

Welsh Government National Development Framework

Consultation response from BT Group

Overview

- BT Group recognises the vitally important part we play in ensuring everyone – wherever they live, work and travel in the UK – has access to high quality and reliable digital connectivity. We demonstrate this every day through: our role in supporting the widespread availability of superfast broadband¹ (to over 96% of UK premises and 93% in Wales), our plans for delivering against the new broadband Universal Service Obligation (USO), our extensive investment in full fibre as well as our mobile leadership. EE 4G coverage available is available across 85% of UK geography, and across 83% of the Welsh landmass.² In both instances, this is more than any other UK mobile operator.³
- We have already driven significant improvements to the digital connectivity that rural communities and businesses enjoy today. But we fully recognise the need to go further, to close the urban-rural divide and to ensure that, as new technologies are deployed, the hardest-to-reach parts of the country are not last in the queue. The challenges identified in the Mobile Action Plan are not unique to Wales, but there is no doubt that parts of the country have a challenging deployment environment. Low population density, as well as the proportion of rural and national park areas, can present some challenges. At BT, we have been providing guidance to the UK Government to improve connectivity across Britain and would like to see the National Development Framework for Wales complement advances we are seeing in other parts of the country.
- Realising this ambition – across both fixed and mobile networks – requires partnership across industry, government at all levels and Ofcom. We need new approaches to regulation and public policy, as well as public funding for deployment in locations that are not commercially viable. While the consultation asks specifically for views on encouraging better mobile coverage in Wales, we believe that the framework also provides an opportunity to address issues around fixed networks. We want to see:
 - Increased momentum behind ‘barrier busting’ efforts to reduce the cost and risk of digital infrastructure deployment. A number of these will require legislative change. In particular, we believe Welsh Government should align its approach toward planning processes for 4G & 5G mobile infrastructure with those that have recently been consulted on in England.
 - While we welcome the concept of ‘Mobile Action Zones’, it is important that the revisions to planning legislation that are required apply across the whole country,

¹ According to the Ofcom definition of 30 Mbit/s

² Ofcom, *Connected Nations* (2018). It notes that 3 Mobile cover 78%, Vodafone 71% and O2 67%

as opposed to specific geographic locations within Wales. This is particularly important as 5G deployment, which is already underway in Wales, picks up pace.

- We will need to ensure that the broadband USO can operate as an effective safety net for those currently unable to access decent digital connectivity.
- Active support for the Shared Rural Network proposal that the mobile industry has presented to the UK Government to reduce total not spots and almost eliminate partial not spots.
- A clear recognition that, in order to deliver a successful 5G network, the industry needs a mature 4G network in place. The sooner this happens, the more quickly (and more successfully) 5G will be deployed in Wales.

Mobile infrastructure in Wales: the situation today

- 1 Mobile coverage has historically evolved in a different way to fixed line connectivity due to the more competitive dynamic that has existed at a network level. EE, part of BT Group, has invested heavily in geographic coverage as a key competitive differentiator and has the largest and fastest 4G network. Over the past three years, EE has built hundreds of new sites in rural locations and is upgrading its entire network to 4G. EE 4G now covers over 85% of UK geography and over 99% of premises. This has driven the aggregate industry footprint – where at least one operator is present – to 91%.⁴
- 2 Whilst we believe that addressing total not spots – where no operator provides coverage – should be the priority, we understand the frustration caused by partial not spots, or areas where at least one but not all mobile operators have coverage. This is currently the case across 25% of the UK landmass. Wales has disproportionately more areas impacted by this issue- with 58% of the landmass having coverage from all four operators.⁵ That leaves the remaining 32% of the landmass with coverage from at least one operator (but not all four).
- 3 One way of addressing this is through operators sharing their infrastructure. There is currently extensive sharing of this nature across the mobile industry. The current structure of the sector of four vertically-integrated network operators, operating from a combined total of approximately 35,000 separate sites, has been supported by the creation of two joint ventures between EE and Three (MBNL) and O2 and Vodafone (CTIL). This has helped to achieve better coverage and reduce network deployment capital and operational costs. There is also significant site sharing between the joint ventures, and the utilisation of wholesale infrastructure providers such as Arqiva and WIG.
- 4 We remain open to sharing all our sites on appropriate commercial terms should other operators request access. For example, EE has built new masts in rural areas to deliver extended coverage for the new Emergency Services Network (ESN), which will also

⁴ Ofcom Connected Nations (Q2 2019)

⁵ Ibid

serve our commercial customers. We made the details of these sites available to all other operators at the earliest possible stage in the build process to allow them the opportunity to offer a service from them.

- 5** Wales is a major beneficiary of the ESN network, with 75 new 4G sites being built directly by EE as part of the programme. These are complemented by a further 93 planned new sites being delivered by the UK Government under the Home Office's Extended Services (EAS) Programme. EE will deliver commercial 4G services from these sites on a case by case basis depending on whether they can support a good customer experience.
- 6** In addition to the steps we're taking on an individual company level, BT Group, alongside the other mobile network operators, has now also put forward to the UK Government a proposal for a 'Shared Rural Network' (SRN). We note that both the Department for Digital, Culture, Media & Sport (DCMS) and Ofcom have publicly welcomed this proposal, and the most recent Secretary of State confirmed the UK Government's support for it to Parliament. Under it, mobile network operators will make substantial additional investments to reduce PNS areas. The proportion of the UK landmass covered by all four networks would rise from 66% to about 88%. This is likely to involve over thousands of mobile sites being upgraded around the UK.
- 7** About half of these new sites would likely require either full planning consent, or 'prior approval' PDRs to proceed in absence of the reforms proposed by the DCMS for England. Application of these reforms in Wales would considerably accelerate the PNS element of the SRN through reducing the number of instances where these currently more onerous planning requirements are applied. If the proposals were modified in line with our comments below, much of the work required could be done under PDRs with no prior approval required.
- 8** Alongside this, the SRN would see the amount of 'total not spots' (TNS) fall in parallel. Today, about 91% of the UK's landmass receives coverage from one or more mobile network. The relative indicator for Wales is in line with the overall national picture, at 90%. Through the SRN new mobile sites will need to be built to ensure that 95% of the UK receives 4G coverage from one or more mobile networks. This estimate is based on mast heights that are no higher than those currently permitted under a 'prior approval' PDR. While we have yet to finalise the number of new mobile sites that would be built in Wales under the SRN, we believe that more will be built than would have been if the alternative- namely coverage obligations imposed by Ofcom- were introduced.
- 9** If the PDR regime could be applied to masts of 50 metres in height, the number of new sites needed could be expected to fall substantially. This number is not insignificant given the costs involved in providing power and 'backhaul' connectivity to sites in the very remote areas where most would be located.

- 10** In addition, industry has proposed that the Home Office's Extended Area Service (EAS) programme (referred to above) should be integrated into the SRN. Under the SRN proposal, 93 proposed new sites would be enhanced by the UK Government to ensure that all operators can provide a commercial service from them. We expect that the total geographic coverage across the UK for one or more operators would rise to 95% through full use of sites delivered as part of EAS.
- 11** These planning reforms are likely to have a considerable impact on delivery of the TNS element of the SRN as well. In particular, the 292 EAS sites have several differing characteristics. Some are brand-new sites. A significant number have already received planning consent. Others are essentially conversions of those currently used by the emergency services' legacy network, Airwave. These will, in many cases, require planning consent to be upgraded to ensure that they can in fact be used by more than one mobile network. We suggest referring to the Home Office for exact numbers that lie in each category.

Supporting new mobile infrastructure in Wales: a preferred approach to planning

- 12** We would like to see the National Development Framework align with the approach being taken towards developments in other parts of the UK for planning of mobile infrastructure. In particular, a number of proposals have recently been consulted on by DCMS and the UK Ministry of Housing, Communities and Local Government (MHCLG). These substantially broaden the scope of Permitted Development Rights (PDRs) as applied to mobile infrastructure in England. We believe that the explicit need for such changes in Wales needs to be acknowledged in this framework.
- 13** Whilst we note that the Welsh Government consulted on and has since delivered changes to the relevant legislation in Wales in 2018⁶, we believe there is a clear need to revisit this legislation so that it is effectively aligned to how equivalent planning reform is evolving in the rest of the UK. Not to do so would be to increase the possibility of Welsh mobile infrastructure deployment being held back unnecessarily.
- 14** This would be entirely in accordance with the text in Proposed Policy 6 in the NDF, which outlines a presumption in favour of new mobile telecommunications infrastructure. In parallel, the second part of that policy seems an over-simplistic qualification to impose. We would suggest that it should instead read "Accordingly, there is a presumption in favour for new mobile telecommunications infrastructure *and that applications must take a balanced view of all social, environmental and economic considerations. In mobile action zones, local planning authorities and telecommunications operators will work together to increase mobile coverage collaboratively by identifying suitable sites and buildings for new equipment and infrastructure*". In addition, any revised PDR regime for Wales will need to take specific account of the need for:

⁶ Town and Country Planning (General Permitted Development) (Wales) Order (GPDO)

- a) **Technology neutrality:** Today, people principally want to be connected. How they are connected matters far less. It follows that the planning system should not apply different standards or expectations to different technologies which deliver this connectivity where it is not necessary to do so. We would expect to see changes to legislation to allow for PDRs to be applied vertical and street cabinet structures used for mobile in the same way they are currently for fixed line infrastructure.
- b) **Rapid Evolution:** Operators need the scope to quickly and efficiently upgrade the infrastructure they have in place as technology evolves, and to support increased sharing of that infrastructure. The greater the ability they have to do this, the faster new mobile technologies can reach local communities. It follows that the degree of planning consents required for upgrades should be proportionate and set at lower thresholds than for new infrastructure. In particular, prior approval should only be required for ground-based masts, not those placed on rooftops or buildings.

- 15 Reforming PDRs related to mast height:** Facilitating taller masts will lead to coverage being delivered with fewer mobile sites being needed. The PDR regime also supports more predictable deployment. The SRN would lead to an additional four percentage points of the UK's geographic area having access to 4G, as well as close partial not spots. Masts of 50m in height will deliver this coverage with less infrastructure than is required today. A new PD right (with prior approval) could extend to 35m or even to 50m.
- 16** These changes would help to mitigate the fact that the planning system remains a key barrier which restricts operators' ability to deploy masts that are sufficiently large enough to provide wide area coverage or to share and upgrade effectively. For example, larger, lattice-type structures with enough compound space, tend to be required to enable multiple operators to install their equipment, operate from the site and share infrastructure effectively. These masts will be a central feature of the SRN.
- 17** Too often, when we are looking to deploy new sites, the local planning authority or potential site providers restrict the type and size of the infrastructure we can build – preferring slim-line, telegraph pole structures. The lower heights restrict geographical coverage and the structure type has very limited, or no, sharing and upgrade potential.
- 18** More broadly, we understand that efforts are underway to revise the Welsh Governments Technical Advice No.19 which outlines considerations involved in granting planning consent for telecommunications infrastructure. Industry remains open to supporting this process.
- 19** We understand that the Welsh Government, as part of the NDP process, has identified several '5km hexagons' which currently have no 4G coverage but contain within them roads, railways, houses, businesses, tourist spots and enterprise zones. Furthermore, for a zone to qualify for Welsh Government support, a Local Authority would have to

give a commitment to support planning and to provide access to sites owned by the public sector (where they are in the right place).

- 20** While we welcome the idea that local authorities should take affirmative action to support coverage, our view would be that any approach to supporting deployment should apply nation-wide, rather than predesignated areas. The kinds of measures outlined above should be applied both in these zones and elsewhere. Similarly, we are keen to ensure that, through our efforts to progress the Shared Rural Network, we are aligned with Welsh Government's efforts to deliver such actions zone.
- 21** Finally, we believe it will be important for the NDF to recognise how, as connectivity grows, an ever-wider variety of policy outcomes will become dependent on it. As we move into a 5G environment, any sense of a digital divide (whether that is socio-economic or geographical) needs to be avoided. In recognition of this, we would suggest the inclusion of an additional paragraph, which builds on the existing section on page 14 entitled 'a connected nation' as follows:

"A Connected Nation

We are an increasingly connected nation. 93% of homes and businesses have access to a superfast fixed broadband speed, though only 38% of homes in Wales use the service. 4G coverage is available to 90% of the Welsh landmass. The next stage is to develop access to ultrafast fixed and mobile broadband speeds. This will be delivered through new fibre and 4G/5G connections.

Moving forward, there will be few NDF outcomes not impacted by the ability to access large volumes of data in real time. This access can positively shape how we live, work, travel and enjoy our leisure time. Geographic and socio-economic divides should not be a barrier to Wales fulfilling its potential and ambitions. We aim to close the digital divide by ensuring everyone in the country is connected"

Fixed broadband in Wales: the situation today

- 22** BT Group has played a central role in delivering the extensive roll-out of superfast broadband and 4G services across the country, including Wales. Through Openreach (with its greater strategic and operational independence), we are accelerating investment in full fibre. We support ambitions to deliver full fibre services nationwide and to deliver high quality mobile coverage wherever people live, work and travel.
- 23** The Government's target of ensuring that 95% of premises have access to superfast broadband (which they define as a 24 Mbps service) has been successfully delivered, with the Broadband Delivery UK (BDUK) programme still underway. Openreach is increasingly delivering full fibre solutions. As matters stand, Wales has better access than the UK as a whole does, with 10% of premises having access to full fibre

broadband, as opposed to 8% across the UK.⁷ The current model of Government supporting and, where necessary, directly funding BT and now Openreach to deliver this connectivity has been central to the achievement of this objective.

- 24** The UK's progress in delivering superfast broadband is consistent with that of other current EU Member States and, in several cases, deployment has progressed further. As of 2018, Spain had provided superfast broadband access to 85% of premises, Germany to 84% and France 52%.⁸
- 25** There is clear evidence that rural coverage has also improved substantively. If we focus on the ONS definition of a rural area, 87% premises now have access to superfast broadband. This has risen from just over 20% in 2012.⁹ Ofcom, using a different definition, suggests this was 77% as of Summer 2019.¹⁰ The figure for Wales is roughly analogous at 78%. Rural areas in Wales have better access to full fibre than their equivalents across the rest of the UK as well, with 16% of Welsh premises having such access and 10% across the UK.
- 26** Today, Openreach is connecting 20,000 new premises to full fibre every week. In April, BT Group agreed to provide Openreach with funding to accelerate roll-out and deliver full fibre to four million homes by 2021, with the ambition of reaching 15 million premises by 2025 if conditions are right.
- 27** Depending on whether the Ofcom or ONS definition of a rural area is used, full fibre is currently accessible to between 5.1-7% of urban premises, and 7.6%-9% of rural premises. Rural premises are currently disproportionately more likely to have full fibre access.¹¹ This is partly a consequence of the preference for installing fibre in rural areas as a solution for delivery of superfast access where the population is widely dispersed, and delivery was partially or fully publicly funded. Welsh fibre penetration is the same as the national figure (7%) according to Ofcom's definition. There has been very good progress. In 2018, the number of homes and businesses in Wales that had access to full fibre more than doubled - from 44,000 to over 95,000.
- 28** There is some evidence that take-up of superfast and full fibre broadband lags significantly behind the level of access to it. As of 2018, 94% of premises had access to superfast broadband (this has since risen to 96%). At that time, only 45% had subscribed to that service. Similarly, at that time, 98% (now 99%) of premises had access to a 'decent' broadband service. Only 65% had an active broadband service that delivered 10 Mbps.¹² This gap is even more pronounced in Wales than it is in the UK as a whole. 93% of Welsh homes and business have access to superfast broadband,

⁷ Ofcom Connected Nations (Q2 2019)

⁸ Department for Culture, Media & Sport, *Future of Telecommunications Infrastructure Review* (2018)

⁹ Based on access to a 30 Mbps service as shown at <https://www.thinkbroadband.com/news/8425-the-10-largest-rural-areas-and-their-broadband-coverage>

¹⁰ Ofcom Connected Nations (Q1 2019) again based on a 30 Mbps service

¹¹ <https://www.thinkbroadband.com/news/8312-picture-of-current-rural-and-urban-broadband-divide-in-great-britain> & Ofcom Connected Nations (Q1 2019)

¹² Ofcom Connected Nations (2018)

but only 38% of homes are using it. This the lowest take up across the UK.

- 29** The more people that use new networks once they are built, the stronger the business case for delivering full fibre across the whole UK becomes. It is therefore imperative that Ofcom, Government and the industry work together to ensure that customers understand the benefits of these services so that take-up of the new networks more closely matches their availability.

Closing the gap: broadband access and mobile coverage in rural areas

- 30** We have made significant progress in terms of supporting superfast and full fibre broadband and delivering 4G coverage in rural areas. We want to go further and ensure we minimise any enduring urban-rural divide. The SRN will form the focus of a concerted effort across industry, Government and Ofcom to create the right conditions for investment. Alongside planning reform, we believe the following are essential if this ambition is to be realised:
- a)** Increased momentum behind ‘barrier busting’ efforts to reduce the cost and risk of digital infrastructure deployment. Some of these will require legislative change.
 - b)** Delivery of the broadband USO as an effective safety net for those currently unable to access decent digital connectivity. Currently 3% of premises in Wales can only receive a broadband service that falls below the USO service definition threshold of 10 Mbps. This rises to 12% of premises in rural areas in Wales.
 - c)** Wider regulatory reform and public funding to support full fibre delivery nationwide.
- 31** We also believe that government and the public sector itself can play an important role in establishing best practice and delivering the intended policy objectives of the new code as quickly as possible. The Welsh Government should focus on.
- a)** Adapting the existing UK Government Digital Infrastructure Toolkit for government assets, published last year, to include property belonging to Welsh Government Departments, agencies and other public bodies.
 - b)** Ensuring that clear guidance is issued to public bodies, in particular local authorities, on the valuation of telecoms agreements under the new Electronic Communications Code and the benefits of mobile connectivity.
 - c)** Standardising documentation that could be used across all public assets to clarify areas of misalignment, such as providing a valuation methodology to be adopted for all assets. This is a matter which is currently leading to deadlock in some negotiations.