

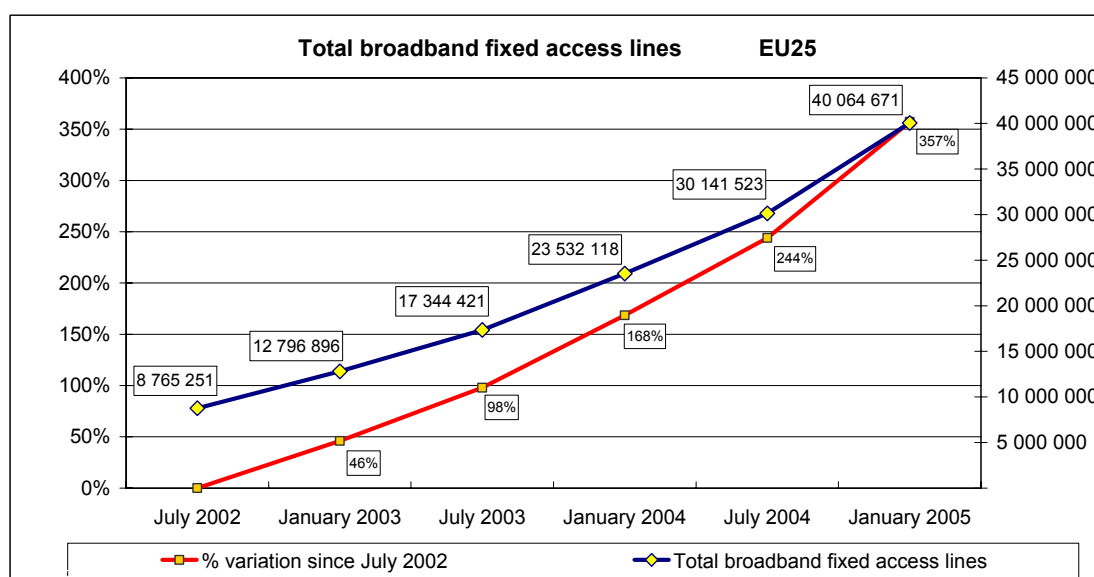
Brussels, 1 June 2005

Broadband access in the EU: situation at 1 January 2005

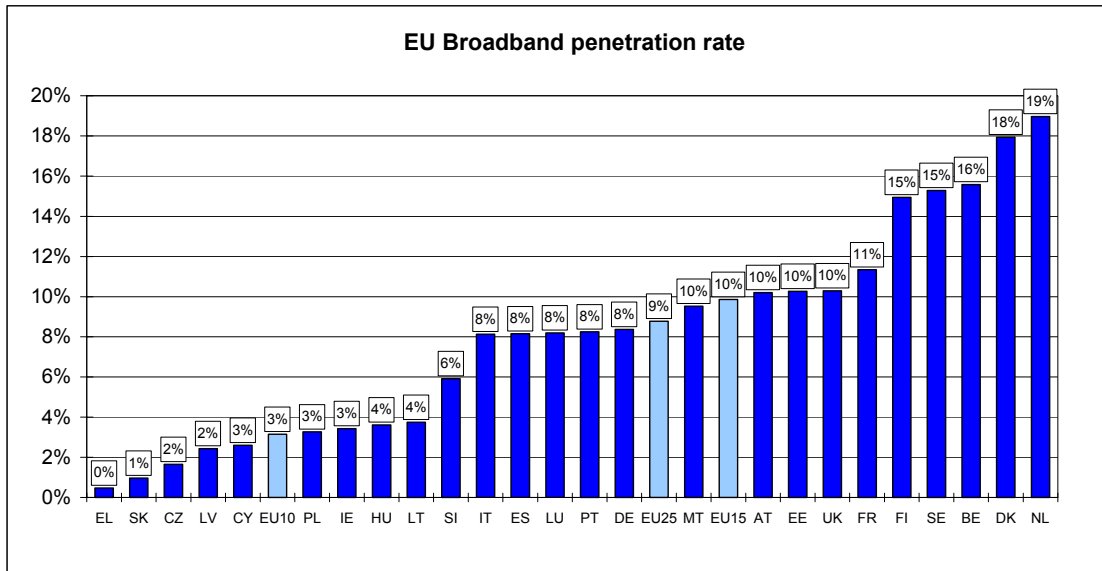
Broadband Internet access can be provided by different means: digital subscriber line (DSL), wireless local loop, (WLL), cable TV access (cable modem), dedicated leased lines and other access technologies (satellite, optical fibre, powerline communications).

DSL has increased its importance as the predominant technology and now represents almost 80% of all broadband lines, with cable modem accounting for most of the balance.

The number of broadband lines in the EU is now over 40 million and take-up is growing faster than a year ago. In fact broadband take-up is growing faster than any previous new service (e.g. mobile) across the OECD.

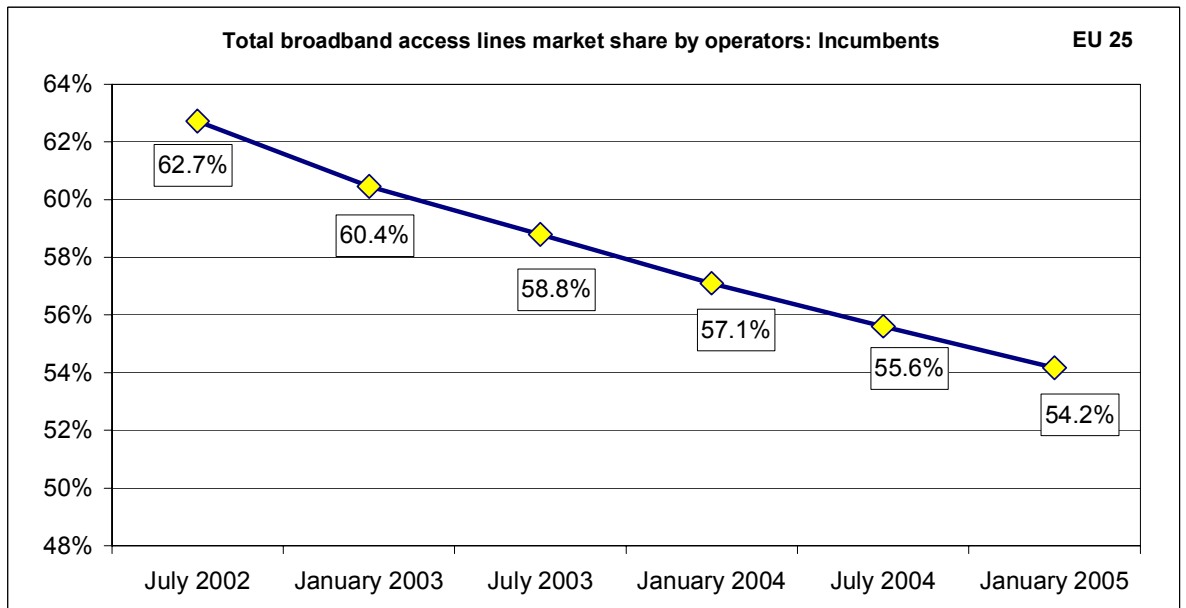


Increased investment in infrastructure by new entrants is reflected in the increase in the number of DSL lines provided using unbundled local loops (shared access).



In January 2004 only 4 countries (Denmark, Belgium, the Netherlands and Sweden) had a penetration rate higher than 10%. A year later, these four countries are still ahead but the Netherlands is now on top, followed by Denmark and Belgium.

There are differences in the growth of the take-up rate. The Netherlands experienced growth in excess of 7% percentage points, whereas in Belgium and Sweden the growth was around 4%. The UK and France have practically doubled the number of broadband lines in one year and are now above the EU15 average.



New entrants are gaining market share. Incumbent operators provide 54.2% of all broadband access lines.

Incumbent operators provided 66% of all DSL lines, down from 81% in 2003 and 74% in January 2004.

What is broadband?

Broadband is not simply a faster way to connect to the Internet - it fundamentally changes the way people use the internet. Connections are immediate and large volumes of data can be transmitted almost instantly. The Internet's overall presentation changes, moving from slow, and often user-unfriendly text format, to a fast, colourful stream combining still images, video, animations and sound.

Broadband capacity is defined as equal to or higher than 144Kb/s. However in reality the vast majority of broadband offerings are at least 512Kb/s and often exceed this, with speeds of 2Mb/s and above now quite common.

Broadband 'take-up' or 'penetration' is measured as the number of lines per 100 of population.

What is DSL?

Stands for "Digital Subscriber Line." It is a medium for transferring data over normal phone lines and can be used to connect to the Internet. However, like a cable modem, a DSL circuit is much faster than a regular phone connection, even though the wires it uses are copper like a typical phone line. xDSL refers to different variations of DSL, such as ADSL (asymmetric DSL) and VDSL (very high speed DSL).

What is a cable modem?

A cable modem is a device that enables you to link your PC to a local cable TV line and receive data at similar speeds to DSL.

What is wireless local loop (WLL)?

WLL is a system that connects subscribers to the public switched telephone network (PSTN) using radio signals as a substitute for copper for all or part of the connection between the subscriber and the switch.

What is a leased line?

A leased line is a telephone line that has been leased for private use. In some contexts, it's called a *dedicated* line. They are generally used by companies and can carry data at broadband speeds.

What is fibre optic cable?

A technology that uses glass (or plastic) threads (fibres) to transmit data. A fibre optic cable consists of a bundle of glass threads, each of which is capable of transmitting messages modulated into light waves. Fibre optics has several advantages over traditional metal communications lines including much greater bandwidth.

What is power line communications?

Using electric power supply lines to offer high speed internet access.

What is local loop unbundling?

This can take two forms:

- Fully unbundled lines: Access lines supplied by incumbent players to other operators. In the case of full unbundling, a copper pair is rented to a third party for its exclusive use.
- Shared access lines: The incumbent continues to provide telephony service, while the new entrant delivers high-speed data services over that same local loop.