# Internet, WiFi and broadband

The Internet is a global telecommunications network which links millions of computers. To connect to the Internet you need a modem, a telephone or fibre connection and an account with an internet service provider (ISP).

Wireless internet or 'Wi-Fi' is the most common way to connect to the Internet in your home and when out and about. There is a wireless box which plugs into your telephone line. It transmits a signal to a receiver in your device/s (your computer, laptop, tablet, smart phone or Smart TV). When you want to connect, the wireless box and your device talk to each other and send information to and from your device.

You can read more about the Internet and the things you can use it for in our article **Getting Online and Digital Equipment.**

## Broadband

Broadband is a permanent fast internet connection. The faster the internet connection is, the broader its bandwidth is. This means, how much data it can cope with. This is where the term 'broadband' comes from. faster your Internet connection, the more the service costs.

## Types of broadband

**Standard or ADSL broadband:** uses the landline copper-wire telephone network. The average download speeds available are 10 to 11 Mbps

**Fibre Optic Broadband:** delivers internet over fibre optic cables. This is a faster connection than the Standard copper wire broadband. The fibre optic cables are connected to to a local street cabinet. This means the last mile between your local street cabinet and home uses standard copper telephone lines.

**Full Fibre Optic Broadband:** is where the fibre optic cables are connected directly to your home or premises, providing a faster connection than Fibre Optic Broadband.

**Cable broadband:** delivers the internet to you through underground coaxial cables. The main cable provider in the UK is Virgin Media, which offers broadband and you will need to use their post code checker to see if it is an option to you.

**Mobile broadband:** is internet delivered over the 3G, 4G and 5G mobile networks. To get online, you'll need a mobile device, such as a smart phone or tablet, with a sim card. Unless you get 5G at present the download speed is slower/limited. This means that mobile broadband isn't usually

cost-effective substitute for fixed line broadband in your home. However, its portability could makes it an attractive additional service for people who want internet on the go.

## Internet speed

Internet speed is measured in Mbps (megabits per second) and Kbps (kilobits per second). A bit is the smallest unit of data that can be transferred so when it comes to calculating speed the higher the number of bits per second, the faster your broadband connection will be. Kbps and Mbps measures are:

- 1 Kbps: 1,000 bits per second
- 1 Mbps: 1,000,000 bits per second

Which? Broadband Speed Test lets you test the speed of your current internet connection.

## Broadband costs

There are many types of broadband packages to choose from. The cost can range from £17 to £30 for a basic package a month. Most internet packages offer unlimited downloads. Some providers may cap the amount of data that you can use. If you choose a capped tariff you will be charged extra if you go over your limit.

Depending on the type of broadband you choose there may be additional costs to install the service and for any equipment that the provider delivers to you, such as a Wi-Fi hub.

## What to think about when choosing a broadband provider

- How do you use the internet?
- How much data do you need?
- Do you download or share files, music, films and TV?
- How many people will be online at once?
- Will you be working from home online?
- Do you need a faster connection so you can make video calls, play games and stream TV, music or films online?
- How many Kbps or Mbps you get and how much it costs
- How many devices in your home will be connected to your broadband? This includes, mobile phones, tablets and smart appliances like light bulbs and video doorbells.
- How long is the contract that you're signing? Some contracts are a minimum of 12 months.
- Is there an installation fee?
- Do you have to return any equipment to the provider at the end of your contract, such as a Wi-Fi hub

**Money Saving Expert has a broadband deals tool** to help you find the best package.

## Broadband for people with a low income

Social tariffs are available to help people who are struggling to pay for their internet, telephone or broadband connections to stay connected digitally.

**Ofcom has a list of the social tariffs available.** Some options are only available to people who receive certain benefits.

**Read more on support to get online and access digital equipment on InformationNOW.**

## Free internet or Wi-Fi

Newcastle City Council offers free public Wi-Fi in many public buildings and locations, including Newcastle libraries, North East Museums, and outdoor areas.

Many shops, shopping centres and public transport also offer free public Wi-Fi.

## How to connect to the free public Wi-Fi

Free public Wi-Fi is great to browse the internet, stream music or TV and chat. It can help you to save your mobile data when on the move.

It is best not to access your bank account, pay for goods online or enter your personal information while using a public Wi-Fi. Public Wi-Fi is more open to others. It's not the same as using your private network at home. Remember to always keep your passwords private, to protect your device and your personal information.

1. Select 'Settings' on your device
2. Select 'Network and WiFi'
3. Turn on your Wi-Fi, if it's not already on
4. A list of available Wi-Fi networks should appear
5. Choose a network that you trust
6. You may have to create an account or log in using an email address.
7. A landing page may appear or you may see a notification on your device to log in to the Wi-Fi network
8. You may have to click to Accept Terms & Conditions
9. **Once connected** You can browse the internet on your device for free whilst you are in the range of your chosen network
10. You can choose to 'remember this network' to connect automatically to the same free Wi-Fi network, when you are in the area.

## Free mobile data

The National Databank ran by Good Things Foundation offers free sims with mobile data to adults with little or no access to the internet, who have a low income. You can use their website to find support in your area.

## Changing your Internet service provider

The Internet industry has agreed to work together to make the process as simple as possible for you. To move your broadband connection from one company to another, without losing your Internet connection, you need to do the following:

- Speak to the customer services staff at your Internet service provider and tell them that you want to switch to another company.
- You no longer need a Migration Authorisation Code (MAC). Your new provider will sort this out under Ofcom regulations.
- The new provider will cancel your previous package for you.

Remember, if you are under contract to your old Internet service provider when you change you may still need to pay for the remainder of your contract with them.

---

## Complaining about your Internet service provider

If you have a complaint about your Internet service provider, whether it is about the quality of your Internet service or about the standard of their customer services, you should contact their complaints department in the first instance. If your concern can't be resolved informally, you should follow their formal complaints procedure.

If you are not satisfied with the outcome of your initial complaint, you can complain to your provider's Alternative Dispute Resolution (ADR) scheme. The ADR scheme acts as an independent middleman between the company and you, the customer. You should find details of the company's ADR scheme either on the back of your bill, or from the company's customer services staff.

ADR schemes are meant to supplement, not replace, the formal complaints procedure. This means that you can only use the ADR scheme if:

- you have tried to make a formal complaint to the company and have had no success, **and** 12 weeks or more has passed since you first complained; or
- the company has written to you to say that they're not going to do anything else about your complaint.

For more information about complaining about your Internet service provider, see the **Ofcom website.**

**Read more on how to make a good complaint on InformationNOW**

---

## Guide to Common Terms Used

- **ADSL**  stands for Asymmetric Digital Subscriber Line, which is a type of broadband connection that uses a standard telephone line.
- **Bandwidth**  is the amount of data that can be transferred over the Internet in a set amount of time. The higher the bandwidth, the faster the connection.

- **Broadband** is a fast, broad bandwidth Internet connection.
- **Data** are pieces of information that can be stored or transmitted, usually via computers. Data can be sound, text or images.
- **Dial-up** is an Internet connection via a telephone line that hasn't been speeded up for broadband.
- **Downloading** is a way of transferring data over the Internet to a computer.
- **Electronic mail (e-mail)** is a way of sending messages and files from one computer to one or more others.
- **Firewall** is the hardware or software that protects your computer when you are connected to the Internet.
- **Home page**– is the front page of a website, which appears every time you go into it.
- **html** stands for hypertext mark-up language, which is the language used to make pages on a website.
- **http** stands for hypertext transfer protocol, which is the standard way of sending and receiving website pages.
- **Hyperlink** is the link that connects web pages. When you put your mouse pointer on a hyperlink and click the left mouse button, it displays the linked page.
- **Internet** is a global telecommunications network linking millions of computers.
- **ISP** stands for Internet Service Provider, which is a company that provides internet access.
- **Link** – Clicking on a link takes you to a new page on a website, or allows you to download something.
- **Online** is being connected to the Internet.
- **Search engine** is a website that searches for website pages on a particular topic.
- **Website address** This tells your computer where to find a website online, for example www.informationnow.org.uk . This is also sometimes called a URL, which stands for Universal Resource Locator.
- **Web browser** is the software that you use on your computer to view pages on a website.

Last updated: June 6, 2025

---

# Useful Organisations

## Ofcom

**Website:** www.ofcom.org.uk

**Telephone:** 0300 123 3333 or 020 7981 3040

**Address:** Riverside House, SE1 9HA

## Simplifydigital

**Website:** http://broadband.simplifydigital.co.uk/

**Telephone:** 0800 542 4704

**Address:** Riverside, W6 9WA

## Citizens Advice

**Website:** www.adviceguide.org.uk

**Telephone:** 0808 223 1133

**Address:** Citizens Advice, EC1A 4HD


## Gocompare.com

**Email:** help@gocompare.com

**Website:** http://www.gocompare.com

**Telephone:** 0808 223 1133

**Address:** Gocompare.com Limited, NP10 8UH


## Getonline@home

**Email:** info@computerrecyclersuk.com

**Website:** https://www.getonlineathome.org/

**Telephone:** 0808 223 1133


## Compare the Market

**Email:** support@comparethemarket.com

**Website:** https://www.comparethemarket.com

**Telephone:** 0808 223 1133

**Address:** Pegasus House, PE2 6YS


## Moneysupermarket

**Website:** www.moneysupermarket.com

**Telephone:**  0333 123 1983

**Address:** Moneysupermarket House,, CH5 3UZ


## BroadbandUK

**Email:** hello@broadbanduk.com

**Website:** https://www.broadbandspeedtest.org.uk/broadband

**Telephone:** 0207 193 5060

**Address:** 31, Berkeley Tower, E14 8RP

## Get Online Newcastle

**Email:** Getonline@newcastle.gov.uk

**Website:** https://new.newcastle.gov.uk/libraries/getting-help-digital-skills

**Telephone:** 0191 277 8842

**Address:** Newcastle City Library , NE1 8AX

---

# Related Articles

Telephones

Digital support

Getting online and using digital equipment

Staying safe online

What you can do online

Keeping in Touch Online

Social Networking

Making your computer or mobile device easier to use

How to make a good complaint