

## Broadband and the road to 5G inquiry

Evidence submitted to the Digital, Culture, Media & Sports Committee  
Evidence submitted by the Rural Services Network



1. The Rural Services Network (RSN) is the national champion for rural services, ensuring that rural people have a strong voice and that rural communities receive a fair deal. It is a membership organisation representing 154 local authorities (county, district and unitary councils) and 85 other service providers or rural interest bodies (including fire and rescue authorities, housing associations, bus operators, land-based colleges and youth organisations).
2. Improving digital connectivity (both fixed broadband and mobile) for rural communities and rural-based businesses is a priority for the RSN. As such it was a theme within our 2019 call on the Government to develop a comprehensive Rural Strategy.
3. Our starting point is that many rural communities and economies have been significantly disadvantaged by the market failure which took place during the roll out of earlier broadband and mobile technologies. This much is evident from statistics in the *Connected Nations* reports produced annually by Ofcom. Although, public funding and regulation have been used to address this, they were late in arriving and tended to focus intervention on the cheapest and easiest to resolve rural places, leaving behind the more remote or isolated.
4. The RSN has been cautiously supportive of more recent policy developments, such as the nationwide ambition and outside-in approach proposed for full fibre networks and the development of the Shared Rural Network for 4G mobile. The issue is how quickly and effectively these can be implemented in practice. The broadband USO has some merit as an intervening fix, though it is woefully unambitious (being set at a level which is already out of date and which is inadequate for thousands of small rural businesses).
5. Whilst we are pleased to see the DCMS Committee focussing an inquiry on gigabit-capable broadband and 5G, it is important to say that many smaller or remote rural communities and businesses are still waiting for more basic levels of connectivity. It is important to address these current issues as well as getting the framework right for next generation connectivity.

### Realism of the 2025 ambition for gigabit-capable broadband

6. The Committee asks how realistic the Government's ambition is. Achieving that ambition by 2025 may well be challenging. That said, it seems quite likely that gigabit-capable broadband could be delivered to commercial urban areas over a similar sort of timescale. The Government committed, in its Future Telecoms Infrastructure Review (FTIR), to a parallel roll out in rural areas using an outside-in approach to guide any public subsidy funding. The implication is, therefore, that Government needs to speed up its network investment plans for uncommercial rural areas. This may require the deployment of a mix of broadband technologies.

7. It is imperative that by bringing forward the ambition from 2033, as stated in the FTIR, to 2025 Government does not water down its commitment made to rural communities and so leave them trailing behind, as they were with superfast broadband. On a positive note, we hear the substantial financial commitment which was made on digital connectivity in the Chancellor's Budget in early March 2020.

### **Challenges of 5G and gigabit-capable broadband roll out**

8. The RSN is concerned that the target for 5G roll out is more ambiguous than that for gigabit-capable broadband. Government policy is for its delivery to "the majority of the population" by 2027, which could be achieved by focussing mainly or even purely on commercial urban areas, since they comprise 83% of the England population. That risk needs to be addressed through an equivalent outside-in commitment made for 5G.
9. There are likely to be some land use planning issues providing 5G infrastructure in countryside settings, including in National Parks and Areas of Outstanding Natural Beauty. Our understanding is that masts for 5G are bulkier (than those used for 4G) and additional masts will be required in some locations. Recent Government planning proposals do, at least, seek to address this.
10. More generally, though, the clear and significant challenge is that investment in new networks for broadband and mobile will frequently not prove commercially viable in rural areas. More infrastructure (e.g. backhaul) needs to be built and the scattered customer base is smaller. This is especially true in the most remote areas. For this reason, the public funding commitment by Government, to enable an outside-in approach, is crucial.
11. It is important that Ofcom, which has particularly focussed on achieving competitive markets, does not let that aim undermine the rural roll out. In many rural areas simply having connectivity, rather than competition, is the prime concern. The recent launch of the Shared Rural Network, which employs mast sharing between mobile network providers to plug gaps in 4G coverage, is relevant. Such a collaborative model may equally have application when it comes to rural 5G roll out.
12. Government, local authorities, Local Enterprise Partnership and others need to work with the telecoms industry to encourage awareness, take-up and utilisation of gigabit and 5G services. This needs to happen in a geographically targeted way, alongside the roll out of such networks. This will help to ensure value for money, especially where public subsidy is used (see next section). Skills Advisory Panels should also look for opportunities to develop the digital skills of SMEs, so they can take advantage of connectivity developments.

### **Outside-in approach to address the digital divide**

13. We recognise that Government must be careful to invest public money only in locations where it is uncommercial to develop gigabit or 5G networks. However, because the intention is to start by publicly funding networks in the hardest-to-reach locations (and to work backwards from there) this should be achievable.

14. Better value for money would be achieved if this can make use of network infrastructure investment which is being used to provide for key services, such as schools or the NHS.
15. Equally important, as noted above, is to generate take-up and utilisation of gigabit and 5G services, so there is faster payback through economic growth, through innovation, through access to new services and other opportunities.
16. We welcome the DCMS 5G Testbeds and Trials Programme, which is exploring applications using 5G technology in a number of rural areas. Lessons from this programme must quickly be learnt and shared.

### **Lessons from take-up of broadband and mobile services**

17. The rural evidence is that take-up of superfast broadband was generally higher in rural than in urban areas: especially so where connectivity had been poor previously. Consumers are more likely to pay for an upgrade to new networks where the connectivity gain is most evident and most needed. In that sense, rural roll out tends to generate real benefit.
18. Businesses seem most likely to pay for an upgrade in connectivity if they learn about the tangible benefits from another (peer) business. This can happen through business networks, good practice information and word of mouth. It must do more than demonstrate connection speeds, showing practical applications and business benefits.
19. Both businesses and residents need accurate, up-to-date and readily available information about when networks in their area are due to be or have been upgraded. Geographic information provided by Ofcom and others has often been insufficiently fine grain, leaving consumers confused and frustrated. This may be particularly true in rural areas where information provided at spatial levels such as postcode areas may cover large geographies that lack on-the-ground precision.

### **Impact on left behind communities and individuals**

20. Many rural economies have been held back by poor connectivity. This affects business premises, home workers and those who frequently work on the move (relying heavily on a mobile). It affects business productivity, innovation, supply chains and client orders. It also deters inward investment in rural areas. A report<sup>1</sup> by Rural England CIC (2018) estimated that resolving digital constraints experienced by rural based businesses would add at least £12 billion annually (Gross Value Added) to the UK economy.
21. It is important to note that modern rural economies are diverse, with a wide range of service, manufacturing and land-based sectors represented. Moreover, that some of the 5G applications being highlighted have obvious rural application e.g. agritech on farms, virtual reality in tourism/heritage facilities.

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<sup>1</sup> Wilson B et al, *Unlocking the digital potential of rural areas across the UK*, Rural England CIC (2018)

22. Connectivity is also, of course, important for access to services (many now digital by default) and for social networks. Whilst these do not currently need gigabit or 5G networks, that is likely to change. Tele-health is just one examples that has obvious rural application e.g. enabling patients to ‘see’ specialist clinicians based in urban hospitals or health facilities.

### **Collaboration between stakeholders**

23. County-based Broadband Partnerships were key to the delivery of superfast broadband programmes and hence to network delivery in rural areas. The approach enabled local authorities and their partners to work with communities and promote take-up. There should be scope to maintain and refresh such partnerships to play a key role in gigabit and 5G programmes. However, in contrast to the superfast broadband programme, this should not require match-funding by local authorities, since this was an extra cost for hard-pressed rural (county and unitary) authorities – one not faced by urban authorities.
24. There should be scope to encourage more rural businesses to benefit from the roll out of this technology through grants available from the UK Shared Prosperity Fund. This is more likely to happen if the Fund includes a dedicated rural strand, tailored to the needs of rural based businesses. Arrangements (including partnerships) that manage the Fund locally therefore need to be a part of the solution.
25. In conclusion, it is imperative that rural communities and businesses are able to share in the opportunities that will arise from gigabit-capable broadband and 5G mobile connectivity. If they do, not only rural areas, but the wider national economy and society will benefit. If they do not, there will be both an opportunity cost and an inherent unfairness. Government and the public sector must therefore provide the policy framework and address the market failure in rural areas from the outset. There is little time to lose.
26. The RSN is happy for this evidence to be placed in the public domain.