

RSN DRAFT

REVITALISING RURAL – REALISING THE VISION

Digital Connectivity

Why it matters

Digital connectivity is a key enabler of business innovation and an important driver of productivity growth. Rural based businesses in all economic sectors and of all sizes (including the self-employed) need access to fast and reliable broadband and mobile networks if they are to thrive, compete and reach new markets.

Digital connectivity creates new opportunities for businesses to set up in or locate to rural places, bringing jobs and wealth to those areas. It also provides opportunities for homeworkers to operate virtually, yet efficiently, from rural settings.

Digital connectivity allows those who are on the move to stay in contact, download information and work remotely, in keeping with modern day expectations of business people, residents of all ages and (crucially, from a rural perspective) those visiting or holidaying in an area.

Digital connectivity offers rural residents the option to access many services without having to make long or complex journeys. It has rapidly become a key means for accessing banking, education and even healthcare, to name just three examples. It can also help address rural loneliness and isolation.

Digital connectivity will allow the aspirations of and benefits from the Industrial Strategy's Grand Challenges to be realised in rural areas. This will include developments such as agri-tech for crop or livestock management, virtual health consultations and augmented reality at visitor attractions.

In short, if rural communities are poorly connected, digitally, their ability for productivity growth will be constrained, causing them to fall further behind economically and to face disadvantages.

The national policy context

Key elements of national policy include:

- Broadband USO – a right giving households or businesses with a slow internet connection (i.e. a download speed below 10 Mbps) the ability to request a free upgrade, if the cost for BT Openreach does not exceed £3,400. They may have to pay costs above this threshold.
- Future Telecoms Infrastructure Review – a Government strategy from 2018, which set a timeframe and approach to roll out full fibre networks delivering ultrafast connectivity. It aims to cover all areas of the UK by 2033, with public funds allocated for an 'outside in' policy, so rural areas start to benefit in parallel with commercially viable urban areas. This will be commenced by the £200 million Rural Gigabit Connectivity programme, which will test a deployment approach based around public sector hubs, such as schools.

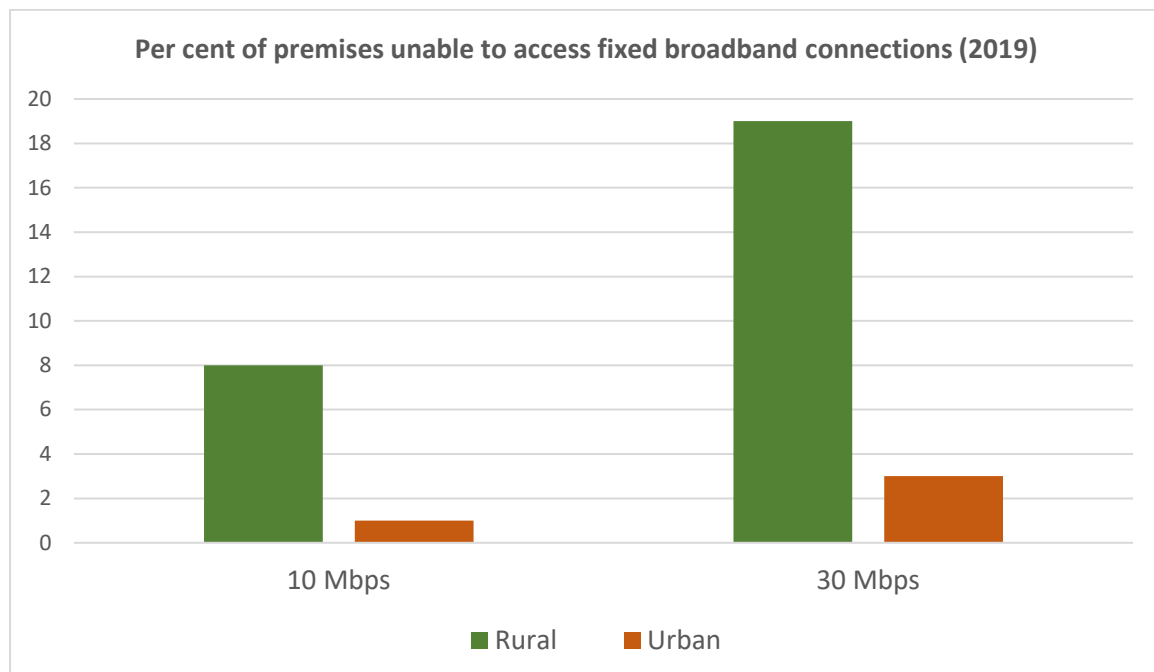
- Shared Rural Network – an agreement signed by the UK’s four mobile network operators, to share masts or permit roaming (between their networks) at locations where this can plug gaps in 4G coverage. This will occur mainly in remoter rural areas and, using public funds, will build new infrastructure at some ‘not spots’ currently unserved by any network.
- 5G test beds and trials programme – a series of pilot projects using emerging 5G mobile technology, to test its application at differing locations and in various economic sectors. It includes 5G Rural First projects trialled in Shropshire and Somerset, and a 5G Rural Integrated Testbed project trialling tourism and agriculture applications.
- Legislation – further upcoming legislation was announced in the December 2019 Queen’s Speech. Amongst other things, this is expected to require that all new homes are built with gigabit capable connections.

The rural dimension

Broadband and mobile networks are clearly more widely available in rural areas than they were a few years ago. However, there remains some notable connectivity challenges to resolve.

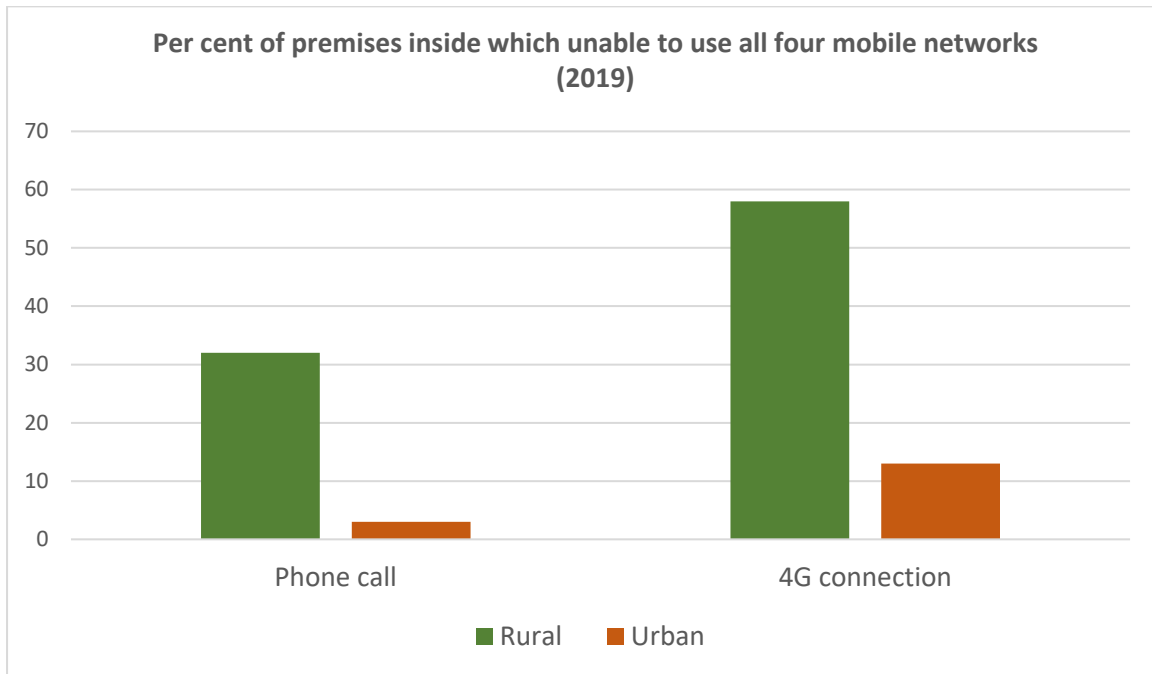
Some 8% of rural premises (or 274,000 households and businesses) in England cannot access a decent fixed broadband connection of 10 Mbps¹. This is the threshold set for the broadband USO, which the regulator (Ofcom) considers necessary for everyday use, though it is likely to prove inadequate for many business’ users.

Some 19% of rural premises in England cannot access a superfast broadband connection of 30 Mbps. A fifth of rural premises cannot yet benefit from superfast speeds.



¹ *Connected Nations – England report*, Ofcom (2019) for all broadband and mobile connectivity statistics

There remain significant issues with mobile connectivity in rural premises. Some 32% of those in England are premises where it is not possible to make an indoor phone call on all four of the mobile networks (EE, O2, Three and Vodafone). Similarly, it is not possible to get an indoor 4G connection on all four networks at a majority (58%) of rural premises.



The outdoor signal is notably better. However, complete ‘not spots’, where no 4G signal is available from any operator, make up 3% of England’s rural landmass. Across 22% of that rural landmass it is not possible to access a 4G signal from all four networks.

During 2019 mobile network operators launched 5G at 40 UK locations on a commercially funded basis. All 40 of these locations were in large cities or towns. Unless public sector funding starts to flow soon, rural areas will fall behind in the 5G roll out.

Research from 2018 estimated that if rural based businesses could resolve their connectivity and other digital constraints, that would add a minimum of £12 billion annually in Gross Value Added to the UK economy².

Policy solutions

TO BE IDENTIFIED AND ADDED AT A LATER PROJECT STAGE: three or four practical policy ideas.

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² *Unlocking the digital potential of rural areas across the UK*, Rural England and SRUC (2018)