

SUBJECT: RURAL BROADBAND UPDATE

MEETING: PLACE SCRUTINY COMMITTEE

DATE: 15 SEPTEMBER 2022

DIVISION/WARDS AFFECTED: ALL

1. PURPOSE

1.1 To provide an update on rural broadband following a request by the Place Scrutiny Committee made on 30th June 2022.

2. RECOMMENDATIONS

2.1 To receive the update on rural broadband as presented.

3. KEY ISSUES

Background¹

3.1 Telecommunications is a reserved power to the UK Parliament, and the UK Government has primary responsibility for setting broadband coverage and coverage targets.

Superfast

- 3.2 From 2010, UK Government policy focused on the roll-out of 'superfast' broadband usually defined as broadband with download speeds of 30 Megabits per second.
- 3.3 Superfast broadband has mostly been delivered by Fibre-to-the-Cabinet (FTTC) technology, when fibre optic cables run into a street cabinet and then existing copper telephone wires run from the cabinet to individual premises. FTTC relies on using the copper telephone network that is owned and operated by Openreach, the infrastructure division of BT group. Communications providers, including BT, Sky and TalkTalk but also hundreds more, then deliver broadband services to consumers using Openreach's network.
- 3.4 Superfast broadband can also be provided by cable (Virgin Media O2), fixed-wireless (for example, provided by Broadway Partners in parts of Monmouthshire) or mobile (4G).

Gigabit-capable

- 3.5 The focus of Government and industry is now providing 'gigabit-capable' broadband (download speeds of at least 1 gigabit-per second; 1 Gbps or 1000 Mbps). Gigabit-capable broadband can be delivered by technologies such as full-fibre (FTTP, fibre from the local exchange direct to each premises), high-speed cable (Virgin Media O2) and possibly 5G.
- 3.6 UK Government has a target for gigabit broadband to be available across the UK by 2030, and it remains committed to reaching 85% coverage by 2025.² It is estimated that 20% of premises, mostly in rural areas, will require public funding to be provided with a gigabit-capable broadband connection.

¹ Gigabit-broadband in the UK: Government targets and policy, House of Commons Library, February 2022, available at: CBP-8392.pdf (parliament.uk), pg. 7.

² Gigabit-broadband in the UK: Government targets and policy, House of Commons Library, February 2022, available at: CBP-8392.pdf (parliament.uk), pg. 14.

3.7 Devolved administrations and local authorities are often involved in the delivery of broadband infrastructure projects. Welsh Government's broadband strategy is set out in its Digital Strategy for Wales.³ It manages the Superfast Cymru project and its extension/successor contracts, which were arranged under the UK Government's previous funding programme and in recent years have delivered gigabit-capable connections.

Current situation in Monmouth constituency

- 3.8 There are two main sources of data on broadband coverage in the UK: Ofcom's Connected Nations reports⁴ (published twice yearly) and Thinkbroadband's data⁵ (published weekly).
- 3.9 The House of Commons Library's analysis of Ofcom's data provides a comparison of Monmouth constituency (including urban and rural area split) to Wales and the UK against various broadband indicators:⁶

Area	Average download speed Mbps	Superfast availability	Gigabit availability	Unable to receive decent broadband	Receiving under 10 Mbps	Receiving over 30 Mbps
Monmouth	56.1	86.7%	26.1%	2.5%	14.0%	68.0%
Urban Areas	62.2	97.7%	34.6%	0.0%	8.9%	75.1%
Rural Areas	47.2	70.5%	13.6%	6.1%	21.5%	57.7%
Wales	69.5	94.2%	44.9%	0.8%	9.0%	76.3%
UK	86.5	95.6%	64.0%	0.3%	7.0%	78.2%

Around 58.9% of the constituency's population lives in an area classified as urban

3.10 It also compares Medium Super Output Areas within the constituency to other areas of the UK, this indicates that some of the most rural parts of the county, such as Raglan and Llantillio Crossenny, are amongst the worst 10% of areas in the UK when it comes to many measures of broadband connectivity:

³ Digital strategy for Wales [HTML] | GOV.WALES

⁴ Connected Nations and infrastructure reports - Ofcom

⁵ https://www.thinkbroadband.com/broadband-data

⁶ House of Commons Library Constituency Data: broadband coverage speeds data dashboard: <u>Constituency data: broadband coverage and speeds (parliament.uk)</u>; this dashboard also produces analysis and enables comparison by Medium Super Output Area.

Which small areas overlapping the constituency have the best and worst connectivity?

Key to table shading:

Best 10% of Best 30% of Worst 30% of Worst 10% of areas in the UK areas in the UK areas in the UK

Worst 10% of areas in the UK

Area name	Average download speed (Mbps)	Superfast availability	Gigabit availability	Unable to receive decent broadband	Lines receiving under 10 Mbps	Lines receiving over 30 Mbps
Abergavenny North	45.6	99.4%	29.6%	0.0%	7.8%	72.3%
Abergavenny South & Crucorney	42.6	86.4%	39.1%	4.5%	14.1%	62.1%
Caldicot North & Caer-went	45.5	80.6%	7.0%	2.9%	14.4%	65.8%
Chepstow North & Trellech	69.8	80.6%	27.0%	5.1%	17.8%	64.3%
Chepstow South	61.0	99.8%	10.2%	0.0%	6.4%	83.2%
Croesyceiliog	86.1	97.8%	71.5%	0.1%	10.6%	79.0%
Gilwern & Llanfoist	45.8	88.2%	21.9%	0.3%	11.5%	65.8%
Llantarnam & Oakfield	78.3	95.8%	45.1%	0.0%	12.1%	83.7%
Monmouth & Wyesham	60.3	94.0%	23.8%	0.0%	11.3%	69.9%
Rhaglan & Llantilio Crossenny	44.1	54.2%	15.3%	12.2%	33.1%	44.6%
Usk, Goytre & Llangybi Fawr	53.2	75.4%	8.1%	2.3%	15.4%	65.1%

Note that some of the areas shown may overlap only partially with the constituency. See the notes below for details.

- 3.11 A key source of data on individual premises in Wales is that produced by Welsh Government's Open Market Review,⁷ the process in which Welsh Government seeks to understand where private sector investment in broadband networks has occurred, is currently being built, or is planned within the next three years.
- 3.12 For Welsh Government, the OMR data allow them to classify premises according to their broadband coverage status. This classification then informs eligibility for receiving public funding (see Appendix A for a summary of this) and inclusion in future Welsh and UK Government interventions, such as Project Gigabit (see Appendix A). For MCC, the OMR data provides a source of data easily comparable with other local authority areas in Wales, a detailed picture of which areas of the county are at risk of being left behind and may require intervention (for example, through the Local Broadband Fund, see Appendix A), and a dataset that can be used to provide premises-level advice and support in response to individual enquiries from residents.
- 3.13 The 2019 OMR data showed that 2,494 or 5.1% of all premises in Monmouthshire (our 'digital deprivation rate') did not have access to broadband at over 30 Mbps and there were no plans for it to be available within three years.⁸ A futher 5,490 or 11.1% of all premises were included in providers plans for network coverage but the upgrades were not fully proven or completed.⁹
- 3.14 The latest OMR was completed in Q2 2022, but MCC is still waiting to receive the full dataset on which to conduct analysis from Welsh Government. Once conducted, this analysis will form the basis of the refreshed Digital Infrastructure Action Plan the 2020

⁷ Broadband open market review 2021: summary of responses [HTML] | GOV.WALES

⁸ These premises are classified as 'white'.

⁹ These premises are classified as 'under review'.

version of which can be found here: <u>5a. Appendix A Digital Infrastructure Action Plan Updated 200710.pdf (monmouthshire.gov.uk)</u>.

The rollout of broadband in Monmouthshire

3.15 'Rolling out' improved broadband connectivity, whether in rural or urban settings, is a complicated process with many (often hidden) barriers, such as securing the necessary permissions from landowners to access land or install/replace infrastructure and needing to use historic infrastructure such as ducts or telephone poles that sometimes needs prior maintenance or replacement.

Full-fibre providers

- 3.16 As mentioned above, the focus of most policymaking and industry initiatives is the building of gigabit-capable, 'full fibre' broadband networks, which are the most future-proofed networks available and the current gold standard of connectivity.
- 3.17 In Monmouthshire, as in most parts of Wales and the UK, full-fibre broadband rollouts are generally being delivered by Openreach (including through their subcontractors) and/or 'alternative providers' (the generic term for providers other than Openreach). In most cases and with some exceptions, alternative providers are newer, smaller companies that build networks and connect customers in areas that Openreach do not plan to build in that is, they do not seek to compete directly with Openreach.

Openreach

- 3.18 Openreach is a company wholly owned by BT Group that maintains much of the telecommunications infrastructure (for example, telephone poles, cables, ducts, cabinets and exchanges) that connects/connected most UK homes and businesses to the national telephone and broadband network.
- 3.19 Openreach currently builds and connects premises to its full-fibre network in three main streams:
 - Commercial rollout
 - As a commercial company, Openreach invests significant amounts of nonpublic funds into upgrading its network.
 - It has stated an 'ambition to reach 25 million homes and businesses [across the UK] by December 2026, if the right investment conditions are in place'.
 - It publishes a map and list of the areas to be upgraded in future online:
 Where and when we're building Ultrafast Full Fibre broadband | Openreach
 - In Monmouthshire, Openreach plans to upgrade many (but almost certainly not all) premises connected to the Abergavenny, Caldicot, Chepstow, Monmouth and Usk exchanges 'by December 2026'.
 - Openreach does not provide MCC with any further information about its commercial rollout plans.
 - Phase 2 Superfast Cymru contract with Welsh Government¹¹
 - Openreach also delivers the current Phase 2 Superfast Cymru contract, let and managed by Welsh Government. The contract has a total value of £52.5 million and will now continue to the end of March 2023 to connect a total of 37,137 premises with gigabit-capable fibre to the premises.
 - Due to past interpretations of state aid legislation, only premises that are without existing access to a superfast broadband connection and not included in providers' commercial build plans (as provided through the Open Market Reviews, see 3.11) are eligible to be provided with public

¹⁰ Where and when we're building Ultrafast Full Fibre broadband | Openreach

¹¹ Openreach also delivered the Phase 1 Superfast Cymru contract, which was supported by £225 million of public funding and provided mainly Fibre to the Cabinet to

- support and included in this contract; as such, these premises are overwhelmingly in villages or more rural areas.
- The nature of the contract means that Openreach conducts surveys of the pool of possible premises, then informs Welsh Government of the expected cost and seeks approval to continue; as such, Welsh Government cannot direct Openreach to connect certain premises/areas.
- Welsh Government provides infrequent updates to MCC as to the number of premises in the county connected through this contract and the list of premises planned to be connected through it.¹²
 - As of April 2022, when data was last provided by Welsh Government, 1825 premises in Monmouthshire have been/are due to be provided with a full-fibre connection through this contract.
- Fibre Community Partnerships (formerly Community Fibre Partnerships)
 - This is a scheme in which Openreach 'works with the local community' to deliver full-fibre broadband.¹³ It typically focuses on smaller or more remote rural communities that are not in providers' future plans for full-fibre.
 - The Partnerships are funded by a combination of the Gigabit Broadband Voucher Scheme (see Appendix A), the community itself, and Openreach, and the build is due to be completed within 12 months of the funding being secured (although there are often significant delays).
 - FCPs have been used successfully to connect communities across the UK, but feedback from residents is that they can be a frustrating and drawn out process, and it is clear that potential schemes are sometimes disrupted by Openreach's own commercial or publicly-subsidised activity.
 - In March 2022, the scheme was put on hold for new applicants, due to overwhelming demand.
 - Openreach provide MCC with a monthly update on FCPs within the county in order that officers can provide additional advice and support to the community, as required. Current potential schemes in Monmouthshire include:
 - 'Crucorney Bettws Cottages'
 - 'Chepstow Mounton House'
 - 'Monmouth St Maughans'
 - 'Trelleck Rock Road'¹⁴
- 3.20 For an individual premises, the end result is the same regardless of by which route they have been connected: they are able to place an order¹⁵ from any of the full-fibre supporting Internet Service Providers that use Openreach's infrastructure.¹⁶

'Alternative providers' or 'Altnets'

- 3.21 A number of smaller companies although often backed by big investment are building their own full-fibre networks, generally using some of Openreach's infrastructure (for example, use of Openreach's telephone poles or ducts to carry the fibre to premises).
- 3.22 Unlike on Openreach's network, when a customer has a wide choice of communications providers with whom to take out a service, on alternative providers' networks, the

¹² Welsh Government also used to host an online checker that people could use to check directly if their premises was included in the rollout; this was taken offline in September 2021.

¹³ Fibre Community Partnership | Openreach

¹⁴ These potential schemes are at different stages. This list is non-exhaustive.

¹⁵ It is important to note that fibre builds will only take the fibre to a piece of infrastructure near a premises; only when a customer places an order with an Internet Service Provider will Openreach be tasked with running the fibre from the last piece of infrastructure to and then into the premises.

¹⁶ Ultrafast Full Fibre broadband service providers | Openreach

customer is often only able to take out a broadband service direct from the provider itself – although this may change in future.

- 3.23 In Monmouthshire, there are two main alternative providers of full-fibre broadband:
 - Ogi (formerly known as Spectrum Internet) has announced a £200 million investment to extend their full-fibre network to cover 150,000 premises in south Wales.
 - These including premises in Abergavenny, Caerwent, Caldicot, Chepstow, Crick, Magor, Monmouth, Portskewett, Pwllmeyric, Rogiet, Sudbrook and Undy.¹⁷
 - The network build is largely complete in Abergavenny with most premises able to order a service, underway in Monmouth and soon to begin in Chepstow.
 - Broadway Partners has secured £145 million investment to enable the rollout of their full-fibre network to cover 250,000 premises in rural Scotland and Wales by 2025.
 - The network build is complete in Llandewi Rhydderch and Llanarth and underway in Llanover.
 - In March 2021, MCC agreed to provide loan funding to a Special Purpose Vehicle wholly-owned by Broadway Partners, 'Monmouthshire Broadband Limited', to enable them to build a mixed wireless and fibre network across Monmouthshire.¹⁸ As of July 2021, 34 of the planned 57 radio base station sites were completed, covering 8,000 premises. Since then, Broadway Partners' new investment and other contextual changes have changed the focus of the scheme towards full fibre, and it is likely that the fibre network will replace much of the wireless network.

Other broadband technology rollouts

- 3.24 Other technologies, such as fixed-wireless access (including mobile broadband) and satellite, are also used to deliver improved broadband connectivity in the county. See Appendix A for further information about these technologies.
- 3.25 One example of a scheme utilising other technologies is a scheme being delivered by MCC in the Llanthony Valley using grant funding from Welsh Government's Local Broadband Fund. The scheme, currently still in the design and planning phase but due to be completed later in the year, will use a mix of fixed-wireless technologies, including licenced 5G spectrum, to deliver a fast (superfast but not gigabit capable) and reliable internet connection to premises in the area.¹⁹

Sources of funding

3.26 Various funding schemes are available to industry and/or residents or businesses to improve broadband speeds. See Appendix A for further information.

4. AFFORDING BROADBAND DURING THE COST-OF-LIVING CRISIS Social tariffs

4.1 A number of broadband providers, including BT, Sky and Virgin Media, offer cheaper long-term tariffs²⁰ for those receiving benefits such as Universal Credit and Pension

¹⁸ The investment is overseen by the MCC Investment Committee.

¹⁷ Boost for Wales's full fibre roll out - Ogi

¹⁹ The challenging topography of and low density of premises within the area means that it is unlikely that building a fibre broadband network will be viable proposition for any provider in the foreseeable future.

²⁰ Some providers may offer new customer-only tariffs or offers that are cheaper than social tariffs but for a shorter contract period.

Credit. See <u>Discounted 'social tariffs' for those on certain benefits</u> (moneysavingexpert.com) for an overview of some of these.

National Databank

4.2 The Good Things Foundation has developed a National Databank to provide free mobile data, calls and texts to people with a low-income – those at risk of data poverty: National Databank - Good Things Foundation.

5. EQUALITY AND FUTURE GENERATIONS EVALUATION (INCLUDES SOCIAL JUSTICE, SAFEGUARDING AND CORPORATE PARENTING)

5.1 An evaluation is not required for this paper as the report is for information only and no policy or service change is proposed.

6. OPTIONS APPRAISAL

6.1 An Options Appraisal is not required, as this paper is for information only.

7. REASONS

- 7.1 The rural digital deprivation rate in Monmouthshire continues to be unacceptable particularly in this post Covid 19 climate whereby an ability to access broadband is an imperative for many citizens, particularly in terms of their ability to work from home to reduce travel costs or to access on line services to address the cost of living crisis.
- 7.2 Once the latest Open Market Review data is released in full, the team will conduct analysis in order to understand where private sector investment in broadband networks has been made, is being made, and is planned to be made within the next three years, in order to identify potential solutions for those that remain at risk of being left behind.

8. RESOURCE IMPLICATIONS

8.1 The are no resource implications for the Council this a report for information only.

9. CONSULTEES

- Broadband companies operating in Monmouthshire
- Senior Leadership Team

10. BACKGROUND PAPERS

Appendix A: Rural broadband additional information

11. AUTHORS

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12. CONTACT DETAILS

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