

Blackdown Hills Parish Network

What are the options?

A pure fibre connection to your property (FTTH) is the gold standard for fast broadband because laser signals transmitted via an optical glass fibre suffer very little attenuation or interference and once installed the speed can be increased in future as faster laser diodes and optical sensors can be installed at either end. This makes it a "future proof" solution able to exceed 1Gbps in future.

Systems which use the existing copper telephone lines such as FTTC and ADSL will always be limited by the attenuation of high frequency electrical signals in the conductor. For FTTC, where the fibre goes as far as a green street cabinet, it does not suffer as bad as ADSL which, relies on copper all the way from the exchange. Typically FTTC will not exceed 30Mbps and ADSL will not exceed 8Mbps.

Fixed Wireless broadband can deliver speeds up to 30Mbps but can be affected by the topography of the terrain between the transmission tower and the receiver on your property. Trees, rain and mist can also affect transmission speeds.

Satellite broadband is available to everyone and can deliver speeds of 30Mbps but the high cost of launching a satellite means that operators spread the costs over as many users as possible and this means that data usage is always capped, making it potentially expensive. The distance signals have to travel between user, satellite and ground station, means that interactive applications can suffer significant delay, causing buffering.

Ultrafast broadband is 100Mbps or above
Superfast broadband is 30Mbps or above

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This leaflet is published for the benefit of Blackdown Hills Parish Network Parish Councillors by the Communications team of the Steering Group and supported by the AONB.



The Blackdown Hills Parish Network (BHPN) was established in 2012, following publication of the Blackdown Hills Community Plan in Autumn 2011. The consultation established that most of the parishes, each wholly or partially within the Blackdown Hills AONB boundary, share common problems, most relating to communications, housing & planning and issues around traffic and transport.

The BHPN seeks to unite and assist parishes to alleviate these and other key problems as they arise. Many of the parishes make a regular annual contribution to the BHPN and send representatives to regular General Meetings, supporting the activities of the elected Steering Group. The BHPN is represented as a stakeholder of the Blackdown Hills AONB Management group.

Membership of the BHPN is open to all parishes with a whole or partial footprint within the Blackdown Hills AONB boundary

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Fast Broadband in the Blackdown Hills A guide for Parish Councillors



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What's available?

Blackdown Hills residents are getting access to broadband via a number of different schemes:

- a) By the end of 2019 some areas will be supplied by **Gigaclear's commercial** programme or **Connecting Devon & Somerset (CDS) Phase 2** programme delivering a pure fibre symmetric broadband service **up to 1,000Mbps** before the end of 2019.
- b) Some areas are already served by **BT CDS Phase 1** programme, with access to superfast FTTC broadband with **download speeds up to 24Mbps** and upload speeds around one eighth of this. In a few of these areas BT also offer a fibre service **up to 300Mbps** down.
- c) Areas not covered by either a) or b) above have access to **ADSL broadband** over standard copper phone lines which deliver **download speeds of up to 8Mbps** but may be much slower where the line length is long.
- d) Some people without a fibre line and slow ADSL speeds use **Fixed Wireless broadband** via a small antenna on their property which can deliver **download speeds up to 30Mbps** supplied by companies such as Voneus or Orion.
- e) With a strong 4G mobile phone signal, your **mobile network supplier can sell you a data dongle** which will give **up to 30Mbps** broadband connection. Data volumes will be capped.
- (e) When none of the above are available then **satellite broadband service** can deliver **up to 30Mbps** via a satellite dish on their property supplied by companies like Avonline and Europasat. Again, data volumes will be capped.

Why is fast broadband important?

It can be difficult to appreciate the benefits of a fast broadband service, just as it was difficult for people to appreciate the benefits of the Industrial Revolution 200 years ago.

When steam railways first came to the south west they created rapid economic growth as farmers were able to sell their milk in towns and cities for the first time and coastal fishermen were able to do the same with their fish, creating the iconic English dish of fish & chips.

Few foresaw the economic impact that railways would have at the time and the same is true for fast broadband today.

Even if you feel happy with the broadband service you receive from your ISP today, this is a rapidly changing technology and to get the most from today's Information Revolution you will need a reliable, fast broadband connection.



Speed is important:

Downloading a 3GB HD Film at 4Mbps will take 1 hour and 47 minutes. At 50Mbps that reduces to 7 minutes 24 seconds and at 1,000Mbps it is just 53 seconds.

Latency is also important: (The time it takes one bit to travel from the server, to your PC and back again.) If this is below 30 milliseconds you will probably not notice any delay but if it exceeds 100 milliseconds it will cause buffering and some interactive applications such as Skype may be unuseable.

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Need more information?

For details of Gigaclear's commercial programme in parts of Upottery, Yarcombe, Churchstanton, Clayhidon and some other Blackdown parishes:

www.Gigaclear.co.uk

The Gigaclear website also provides information for postcodes that will receive a CDS Phase 2 service from them.



For details of CDS Phase 1 and 2 programmes, and the CDS voucher scheme which can subsidise hardware and connection costs of fixed wireless and satellite services if your current speed is <2Mbps:

www.connectingdevonandsomerset.co.uk

The CDS website provides contact details for all the companies providing a service via the voucher scheme

BUT..... Be wary of marketing hype!

Some suppliers like to claim they offer "fibre broadband" even when the wires entering your property remain copper (or aluminium in some areas.)

Don't always believe quoted speeds!

"Sync speed" will always be higher than "Download Speed", but only download speed is relevant because the sync speed includes all the bits you do not use but which the internet uses to manage the data flow.