



1. **The UK's most reliable broadband technology**
2. **“Birmingham deserves better broadband”**
3. **“Join the city's [Birmingham] fastest major broadband provider”**

1. **The UK's most reliable broadband technology**

Full fibre broadband outperforms copper, fibre-to-the-cabinet and cable technologies for all the key metrics associated with broadband – latency, speed consistency, packet loss, downstream jitter etc. The Ofcom UK Home Broadband Performance report 2021 sets out why this is the case:

Ofcom UK Home Broadband Performance report 2021, page 12:

Full-fibre connections have the least variation in performance

There are two main reasons why home broadband connections do not always provide their maximum or headline (advertised) speed throughout the day:

- For copper-based technologies such as ADSL and FTTC, the maximum speed that a line can support is dependent on the length and quality of the line from the end-user's home to the local exchange (for ADSL) or street cabinet (for FTTC); lines to some premises will never support the service's advertised speed (although under the [Voluntary Code of Practice for broadband speeds](#), broadband providers must provide an estimate of the speed that the line can support before purchase).
- The actual speeds of all connection types tend to fall when broadband providers' networks are busy. The variation in speeds at peak times tends to be higher for cable connections, due to network congestion occurring nearer to the customer, making it harder to add the additional capacity required to reduce the effects of congestion.

Ofcom's performance reports compare the technologies using Sam Knows test data, and show the improved reliability and speed consistency full fibre offers – see this example from the most recent Ofcom report, published September 2023 for latency:

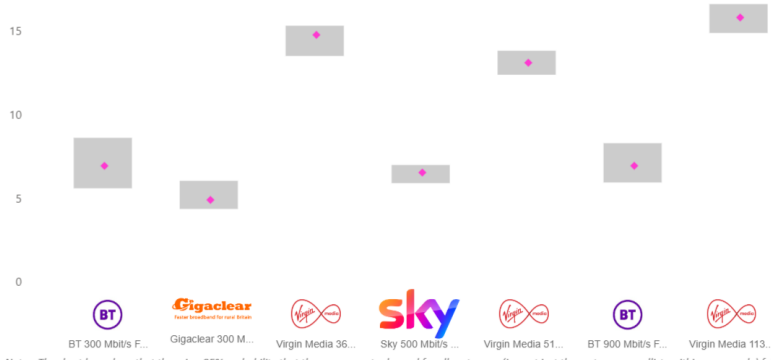
300 Mbit/s+

- Download
- Download max
- Download min
- Upload
- Upload max
- Web loading
- Latency
- Latency under load
- Packet Loss
- Jitter downstream
- Jitter upstream
- Disconnections
- DNS resolution time
- DNS Failure

24 hours

8pm-10pm

Peak-time latency for ISP packages (lower values indicate better performance), and significant differences, to a 95% level of confidence: Mar 2023 (ms)



Notes: The chart bars show that there is a 95% probability that the average actual speed for all customers (i.e. not just the customer panellists within our sample) falls within the ranges shown; data labels show the median average values. The majority of measurement units record zero DNS failure rates, therefore median values for all DNS failure tests are zero.

30-50 Mbit/s

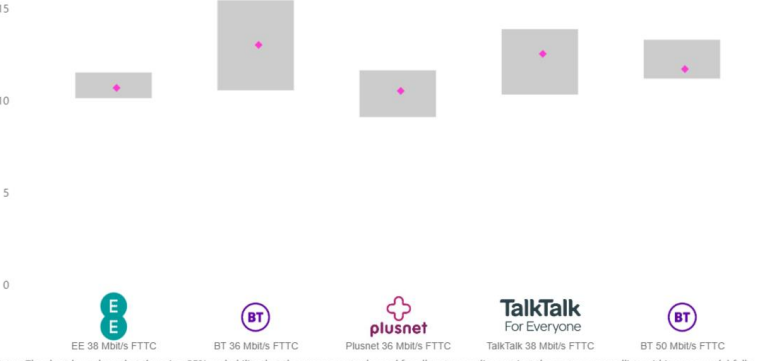
- 300 Mbit/s+
- 30-50 Mbit/s
- 51-74 Mbit/s
- 75 - 299 Mbit/s+
- ADSL2+

- Latency under load
- Packet Loss
- Jitter downstream
- Jitter upstream
- Disconnections
- DNS resolution time
- DNS Failure

24 hours

8pm-10pm

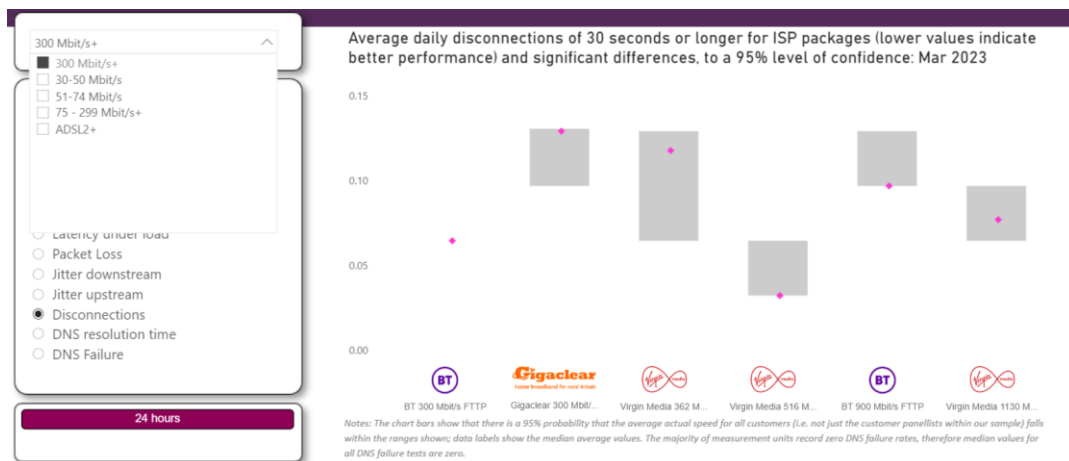
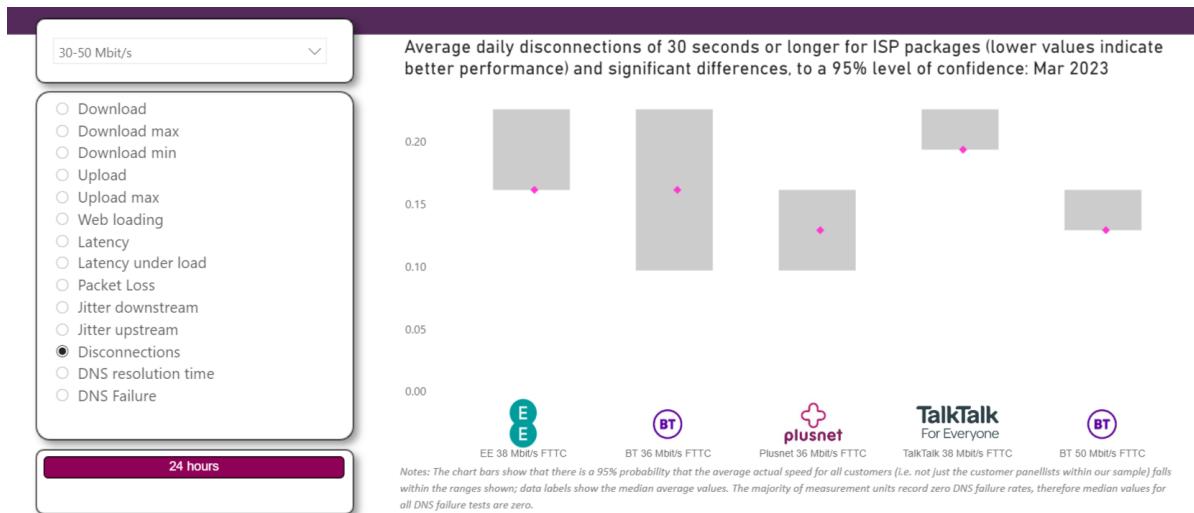
Peak-time latency for ISP packages (lower values indicate better performance), and significant differences, to a 95% level of confidence: Mar 2023 (ms)



Notes: The chart bars show that there is a 95% probability that the average actual speed for all customers (i.e. not just the customer panellists within our sample) falls within the ranges shown; data labels show the median average values. The majority of measurement units record zero DNS failure rates, therefore median values for all DNS failure tests are zero.

Mean Median

The stats for disconnections also show the superior performance of full fibre vs fibre to the cabinet and cable services:



The full data can be found here:

[UK home broadband performance, measurement period March 2023: Interactive data - Ofcom](#)

2. “Birmingham deserves better broadband”

The claim describes the roll out of full fibre broadband in Birmingham, which EE provides from the Openreach network, and compares this new technology with the existing copper, fibre-to-the-cabinet and cable services currently available. As demonstrated above, full fibre performs better than these technologies on the key metrics associated with broadband performance. EE is also the only major broadband provider to make 1.6 Gbps full fibre available in Birmingham.

3. “Join the city’s fastest major broadband provider”

EE is the only major provider to sell the fastest tier of Openreach full fibre, which means we are the only major provider to sell speeds of 1.6 Gbps in Birmingham and consequently the fastest major broadband provider in Birmingham. See the table below:

Broadband provider	Does the Provider offer speeds equal to or greater than 1.6Gbps	
EE	✓	1.6Gbps
BT	✗	900Mbps
Virgin Media/O2	✗	1.1Gbps
Plusnet	✗	900Mbps
Sky	✗	900Mbps
Shell Energy	✗	948bps
TalkTalk	✗	944Mbps
Vodafone	✗	910Mbps