

Bringing faster broadband to the last 5%



The Digital Scotland Superfast Broadband programme is expected to bring fibre broadband to around 95% of homes and businesses in Scotland by the time the programme ends in March 2018. But what about the 5% which this programme just won't manage to reach?

It is worth recognising that it is not only Scotland that faces significant challenges in trying to reach the 'hard to reach' properties. The difficulty of bringing fibre to this group of people is experienced throughout the UK and in other countries where fibre broadband is being rolled out.

The main technology currently being used by the project to deliver better broadband is 'Fibre to the Cabinet' (FTTC). It involves building green fibre cabinets which link premises into the local network. The broadband services come from the cabinet along the customer's existing telephone line. The cabinets have been built to reach as many people as possible in each area.

FTTC technology is great if you are close to your green cabinet. However, there are some premises it simply cannot reach. Those unable to benefit from FTTC generally fall into two categories:

- Those on a long line. Broadband speeds diminish the further away you are from the cabinet. Up to 1km you will be likely to have superfast speeds. Up to 2kms you may see an uplift, but after that speeds fall away. This could improve as the technology develops in future.
- Those who live in a place where there is only a small cluster of homes, or where homes are quite scattered.
 A future phase in the project may mean we can extend the network and reach these smaller clusters of homes.

There are also alternative technology options to get superfast broadband.

Alternative solutions

'Fibre to the premises' (FTTP) is a technology where fibre optic cabling comes direct to the home or business. However, to supply 'fibre to the premises'

to all the remote properties that fall within the 5% would involve costs that are far beyond the scope of either commercial operators or programmes such as Digital Scotland Superfast Broadband.

Pilot activity has shown that cost-effective superfast broadband can be delivered by a mix of alternative technologies. These include satellite broadband, fixed wireless broadband, wireless hybrids and fibre to the remote node.

These technologies are likely to hold the key to bringing faster broadband to many people in the hardest to reach areas and considerable work is being undertaken to identify the best mix for Scotland.







As well as the alternative technologies outlined, work is underway on identifying solutions to the challenge of bringing faster speeds to the last 5%.

Community initiatives

For those who can't be reached by the Digital Scotland Superfast Broadband programme, there is the option of developing a community-led project. The Scottish Government is funding the Community Broadband Scotland initiative (CBS) to work with remote communities to help deliver local broadband projects.

There are already some exciting community projects underway. For example, a group of rural communities in Perthshire have installed a wireless system capable of delivering superfast speeds. Telegraph poles are equipped with antenna to transmit the signals to premises and are powered by a combination of wind and solar energy.

Around 150 premises are expected to benefit from the broadband service provided by Loch Tay Internet, and which has been supported by Community Broadband Scotland (CBS).

To find out more, visit www.hie.co.uk/cbs or email cbs-enquiries@hient.co.uk

Satellite Broadband

The UK Government has set a target for all homes and businesses to have access to a standard broadband service of at least 2Mbps. As part of this commitment, Broadband Delivery UK (BDUK) has developed a programme offering subsidised satellite broadband installation to eligible properties in Scotland.

This national scheme will contribute towards the equipment and installation costs of a satellite broadband connection. You will be able to choose from a range of services including options that provide speeds significantly greater than 2Mbps.

In order to benefit from this scheme, check out the further information on our website.

Reaching 100%

Recently, the Scottish Government has pledged to reach 100% coverage of superfast broadband across Scotland by 2021. So you can rest assured that even if you find yourself in the 5% that cannot get fibre broadband by the end of the Digital Scotland Superfast Broadband programme in 2018, it's on its way.

So what can people in the 5% know for sure?

What we can promise you is:

- · You have not been forgotten
- New alternative technologies are constantly emerging
- The Scottish Government has pledged that all areas will have a superfast speed available by 2021
- Digital Scotland is focused on bringing faster broadband to the maximum number of homes and businesses in Scotland as soon as possible.





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