

Getting connected 3 | What is broadband?

This article answers some frequently-asked questions about broadband internet access.

Broadband provides high speed Internet access. There are different ways of accessing the Internet using a broadband connection. Most people use a connection via their existing telephone or cable line. However, broadband is also available using other technologies including radio, satellite and power lines.

Broadband services are 'always-on'. This means there's no need to dial up to the Internet or log off once you've finished surfing. So your e-mails appear immediately without having to log on first.

Most broadband services are unmetered so you pay a flat fee each month with no additional charges for the amount of time you spend online.

However unmetered does not necessarily mean unlimited. To ensure that capacity is shared fairly between users, some service providers limit the number of hours you can spend online (e.g. x hours a month) or the amount of data you can download (e.g. 1 gigabit per day). In most cases, these limits are unlikely to affect the average user. However, unlimited services are widely available so if you are a heavy user, check with your ISP what restrictions apply before signing up.

The Office of Telecommunications (Ofcom) is an independent regulator for the UK telecommunications industry. Ofcom wants to see quality, choice and value for money for everyone using broadband Internet access in the UK. The Ofcom guide helps broadband consumers take advantage of the wide choice of service providers and broadband Internet packages that are available.

Frequently Asked Questions (FAQs) about broadband

How can I get broadband?

There are a wide range of broadband services suppliers in the West Country. Check out the suppliers and broadband availability in your local area by using the postcode checker at <http://www.adslchecker.bt.com/pls/adsl/adslchecker.welcome>

Will broadband save me money?

It depends upon what type of connection you currently use and how you use the Internet. For most businesses, broadband provides the benefit of fast connection and download speeds at a fixed price per month. It also provides your company with the opportunity to use a variety of web-based services that would not be available if you only had a dial-up modem.

How will broadband help my business?

Having a faster Internet connection can help your business in a variety of ways, from saving you money to helping you serve your customers more effectively.

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Are there any problems or risks I should be aware of if I get broadband?

There are no serious problems in transferring to a broadband connection. The biggest change is that your computer or network server will be connected permanently to the Internet. Hackers and software viruses can exploit vulnerable broadband connections. By being aware of this and taking precautionary actions such as installing a firewall, you can manage potential risks and reduce the vulnerability of your systems.

Do other companies of our size and type use broadband?

Research shows two main influencing factors in the uptake of broadband:

- 1 Companies that have been early adopters of other Internet technologies such as e-mail and e-commerce have also been the early adopters of broadband as they have realised the value to their business
- 2 Companies that are growing quickly, or believe they will grow quickly in the future, appear to have recognised the potential of broadband to support that growth

It depends less on your sector and more on what you do within the business. If you are a frequent user of the Internet, use technologies such as video conferencing or occasionally have to transfer large files, then broadband must be seriously considered.

If I get broadband, will I be charged for the time I spend browsing the Internet or sending e-mail?

Most broadband services are unmetered so you pay a flat fee each month with no additional charges for the amount of time you spend online.

Will I need to modify my computer system to change over to broadband?

You will need to acquire a broadband modem and the software that goes with it, but this is often provided by the supplier and included in your fixed monthly costs. You will also have to ensure that your computer or server meets with the minimum requirements as specified by the individual broadband supplier. Your supplier will provide full details of what is required.

Why do I need to install firewall and anti-virus software?

When you have a connection to the Internet that is always-on, its important to install firewall software. This will protect against the possibility that a hacker could try to break into your computer and access your files. The following sites provide firewall and anti-virusing solutions

<http://www.zoneslabs.com> <http://www.watchguard.com> and <http://www.symantec.com>

Anti-virus software will protect your computer from viruses that can cause serious data corruption. A firewall alone will not necessarily protect you from this, therefore you should ensure that you have up-to-date virus protection software on all computers that have Internet access.

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What different types of broadband are there?

There are three main types of broadband connection:

- fixed line
- wireless
- satellite

The most common option is to use a fixed-line service, which is sometimes referred to as a leased-line because you lease the use of the connection from the telecommunications provider. This option incurs an on-going annual revenue cost.

The cable line will normally either be copper or fibre-optic. Copper solutions include ADSL (asymmetrical digital service line) that provides fast download speeds but slower upload speeds (hence asymmetrical). One attraction of using existing wiring is that the cost of installing a new cable is removed.

This option is dependent on:

- whether your local exchange has already been equipped with the necessary technology (depends on BT having sufficient customer demand)
- whether your business is within 6km line length from the local exchange. BT can arrange a free test for you.

Alternatively there are wireless solutions. These use radio signals to deliver broadband data over areas of 50-100 kilometres. Local 'nodes' or 'base stations' transmit and receive data to and from a network with lines of site required between nodes. These solutions have a high initial capital cost but, in comparison to leased lines, low running costs. Satellites can also offer high-speed downloads, but upload using this type of technology is more expensive.

What is the most suitable form of broadband for me?

This Broadband Differences Table will help you understand which broadband technology might be best suited to your business.

Technology	Availability	Small office /home office	SME <250 users	Large company	Equal up & down speed	Lead-in time
ADSL	Urban/Rural*	Yes	Yes	Yes	-	Long
Cable modem	Urban	Yes	-	-	-	Short
Fixed wireless	Rural/Urban	Yes	-	-	Yes	Short
Satellite	Rural	Yes	Yes	-	-	Short
Leased line	Urban	-	Yes	Yes	Yes	Long

* Depends on whether your local rural exchange is already equipped.

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Faster Internet access and reduced file download times are key benefits for all broadband users. The table below will give you a feel for the impact that broadband can have on your use of the Internet.

	Average webpage	Music file	3.5 Mb Movie trailer
2Mbps Leased line	0.5 secs	8 secs	18 secs
512kbps ADSL	2 secs	24 secs	69 secs
128kbps ISDN	8 secs	1.6 mins	5 mins
56kbps PC modem	18 secs	3.6 mins	11 mins

How much will broadband cost?

The table below gives a rough summary of some of the lowest prices for different broadband connections.

Type of connection	Download speed	Installation cost	Monthly service charge	Other charges
ADSL	500kbps	Free	£30	None
Cable modem	1Mbps	£260	£105	check with provider
Fixed Wireless	512kbps	£300	£30	check with provider
Satellite	500kbps	£900	£80	None
Leased line	2Mbps	£1,000	£1,000	check with provider

Do I have to be a BT customer to get ADSL?

No, but you do need to have a BT line installed if you do not already have one. Your broadband supplier will advise you on the set-up of the new line and help you with the paperwork.

Useful resources

<http://www.adslguide.org.uk> - latest broadband news in the UK.

<http://www.broadband4britain.co.uk> - broadband campaigning website.

<http://www.broadbandsuppliers.co.uk> - a jargon free guide to the latest broadband offers and cheap broadband suppliers

Taken from: <http://www.scottish-enterprise.com>

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