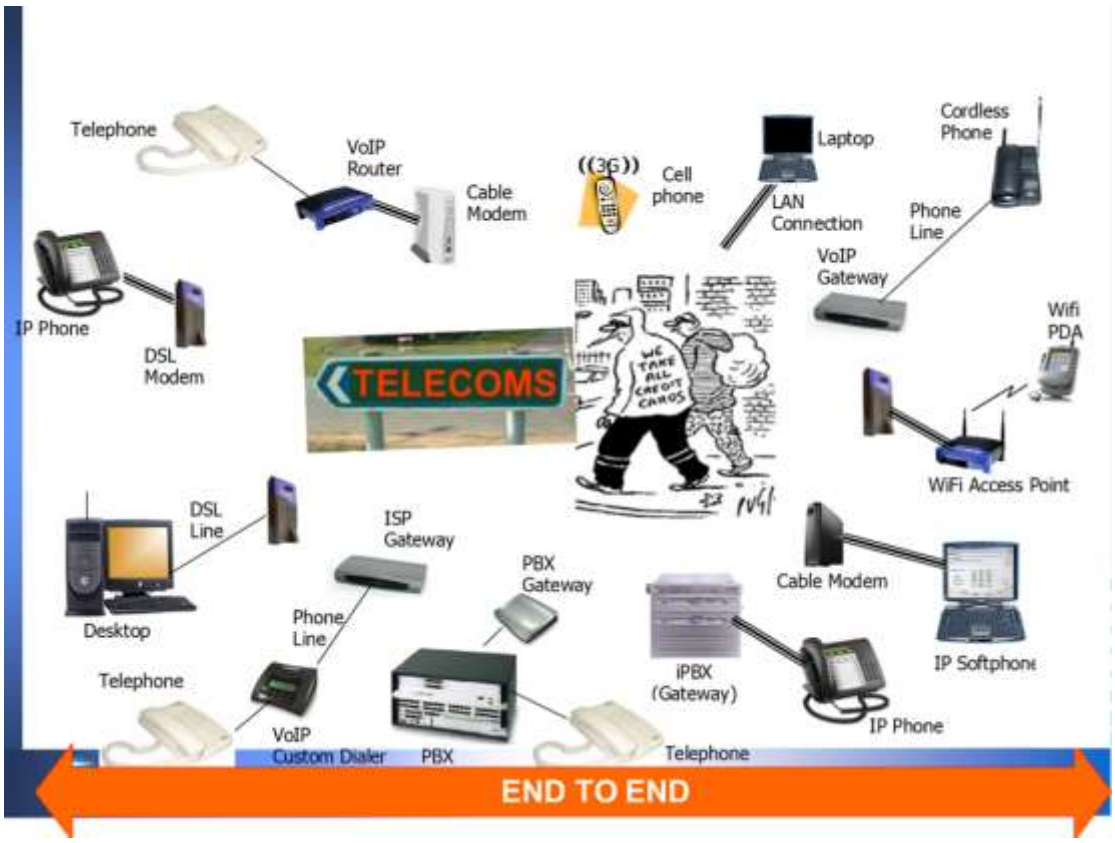
TAXONOMY OF TELECOM TERMS



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This short taxonomy is designed to describe the various terms used in today's telecommunications industry. It is not intended to be all embracing but to describe the common terms that are in use on a day to day basis that the non telecom person may come across. To assist in the visualisation of where these terms may be used the following graphic is used to show where on/in a telecom networks such terms may arise.

Telephone

Normally refers to a fixed line instrument that can be used to make voice calls over land lines which can either be copper or fibre optic. In the UK numbers which are used in these types of calls are allocated by the Telecom Regulator Ofcom and in the main (but NOT always) will indicate a particular geographical location (example – 020 8 – indicating an outer London Number) however due to the way numbers are reallocated by telecom companies it is no longer possible to be certain that the geographical indicator is indicative of the actual location of the device that bears the number. These types of calls create a communications tunnel between the called party and the calling party and this remains a dedicated connection during the time the call in in progress. This connection is originated and terminated on what is called the Public Switched Telephone Network (PSTN)

IP Phone

Phones which use the Internet Protocol (IP) to connect via the internet may look like normal phones but operate in a totally different way. They can either connect via a fixed line modem or use some other means to connect to the internet. (for example a computer or a dedicated gateway device known as a switch or exchange) In addition to being referred to as IP phones they are also often referred to as VOIP phone as they use the Voice Over the Internet Protocol to communicate. IP phones can and do appear in a variety of configurations including but not limited to systems such as Skype. The information between the calling party and the called party is "digitised" and split into small packets of data which transits the various networks before arriving at the destination where the packets of data are joined together to form the original information be it a voice, data or media transmission.

VOIP Router

Voice **O**ver the **I**nternet **P**rotocol router is a device which is sometimes also called a VOIP Gateway and connects to the internet and enables calls to be made via that medium in much the same way as calls are made via the normal telephone system in much the same way as using a normal telephone line. Calls are converted into a digital form which enables them to be routed via the internet to their final destination.

VOIP Custom Dialer

A device which is configured to automatically route outgoing calls via the internet as a preference or if such a connection is not possible divert calls to the normal public switched telephone network.

Cable Modem

A device that is a type of network bridge that connects a device such as a personal computer to the internet via a cable. The device enables 2 way data communication to be achieved thus taking advantage of the high bandwidth that such connections provide.

3G

A term used to indicate third generation of standards in mobile communications indicating that they meet an improved standard for speed and reliability. One of the major changes between the previous 2G standard and 3G standard is the ability to make better use of the technology to provide high speed data connections which in turn enable services such as video and mobile internet to become a reality on mobile devices.

Cell Phone

A term used to indicate a mobile handset which operates via a mobile network. The term comes from the need for such devices to connect via a Cell which forms part of the mobile network infrastructure.

LAN

Local **A**rea **N**etwork refers to a network of connected devices normally in the same geographical location such as a school or office. The main connections are often via cable however more modern networks also use wireless connections. Local Area Networks can operate independently of the internet or can be connected to the internet via routers or other gateway equipment.

WAN

Wide **A**rea **N**etwork refers to a network of devices (computers, laptops etc) that connect via dedicated lines or the internet via routers/gateways, where the devices are located in different locations or countries. Often this type of configuration consists of a number of LAN's which when connected via a WAN form one network.

Cordless Phone

Many fixed line telephones have what are referred to as remote handsets or cordless handsets. Such phones use short range communications to link the handset with the line on which the phone system is supplies.

DSL Modem

Digital **S**ubscriber **L**ine Modem is a device that is used to connect a device or a number of devices (computers) via a normal telephone line and allows digital transmissions to be made over wire cable. The Modem translates an analogue signal into a digital signal thus enabling communications via the DSL line (often referred to as Broadband lines) whilst at the same time enabling normal voice calls to be made over the same line at the same time.

ISP Gateway

Internet **S**ervice **P**rovider Gateway is an interface point where communications which use different protocols (standards) can be interconnected. The Gateway acts as a translation device to translate one protocol to another.

PBX/PABX

Private **B**ranch **E**xchange or **P**rivate **A**utomatic **B**ranch **E**xchange is a term used to signify a telephone exchange that is operated by private business or individual. Such exchanges are common in small and medium business as well as large international corporations. Such exchanges are connected to the outside world via a number of dedicated telephone lines and or equipment to route outgoing and incoming calls via the internet using voice over the internet protocols.

iPBX

Internet **P**rivate **B**ranch **E**xchange are exchanges which operate exclusively via the internet using the voice over internet protocols.

IP Softphone

Internet **P**rotocol Softphone is a software product which enables the audio associated with computers to be used as an IP phone that used the Internet Protocol to communicate –examples of this type of product is Skype.

WiFi Access Point

Modern communication devices often had the functionality to connect via a wireless connection. Such connectivity is done via a wifi access point which is a locally positioned short range transmitter and receiver which in turn is connected via a router or modem to the internet thus enabling wireless communications between devices. In addition to computers wifi is also found in modern mobile handsets/cell phones as well as games consuls. This technology is often used in public spaces such as café's and hotels to provide connection to the internet for users of mobile devices.

Call Divert

A facility available to both mobile and fixed line users of the telephone system to have calls which were directed to one specified subscriber number to be automatically diverted to another subscriber number. This facility is often used to divert calls from a fixed line number to a mobile number when the customer is away from where the fixed line is located or where there may be a fault on the line. This function can be activated via a mobile handset by a customer or via an operator on the customers behalf. The are no warning tones or announcements normally made to indicate a call has been diverted.

Additional information on telecom terminology can be obtained from:

http://www.carrieraccessbilling.com/telecommunications-glossary-a.asp