## Improving Broadband Speed

Whether you are connected to "old" broadband (ADSL) or new fibre, **Ofcom** has the following advice to get the best from your service:

- ### Carry out a speed test

This will show you what speed you're actually getting, and help you to decide if there is in fact a problem.   There is a separate factsheet in this pack advising how to go about carrying out a speed test

- ### Check your download allowance

Make sure your Internet Service Provider (ISP) hasn't capped your speed because you exceeded the limits of your monthly usage allowance or traffic management policy. Many ISPs now reduce your speed rather than charging you for exceeding your allowance.

You should be emailed a warning if you exceed your usage allowance.  However if you've simply exceeded the traffic management allowance (often in place at peak times) you won't be informed and your speed will simply drop for a fixed number of hours (or until the peak period ends).

Your ISPs website should give you details of any traffic management policy in place and inform you of the effects of exceeding your usage allowance.

- ### Check your browser

Check whether you're using the latest version of your web browser (this could be Microsoft Outlook/ Safari/Chrome/ Firefox or others) - newer versions not only provide better security but should also work faster.

- ### Check for any electrical interference

Electrical equipment can cause interference; anything with a motor or pump can be an issue. Experiment with turning off electrical devices to see if they are interfering.  If possible keep your router/modem away from other electrical equipment.  Evidence shows that faulty fluorescent lighting and even Christmas tree lights can drastically reduce broadband speeds in some cases.

- ### Check for any phone line interference

Any interference on your phone line could slow your broadband speed down. Make sure your home has the most up-to-date main phone socket and plug microfilters into every

phone socket in your home. They look like little white boxes and split the phone and broadband signals so that they don't affect each other.

- **Upgrade to a good quality router**

If you are using a cheap modem or router and your provider allows it, consider replacing with a newer higher quality router as this can sometimes be the cause of a poor broadband experience. Investing in a higher quality router can lead to improvements in speed and reliability, especially on poor quality telephone lines. If you're not sure, look online for user reviews of your make and model of modem or router - if there are problems it's likely that reviews will show this.

This can especially be an issue when you haven't switched broadband suppliers for quite some time as you may be using a router that doesn't support more recent upgrades to your telephone exchange. If in doubt, ask your ISP support team.

- **Plug your broadband router directly into your home's main phone socket**

Try not to use a telephone extension lead - leads can cause interference which could lower your speed. If you have to use an extension lead, use a new, high quality cable with the shortest possible length. Tangled and coiled cables can also affect speeds.

- **Try wired rather than wireless**

Use an Ethernet cable to connect your computer directly to your router rather than using wireless.  An Ethernet cable is a computer networking cable which should give you a faster, more reliable connection.

- **Password-protect your broadband**

If you don't keep your wireless router secure, anyone nearby could log on to your broadband.  Not only could this slow down your internet speeds but your online security could also be at risk. To find out whether you are secure, search for available wireless networks. If your network is secure there should be a picture of a padlock next to it. If there isn't then you'll need to password-protect your router. Use a password that contains a mixture of numbers and upper and lower case letters. If you're not sure how to set or change a password, speak to your provider.

- **Fit a broadband accelerator or filter device**

There are a number of devices available that are designed to filter out interference from your home phone wiring. These may improve speed and, even if they don't, can help stabilise your broadband line and make it more reliable. Try searching online for devices that may suit your needs

Source: Ofcom

The e-Sussex project delivers fixed (wired) broadband services – the tips above may well help to optimise the performance your fixed line connection, but don't forget that most people also choose to connect multiple devices in their property via a wi-fi signal and may also wish to optimise this to get the best coverage around the property.  It is always a good idea to seek professional advice, however your ISP may also offer its own advice on how to do this.  An example of this is from **Zen**, who say:

**'1. Find the right spot for your router**

Properly positioning your router can make a significant difference when it comes to ensuring good coverage around your home. It can be difficult to move your router around too much when its location is somewhat dictated by the location of your master socket, but you might want to consider some of the following.

First of all, try to elevate your router as much as possible. At the very least, it's not a great idea to keep your router on the floor, so try to keep it on top of a cabinet or desk. If your router is upstairs, you won't need to worry about elevation, but at least keep it off the floor.

If possible, try to move your router to a central point in your home. If your router is by a window, or in a corner, a good deal of the signal is going to be lost. Positioning your router centrally means a more even coverage around the home. This can be difficult depending on the location of your master socket, but if it is easy to achieve and doesn't look unsightly, investing in some longer cables to give you a little more room to play with can pay off.

Finally, moving your router away from obstacles can also help. So don't keep the router in a cupboard, or close to furniture that might block the signal. Where possible, try to allow for some clearance around the router.

**2. Use 5GHz if possible**

If you have a modern dual band router, you'll have the option to connect at the 5GHz frequency instead of 2.4GHz. Lots of routers will take care of this for you automatically, but they also allow you to manually control which frequency you want to connect to (you'll need to set up two SSIDs in your router settings).

As a rule, 2.4GHz will give more range, but connections will be faster at 5GHz. The other advantage of the 5GHz spectrum is that it will generally be less congested. That is, there will be less interference from things like home appliances and your neighbours' WiFi.

**3. Change the channel**

Your router will transmit its signal on particular channels chosen from an available range. If other wireless networks in your vicinity are transmitting on the same or adjacent channels there is a possibility that you might run into interference issues.

Most routers will automatically choose the best channels for you, but you can always manually choose if you are experiencing difficulties and you think that channel selection might be the culprit.

**4. Check those antennae**

Lots of modern routers have internal antennae, so there's not much you can do about that (though they should be optimally set up, so there probably isn't much need for worry). However many routers (new and old) still use external antennae.

Crucially, when it comes to positioning these antennae, the general advice is to position them upright.  So if one antenna is pointing straight up, the other should be positioned horizontally, at a right angle to the first antenna. This is because reception will be better on your tablet, smartphone, laptop, etc. if their antennae are oriented the same way. So, positioning your antennae upright ensures better communication with your devices regardless of their location.'

Source:  https://www.zen.co.uk/


Other links providing helpful information:

https://broadbandsavvy.com/what-internet-speed-do-i-need/

https://broadbandsavvy.com/how-to-improve-internet-speed/

https://www.choose.co.uk/compare/broadband/

https://comparefibre.co.uk/fibre-broadband-deals/