

Glossary of terms and acronyms

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A

ADSL 2+ (Asymmetric Digital Subscriber Line)

A more advanced and modern type of ADSL technology, which allows, among other things, to accelerate the data transmission speed to up to 24 Mbps. 6–16 Mbps is the optimum actual speed for the majority of households.

Android

An operating system by Google for smartphones.

Asymmetric transmission

Data transmission with different uplink and downlink speeds.

B

Base station

Base Transceiver Station (BTS) provides for radio connection with a mobile telephone. It typically supports several transceivers (TRX), each covering a specific area with radio signal.

BlackBerry

A technology for easy and safe access to email, calendar and data. Runs specifically on mobile devices by Research In Motion (RIM) from Canada.

Bluetooth

A technology of wireless device-to-device communication – e.g. mobile telephone and hands-free set, PDA and PC, etc. A mobile telephone with Bluetooth can communicate with other devices over a range of up to 100 metres, depending on the Bluetooth version used.

BPIN

Bank PIN (security code) is distributed together with the SIM card in the scratch field.

BTS (Base Transceiver Station)

BTS relays signal to mobile telephones.

Business Partner

A point of sale with a full range of mobile telephones and accessories, where a trained sales associate will help you with selection, activation and change requests.

C

Call redirection

A network function that allows for an incoming call to be redirected to any other receiving line, or to voice mail.

CAMEL (Customised Applications for Mobile networks Enhanced Logic)

A technology for direct communication between the roaming partner's and home network during the connecting of a call placed by a prepaid customer. The roaming partner's network can thus check the level of credit in the home network and connect the call accordingly.

CDMA (Code Division Multiple Access)

A digital transmission technology. Coded information is transmitted to several receivers at the same time within the same frequency band. Individual receivers use a dedicated decoding key to decode the data flow, and process only data meant for the receiver; other ('foreign') data is ignored.

Cell

A territory covered with a mobile telephone signal from a transceiver mounted on a BTS. One BTS can support several transceivers for several cells. In an open terrain, one cell may be 35 kilometres in diameter, however in an urban landscape, one cell may only cover one street.

Cellular network

A mobile network. An area covered with signal is split into smaller areas (cells) covered with individual BTS. A mobile telephone network typically consists of several thousands of cells.

CLIP (Calling Line Identification Presentation)

Caller identification.

CONEX

A direct connection of the O2 mobile telephone network centre with the local (company) PBX (Private Branch Exchange). This turns mobile telephones and the company telephone system into an integrated communication system that saves costs on calls between company branch lines and company mobile telephones.

Conference call

A mobile network service that allows a multi-party call.

CZK 100 discount on the postpaid tariff

If you subscribe to an O2 NEON tariff or O2 Business tariff and you activate O2 Internet, you get a discount of CZK 100 per month on your O2 NEON or O2 Business tariff. All you need to do is to enter your number associated with the O2 NEON tariff at the check-out in our e-shop. To take advantage of this offer, both services (O2 Internet and the mobile tariff) must be subscribed for the same duration of time.

D

DCS 1800 MHz

A standard for GSM mobile telephone networks. The main difference is that the network uses the 1,800 MHz frequency, which has a better quality signal compared to the normal 900 MHz. Both GSM standards are used in the Czech Republic (900 MHz and 1,800 MHz). Such networks are called 'dual'.

DECT (Digital Enhanced Cordless Telecommunication)

A wireless digital technology connecting a telephone receiver with the base. It allows unmitigated movement within the range of the radio signal (typically 300 metres in open spaces and 50 metres indoors). Another solution achieving a similar effect is to install a wireless Private Branch Exchange that can support more receivers from one base.

Device blocking

To increase security, some devices can be restricted for use with the help of a special security code; the code is selected on the device (unlike PIN and PUK codes that are stored on the SIM card). Please consult the manual of your device on the use of the security code in the model you have.

E

EDGE

A technology for fast mobile data transmission. EDGE deployed in combination with the packet service (GPRS) can give a speed of up to 384 kbps. The telephone or modem must be EDGE-enabled to take advantage of the technology.

EFR (Enhanced Full Rate)

An improved sound coding in the GSM network, with the quality of voice nearing that of a CD player. Good signal quality is required.

F

FUP (Fair User Policy)

A service that protects regular users from the consequences of network overuse by heavy users. FUP gradually slows down the transmission speed to those users who use too much bandwidth, especially by downloading large volumes of data for too long a time.

G

Gateway

A device which acts as an interface between two different networks (e.g. mobile – internet; fixed access – mobile access, etc.)

GPRS (General Packet Radio Service)

A mobile data transmission technology. The transmitted data is divided into chunks, which are called packets. The destination address is attached to each such packet. Depending on the current network capacity, packets are transmitted to the terminal device, in which they are reassembled into the original data sequence. The terminal device (mobile telephone, modem) is connected permanently, but the transmission capacity of the network is used only when it receives or sends packets of data. The data transmission is charged based on the volume of data transmitted – not based on the duration of connection.

GPS

The GPS (Global Positioning System) allows for seeing the position of a device within a range of few metres. It is used mainly for satellite navigation and is now a standard feature of most smartphones.

GSM (Global System for Mobile Communication)

An acronym derived from the standard for mobile communication. GSM networks are often called second generation networks. They offer SMS, roaming, caller identification, call redirection, fax service, data, etc.

H

Hands-free

A device that allows hands-free calling from a mobile telephone.

HSCSD (High Speed Circuit Switched Data)

A technology used for data transmission in mobile GSM telephone networks which uses the so-called circuit switching. It uses multiple timeslots at the same time, which gives the mobile data transmission the much called-for speed. Available terminals use up to 4 timeslots and give a transmission speed of up to 43.2 kbps.

HSDPA (High-Speed Downlink Packet Access)

A technology in 3rd generation mobile networks (UMTS) that improves the data download speed to up to 14.4 Mbps. It is the most advanced technology of its kind used in the Czech Republic.

HSUPA (High-Speed Uplink Packet Access)

A technology in 3rd generation mobile networks (UMTS) that improves the data upload speed to up to 5.76 Mbps. It is the most advanced technology of its kind used in the Czech Republic.

I

IMEI

A fifteen-digit numerical sequence that carries coded information about the type and serial number of the device. IMEI is typically found on the back side of the telephone in the battery slot; alternately, it can be recalled to the device display by entering the code *#06#.

Intelligent Call Assistant (ICA)

Intelligent Call Assistant (ICA) allows calls from customers of other operators roaming our network to connect even if the number is dialled in the wrong format: common mistakes is dialling without an international dialling prefix, with one extra zero in the international dialling prefix (especially UK customers), using * instead of + in front of the international dialling prefix, etc. The system uses algorithms to correct the called number while respecting the numbering plan of the country. Calls that would not be connected otherwise due to an erroneous format (as before the service deployment) are redirected to ICA. Calls dialled connected are put through as usual and bypass ICA.

IPv6

A new generation of IP address which is 128 bits long. It is set to replace IPv4 which uses only 32 bits, which limits the number of available addresses; the available pool of unused addresses is almost exhausted. IPv6 will increase the number of addresses by several orders.

IrDA

A communication interface for mobile telephones and computers. Infrared radiation allows them to communicate with other devices within the range of direct visibility.

J

Java

A programming language. Applications (software, games...) in Java can be run on a mobile device (if the device supports Java script).

L

Li-Ion

A lithium-ion battery that is used to power wireless communication devices. Li-Ion batteries are lighter than older types of batteries, are relatively long-life and do not require full depletion – so they can be recharged any time.

Line

The basic technology for ADSL fixed internet access, O2 TV or calling from home via the O2 telephone network.

LTE

LTE (3GPP Long Term Evolution) is a fast mobile internet technology. It is formally classified as 3G, while its successor – LTE Advanced – will be a fully-fledged fourth-generation solution (4G). The theoretical downlink speed and uplink speed is 300 Mbps and 75 Mbps, respectively.

M

MMS

MMS (Multimedia Messaging Service) allows mobile telephones to send and receive not only text but also photographs and short videos. It is an improvement on SMS, which supports only text messages.

N

Network monitoring centre

A non-stop operation with a team of specialists that monitor the functions of all parts of the national data network. Any technical problems that may arise are dealt with remotely by the NMC team or engineers are despatched to the site. The O2 NMC centre is among the most modern in Europe.

NFC

NFC (Near Field Communication) is a technology for wireless communication between electronic devices over short distances; the standard specifies a maximum range of 20 cm, in reality it is more like 2–6 cm. The technology builds and improves on the standard ISO/IEC 14443 (contact-free cards, RFID), which combines the interface of the microchip Smartcards and of a wireless communication device. NFC is expected to propel the boom of mobile payments. Telefónica Czech Republic is a pioneer of NFC in the Czech Republic. Together with the City Transport Company in Pilsen (PMDP), Telefónica Czech Republic came out with 'Pilsen Card', an NFC application for mobile phones already in 2009.

NiCd

A nickel-cadmium battery is a long-life rechargeable battery that typically lasts up to 700 charging cycles (charge and deplete). If the battery is not fully depleted before recharging, the so-called memory effect can reduce its useful life.

NiMH

A nickel-metal hydride is an accumulator battery that holds more energy than NiCd batteries and has less of the memory effect (the need to fully deplete the battery to prevent the shortening of its life). It is typically more expensive than Ni-Cd batteries.

Node B

A UMTS base station – similar to BTS in the GSM network – provides for communication between the mobile network and a mobile telephone or another device using radio frequencies.

O**OLED (Organic Light-emitting Diode) display**

A new generation display with excellent technical parameters: more than 16 million colours, a wide viewing angle, the image is high clarity and high contrast with extremely sharp rendering. It is very energy efficient and requires low operating voltage.

OTA

OTA (Over the air) is used for service activation and changes to services without the need to connect the device to a computer. Hardware manufacturers can thus offer users remote updates of the operating software.

P**PAC ID**

An identification number that precisely guides a number porting request between operators. The sequence has eleven characters.

PBX (Private Branch Exchange)

A solution of inter-company telecommunications. PBX supports a maximum of 100,000 subscriber units. Different PBX rely on different technology and also differ in the number of branch lines they support.

PDA (Personal Digital Assistant)

A pocket computer combining the functionality of a mobile telephone and a personal computer.

PIN (Personal Identification Number)

A numerical security code. It is used, for instance, to protect the SIM card from unauthorised use. In this case you were given it when you purchased your SIM card. If a wrong PIN is entered three times in a row, the SIM card is blocked and can be unblocked by using the PUK code.

PPPoA / PPPoE

PPPoA / PPPoE is a type of protocol that facilitates data transmission in the internet network. The older type of PPPoA does not support new trends and technologies and fast internet. PPPoE is the current standard in most European countries and supports faster internet and digital television broadcasting.

Prepaid services

A popular method of using telecommunications services; the customer does not commit to the operator in a written contract. Mobile services are paid for through prepaid credit. The credit is charged depending on the service used (calling, SMS, MMS, internet access, etc.). When the credit runs out, it must be topped up to ensure the continuation of service.

Pricing of O2 NEON tariffs

If you are subscribed to O2 NEON and choose O2 Internet for CZK 600 per month, you are eligible for a discount of CZK 100 per month on your O2 NEON subscription. All you need to do is to enter your number associated with the O2 NEON tariff at the check-out in our e-shop. To take advantage of this offer, both services (O2 Internet and O2 NEON) must be subscribed for the same duration of time.

PUK

An eight-digit numerical security code that will unblock a SIM card after previous repeated failed attempts to enter PIN. If PUK is entered incorrectly 10 times, the SIM card is blocked for good and its holder must seek professional assistance in the operator's brand store.

R

Roaming

A function in the GSM mobile network that allows for a mobile telephone to be used in GSM networks of other operators abroad. Roaming services are billed based on inter-operator roaming agreements.

S

Sales Office

A team of certified sales representatives who will see customers in their own offices or in your company.

SAR

SAR (Specific Absorption Rate) is the energy absorbed by a body exposed to the radiofrequency field. Its unit is W/kg, which is the absorption rate per 1 kilogram of weight. The limit in Europe is max. 2.0 W/kg for the head and the torso.

Set-top-box

A device that receives digital broadcasting signal and converts it into images on the connected television set. In addition to channel switching it supports many other functions.

SIM card

A card with a chip containing identification information – the operator's network, phone number, activated services, billing, credit, etc. Mobile telephones require a SIM card to be inserted before they can connect to the network. The SIM card is protected using the PIN security code. SIM cards have a built-in (very small) memory for storing telephone numbers or SMS received.

SIM card blocking

A SIM card can be blocked by the user or by the operator. A user can block a SIM card if they enter a wrong PIN code three times. Unblocking is possible only with the so-called PUK code. If a wrong PUK code is entered, the SIM card is blocked for good. An operator will block a SIM card (access for the SIM card to the network) in the event of a breach of the contract or on request of the user (e.g. in the case of theft).

SLA

SLA (service level agreement) is an agreement to deliver in a certain quality; sanctions apply when it is breached.

SMS centre

An exchange for despatching short text messages. If the recipient's mobile device is off the network, the message is stored in the network's SMS centre for limited time.

Splitter

A device that splits data traffic from voice traffic in a single fixed telephone line.

Symbian

An open-source operating system by Nokia for mobile devices; it supports a wide range of smartphone applications.

T**Tablet**

A portable computer with a touchscreen display, typically 7–10 inches in diameter. iPad from Apple became the first tablet to conquer the mass market; it was followed by a number of other devices, with the Android operating system from Google for the most part. Tablets can be equipped with a built-in 3G module to stay online also in areas without WiFi coverage.

TDMA (Time Division Multiple Access)

A technology used to carry multiple calls in the GSM network. One transmission frequency is shared by several calls based on time division. Each mobile telephone sharing the frequency is assigned a short window within which it receives or transmits on the frequency. The devices alternated in sending/receiving very fast. The sequence of those short windows creates a timeslot during which the mobile telephone communicates with the mobile network's base station and vice versa.

Telematics

Telematics allows for a mobile connection to be used to collect data to be processed later. It is used, among other things, to monitor the movement of vehicles.

TFT (Thin Film Transistor) display

A type of display made of great many small transistors, each controlling a single pixel. This construction gives a very good quality image as it prevents shadows caused by display movement, and has a contrast of up to 100:1, which is ideal for fast animation. Its energy efficiency and thinness compared to older model add to its advantages.

Timeslot

A transmission channel between a mobile device and a base station in the mobile network, which is made up of quickly alternating and sequenced time windows of receiving/transmitting on a given frequency. A GSM frequency can support 8 timeslots. Mobile data transmission technologies (HSCSD and GPRS) allow using several timeslots simultaneously.

U**UMTS (Universal Mobile Telephony Standard)**

The so-called 3rd generation (3G) mobile telecommunication network, which allows data transmission at a speed of up to 42 Mbps.

USSD (Unstructured Supplementary Service Data)

This technology allows operators to provide specific services, such as seeing the amount of credit when calling from abroad, call redirection, etc. Special prefixes activate specific services in the network.

V**VDSL**

VDSL (Very High Speed DSL) is a technology for faster data transmission in the existing telephone network. Customer who are within 1.3 km range from the exchange, i.e. approximately a half of all Czech households, can make use of the benefits the technology brings. The high transmission speeds that VDSL offers (up to 25 Mbps downlink and 2 Mbps uplink) are ideal for new applications and the simultaneous running of O2 TV digital television and multiple internet connections at home.

Video Library

The Video Library gives O2 TV customers the option to select and buy programmes via their television screen. Video Library is a virtual video rental directly in your television.

Voice-enabled searching

The search item does not need to be written into the search engine field – saying it is sufficient.

VOIP (Voice over IP)

A call of which a part is carried via the internet. The voice is converted into a data sequence and it is carried via broadband internet lines. Unlike a normal call when the call engages the whole line for its duration, internet telephony can run simultaneously with regular data transmission or other calls.

VPN (Virtual Private Network)

A Virtual Private Network allows for communication between remote devices as if they were in one local network. The service connects all mobile telephones of a company into one virtual network connected to a PBX. Calling between mobile telephones in the virtual network can be done with only short format numbers and user privileges can be configured, as in the case of PBX. The calls within VPN are also charged at very low rates.

W

WAP (Wireless Application Protocol)

A data format for viewing special versions of websites on mobile phone displays. WAP is not so widely used any more as smartphones can display websites in a similar structure and detail as we know from a PC.

WiFi

A wireless network technology that allows the device to be online in the vicinity of the access point. WiFi wireless networks are easy to set up at home, to benefit from your ADSL/VDSL connection on all your household devices – PCs, tablets and WiFi-enabled mobile phones. The network operates in an unlicensed band on the 802.11 standard. O2 offers the so-called HotSpots service for internet access for PCs and mobile phones (enabled for this service).

WiFi modem

A device that is needed to connect a computer (or a computer network) to the internet via the ADSL technology. The WiFi modem is connected to the telephone line and covers the near range with a wireless network, so that multiple computers or other devices can be online simultaneously.