттт	Time to Trigger
TTY	Text Telephone
TWAMP	Two-Way Active Measurement Protocol: IETF (Internet Engineering Task Force) standard for measuring round-trip network performance between any two devices that

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support the TWAMP protocols. It uses a client/server architecture, where each endpoint must be running compatible TWAMP software to perform the testing.

- TWAN Trusted WLAN (Wireless Local Area Network) Access Network
- TWAP Trusted WLAN (Wireless Local Area Network) Access Point
- TWIF Trusted WLAN (Wireless Local Area Network) Interworking Function
- Transmit or Transmitter Тx

U	
U2N	UE (User Equipment) to Network
UAC	Unified Access Control or User Agent Client
UAS	User Agent Server
UCI	Uplink Control Information
UDC	Uplink Data Compression
udev	userspace /dev (Linux)
UDM	Unified Data Management (5G Network Element that serves much the same function as the HSS (Home Subscriber Service) in LTE)
UDP	User Datagram Protocol
UDR	Unified Data Repository
UDSF	Unstructured Data Storage network function
UE	User Equipment
UEA	UMTS (Universal Mobile Telecommunication System) Encrypted Algorithm
UE-AMBR	User Equipment - Aggregate Maximum Bit Rate
UEK	Unbreakable Enterprise Kernel: A Linux kernel built by Oracle.
UETR	UE Trace
UIA	UMTS (Universal Mobile Telecommunication System) Integrity Algorithm
UICC	Universal Integrated Circuit Card
UID	Unique Identifier, a Kubernetes systems-generated string to identify objects
UL	Uplink
UL-AoA	Uplink Angles of Arrival
UL CL	Uplink Classifier
ULI	User Location Information
ULP	User Plane Location Protocol

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ULR	Update Location Request
UL-RTOA	Uplink Relative time of Arrival
UL-SCH	Uplink Shared Channel
UL TFT	Uplink Traffic Flow Template
UM	Unacknowledged Mode
UMTS	Universal Mobile Telecommunication System
UP	User Plane
UPDP	UE (User Equipment) Policy Delivery Protocol
UPE	User Plane Entity
UPF	User plane Function (5G Network Element that serves the same function as SGW-U + PGW-U in LTE) $% \left( \frac{1}{2}\right) =0$
UPGW	User Plane Gateway
UpPTS	Uplink Pilot Time Slot
UPSC	UE (User Equipment) Policy Section Code
UPSI	UE (User Equipment) Policy Section Identifier
URA	UTRAN (Universal Mobile Telecommunication System Terrestrial Radio Access Network) Routing Area
URI	Uniform Resource Identifier (a superset of URL)
URL	Uniform Resource Locator (a subset of URI)
URLLC	Ultra- Reliable Low Latency Communications
URN	Uniform Resource Name
URRP-MME	UE (User Equipment) Reachability Request Parameter for MME (Mobility Management Entity)
URSP	UE (User Equipment) Route Selection Policy
URR	Usage Reporting Rule
URRP-AMF	UE Reachability Request Parameter for AMF (Access and Mobility Management Function)
URSP	UE (User Equipment) Route Selection Policy
USAT	USIM (Universal Subscriber Identity Module) Application Toolkit
USB	Universal Serial Bus
USD	User Service Description
USIM	Universal Subscriber Identity Module <i>or</i> UMTS (Universal Mobile Telecommunication System) Subscriber Identity Module

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USS	User Security Settings
UTC	Universal Time Coordinated or Coordinated Universal Time
UTDOA	Uplink Time Difference of Arrival
UTRA	Universal Terrestrial Radio Access
UTRAN	Universal Terrestrial Radio Access Network
Uu	Over the air logical interface between handset and eNodeB
UUID	Universally Unique Identifier
UUM	Logical Over the Air (RF) Interface between U1 Modem and eNodeB/gNB
V	
V2X	Vehicle-to-Everything
VBS	Voice Broadcast Service
vCPU	Virtual Central Processing Unit
VCS	Version Control Software
VDI	Virtual Desktop Infrastructure
VDS	Velocity Database Services
VF	Virtual Function (Typically used in the context of NFV (Network Function Virtualization)) <i>or</i> Voice Frequency (typically used to describe the narrowband frequency range on a DSL (Digital Subscriber Line) circuit used to transit analog voice)
VGCS	Voice Group Call Service
VHD	Virtual Hard Disk
VI	Video
VID	VLAN (Virtual LAN (Local Access Network)) Identifier
VIM	Virtual Infrastructure Manager
VisionWorks T&D	VisionWorks Test and Diagnostics: A Spirent OSS (Operations Support System) designed for the management of testing activities of large-scale, carrier-class networks. VisionWorks T&D is a full-featured system that drives network testing and results management associated with a variety of NE (Network Element) and test set models.
VLAN	Virtual Local Area Network
VLD	Virtual Link Descriptor
VLR	Visitor Location Register
VM	Virtual Machine: A generic term to describe a physical computer that is emulated with software. A VM requires a host platform that can run the image, provide administrative access, and provide the necessary connectivity to applicable network.

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VMHD	Virtual Machine Hard Drive
VNF	Virtual Network Function (See NFV (Network Function Virtualization))
VNFaaS	VNF (Virtual Network Function) as a Service
VNFC	VNF (Virtual Network Function) Component
VNFD	VNF (Virtual Network Function) Descriptor
VNFFGD	VNF (Virtual Network Function) Forwarding Graph Descriptor
VNFM	VNF (Virtual Network Function) Manager
VNPaaS	Virtual Network Platform as a Service
VO	Voice
Vo5G	Voice Over 5G
VoD	Video on Demand
VoIP	Voice Over IP (Internet Protocol)
VoLTE	Voice over LTE (Long Term Evolution)
VPC	Virtual Private Cloud
VPD	Virtual Private Desktop
vPE	Virtual Provider Edge / Virtual Provider Edge Router
V-PCF	A Policy Control Function in the VPLMN (Visited Public Land Mobile Network)
VPLMN	Visited PLMN (Public Land Mobile Network)
VPLS	Virtual Private LAN (Local Area Network) Service
VPN	Virtual Private Network
VPS	Virtual Private Server
VR	Virtual Reality
vRAN	Virtualized Radio Access Network
VRB	Virtual Resource Block
VRF	Virtual Routing & Forwarding
VSA	Virtual Service Assurance
V-SLP	Visited SUPL (Secure User Plane for Location) Location Platform
vSTA	Virtual STA (Station)
VTA	Virtual Test Agent: A lightweight, virtualized test function that focuses on a specific task, such as a TWAMP or a ping test. VTAs typically run as VMs (Virtual Machine) or containers and other general platforms. In a Spirent Controller architecture, VTAs

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perform all testing functions and submit results to the TRAM (Test Results Analysis Module) component.

VTC	Virtual Traffic Classifier
VTP	Virtual Test Platform
vTAS	Virtual Test Administration Server (Landslide)
vTS	Virtual Test Server (Landslide)
V-UDR	A Unified Data Repository in the VPLMN (Visited Public Land Mobile Network)
VVM	Visual Voice Mail
W	
W-5GAN	Wireline 5G Access Network
W-5GBAN	Wireline BBF (Bearer Binding Function) Access Network
W-5GCAN	Wireline 5G Cable Access Network
WAAS	Wide Area Augmentation System
WAF	Web Application Firewall
W-AGF	Wireline Access Gateway Function
WAN	Wide-Area Network: Generic name for larger networks that provide interconnectivity between LANs.
WAP	Wireless Application Protocol
WARN	Warning, Alert, and Response Network (H.R. 5785 – 109 <sup>th</sup> Congress (2005-2006) To establish a unified national hazard alert system; the Warning, Alert, and Response Network Act.)
WCDMA	Wideband Code Division Multiple Access
WCTP	Wireless Communications Transport Protocol
WDM	Wavelength Division Multiplexing
WEA	Wireless Emergency Alert
WGS	World Geodetic System
Wi-Fi	Wireless Fidelity
WIM	Wireless Identity Module
WiMAX	Worldwide Interoperability for Microwave Access
WLAN	Wireless Local Area Network (Wireless Local Area Network) based on IEEE 802.11 Standard
WLANSP	Wireless Local Area Network Selection Policy
WLS	Wireless Subsystem Interface

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WLS_DPDK	WLS (Wireless Subsystem Interface) that uses DPDK (Data Plane Design Kit) functions instead of accessing kernel functions
WPA	Wi-Fi Protected Access
WPKI	Wireless PKI (Public Key Infrastructure)
WPS	Wireless Priority Service
WRC	World Radiocommunication Conference; held every three to four years, the job of the WRC is to review radio regulations and international treaty governing the use of spectrum.
WSDL	Web Services Description Language
WSID	WLAN (Wireless Local Area Network) Specific Identifier
WT	WLAN (Wireless Local Area Network) Termination
WTLS	Wireless Transport Layer Security
WUS	Wake Up Signal
WWW	World Wide Web
X	
X2 Interface	Interconnect between eNodeBs
X2-C	X2 Control Plane
X2-U	X2 User Plane
XAUI	10 Gigabit Attachment Unit Interface, IEEE 802.3ae
XENPAK	A multi-source agreement (MSA) for a 10 Gigabit Ethernet (10GbE) transceiver package. It is the oldest 10G fiber optic transceiver.
XGMII	X(Roman Numeral 10)-G-Media-Independent-Interface which is IEEE 802.3 Clause 46 ratified specification enabling a variety of PHY and MAC chips from different vendors to interface
XGXS	XGMII Extender Sublayer
XML	Extensible Markup Language
XMPP	Extensible Messaging and Presence Protocol
Xn	A logical interface which interconnects the New RAN nodes - gNB to gNB and LTE eNB to gNB
XnAP	Xn Application Protocol
Xn-C	Xn-Control plane
Xn-U	Xn-User plane
xRAN	Extensible Radio Access Network

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XRES	Expected Response
Xw Interface	Interconnect between WT (WLAN (Wireless Local Area Network)) Termination and eNodeB
Y	
YaST	Yet another Setup Tool (Linux)
Y2	Reference point between the untrusted non-3GPP access and the N3IWF (Non-3GPP Interworking Function) for the transport of NWu (Reference point between UE and N3IWF) traffic; tested with Landslide using AMF Nodal and N3IWF Node
Yum	Yellowdog Updater, Modified (Linux command)
Z	

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