

Broadband Glossary

This a non-exhaustive list of relevant terms relevant to broadband.



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#

5G

Fifth generation wireless technology for digital cellular networks

A

Access (to equipment, facilities, services etc.)

The making available of facilities and/or services to another undertaking, under defined conditions, on either an exclusive or non-exclusive basis, for the purpose of providing electronic communications services, including when they are used for the delivery of information society services or broadcast content services. It covers inter alia: access to network elements and associated facilities, which may involve the connection of equipment, by fixed or non-fixed means (in particular this includes access to the local loop and to facilities and services necessary to provide services over the local loop); access to physical infrastructure including buildings, ducts and masts; access to relevant software systems including operational support systems; access to information systems or databases for pre-ordering, provisioning, ordering, maintaining and repair requests, and billing; access to number translation or systems offering equivalent functionality; access to fixed and mobile networks, in particular for roaming; access to conditional access systems for digital television services and access to virtual network services.

ADC - Access Deficit Cost

Cover the gap between tariff and costs - Access deficit arises when the tariff specified for access does not cover the cost of providing access.

ADSL - Asymmetric Digital Subscriber Line

A technology that enables, for example, rapid access to interactive broadband services and video on demand through copper wire used in existing local telephone loop plant, In its "2+" iteration, ADSL supports one-way transmission at bit rates up to 24 Mbps on a single pair of copper wires and enables subscribers to connect to data networks and the Internet at speeds from 50 to 200 times faster than current analogue modems operating at 28.8 Kbps.

ADSS - All Dielectric Self-Supporting cable/h4>

A type of optical fibre cable that is strong enough to support itself between structures without using conductive metal elements. It is used by electrical utility companies as a communications medium.

AN

Access Node

AON - Active Optical Network

A technology for FTTH/FTTB (aka Ethernet point-to-point)

API - Application programme interface

1. API means the software interfaces between applications, made available by broadcasters or service providers, and the resources in the enhanced digital television equipment for digital television and radio services. The API- also known as middleware - is the underlying technical facility for features such as the Electronic Programme Guide, hard disk Personal Video Recorders (PVRs) and any interactive television service, whether enhanced broadcasting carousel-based services derived from teletext or fully interactive services using a return-channel. APIs can be grouped into two types, those which are more intensively computational, based on an execution engine and those which are declarative, based on presentation engines. To date the following APIs have been standardised by a European body, MHEG 5 and the Multimedia Home Platform (MHP). Others are Open TV, Liberate.
2. Application Programming Interface - is a protocol intended to be used as an interface by software components to communicate with each other. An API may include specifications for routines, data structures, object classes, and variables.

Associated facilities

Those associated services, physical infrastructures and other facilities or elements associated with an electronic communications network and/or an electronic communications service which enable and/or support the provision of services via that network and/or service or have the potential to do so, and include, inter alia, buildings or entries to buildings, building wiring, antennae, towers and other supporting constructions, ducts, conduits, masts, manholes, and cabinets.

Associated services

Those services associated with an electronic communications network and/or an electronic communications service which enable and/or support the provision of services via that network and/or service or have the potential to do so and include, inter alia, number translation or systems offering equivalent functionality, conditional access systems and electronic programme guides, as well as other services such as identity, location and presence service.

ASP - Application Service Provider

ATM - Asynchronous Transfer Mode

Broadband transmission technology which provides the backbone of the world's telecommunications network. ATM breaks information flows into small fixed-length cells of 53 bytes. Cells of any type of traffic - voice, multimedia, data or video - can be interspersed with each other. ATM operates at speeds of 25, 155 and 622 Mbps.

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Bandwidth

Bandwidth is the capacity of a network or other communication channel for transferring data, measured in bps.

Backhaul

The middle part of a broadband network, connecting the local access to the core internet network. Technically the link from the cable head to the international switching centre.

Black areas

Areas where at least two competing high capacity broadband network operators are present.

BEREC - Body of European regulators for electronic communications

BEREC and the BEREC Office were created by Regulation 1211/2009 of the European Parliament and of the Council of 25 November 2009 to assist the Commission and the national regulatory authorities (NRAs) in the implementation of the EU regulatory framework for electronic communications, to give advice on request and on its own initiative to the European institutions and to complement at European level the regulatory tasks performed at national level by the regulatory authorities, all in the aim of creating an internal market for electronic communications. BEREC is composed of the 27 NRAs.

Bitstream - A sequence of bits (also known as binary sequence)

Bitstream access

1. A form of non-physical or virtual network access, included in Market 5: Wholesale Broadband Access.
2. A service provided by an incumbent operator whereby a new entrant rents a high-speed access link to the customer.

Broadband

A term applied to high speed telecommunications systems, i.e. those capable of simultaneously supporting multiple information formats such as voice, high-speed data services and video services on demand. The Digital Agenda defines three levels of broadband speeds: 2, 30, and 100 Megabit per second. The European Electronic Communications Code defines the 1 Gigabit per second target.

Broadband Guidelines on State Aid

In 2013, new rules on state aid for broadband were adopted, replacing the 2009 broadband guidelines. The main changes are the need for a step change, i.e. a substantial improvement of broadband coverage as a result of aid, Aid for minor improvements is excluded under strict conditions aid for ultrafast broadband in under-served areas, is eligible. The new rules include a technology-neutral definition for fixed wireless access solutions to fall under the definition of NGA.

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Cable landing right

Refers to the rules that apply to landing a submarine cable in a country.

CAPEX

Capital expenditure

CCN - Content-centric networking

Content-centric networking is a term used to refer to Information-centric networking (ICN). Please see entry on ICN.

ccTLD - country code top-level domain

Is an internet top level domain generally used or reserved for a country (a sovereign state of a dependent territory, e.g. fr .nl).

CDMA - Code-Division Multiple Access

Code-Division Multiple Access is a digital cellular technology that uses spread-spectrum techniques. CDMA does not assign a specific frequency to each user. Instead, every channel uses the full available spectrum. Individual conversations are encoded with a pseudo-random digital sequence. CDMA is a military technology first used during World War II by the English allies to foil German attempts at jamming transmissions. The allies decided to transmit over several frequencies, instead of one, making it difficult for the Germans to pick up the complete signal.

CEF - Connecting Europe Facility

The CEF (Connecting Europe Facility) is the financing instrument for the Trans-European Networks for Transport, Energy and Telecommunications for 2014-2020. CEF Telecom aims at stimulating the deployment and modernisation of broadband networks. The most important instrument for financing broadband deployment within the 2021-2027 Multiannual Financial Framework (MFF) will be the Connecting Europe Facility 2 - Digital (CEF 2 Digital), which promotes strategic projects for the development of digital infrastructures.

CEF-DSI - Connecting Europe Facility-Digital Services Infrastructure

Digital Services Infrastructure (DSI or CEF-DSI) refers to the part of the CEF funding that would support public interest digital service infrastructure such as electronic health records, electronic identification and electronic procurement.

CIP - Critical Infrastructure Protection

The programs, activities and interactions used by owners and operators to protect their critical infrastructure.

Cloud-based software

Cloud-based computing allows users access to software applications that run on shared computing resources via the Internet.

Coaxial Cable

Shielded and insulated copper cable, mainly used by cable TV companies and also for computer networks. Coaxial cable is supposed to minimise interference with electrical and radio transmissions.

COCOM

The Cocom assists the Commission in carrying out its executive powers under the regulatory framework and the regulation on the .eu Top Level Domain. The Cocom exercises its function through advisory and regulatory procedures in accordance with the Council Comitology Decision. Furthermore, the Cocom provides a platform for an exchange of information on market developments and regulatory activities.

Co-location

The provision of physical space and technical facilities necessary to reasonably accommodate and connect the relevant equipment of a beneficiary.

Copper wires

Copper is the electrical conductor used in telecommunications. The DSL technology is based on copper wires. Transmission speeds depend on the lengths and quality of the copper wire from the distribution point to the building.

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Digital divide

The digital divide is the gulf between those parts of the population that have access to the internet and other digital technologies and those sections of the population that do not. There is concern that as so many services (both commercial and governmental) become available online, groups without digital access (caused by, among other things, high cost, lack of skills, location, or a combination of these) will be left behind, and miss out on opportunities in life and in work.

Digital Dividend

The digital dividend refers to the radio spectrum which becomes available as a result of the switchover of terrestrial TV broadcast from analogue to digital technology which uses the spectrum more efficiently. This is a unique and one-off opportunity to boost the capacity for providing new and innovative broadcast and wireless communication services. The first step related to the 800 Mhz (790 MHz to 862 MHz) while a second phase, following the decision of WRC 12 to open the band to mobile communications, would cover the 700 MHz band.

DOCSIS - Data Over Cable System Interface Specification

A cable TV network solution

DSL

Digital Subscriber Line

DSLAMs - Digital subscriber line access multiplexers

A network device, often located in telephone exchanges, that connects multiple customer digital subscriber line (DSL) interfaces to a high-speed digital communications channel using multiplexing techniques. Asymmetric: with faster download speeds than upload speeds. Symmetric: equal download and upload speeds.

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EC

European Commission

F

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Financial Instruments

Financial instruments are loans, guarantees, EU-support to project bonds, or dedicated equity funds. As compared to the traditional grant instrument, financial instruments have the advantage of attracting more additional investment (leverage). For the Connecting Europe Facility (CEF) support to the roll-out of broadband, the Commission envisions to use financial instruments as much as possible.

Fixed wireless

Wireless communication devices or systems used to connect two fixed locations with a radio or other wireless link

FTTB - Fibre To The Building

(typically an MDU), a first-mile infrastructure. Fibre laid all the way to the building.

FTTC - Fibre To The Cabinet

(from which the first-mile connection starts), a local area infrastructure. Fibre laid to the cabinet, with copper wires completing the connection.

FTTH - Fibre To The Home

Technology aiming to replace the technologies xDSL by installing optic fiber to the consumer, where fibre is laid all the way to the home. Less ambitious versions are FTTC (Fibre To The Curb) and FTTB (Fibre To The Building).

FTTX

Broadband network architecture using optical fiber to create a broadband network for the last mile.

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Gbps - Gigabits per second

GDP - Gross domestic product

GPON - Gigabit Passive Optical Network

A shared-access technology for FTTH/FTTB (ITU-T G.984)

GPS - Global Positioning System

Grey areas

Areas with only one high capacity broadband infrastructure or one infrastructure provider in place.

Guide to Broadband Investment

The Guide, first issued by the European Commission in 2011, is aimed at assisting management authorities of EU funds to plan and implement broadband projects financed in the context of EU regional and rural development policies. The guide is structured around seven questions concerning policy, regulatory, investment and technological issues including the pros and cons of five different investment models for efficient and effective public-sector interventions in next-generation broadband access networks.

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HDTV

High-definition television

HFC - Hybrid fibre-coaxial

Combination of optical fibre and coaxial cable.

High-speed broadband

High-speed broadband is a broadband service provided through a Next Generation Network (NGN).

High-speed bit-stream service

A service provided by an incumbent operator whereby a new entrant rents a high-speed access path to the customer. The incumbent provides and maintains the transmission systems (e.g. ADSL modem at the local exchange) needed to provide the access path.

HIPERLAN - High-performance radio local area network

HSPA - High Speed Packet Access

Extension of the UMTS standard allowing for faster data transfer.

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Incumbent operators (incumbents)

Telecommunications organisations granted special and exclusive rights by Member States or public operator(s) which enjoyed a de facto monopoly before liberalisation. A former monopoly that still has a dominant market share.

IoT - Internet of Things

IPTV - Internet Protocol Television

IRU

Indefeasible right of use

ISP - Internet service provider

e.g. a SP delivering Internet service

ITU - International Telecommunication Union

The International Telecommunication Union (ITU) is the United Nations agency for information and communication technology issues, ITU coordinates the shared global use of the radio spectrum, and establishes the worldwide standards that foster interconnection of a vast range of communications systems.

IXP - Internet Exchange Point

The physical infrastructure through which Internet service providers (ISPs) and content delivery networks (CDNs) exchange Internet traffic between their networks.

K

Kbps - Kilobits per second

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Local Loop

The physical twisted copper pair circuit connecting the network termination point at the subscriber's premises to the main distribution frame or equivalent facility in the fixed public telephone network. The local loop may also include optical elements. The physical circuit connecting the network termination point to a distribution frame or equivalent facility in the fixed public electronic communications network.

LLU - Local loop unbundling

A service whereby a telecommunication organisation provides (shared or fully) unbundled access to its local loop to another telecommunications organisation.

Local sub-loop

A partial local loop connecting the network termination point at the subscriber's premises to a concentration point or a specified intermediate access point in the fixed public telephone network.

Long Run Incremental Costs (LRIC)

The costs that are directly associated with the production of a business increment, i.e. the additional cost of supplying a service over and above the situation where the service was not provided, assuming all other production activities remain unchanged. 'Long run' means that all factors of production including capital equipment are variable in response to changes in demand due to changes in the volume or in the structure of production, therefore all investments are considered as variable costs.

The 'bottom-up' LRIC modelling approach develops a cost model starting from the expected demand in terms of subscribers and traffic; it then models the efficient network that is required to meet the expected demand, and assesses the related costs according to a theoretical network-engineering model. The purpose of a bottom-up model is to calculate the cost on the basis of an efficient network using the newest technology employed in large-scale networks. This approach differs from a top-down modelling approach, which is based on the undertaking's accounts. In a hybrid modelling approach, the bottom-up model is refined by looking at the results of the top-down model. It is also possible to check the plausibility of some of the results of the top-down model by using the bottom-up model.

LTE - Long Term Evolution

High performance communication system for cellular mobile phones. Step towards 4th generation, but commonly called 4G (see 4G entry).

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Mbps - Megabits per second

MDU - Multi-dwelling unit

An apartment block

Microtrenching

A technique of deploying cables, e.g. for broadband networks, at a lower cost than by the usual method. A micro trencher is a "small rockwheel" specially designed for work in urban area. It is fitted with a cutting wheel that cuts a microtrench with smaller dimensions than can be achieved with conventional trench digging equipment. The trench dimensions are widths ranging from about 30 mm to 130 mm, and a maximum depth of about 500 mm. Micro trenchers may also be used to install FTTx connections.

Mobile broadband

Mobile broadband is the name used to describe various types of wireless high-speed internet access through a portable modem, telephone or other device. Various network standards may be used, such as WiMAX, UMTS/HSPA, EV-DO and some portable satellite-based systems.

MSS - Mobile satellite services

MSS allow communications between satellites and mobile terrestrial equipment. Their use can range from high-speed internet access to mobile television and radio and emergency communications. Mobile satellite services cover a large part of the EU's territory, thereby reaching millions of EU citizens across borders. They can ensure access for all Europeans to new communication services, not only in metropolitan areas, but also in rural and less populated regions.

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Net Neutrality

Network neutrality is the principle that all electronic communication passing through a network is treated equally. That all communication is treated equally means that it is treated independent of (i) content, (ii) application, (iii) service, (iv) device, (v) sender address and (vi) receiver address. Under the reformed Telecom Rules, national telecoms regulatory authorities will, in particular, be required to promote "the ability of end-users to access and distribute information or run applications of their choice". This will contribute to strengthening the "neutral character" of the internet in Europe.

NGA - Next Generation Access

Access networks which consist wholly or in part of optical elements and which are capable of delivering broadband access services with enhanced characteristics (such as higher throughput) as

compared to those provided over already existing copper networks. In most cases, NGA is the result of an upgrade of an already existing copper or co-axial access network.

NGN - Next Generation Network

Where one network transports all information and services (voice, data, and media such as video) by encapsulating these into IP packets, similar to those used on the Internet

NIS - Network and Information Security

Ability of a network or an information system to resist, at a given level of confidence, accidental events or malicious actions. Such events or actions could compromise the availability, authenticity, integrity and confidentiality of stored or transmitted data as well as related services offered via these networks and systems.

Non-discrimination

In relation to interconnection and/or access, an obligation of non-discrimination ensures that an operator applies equivalent conditions in equivalent circumstances to other undertakings providing equivalent services, and provides services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries or partners.

NP - Network Provider

Operates the active equipment and delivers SP's services to the end-users

NRP - National Regulatory Authority

The body or bodies charged by a Member State with any of the regulatory tasks assigned in the Regulatory framework for telecommunications.

NTP - Network termination point

The physical point at which a subscriber is provided with access to a public communications network; in the case of networks involving switching or routing, the NTP is identified by means of a specific network address, which may be linked to a subscriber number or name.

O

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OBA

On line behavioural advertising (OBA) uses tracking cookies. Hence, pursuant to EU privacy laws such practices must comply with the requirement to obtain users' consent. DG CONNECT is facilitating stakeholder discussion on a proposed self-regulation on online behavioural advertising which should provide transparent, consent based, user-friendly mechanisms with effective enforcement. Stakeholders involved include advertising associations, ICT industry and associations and consumer representatives.

Open access network

Where the owner or manager of the network does not supply services for the network. These services must be supplied by separate retail service providers.

Operator

Is an undertaking providing or authorised to provide a public communications network or an associated facility

OPEX

Operational expenditure

Optical Fibre

An optical fiber is a fiber made of glass or plastic allowing the transmission of information over light over long distances with very high data rates.

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PA

Public authority

P2P - Peer to Peer Network

In a peer to peer (or P2P) computer network participants are connected with each other, whereby the cumulative bandwidth of network participants is used. P2P networks are typically used for connecting nodes via ad hoc connections. A pure P2P network does not have the notion of clients or servers but only equal peer nodes that simultaneously function as both "clients" and "servers" to the other nodes on the network. Such networks are widely used for sharing content files such as software, audio, video, data or anything in digital format. Real-time data, such as telephony traffic or IPTV, is also passed using P2P technology. The technology itself is legal and applied increasingly in various business models. However, it has also been used for copyright infringements and the dissemination of child sexual abuse images (illegal file sharing).

Parallel computing

In parallel computing a is split into smaller programmes to be executed in different processors at the same time. This is a way to speed-up the execution of computational tasks and is very useful for complex problems requiring high-intensity processing.

PIP - Physical infrastructure provider

Owns and operates the passive infrastructure

POP - Point of presence

POP mainly refers to an access point, location or facility that connects to the Internet and helps other devices establish a connection with the Internet.

PLC - Power Line Communications

Power line communication carries data on a conductor that is also used simultaneously for AC electric power transmission or electric power distribution to consumers. A wide range of power line communication technologies are needed for different applications, ranging from home automation to Internet access.

PON - Passive optical network

A shared-access technology for FTTH/FTTB

Provision of an electronic communications network

The establishment, operation, control or making available of such a network.

PSTN

Public Switched Telephone Network

Public communications network

An electronic communications network used wholly or mainly for the provision of publicly available electronic communications services.

Publicly available telephone service

A service available to the public for originating and receiving national and international calls and access to emergency services through a number or numbers in a national or international telephone numbering plan, and in addition may, where relevant, include one or more of the following services: the provision of operator assistance, directory enquiry services, directories, provision of public pay phones, provision of service under special terms, provision of special facilities for customers with disabilities or with special social needs and/or the provision of non-geographic services.

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RAB - Regulatory Asset Base

The total capital value of the assets used to calculate the costs of the regulated services.

Radio Spectrum

Part of the electromagnetic spectrum corresponding to radio frequencies. For the purpose of the Spectrum Decision, it includes radio waves in frequencies between 9 kHz and 3000 GHz; radio waves

are electromagnetic waves propagated in space without artificial guide.

Radio Spectrum Policy Programme

The envisaged multiannual programme, to be adopted in co-decision, to provide strategic orientations for spectrum policy in the EU.

Related facilities

The facilities associated with the provision of unbundled access to the local loop, notably collocation, cable connections and relevant information technology systems, access to which is necessary for a beneficiary to provide services on a competitive and fair basis.

RFID - Radio Frequency Identification

Radio frequency identification (RFID) is a generic term that is used to describe a system that transmits the identity (in the form of a unique serial number) of an object or person wirelessly, using radio waves. RFID belongs to the broad category of automatic identification technologies. It is in use all around us – for shopping (e.g. tagging of groceries), driving a car (e.g. speeding up transactions on the road), public transport ticketing (e.g. RFID-enabled smart cards in trains and buses, fighting against fraud and/or providing value-added services to travellers), leisure (e.g. secure access and payments in parks, zoos, stadiums, bars/clubs), going to work (e.g. secure access, time registration, evacuation management), crossing borders (e.g. tracking luggage, e-passport), healthcare (e.g. more efficient management, more secure care).

Unlike ubiquitous UPC bar-code technology, RFID technology does not require contact or line of sight for communication.

Rights of way

Rights to install facilities on, over or under public or private property to an undertaking authorised to provide electronic communications networks whether public or not.

Roaming

In wireless telecommunications, roaming is a general term that refers to the extending of connectivity service in a location that is different from the home location where the service was registered. Regulation on roaming charges in the European Union is a part of policy of the EU promoting competition, safeguarding consumer interests and enhancing digital single market. The current roaming rules aim at increasing competition in the roaming market by structural remedies such as enabling consumers to buy roaming services separately from domestic mobile services and providing in the meantime safeguards to consumers in the form of prices caps within European Union and European Economic Area member states.

RoW

Right of Way

RSC - Radio Spectrum Committee

Comitology committee established under the 2002 Radio Spectrum Decision for the technical harmonisation of spectrum. The European Conference of Postal and Telecommunications Administrations (CEPT) provides technical advice for the work of the committee.

RSPG - Radio Spectrum Policy Group

An advisory body composed of High Level officials from the Member States responsible for radio spectrum policy created by the Commission. Advises the Commission (and, following the entry into force of the new regulatory framework, may provide reports and opinions to Parliament and Council) on strategic issues concerning radio spectrum policy.

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Service neutrality

The concept introduced in the regulatory framework that it is the user of radio spectrum that decides on the electronic communications service that they provide. Exceptions to this have to be justified as necessary for the fulfilment of a general interest objective.

Service providers

Operators who provide public telecommunications services at large using a third party's (fixed or wireless) network, excluding fixed voice telephony service providers that do not provide voice telephony within the meaning of Community law, such as simple resellers, calling card service providers and call back operators.

Shared access to the local loop

The provision to a beneficiary of access to the local loop or local sub loop of the notified operator, authorising the use of the non-voice band frequency spectrum of the twisted metallic pair; the local loop continues to be used by the notified operator to provide the telephone service to the public.

SLA - Service Level Agreement

SMP

Significant market power

SP - Service Provider

Sells services (e.g. Internet, TV, telephony, etc.) to the end user

Spectrum allocation

The designation of a given frequency band for use by one or more types of radio communications services, where appropriate, under specific conditions.

Splicing - A method of joining two fiber optic cables

State aid to public service broadcasting

The application of State aid rules to public service broadcasting has to take into account a wide

number of different elements. The Commission adopted Directive 80/723/EEC of 25 June 1980 on the transparency of financial relations between Member States and public undertakings as well as on financial transparency within certain undertakings. These rules are interpreted by the Court of Justice and the Court of First Instance. The Commission Communication on the application of State aid rules to public service broadcasting sets out the principles to be followed by the Commission in the application of the relevant Articles in the EC Treaty to State funding of public service broadcasting.

Subscriber

Any natural person or legal entity who or which is a party to a contract with the provider of publicly available electronic communications services for the supply of such services

Symmetrical - A connection with equal download and upload speeds

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Take-up - The percentage of households having a broadband subscription compared to the total number of households

Territorialisation of State aid

Some Member States require film producers receiving State aid to spend a specific proportion of the aid received or of the film budget in the territory of the supporting country. Under the Cinema Communication, the producer must be free to spend at least 20% of the film budget in other Member States without suffering any reduction in the aid provided for under the scheme. In other words, the Commission has until now accepted as an eligibility criteria territorialisation in terms of expenditure of up to 80% of the production budget of an aided film or TV work.

Traffic data

Any data processed for the purpose of the conveyance of a communication on an electronic communications network or for the billing thereof. According to the means of communication used, the data needed to convey the communication will vary, but may typically include contact details, time and location data. Although such traffic data are to be distinguished from content data, both are quite sensitive as they give insight into confidential communications.

Trans-national markets

Markets identified in accordance with Article 15(4) of the Framework Directive covering the Community or a substantial part thereof located in more than one Member State.

Triple play

A marketing term for the provision of broadband Internet access, television and telephone over a single broadband connection. A triple-play network is one in which voice, video and data are all provided in a single access subscription. Quadruple play also contains provision of mobile service.

U

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Unbundled access to the local loop

Full unbundled access to the local loop and shared access to the local loop; it does not entail a change in ownership of the local loop.

Undertakings

Market players players; for instance a connection to the public telephone network and access to publicly available telephone services at a fixed location enabling voice and data communications services (including also broadband if so determined at the national level like done so far in FI, MT, ES), comprehensive directory and directory enquiry service, availability of public payphones (operators, providers etc.) as defined under EU law.

Universal Service

The minimum set of services, defined in the Universal Service Directive, of specified quality which is available to all users regardless of their geographical location and, in the light of specific national conditions, at an affordable price.

USO - Universal Service Obligation

The provision of a defined minimum set of services to all end-users at an affordable price; for instance a connection to the public telephone network and access to publicly available telephone services at a fixed location enabling voice and data communications services (including also broadband if so determined at the national level like done so far in FI, MT, ES), comprehensive directory and directory enquiry service, availability of public payphones.

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Value-added service

Any service which requires the processing of traffic data or location data other than traffic data beyond what is necessary for the transmission of a communication or the billing thereof.

VDSL

Very-high bit-rate Digital Subscriber Line

Very high capacity (VHC) broadband:

These connections boast speeds of at least 1 Gbps. They normally require fibre connections to the home or to the building (FTTH/B). The European Commission sets the target for 2025 to reach all main socio-economic drivers with VHC broadband. Connections to households should be upgradable to VHC broadband too.

VoIP - Voice over Internet Protocol

A technology used for transmitting standard telephone calls over the Internet using packet-linked routes, from any device, including mobile and fixed line phones.

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Wave division multiplexing

It is the technique of passing multiple frequencies (wavelength and colours) of light simultaneously across a single fibre, thereby increasing the capacity of installed fibre infrastructure.

WCDMA

Short for wideband CDMA, a high-speed 3G mobile wireless technology with the capacity to offer higher data speeds than CDMA. WCDMA can reach speeds of up to 2 Mbps for voice, video, data and image transmission. WCDMA was adopted as a standard by the ITU under the name "IMT-2000 direct spread."

White areas

Areas where no high capacity broadband infrastructure exists.

WiMAX - Worldwide Interoperability for Microwave Access

International standards for high speed/high bandwidth services over wireless networks, often connecting to the mainstream fixed telecommunications networks.

WLL

Wireless local loop: a wireless connection between a telephone exchange and the subscriber's telephone.

X

xDSL

A collective term for all types of digital subscriber lines, including asymmetric digital subscriber line (ADSL), symmetric digital subscriber line (SDSL) and high-data-rate digital subscriber line (HDSL).

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Related Content

Big Picture

Support for Broadband rollout

Increasing broadband network coverage is key for reaching the EU's Gigabit Society objectives. EU businesses, project managers, as well as local and regional authorities can find information on broadband best practices, financing tools, technological and business solutions, as...

See Also

Broadband in EU countries

Find current information on broadband development in each country, as well as national strategies and policies for developing broadband.

European Broadband Awards: broadband deployment projects

The European Broadband Awards is an event that recognises outstanding broadband deployment projects in Europe and highlights successful infrastructures.

EU rules to reduce cost of high-speed broadband deployment

To make high-speed broadband quickly available, the EU established a set of harmonised measures to lower the cost of rolling out broadband, through the Broadband Cost Reduction Directive.

Broadband project planning

The Broadband planning section, along with the Broadband investment guide aids municipalities and other entities in their planning of successful broadband development projects.

Broadband Competence Offices (BCOs) Network

The European Broadband Competence Offices Network supports EU countries in reaching the Gigabit society objectives and rolling out broadband.

Source URL: <https://digital-strategy.ec.europa.eu/policies/broadband-glossary>