UK home broadband performance

A consumer summary of fixed-line broadband performance

Ofcom
making communications work for everyone

This guide looks at Ofcom's research into home broadband performance, focusing on three key measures:

Download speeds **Upload speeds** **Video streaming**

Types of home broadband

The report looks at the performance of three types of broadband connections:

ADSL: ADSL is standard broadband delivered over copper telephone lines.

Fibre: fibre technology uses fibre-optic lines. Speeds are typically faster than ADSL. There are two main types:

- ***Ultrafast full fibre***, which involves fibre optic cables running directly to homes, and
- ***Superfast fibre-to-the-cabinet (FTTC)***, which uses a mixture of fibre-optic cables and copper wires. Most of the fibre broadband in the UK is FTTC.

Cable: cable technology is used to deliver superfast and ultrafast home broadband over cable TV networks.

What are the benefits of superfast and ultrafast broadband?

Superfast and ultrafast broadband are significantly faster than standard broadband, with speeds of 30Mbit/s or more, and 300Mbit/s or more, respectively. Using superfast or ultrafast broadband enables you to:

- download things much faster;
- make high-quality video calls;
- easily access online TV and music streaming services; and
- have several people using the broadband connection at the same time in your home without significant slowdown.

Why you may not be getting the speed advertised:

- Your wifi router might need an upgrade, or it might be poorly configured;
- Your router might be picking up interference due to its position in your home;
- More people may be using your provider's network at peak times, leading to slower speeds; and
- The distance of your home from the street cabinet or the exchange can affect your broadband connection

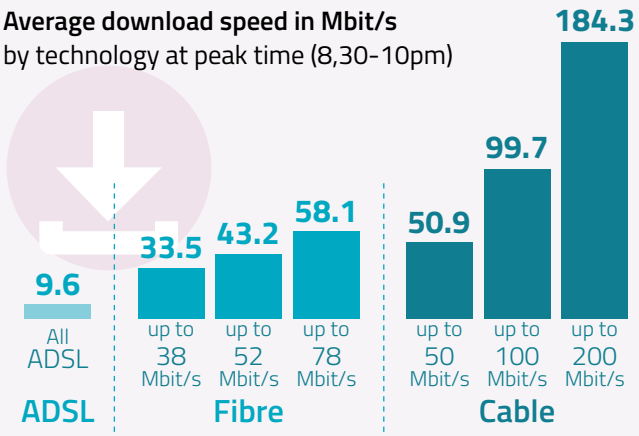
For tips on how to improve your broadband speeds, see our guide.

Download speeds and upload speeds

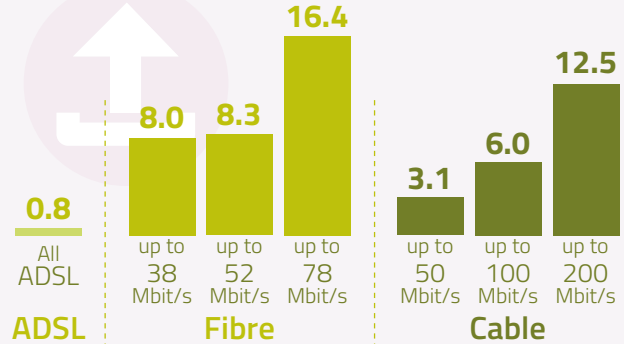
These charts show the average download and upload speeds for different technologies between 8pm and 10pm (peak times), when most people are using the internet at home.

Download speeds determine how long it takes to download content on your computer or device. Faster speeds are particularly important for downloading large files such as films or apps.

Average download speed in Mbit/s
by technology at peak time (8,30-10pm)



Upload speeds determine how long it takes for a file to transfer from your device to the internet. Higher speeds are important for sharing photos on social media, attaching documents to emails and posting videos on YouTube.



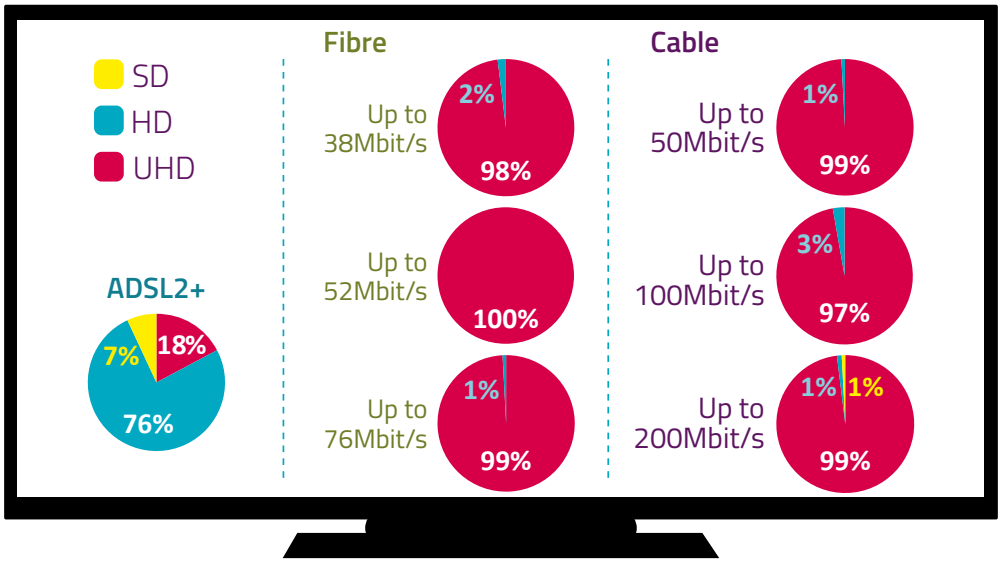
Average upload speed in Mbit/s
by technology at peak time (8,30-10pm)

Video streaming

Video streaming is one of the most common internet activities and viewers expect high quality without buffering. Our research looks at the quality of video streaming in standard definition , high definition and ultra-high definition. The higher quality the stream, the faster the broadband speed required.

There are other measures that determine user experience, including web-page loading time, latency and packet loss. These are explained in the report.

Percentage of Netflix videos reliably delivered via SD, HD and UHD

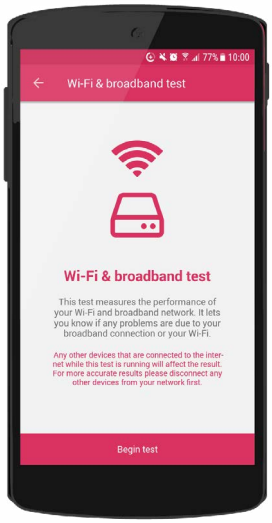


Ofcom's residential broadband speeds code of practice

Under our voluntary code of practice on broadband speeds, internet service providers (ISPs) must give clear information on broadband speeds to consumers who are considering, or buying, a home broadband service, and the providers promise to provide compensation when speed performance is poor.

The new voluntary code of practice, coming into force on 1 March 2019, updates the existing code, making the following improvements:

- improving speed estimates, so that they reflect actual peak-time speeds;
- providing customers with a minimum guaranteed download speed, at the point of sale;
- improving the process for customers' right to exit; and
- widening the scope of the code, to cover all types of technology.



Helpful tools from Ofcom

Ofcom-accredited price comparison sites can help you find the best broadband deals for you.

Ofcom's broadband and mobile checker allows you to find out which mobile services are available in specific locations, such as your home or workplace. The app also enables you to see if your home wifi is likely to be slowing down your broadband connection.

Download on the App Store

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