

National Infrastructure Commission for Wales

Report on Digital Infrastructure

Welsh Government response

Introduction

We would like to thank the Commissioners for the work they have done in producing their report into digital infrastructure in Wales.

It is important to recognise that telecommunications is not devolved to Wales and is the responsibility of the UK Government. We have intervened previously, most notably through our Superfast Cymru project, to step into this non-devolved area so that digital connectivity is improved and digital service delivery enabled.

The challenges of deploying digital infrastructure in Wales should not be underestimated. The topography and population density particularly in our rural areas fundamentally undermine the economic viability of deploying digital infrastructure on a commercial basis.

Below are the Welsh Government response to each of the recommendations made by the Commissioners.

Recommendation 'a'

The Welsh Government should continue to engage actively with the UK Government and Building Digital UK during the development of the new Gigabit funding programme, which should be more flexible than the previous superfast programme. In particular, the Welsh Government should seek to:

- i. Ensure that the tendering arrangements can accommodate the relative lack of competitive provision of FTTH infrastructure in Wales today and likely greater role to be played by Openreach in the programme. This includes tendering lots of significantly more than 3000 households.
- ii. Ensure that funds can be applied to technologies which currently deliver 100 Mb/s, such as 4G and 5G home broadband services, and not only in 'limited cases' as the UK Government currently seems to envisage.
- iii. Ensure that funds that are 'clawed back' under an FTTH contract can be reallocated flexibly to any scheme, rather than having to be allocated to new programmes being undertaken by the same operator. In this context 'any scheme' should include FTTH deployed by another operator, 4G/5G broadband deployed by mobile operators, or voucher schemes of any kind.
- iv. Allow funds to be provided on condition that availability of FTTH connections to businesses is prioritised over the needs of households.

Response

- i. Accept: Welsh Government officials are already working closely with their counterparts in Building Digital UK (BDUK) on the UK Government gigabit programme. Workstreams have been established and discussions to date have focussed on data, procurement and approach. Discussions are ongoing.
- ii. Reject: We always favour a technology neutral approach based on the circumstances at hand. The UK Government programme focuses on gigabit connectivity rather than ultrafast. Under previous procurements to address large scale broadband roll-outs to homes and businesses, including for our current fibre roll-out two years ago, there has been no interest from the mobile industry to deliver this type of connectivity at scale.

The joint mobile industry and UK Government Shared Rural Network project will bring coverage from all four mobile operators to 80 per cent of the Welsh landmass creating more opportunities to deliver home and business broadband. However, to deliver broadband using 4G and 5G at the speeds suggested by the Commissioners would require more infrastructure, more fibre backhaul connectivity, changes to the spectrum bandwidths currently deployed in many parts of Wales and for the infrastructure to be brought much closer to homes and businesses.

Our grant schemes are always designed and operated on a technology neutral basis and have supported numerous 4G home installations.

- iii. Accept: As stated above we take a technology neutral approach to publicly funded broadband delivery in Wales and under previous procurements mobile network operators have shown no interest in bidding. How clawback funding is spent is subject to the terms of the grant agreement with BT and is a standard element of all BDUK template grant agreements, of which the Welsh Government agreement is one. However, we will explore existing arrangements and seek maximum flexibility in how clawback funding arising from current and future schemes is spent.
- iv. Accept: The assessment criteria for the current fibre roll-out with Openreach included weighting in favour of business premises. We will review this approach for future procurements to ensure that businesses continue to benefit but also to ensure that new working patterns that have emerged during the current pandemic, such as working from home and remote working, are supported where we can.

Recommendation 'b'

In doing so, the Welsh Government should assume that Wales is unlikely to obtain access to the £1.3 billion of funds which we estimate would be required to deliver fibre to every household and business in Wales and nor should it dogmatically mimic the UK Government's commitment to FTTH. The Welsh Government should instead

develop its own strategy to maximise the economic and other benefits from lower cost investments in 4G and 5G mobile infrastructure.

Response

Reject

As already stated we take a technology neutral approach to delivery of publicly funded broadband taking into account a number of factors including value for money and the requirement to reinvest in the future. Telecommunications is non-devolved with responsibility lying with the UK Government. The UK Gigabit Programme and the UK Shared Rural Network project, where DCMS is working with the mobile industry, will deliver connectivity that will support both FTTP and 4G, and eventually 5G. It is not clear how a large scale Welsh Government investment in mobile technology might deliver the 4G and 5G services the report envisages more quickly than the SRN. Where 'last mile' connectivity using mobile technologies makes sense we will invest in that. We are already seeing a greater demand for 4G connectivity through our ABC scheme and as the SRN rolls out we expect to see that demand increase.

Recommendation 'c'

The Welsh Government should seek to encourage entry and investment by new FTTH operators in Wales, as we are now seeing elsewhere in the UK. One step in doing this is for the Welsh Government to provide all local authorities with specific guidance and direction on making ducts and other public assets available at fees which encourage their utilisation by operators and which are in accordance with the aims of the new UK Electronic Communications Code.

Response

Accept

Work is already underway with public bodies in Wales on making public assets available to telecommunications operators via a sub-group of Ystadau Cymru the public estates group for Wales.

Recommendation 'd'

The Welsh Government should undertake a rapid review of its existing broadband voucher schemes. Having done so, it may conclude that the Access Cymru scheme is out of date and should be closed. Communication of the Welsh voucher arrangements should be simplified and improved in order to significantly improve take up (for which targets should be set). At the same time, the Government should guard against 'voucher inflation' which is otherwise likely to be driven by the very high costs of FTTH deployment in some parts of Wales. Awarding vouchers for many thousands of pounds per household in the next 5 years should only be considered if all feasible alternatives – including the provision through subsidised 4G or 5G home broadband connections – have been exhausted. The Welsh Government should

adopt a self-imposed cap of £3400 per household, similar to that which applies under the Universal Broadband scheme, at least for the next few years.

Response

Accept:

The Welsh Government only operates one scheme of this nature, the Access Broadband Cymru grant scheme. A top-up is also, however, provided to the UK Government's Rural Gigabit Connectivity voucher scheme. A review of our approach to grant and voucher funding will be undertaken to ensure that current or future schemes meet the requirements of home and businesses across Wales. The ABC scheme has provided a critical lifeline to many homes and businesses, so while the emergence of UK Government schemes over recent years has been a very welcome development, it is important that a safety net is maintained for those that require rapid support.

The reference to FTTP cost inflation is interesting and will be explored further, however, it is important to note that the vast majority of funded solutions through the ABC scheme has increasingly been through via the provision of 4G mobile solutions. We always seek to ensure value for money, indeed funding available through the ABC scheme was reduced from £1,000 per premises to £800.

We will not, however, impose a cap per premises as recommended by the Commissioners but rather continue to take decisions based on value for money and technological neutrality. This will allow us to deliver future proofed digital infrastructure in a way that makes sense given the challenges and constraints of the premises in question. We will also continue to monitor cost per premises to ensure value for money.

Recommendation 'e'

The Welsh Government should replace the existing all Wales Digital Infrastructure Group with a new 'barrier busting' taskforce, led by a senior official, with clear objectives and deadlines in which to achieve them. The taskforce should lead the development and implementation of new guidance that is issued by the Welsh Government, including (but not limited to) that relating to the use of public assets and levy of fees for them, the implementation of a new planning regime for telecommunications (TAN19), liaison with Network Rail, Transport for Wales, the North and Mid Wales trunk Road Agent, the South Wales Trunk Road agent, and liaison with the equivalent taskforce in the UK Government.

Response

Accept:

A taskforce will be established that builds on existing arrangements under the Wales Digital Infrastructure Group, and will draw on membership from across the public sector and industry. The taskforce will define those issues that need to be addressed and the approach that needs to be taken to tackle those issues.

It must be recognised, however, that addressing barriers to deployment will not, on their own, unlock investment by the industry as it will not address the underlying economics that drive the fundamental challenges of deploying new digital infrastructure in Wales. Removing or reducing barriers around existing or planned investment is a sensible and tangible approach, however, care must be taken to ensure that this dialogue and collaborative problem solving does not distract from the need for concerted industry and UK Government investment in Wales.

The new taskforce will sit alongside the existing Wales Digital Infrastructure Group, which will continue to help coordinate deployment of broadband and mobile connectivity, communications and engagement activity, share ideas and good practice, share data and develop new interventions. The group has been successful and is considered a worthwhile vehicle for airing and resolving issues by current participants.

Recommendation ‘f’

The Welsh Government should not invest funds into 5G case studies, proof of concept activities, testbeds or trials, but should instead aim to ensure that successful applications that are developed elsewhere in the world can then be adopted in Wales.

Response

Reject

All Governments, including the Welsh Government, have an important and widely recognised role to in supporting and nurturing the development of new technologies, new industries and new skills. We already have a developing academic ecosystem in telecommunications technologies not least at the Digital Signal Processing centre at Bangor University. Testbeds, trials and other similar activities can help develop skills and confidence, stimulate creativity and grow new collaborations. Wales is an exciting place to do business, research new ideas and, from a telecommunications perspective, offers an interesting opportunity test and trial technology deployment in rural and hilly locations that will have relevance across the world. Participating in such activity will not only improve the profile of Wales but also ensure that new technologies are fit for our landscape and our particular opportunities and challenges.

The Welsh Government is the lead partner in a ‘Rural Connected Communities’ consortium as one of a number of projects to win funding from the UK government to help spread the benefits of 5G across rural communities. The project taps into the capabilities and expertise of the leading technology, security, academic and mobility organisations that make up the consortium including Cisco, BT, Cardiff University, Monmouthshire CC, Blaenau Gwent CBC, Utterberry and AppyWay. The project exists to build the case for 5G connectivity in rural Wales – improving connectivity, access to important services, and attracting investment in a digital Wales.

The project will aim to deliver a commercial network and services to demonstrate the commercial potential and social impact of increased 5G connectivity in remote areas.

It aims to provide a replicable framework for increased investment by mobile network operators in remote areas. Projects are being developed across transport, farming, tourism and education.

Recommendation 'g'

We make no specific proposals for new initiatives to promote the greater adoption of FTTH services when and where they become available in Wales. Instead, we recommend that Audit Wales be asked to identify and review the effectiveness of the broadband adoption programmes that are already being undertaken in Wales, and to identify best practice outside of Wales, and make recommendations to the Welsh Government. Existing activities which are ineffective should be ended and resources reallocated. The Welsh Government should also seek to liaise closely with the UK Government's new Gigabit Digital Take-up Advisory Group.

Response

Reject

There is a difference in adoption rates across Wales with Wales wide adoption at 55 per cent (Ofcom Connected Nations December 2020) in areas where superfast is available but adoption in areas where Welsh Government have intervened through Superfast Cymru and delivered associated communications and marketing activity the take-up rate is nearly 69 per cent (Welsh Government figures) with work still ongoing. Concerted effort is required from the industry to drive take-up across those areas of the country not served by a Welsh Government intervention.

The Wales Digital Infrastructure Group already acts as coordinating group for take-up activity across local authorities and city and growth deals in Wales including a network locally funded broadband engagement officers.

We will, of course, liaise closely with the UK Government's new Gigabit Digital Take-up Advisory Group.

Recommendation 'h'

We recommend that the new Welsh Government Chief Digital Officer be asked to contribute to the work of Audit Wales by providing evidence on the adoption of broadband technologies by public authorities in Wales.

Response

Reject

As highlighted above, the forward work programme of Audit Wales is a matter for Audit Wales, however, we do recognise the importance of digital connectivity to the public sector in Wales, and how such digital connectivity helps enable and deliver digital public services. The Public Sector Broadband Aggregation delivers fast and reliable connectivity to 117 organisations and over 5,000 premises in Wales.

Our new Digital Strategy for Wales is to take a look ahead and set out a national vision for jointly adopting a digital approach across Wales. The vision is to “improve the lives of everyone through collaboration, innovation and better public services” It contains six missions:

Mission 1: Digital Services – to deliver and modernise services so that they are designed around user needs and are simple, secure and convenient.

Mission 2: Digital Inclusion – to equip people with the motivation, access, skills and confidence to engage with an increasingly digital world, based on their needs.

Mission 3: Digital Skills- to create a workforce that has the digital skills, capability and confidence to excel in the workplace and in everyday life.

Mission 4: Digital Economy – to drive economic prosperity and resilience by embracing and exploiting digital innovation.

Mission 5: Digital Connectivity- to ensure services are supported by fast and reliable infrastructure.

Mission 6: Data and Collaboration – to ensure services are improved by working together, with data and knowledge being used and shared.

The Strategy aims to ensure people in Wales experience modern and efficient public services supported by good, ethical, use of data. It wants to stimulate innovation in our economy and support businesses to develop the resilience they need to succeed. It sets out to provide the people of Wales with the confidence they need to engage in their communities and in modern society. It aims for learners of all ages to have the knowledge, experience and skills to benefit from an increasingly digital and changing economy.

Recommendation ‘i’

The planning regime for telecommunication in Wales should be brought into line with that currently being proposed for England (and likely to be replicated in Scotland) as a matter of urgency. This should be accompanied by the wholesale revision of the TAN19 guidance to local authorities, as well as revisions to the Code of Practice on Mobile Phone Network Development, both of which are now over 15 years old. However, we think that more favourable provisions should only be adopted if Welsh households and businesses can be assured of obtaining significant improvements in broadband connectivity as a result. This would require the mobile industry, perhaps represented by Mobile UK, to commit to further improving coverage in Wales, beyond the commitments already provided under the Shared Rural Network programme.

Response

Reject

The planning regime in Wales, Planning Policy Wales is very supportive, in policy terms, towards the roll-out of new telecommunications and digital infrastructure. Future Wales (the National Development Framework) continues this policy outlook and advocates proactive policies for local planning authorities and the industry to act in areas of limited or no coverage.

In terms of the planning systems within the devolved administrations, this is for each Government to decide on their priorities for legislation and policy development and act accordingly. The Minister for Housing and Local Government laid new secondary legislation in November 2020 to further de-regularise the permitted development rights for small antenna. The Amendment Order came into force on 21 December and will help to facilitate the roll-out of next generation 5G mobile services across the country, ensuring Wales is not disadvantaged in this respect.

Increases to the height and width of masts in both urban and rural areas came in to force across Wales in April 2019. The telecoms industry frequently state that the Welsh Government should raise the permitted development rights thresholds for the heights of masts and compare one UK nation against another. However, the planning system needs to take into account the impact that these developments have on the environment and surrounding residents.

If masts higher than the permitted development limits are needed in a particular place, then a planning application can be submitted for such a scheme. This route would involve the community in assessing the impacts and potentially realising the benefits from the development, which wouldn't occur through permitted development.

A convincing argument has not been made by the industry to raise this threshold. The industry has provided no evidence nor any tangible assurance that raising the threshold higher will result in more masts being built in areas that endure little or no coverage presently. Wales' topography is different and simply copying other nation's approaches to permitted development rights would not be appropriate.

The purpose of TAN 19 will be reviewed in light of the new Code of Best Practice on Mobile Phone Network development published in February 2021.

Recommendation 'j'

We recommend the Welsh Government undertake a small project to obtain better data on existing levels of mobile coverage and performance in Wales. This should be used to inform data already produced by Ofcom and the assumptions made by both the Welsh and UK Governments when developing policy or enforcing targets.

Response

Accept

Welsh Government will work with Ofcom, the UK Government, the industry and other data providers to attempt to obtain better data on existing levels of mobile coverage and performance in Wales. However, data on coverage is commercially very

sensitive and there has historically been a frustrating reluctance by the industry to share data or to allow data to be shared by Ofcom.

Recommendation 'k'

We recommend that the Welsh Government explore, with industry and in parallel with the implementation of recommendation (i), the extent to which further 4G coverage and accelerated 5G delivery could be achieved in Wales within the next 5 years, likely using the 700 MHz spectrum that will be available from 2021, if:

- i. The Welsh Government were to adopt further amendments to the planning regime in Wales above and beyond those currently proposed by the UK Government for England, to further facilitate the deployment of mobile infrastructure
- ii. The Welsh Government were to provide additional public funding, above and beyond that in the existing SRN agreement, in order to further extend mobile coverage in some parts of Wales. Such funds could be reallocated from the share of the £5 billion Gigabit funding programme which the Welsh Government expects to obtain from the UK Government (and could represent a significant proportion of that allocation)

Response

Reject

As highlighted above we have already made significant changes to the planning regime in Wales and a case for further changes has not been made.

Responsibility for telecommunications across the UK, including in Wales, rests with the UK Government. Its joint Shared Rural Network project with the mobile industry will deliver improved mobile connectivity across Wales. How it plans to deliver this project is a matter for the UK Government. We do not currently anticipate undertaking a publicly funded intervention in mobile connectivity in Wales. UK Government funding for the gigabit roll out cannot be repurposed for other connectivity that does not deliver gigabit connectivity.

Recommendation 'l'

We recommend that the Welsh Government ask the UK Government to consider introducing 5G coverage and performance targets (alongside those already adopted for 4G) into the existing Shared Rural Network arrangements. If this is not supported, and if progress is made with the UK mobile operators, then the Welsh Government should pursue a separate agreement with the mobile operators which would incorporate such targets.

Response

Accept:

We will ask the UK Government to establish 5G coverage and performance targets into both the existing Shared Rural Network arrangements and any future mobile infrastructure intervention.

At the very least, the Welsh Government will wish to see coverage parity in Wales with other parts of the UK so that households and businesses in Wales benefit from emerging opportunities without an unhelpful lag or delay. Setting specific Welsh Government targets independently for Wales, however, would be challenging without the levers in place for achieving such targets. We do not currently anticipate undertaking a publicly funded 5G intervention in Wales. Any intervention currently would be premature as we could only intervene where the market has failed to do so and as such must let the market deployment of 5G play out.

Recommendation 'm'

We recommend that the barrier busting taskforce be asked to assist Mobile UK and/or mobile operators in their discussions with Highways Authorities and Network Rail with a view to resolving the issues which we list in paragraph 342 of this report.

Response

Accept

The task force will be asked to look issues that address the whole of the telecommunications industry including highways and rail issues.

Recommendation 'n'

We recommend that the Welsh Government engage directly with the Home Office to determine whether and the extent to which delays in the delivery of ESN affect coverage in Wales and to satisfy itself that they will be resolved or to identify actions which the Welsh Government can take to assist.

Response

Accept

Welsh Government already has links into the ESN project and wider ESMCP programme.

The Welsh Government, as a sponsor body, and the Joint Emergency Services Group (Wales) are both actively engaged with the Extended Area Services Team, Natural Resources Wales, the Planning Authorities and Welsh Government ESNR Planning Division and in some cases the local councillors to ensure wherever possible the masts fast tracked to enable an early switch on.

The Welsh Government is also providing some additional funding to the programme to upgrade VSAT masts to either Microwave or Fibre to facilitate take up of other mobile network operators (MNOs) to seek to offer mobile broadband to rural communities. Wales is currently discussing with the EAS team opportunities to

activate in the region of twenty EAS Masts across Wales within the next twelve months two years ahead of schedule.