

3G: Third Generation, describes next generation wireless technology that is expected to be CDMA-based and offer high-speed packet data mobile wireless Internet access and multimedia communications. Analog cellular is considered the First Generation of wireless, while digital is Second Generation.

ADSL (asymmetric digital subscriber line): A technology that allows existing copper telephone lines to carry voice, data and video images at very high speeds.

Analog: A transmission method employing a continuous (rather than pulsed or digital) electrical signal.

ARPM (average revenue per minute): For long distance traffic.

ARPU (average revenue per unit): Average revenue per unit, or wireless subscriber, expressed as a rate per month for a given measurement period.

ASP (application service provider): A company that offers individuals or enterprises access over the Internet to applications and related services that would otherwise have to be located in their own personal or enterprise computers.

ATM (asynchronous transfer mode): A high-speed switching technology that routes voice, data and video at high speeds over the same network.

Bandwidth: The difference between the top and bottom limiting frequencies of a continuous frequency band; or indicator of the information-carrying capacity of a channel. The greater the bandwidth, the greater the information-carrying capacity.

Bundle: A group of telecommunications services, i.e. Internet, long distance and calling features that are sold together, often at a lower price than if purchased separately.

CDMA (code division multiple access): Technique that spreads a signal over a frequency band that is larger than the signal to enable the use of a common band by many users and to achieve signal security and privacy. See also IS-95 and CDMA2000.

CDMA2000: A third-generation wireless standard adopted by the International Telecommunications Union (ITU) which prescribes an evolutionary path to 3G for IS-95 based systems. The first step in the CDMA2000 evolution after IS-95 is called 1XRTT. See also IS-95 and CDMA.

CDPD (cellular digital packet data): A specification for supporting wireless access to the Internet and other public packet-switched networks.

Cell site: Individual locations of network transmitter, receiver, antenna signalling and related base station equipment.

Cellular: The mobile radio-telephone service, licensed by Industry Canada in Canada and the FCC in the United States to utilize 50 MHz of spectrum in the 800 MHz band. There are two 25 MHz licences in each region of Canada.

Churn rate: The number of subscriber units disconnected divided by the average number of units on the network, expressed as a rate per month for a given measurement period.

CLEC (competitive local exchange carrier): A company that competes with the already established local telephone business by providing its own network and switching.

CRTC (Canadian Radio-television and Telecommunications Commission): The federal regulator for radio and television broadcasters, and cable TV and telecommunications companies in Canada.

Dial-up access: Connecting to another computer or network using a modem over a regular telephone line.

Digital: A transmission method employing a sequence of discrete, distinct pulses that represent the binary digits 0 and 1 to indicate specific information, in contrast to the continuous signal of analog. Digital networks provide improved clarity, capacity, features and privacy compared to analog systems.

EBITDA: Earnings before interest, taxes, depreciation and amortization.

e.commerce: Refers to business conducted electronically, usually via the Internet.

ESMR (enhanced specialized mobile radio): Specialized mobile radio networks that have incorporated frequency reuse and TDMA technology to increase their capacity and to provide service over very large coverage areas. An ESMR network is designed not only for the dispatch service associated with SMR, but also for mobile telephony and short messaging services as well as circuit-switched and packet data services. See also iDEN.

Ethernet: A common method of networking computers in a local area network. Ethernet will handle about 10 million bits-per-second and can be used with almost any kind of computer.

Fibre network: Transmits information by light pulses along hair-thin glass fibres. Cables of optical fibres can be made smaller and lighter than conventional cables using copper wires or coaxial cable, yet they can carry much more information, making them useful for transmitting large amounts of data between computers or many simultaneous telephone conversations.

Frame relay: A high-speed packet switching technology that has evolved to meet the LAN-to-LAN interconnection market. Frame relay is designed to provide high-speed packet transmission, very low network delay and efficient use of network bandwidth.

GAAP: Generally accepted accounting principles.

gbps (gigabits per second): Billions of bits per second, a measure of bandwidth on a digital data transmission medium such as optical fibre.

GHz: Gigahertz. See Hertz.

GSM (Global System for Mobile Communications):

A TDMA-based digital communications standard that has been widely deployed in Europe and around the world in the 900 and 1800 MHz bands. A separate variant called PCS-1900 has been developed for use in the 1.9 GHz PCS frequency range in North America.

Hertz: The dimensional unit for measuring the frequency with which an electromagnetic signal cycles through the zero-value state between lowest and highest states. One hertz (Hz) equals one cycle per second. KHz (kilohertz) equals one thousand hertz. MHz (megahertz) equals one million hertz. GHz (gigahertz) equals one billion hertz.

Hosting: The business of housing, serving and maintaining files for one or more Web sites. Using a hosting service lets many companies share the cost of a fast Internet connection for serving files, as well as other Internet infrastructure and management costs. Also known as Web hosting.

iDEN (integrated digital enhanced network): An ESMR network technology developed by Motorola to utilize 800 MHz SMR channels for ESMR digital service. The digital signals offer greatly enhanced spectrum efficiency and system capacity.

ILEC (incumbent local exchange carrier): A telecommunications company providing local service in-region.

Industry Canada: The Canadian federal Department of Industry, on behalf of the Canadian Minister of Industry. Among other mandates, Industry Canada has responsibility for national telecom policy and for the regulation, management and allocation of radio spectrum in Canada and for establishing technical requirements for various wireless systems.

Internet: The global Web of networks that connects computers around the world, providing rapid access to information from multiple sources. The Internet was established by the U.S. Department of Defense during the Cold War.

Internet protocol (IP): Standards adopted by the Internet community to help with specific tasks such as transferring files between computers and sending mail.

IS-95 (Interim Standard 95): A version of CDMA specified by the Telecommunications Industry Association (TIA) that is used by TELUS Mobility and other networks around the world. IS-95 is often referred to as cdmaOne. See also CDMA.

ISDN (integrated services digital network): Switched network providing end-to-end digital connection for simultaneous transmission of voice and/or data over multiple multiplexed communication channels and employing transmission that conforms to internationally defined standards.

ISP (Internet service provider): A company that provides Internet access service to residences and/or businesses.

IT (information technology): A term that encompasses all forms of technology used to create, store, exchange and use information in its various forms (data, voice conversations, still images, motion pictures, multimedia and other forms, including those not yet conceived).

kbps (kilobits per second): Thousands of bits per second, used to describe the speed of a network connection or telecommunications medium.

LAN (local area network): A way of connecting several computers, typically either in the same room or building, so that they can share files and devices like printers and copiers.

Local loop: The transmission path between the telecommunications network and a client's terminal equipment.

mbps (megabits per second): Millions of bits per second, used to describe the speed of a network connection or telecommunications medium.

m-commerce: Mobile commerce is the buying and selling of goods and services through wireless handheld devices such as cellular telephones and personal digital assistants.

MHz: Megahertz. See Hertz.

Multimedia: The combination of various forms of media (text, graphics, animation, audio, etc.) to communicate information. The term also refers to information products that include text, audio and visual content.

Paging: Wireless text messaging services.

PCS (personal communications services): Digital wireless voice, data and text messaging services. In Canada and the United States, PCS spectrum has been allocated for use by public systems at the 1.9 GHz frequency range.

Peering: Peering is the arrangement of traffic exchange between Internet Service Providers (ISPs). Larger ISPs with their own backbone networks agree to allow traffic from other large ISPs in exchange for traffic on their backbones. They also exchange traffic with smaller ISPs so that they can reach regional end points.

Points of Presence: An access point to the Internet that has a unique Internet Protocol (IP) address. The number of points that an Internet Service Provider has is sometimes used as a measure of its size or growth rate.

POP: One person living in a population area that, in whole or in substantial part, is included in a network's coverage area.

Postpaid: A conventional method of payment for wireless service where a subscriber pays for a significant portion of services and usage in arrears, subsequent to consuming the services.

Prepaid: A method of payment for wireless service that allows a subscriber to prepay for a set amount of airtime in advance of actual usage. Generally, a subscriber's prepaid account is debited at the time of sale so that actual usage cannot exceed the prepaid amount until an additional prepayment is made.

Roaming: A service offered by wireless network operators that allows subscribers to use their radios or telephones while in the service area of another operator; requires a roaming agreement between the operators.

SONET (synchronous optical network): An optical interface standard that allows interworking of transmission products from multiple vendors.

Spectrum: The range of electromagnetic radio frequencies used in the transmission of sound, data and video.

Switch: The central computer system or systems in the wireless network responsible for mobility management, interconnection to the Public Switched Telephone Network and call detail accounting.

tbps (terabits per second): One trillion bits per second, a measurement of data transmission speed used for measuring the amount of data that is transferred in a second between two telecommunication points or within network devices.

TDMA (time division multiple access): A digital wireless transmission methodology standard used in cellular telephone, ESMR, PCS and other wireless communications systems. iDEN, GSM and PCS-1900 are examples of TDMA systems.

VoIP (Voice over Internet Protocol): The real-time transmission of voice signals over the Internet or IP network.

VPN (virtual private network): A private data network that makes use of a public telecommunication infrastructure, maintaining privacy through the use of a private secure network and security procedures.

WAN (wide area network): A data network extending a LAN (local area network) outside the building, over telecommunication lines, to link to other LANs over great distances.

WAP (wireless application protocol): An industry standard for the development of data applications and services over wireless communications networks. TELUS Mobility is a member of the WAP Forum, which is developing the open, global wireless protocol specification that works across differing wireless network technology types.

Web portal: An Internet gateway providing customers with access to online news and information, 24 hours a day, seven days a week.

Wireless Web/Internet access: Technology that provides access to the Internet through the wireless cellular network instead of the traditional wireline telephone network.