

Report of the ICN Working Group on Telecommunications Services

APPENDIX IV & V
GLOSSARY & REFERENCES



APPENDIX IV - GLOSSARY³⁰⁶

3G – Third generation mobile communication system. The services associated with 3G provide the ability to transfer both voice data (a telephone call) and non-voice data (such as downloading information, exchanging email and instant messaging).

Bandwidth – the range of frequencies that can pass along a transmission line or other medium. The higher the bandwidth, the greater the amount of information that can be transmitted at the same time.

Base station – a radio transmitter/receiver and antenna used in the mobile cellular network. It maintains communications with cellular telephones within a given cell and transfers mobile traffic to other base stations and the fixed telephone network.

Broadband – broadband communications use transmission media with a large bandwidth such as wireless, coaxial or optical fibre. This allows transmission at higher speeds (*i.e.* bits per second or "bps").

DSL – Digital Subscriber Lines are one of many technologies, which allow high bandwidth services to be carried over a traditional copper twisted pair. The bandwidth achievable usually depends on the length of the copper pair.

Interconnection – the physical connection of telephone networks owned by two different operators in order to allow customers connected to different networks to communicate, to ensure the interoperability of services.

IP – Internet Protocol, a communication standard based on sending data in "packets" of information, which has become widely adopted for both private networks and the public Internet.

IPTV – television broadcast over the Internet in which it requires significant amount of bandwidth.

Last mile – is the transmission path that links end-users or subscribers to the nearest exchange. It may consist of pair of copper wires, but also employ fibre-optic or wireless technologies. The last mile is sometimes referred to as the "local loop".

Local loop – is the transmission path that links end-users or subscribers to the nearest exchange. It may consist of pair of copper wires, but also employ fibre-optic or wireless technologies. The local loop is sometimes referred to as the "last mile".

Local Loop Unbundling – access to the full and exclusive use of the copper pair connected to the customer and/or some form of shared access to the local loop.

³⁰⁶ Many of the definitions have been extracted from: The World Bank, *Telecommunications Regulation Handbook (Appendices)* (Washington: The World Bank, Nov. 2000), Online: http://rru.worldbank.org/Documents/Toolkits/telecom_annexes.pdf

PSTN – Public Switched Telephone Network, the infrastructure of physical switching and transmission facilities that is used to provide the majority of telephone and other telecommunications services to the public.

Roaming – a service allowing cellular subscribers to use their handsets on networks of other operators.

Switch – telecommunications equipment that establishes and routes communications paths between different lines, trunks or other circuits. Switches establish circuits or paths between different end users or between other devices attached to telecommunications networks.

Unbundling – refers to the provision of components on a stand-alone basis. Therefore, interconnecting carriers can obtain access to single unbundled component without an obligation to buy other components as part of an "interconnection package".

Value Added Services – telecommunication services provided over public or private networks which add value to the basic carriage, usually through the application of computerized intelligence, for instance, reservation systems, bulletin boards and information services.

VDSL – Very-High-Rate Digital Subscriber Line, it is similar to DSL but the data transmission rates are much higher and replaces copper lines between switches with optical fibre.

VoIP – Voice over Internet Protocol, works through sending voice information in digital form in packets over broadband, rather than in the traditional circuit-committed protocols of the PSTN.

Wi-Fi – is essentially a fixed-wireless technology that allows the mobile end to connect to the broadband connection over short distances. Many airports, hotels and other services offer public access to Wi-Fi networks (hotspots) so people can log onto the Internet while on the move.

Wi-MAX – Worldwide Interoperability for Microwave Access, is a standards-based wireless technology that provides high-throughput broadband connections over long distances. Wi-MAX can be used for a number of applications, including "last mile" broadband connections, hotspots and cellular backhaul, and high-speed enterprise connectivity for business.

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