

Digital Briefing Note

Karen O'Kane, BBfN Programme Director

This document aims to provide information that the public may find useful. Councillors may wish to share part or all of it with Parish Councils, and with the public.

Overview of existing and planned connectivity in Norfolk

Superfast broadband by 2020

There are two infrastructure providers that have deployed fibre infrastructure capable of delivering Superfast broadband (24Mbps+); BT Openreach and Virgin Media. Commercial investment from these two companies provided access to Superfast broadband for 42% of Norfolk properties.

The Better Broadband for Norfolk (BBfN) Programme is expected to increase access to Superfast broadband to 95% of Norfolk properties by the end of March 2020.

To date, BBfN has seen access to Superfast broadband speeds increase from 42% in 2013, to 87% of Norfolk properties in March 2017. These figures are taken from the independent organisation "Think Broadband" data. <http://labs.thinkbroadband.com/local/index.php?area=E10000020>

Provisions within the BBfN contract provide rebates from BT if Take-up of services using BBfN funded infrastructure are higher than expected. This is expected to provide further funding to allow the county to move towards its aim of achieving 100% coverage.

Mobile connections

There are four main mobile operators in the UK; EE, O2, Three and Vodafone.

Coverage is increasing, based on a £2.5 billion commercial investment which was agreed between Government and these operators. This is expected to provide 90% geographic voice coverage by the end 2017. However, the location of the 90% of UK geography will be determined by the operators.

During 2018, Ofcom are expected to conduct a review of resulting coverage, this is expected to further inform future government policy.

Government policy

UK Digital Strategy

The Government has set-up the **National Productivity Investment Fund** (NPIF) to provide over £23 billion of investment between 2017-18 and 2021-22. Investing in priority areas including economic infrastructure, housing and research & development.

Of this money £740 million will be invested in digital by 2020-21. This investment is underpinned by the UK Digital Strategy which supports the next generation of fast and reliable mobile and broadband communications for consumers and businesses. Key digital areas include:

Full Fibre

The Budget announces the first steps, specifically £200m investment to leverage commercial investment in Full-Fibre, the 'gold standard' of fast and reliable broadband

Complementing the NPIF programmes, the new **Digital Infrastructure Investment Fund** will be launched in spring 2017. Government investment of £400 million will be at least

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matched by private sector investors, and will accelerate the deployment of Full Fibre networks by providing developers with greater access to commercial finance.

5G

The Budget also announced up to £16m for leading UK research institutions to cooperate on a cutting edge 5G facility to trial and demonstrate 5G technology. The first step to a new National 5G Innovation Network

This will involve government working as closely as possible with industry, investors, regulators, and researchers to refine the Government's policy as 5G technology emerges and evolves.

Support consumers in getting the best deal in digital connectivity

Ensuring adverts for broadband accurately reflect the speeds and technology actually on offer for the majority of customers, so that people know what they are getting and can better find the most competitive deal. The budget announced various new ways to protect customer will be investigated.

Roll out free Wi-Fi on trains, and in more public places.

Providing access to free Wi-Fi whilst on the move.

Introducing a Broadband Universal Service Obligation

By 2020, the UK Government intends to introduce a Broadband Universal Service Obligation (USO) that would give everyone a right to a [decent broadband connection on reasonable request](#). This is in recognition of the increasing importance of broadband to people's everyday lives.

Given the fast pace of change in consumer and business needs from broadband, Ofcom have provided advice on a range of technical specifications:

- Scenario 1: a standard broadband service, characterised only by a 10Mbit/s download speed;
- Scenario 2: a more highly specified standard broadband service, adding upload speed (1Mbit/s), latency (medium response time), maximum sharing between customers (a 'contention ratio' of 50:1), and a defined data cap based on current usage profiles (100GB per month); and
- Scenario 3: a superfast broadband service, with download speeds of 30Mbit/s, upload of 6Mbit/s, fast response times, a 'committed information rate' of 10Mbit/s (i.e. guaranteed 10Mbit/s at all times) and an unlimited usage cap.

Planning Regime reforms

Will support the mobile industry in the rapid rollout of 4G technology, to help reach more people, more quickly.

The Electronic Communications Code

Regulates the telecommunications sector, reforms will put digital communications infrastructure on a similar regime to utilities like electricity and water. The aim is to ensure new technologies like 5G can be rollout out more quickly and benefit more people.

Some general information about broadband

What people need to do once a fibre upgrade has taken place?

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Once fibre infrastructure is available in your area, you'll need to contact your Internet Service Provider, or another, to discuss suitable services packages. Over 100 Internet Service Providers offer fibre based broadband service. The upgrade to a fast fibre based service won't happen automatically.

Fibre based broadband is usually delivered on your existing phone line, so there is normally no need for additional wiring.

This link to an Ofcom sites provides access to comparison websites that show what service packages are available, how much they cost etc. There are usually good deals around and people might like to "shop around" every time their broadband contract comes up for renewal

<https://www.ofcom.org.uk/phones-telecoms-and-internet/advice-for-consumers/costs-and-billing/price-comparison>

What affects the speed available at a property?

The connection to at a property will be capable of delivering a specific download and upload speed. The speed you actually receive depends on many things including:

- Make sure you ask for a fibre based service, if one is available
- The Internet Service Provider you choose, each ISP offers different service packages which provide different speeds. Most ISPs have a range of packages to choose from, with different costs
- There are usually good offers available. It's worth shopping around each time your contract is up for renewal
- Increasingly ISPs are prepared to confirm the minimum speed you can expect. The Government intends making sure all ISPs do this. It is worth asking the ISP to confirm the minimum speed it will provide before you sign-up
- Wireless routers slow the speed available, to test the speed you're actually getting, plug your device (PC or laptop) directly into the router, then do a speed test
- Don't position your router near other electrical / electronic equipment as interference can slow things down
- Secondary connections, such as those in bedrooms can cause interference and slow the broadband, even when the router is plugged into the main phone socket
- Remember in some parts of Norfolk Virgin Media provide coverage, including packages for businesses. Its online checker can be found at <http://store.virginmedia.com/check-your-postcode>
- If your speed suddenly worsens, there may be a fault on the line. Report this to your Internet service Provider.