



The Telecom Glossary

96 Terms Every Wireless Operator Should Know

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Plain English definitions for the telecom terms that matter, from network infrastructure and SIM technology through billing, compliance, and operations. Compiled by the Atomic Mobile team from experience helping launch and support more than 100 MVNOS. The always current version lives at atomicmobile.com/products/glossary.



Network

Term	Definition
MNO	Mobile Network Operator. A company that owns and operates licensed radio spectrum and the physical network infrastructure (towers, base stations, core network) used to deliver mobile services directly to consumers.
MVNO	Mobile Virtual Network Operator. A wireless communications service provider that does not own the radio spectrum or network infrastructure it uses to offer services. MVNOs lease access from MNOs at wholesale rates and resell under their own brand.
MVNE	Mobile Virtual Network Enabler. A company that provides operational, technical, and business support infrastructure to MVNOs. MVNEs supply platforms such as billing, provisioning, SIM management, and OSS/BSS so MVNOs can launch without building those systems themselves.
MVNA	Mobile Virtual Network Aggregator. An intermediary that negotiates bulk wholesale agreements with MNOs and then provides access—sometimes bundled with MVNE services—to multiple MVNOs under a single umbrella contract.
RAN	Radio Access Network. The portion of a mobile network that connects subscriber devices to the core network via radio frequencies. Includes cell towers, base stations, and antenna equipment.
Core Network	The central backbone of a mobile network responsible for routing calls and data, managing subscriber authentication, billing, and inter-network connectivity. Includes components like HLR/HSS, SMSC, and GGSN/PGW.
PLMN	Public Land Mobile Network. A network established and operated by a government or private operator for the purpose of providing land mobile telecommunications services to the public. Identified by a unique MCC+MNC combination.
MCC	Mobile Country Code. A three-digit code assigned by the ITU that identifies the country of a mobile subscriber's home network. Used in combination with MNC to uniquely identify a PLMN.
MNC	Mobile Network Code. A two- or three-digit code used in combination with MCC to identify a specific mobile operator within a country.
LTE	Long Term Evolution. A 4G wireless broadband standard that provides high-speed data transmission. Most MVNOs in the U.S. operate primarily on LTE networks.
5G NR	5G New Radio. The global standard for a new generation of wireless networks, offering dramatically higher data speeds, lower latency, and greater capacity than LTE. Increasingly available to MVNOs through wholesale agreements.
VoLTE	Voice over LTE. A standard for making high-definition voice calls over a 4G LTE network rather than falling back to legacy 2G/3G for voice. Requires both device and network support.
VoWiFi	Voice over WiFi. Technology that allows voice calls to be routed over a WiFi connection instead of the cellular network, useful for improving coverage indoors or in areas with weak cellular signal.

Term	Definition
IMS	IP Multimedia Subsystem. An architectural framework for delivering IP-based multimedia services including VoLTE, video calling, and rich communication services (RCS). Required for VoLTE support.
APN	Access Point Name. A gateway name that a mobile device uses to connect to the internet or private networks through the carrier's data network. MVNOs often configure custom APNs for their subscribers.
Roaming	The ability for a mobile subscriber to use their service on a network other than their home network, typically when traveling. Governed by roaming agreements between operators and can be domestic or international.

Identity & SIM

Term	Definition
SIM	Subscriber Identity Module. A smart card inserted into a mobile device that stores the subscriber's identity credentials (IMSI, authentication keys) and enables the device to authenticate to the network.
eSIM	Embedded SIM. A programmable SIM chip soldered directly into a device that can be provisioned remotely with carrier profiles via OTA updates, eliminating the need for a physical SIM card.
iSIM	Integrated SIM. A further evolution of eSIM where the SIM functionality is built directly into the device's main processor chip, reducing size and improving security.
IMSI	International Mobile Subscriber Identity. A unique 15-digit number stored on a SIM that identifies a subscriber's account on the mobile network. Used internally for authentication and routing.
ICCID	Integrated Circuit Card Identifier. A unique 18–22 digit serial number that identifies a SIM card itself (as opposed to the subscriber). Printed on the SIM card and used for SIM inventory management.
MSISDN	Mobile Station International Subscriber Directory Number. The full international phone number assigned to a SIM/subscriber. This is the number that other parties dial to reach the subscriber.
IMEI	International Mobile Equipment Identity. A unique 15-digit number assigned to every mobile device that identifies the physical handset. Used by networks to block stolen or non-compliant devices.
MDN	Mobile Directory Number. The 10-digit U.S. phone number associated with a mobile subscription, synonymous with MSISDN in North American context.
OTA	Over The Air. The process of wirelessly delivering software updates, configuration changes, or SIM profile updates to mobile devices without requiring a physical connection.
SIM Swap	The process of transferring a subscriber's phone number and account from one SIM card to another. Can be initiated legitimately by the subscriber or fraudulently by bad actors.

Term	Definition
SIM Provisioning	The process of configuring a SIM card with the necessary credentials and settings (IMSI, authentication keys, service configurations) to enable it to function on a specific network.

OSS/BSS

Term	Definition
OSS	Operations Support Systems. The software systems used to manage, monitor, and maintain a telecom network. Includes network inventory, fault management, configuration management, and service provisioning.
BSS	Business Support Systems. The software systems that handle the customer-facing and revenue-generating functions of a telecom operator, including billing, CRM, order management, and product catalogs.
HLR	Home Location Register. A central database in 2G/3G networks that stores subscription information for all registered users, including their location, service entitlements, and authentication data.
HSS	Home Subscriber Server. The 4G/LTE evolution of the HLR. A central database that stores subscriber information including profiles, authentication data, and location for IMS and LTE networks.
CDR	Call Detail Record. A data record generated by the network documenting the details of a call or data session—including originating number, destination, duration, and timestamps—used for billing and analytics.
Mediation	The process in telecom billing that collects raw usage records (CDRs/UDRs) from the network, normalizes and correlates them, and forwards them to the billing system for rating and invoicing.
Rating Engine	The component of a billing system that applies pricing rules to usage records (CDRs) to calculate the monetary value of each event based on the subscriber's plan, time of use, and other factors.
CRM	Customer Relationship Management. Software used to manage subscriber accounts, track interactions, handle customer support requests, and store customer data throughout the subscriber lifecycle.
EIR	Equipment Identity Register. A database that stores IMEI numbers and their status (whitelisted, blacklisted, or greylisted) to allow or deny network access to specific devices.
SMSC	Short Message Service Center. The network element responsible for storing, routing, and delivering SMS messages between mobile subscribers.
Product Catalog	A structured database within BSS that defines all available products, plans, add-ons, and bundles, including their pricing, eligibility rules, and configurations.

Billing & Revenue

Term	Definition
Prepaid	A billing model where subscribers pay for service before using it. Credit is loaded onto the account and consumed as services are used. When credit runs out, service is suspended until topped up.
Postpaid	A billing model where subscribers use services throughout a billing cycle and receive an invoice at the end. Requires credit checking and carries collection risk for the operator.
ARPU	Average Revenue Per User. A key telecom metric calculated by dividing total revenue by the number of subscribers in a given period. Used to measure monetization effectiveness.
Churn	The rate at which subscribers leave a service provider. Expressed as a percentage of the subscriber base over a given period. High churn erodes revenue and increases customer acquisition costs.
LTV	Lifetime Value. The total net revenue expected from a subscriber over the entire duration of their relationship with the MVNO. A key metric for evaluating customer acquisition cost efficiency.
Breakage	Revenue retained by a carrier when prepaid subscribers do not fully use the services or data they have paid for. MVNOs that design their own unlimited plans can manage breakage through throttling.
Interconnect	The commercial and technical arrangement between two operators that allows their subscribers to communicate with each other. Interconnect agreements define the fees each carrier pays when its subscriber originates a call that terminates on another network.
Wholesale	The pricing tier at which MVNOs purchase network access, minutes, data, and SMS from MNOs. Wholesale rates are lower than retail rates, allowing MVNOs to build in a margin when reselling to consumers.
Revenue Assurance	Processes and controls designed to ensure that all billable events are accurately captured, rated, and collected, minimizing revenue leakage from errors in mediation, rating, or billing.
USF	Universal Service Fund. A U.S. federal program administered by the FCC that collects fees from telecom providers and redistributes them to subsidize telecommunications services in high-cost areas, schools, libraries, and low-income households.
Surcharges	Additional fees added to a subscriber's bill beyond the base plan price, including regulatory fees, taxes, and carrier-imposed charges such as administrative fees or network access charges.
Tax Remittance	The process of calculating, collecting, and paying applicable federal, state, and local telecommunications taxes to the appropriate government authorities on behalf of subscribers.

Plans & QoS

Term	Definition
QoS	Quality of Service. The overall performance of a network as experienced by users, including metrics like throughput, latency, jitter, and packet loss. Operators apply QoS policies to prioritize certain traffic types.

Term	Definition
Throttling	The intentional slowing of a subscriber's data connection speed after they have consumed a defined threshold of high-speed data. Used by MVNOs to manage network costs and create tiered plan structures.
FUP	Fair Usage Policy. A policy that defines the thresholds at which an MVNO will reduce speeds or apply restrictions to subscribers on 'unlimited' plans who consume excessive data, protecting network quality for all users.
Data Cap	A predetermined limit on the amount of data a subscriber can consume at full speed in a billing period. After reaching the cap, service may be throttled, blocked, or charged at overage rates depending on the plan.
Overage	Usage beyond the included allowance of a subscriber's plan. Overages can result in additional charges or reduced speeds depending on the plan terms.
Add-On	An optional supplemental product that subscribers can purchase in addition to their base plan, such as international roaming passes, extra data buckets, or premium features.
Bundle	A packaged combination of services offered at a single price, such as voice + data + SMS together, or service combined with a device or other product.
DPI	Deep Packet Inspection. A method of analyzing network traffic at the application level in real time, used by operators to enforce QoS policies, detect specific traffic types, and apply differentiated throttling rules.
PCRF	Policy and Charging Rules Function. A network element in 4G/LTE systems that determines QoS rules and charging policies in real time based on the subscriber's plan, current usage, and network conditions.
Network Prioritization	The practice by MNOs of giving lower priority to MVNO traffic compared to their own retail subscribers during periods of network congestion, which can result in slower speeds for MVNO customers.

Number Management

Term	Definition
MNP	Mobile Number Portability. The ability for a subscriber to keep their existing phone number when switching from one mobile operator to another. Regulated in most markets including the U.S.
LNP	Local Number Portability. The broader regulatory framework that allows phone numbers to be transferred between carriers, including both wireline and wireless providers.
NPAC	Number Portability Administration Center. The centralized database in the U.S. that manages number portability records and coordinates port requests between carriers.
Number Porting	The process by which a subscriber's phone number is transferred from their current carrier to a new carrier. The losing carrier must release the number within regulated timeframes.
DID	Direct Inward Dialing. A service that allows a block of telephone numbers to route calls directly to specific extensions or subscribers within a system without operator assistance.

Term	Definition
E.164	The international numbering standard that defines the format of telephone numbers. E.164 numbers can have a maximum of 15 digits and include a country code, making them globally unique.
CNAM	Caller Name. A database service that associates a subscriber's name with their phone number, enabling caller ID name display on the receiving party's device.
STIR/SHAKEN	Secure Telephone Identity Revisited / Signature-based Handling of Asserted information using toKENs. A framework of standards implemented in the U.S. to combat caller ID spoofing and robocalling by cryptographically attesting the legitimacy of calls.

MVNO Types

Term	Definition
Full MVNO	An MVNO that owns or leases its own core network elements (HLR/HSS, SMSC, billing system) and manages its own SIM cards and IMSI range. Has the greatest control over services and costs but requires significant investment.
Light MVNO	An MVNO that relies on the MNO or MVNE for most core network functions including HLR/HSS and billing. Faster and cheaper to launch but with less control over the subscriber experience and unit economics.
MVNO in a Box	A turnkey solution that bundles everything needed to launch an MVNO — carrier network access, billing, SIM/eSIM provisioning, subscriber management, APIs, and regulatory compliance — into a single pre-integrated platform from one partner, rather than assembling separate vendors for each layer.
Branded Reseller	The simplest form of MVNO—essentially reselling an MNO's service under a different brand with minimal differentiation. The MNO handles all technical and operational functions.
Enhanced Service Provider	An MVNO that adds value beyond basic connectivity, such as specialized applications, IoT platforms, vertical-specific features, or unique customer experiences layered on top of the underlying network.
IoT MVNO	An MVNO that specializes in providing mobile connectivity for Internet of Things devices such as connected vehicles, industrial sensors, wearables, and smart home equipment.
Wholesale MVNO	An MVNO that purchases network access in large volumes and resells it to smaller branded resellers or sub-MVNOs, acting similarly to an MVNA in function.

Compliance

Term	Definition
KYC	Know Your Customer. Regulatory requirements that obligate operators to verify the identity of their subscribers before providing service, as part of anti-fraud and anti-money laundering compliance.
AML	Anti-Money Laundering. Laws and regulations that require financial and telecom operators to detect and report suspicious activity that may indicate money laundering or fraud.

Term	Definition
CPNI	Customer Proprietary Network Information. Information that U.S. telecommunications providers collect about their subscribers' calling patterns and network usage. The FCC restricts how this data can be shared or used.
CALEA	Communications Assistance for Law Enforcement Act. U.S. federal law requiring telecom carriers and equipment manufacturers to build lawful intercept capabilities into their networks to support law enforcement wiretapping.
TCPA	Telephone Consumer Protection Act. U.S. law regulating telemarketing calls, robocalls, and text messages. Operators and businesses must obtain express consent before sending marketing communications.
Lifeline	A U.S. government program administered through the USF that provides discounted telephone and broadband service to low-income consumers. MVNOs can become designated Lifeline providers.
E911	Enhanced 911. A system that automatically provides the caller's location information to emergency dispatchers when a 911 call is placed. U.S. regulations require all wireless carriers, including MVNOs, to support E911.
Regulatory Reporting	Mandatory filings and disclosures that telecom operators must submit to government bodies such as the FCC, including data on subscribers, revenue, outage incidents, and service quality.

Operations

Term	Definition
Provisioning	The process of activating and configuring a subscriber's account and SIM on the network, enabling them to make calls, send messages, and use data according to their subscribed plan.
De-provisioning	The process of deactivating a subscriber's account and releasing the associated resources (SIM, phone number, IMSI) when service is terminated.
Tier 1 Support	The first level of customer service that handles common subscriber inquiries such as account questions, basic troubleshooting, and billing disputes before escalating more complex issues.
Porting Interval	The regulated timeframe within which a carrier must complete a number port request. In the U.S., wireless ports are typically completed within one business day.
MVNO Agreement	The commercial contract between an MVNO and an MNO (or MVNE) that defines the wholesale rates, service levels, network access terms, minimum commitments, and operational responsibilities of each party.
SLA	Service Level Agreement. A contractual commitment from a provider to deliver a specified level of service quality, uptime, and support response time. MVNOs negotiate SLAs with their MNO and MVNE partners.
White-Label	A product or service produced by one company (the provider) that is rebranded and sold by another company (the reseller) as if it were their own. MVNOs commonly use white-label billing, support, and platform services.

Term	Definition
Soft Launch	A limited initial release of an MVNO's service to a small group of subscribers before a full public launch, used to validate systems, identify issues, and refine the customer experience.
GSMA	GSM Association. The global industry organization representing mobile operators, device manufacturers, and technology companies worldwide. Sets interoperability standards and manages initiatives such as eSIM specifications.
API	Application Programming Interface. A set of defined protocols that allows software systems to communicate with each other. MVNOs use APIs to integrate platforms, automate provisioning, manage SIMs, and access usage data programmatically.
SFTP	Secure File Transfer Protocol. An encrypted protocol for transferring files between systems. Used in telecom for securely delivering usage records, CDRs, and reports between MVNEs, MVNOs, and billing systems.
Network Slice	A virtualized, logically isolated portion of a 5G network with configurable characteristics (bandwidth, latency, reliability) that can be dedicated to specific use cases or MVNOs.
MVNO Platform	An integrated suite of technology components—typically including BSS, OSS, SIM management, and API layer—that enables an MVNO to launch and operate mobile services without building infrastructure from scratch.

This glossary is maintained and updated at atomicmobile.com/products/glossary.