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Ref: NFU consultation response - Statement of Strategic Priorities for telecommunications, the management of radio spectrum and postal services (DCMS consultation)

Contact: Andrew Francis, NFU Chief Adviser (Economics)

Tel: 024 7685 8542

Email: Andrew.Francis@nfu.org.uk

NFU consultation response - Statement of Strategic Priorities for telecommunications, the management of radio spectrum and postal services

Summary

Full digital connectivity is important for the wider UK economy, to help deliver the Industrial Strategy and to ensure businesses can thrive in rural areas. Full connectivity allows productivity improvements to be made on farm. It can address safety concerns, reduce social isolation and allows access to services that are more and more moving online (such as Making Tax Digital).

The NFU welcomes the objective to provide nationwide full-fibre gigabit-capable networks by 2033 and the approach to provide full capability across all of the UK and to ensure that no areas are systematically left behind. Whilst the vision as described in the consultation sets out the connectivity of the future, the NFU is concerned that many of our members (principally in rural communities) are being denied access to even basic fixed line broadband and mobile coverage right now.

It is encouraging that the latest NFU 2018 broadband and mobile results suggest that there has been some recent service improvement among farmers in rural communities. However, significant problems for both fixed broadband mobile coverage remain. One way of mitigating this, for mobile networks is for Ofcom to consider whether to offer roaming services to consumers when licencing spectrum. The costs in doing so (c. £60m) are significantly less than that needed for full individual network coverage (£3bn - £6bn).

5G offers exciting opportunities for farming businesses. We therefore would ask for more detail about how Ofcom intend to monitor the investment in 5G and what the appropriate options are should the market not be delivering 5G investment at sustainable levels. Our worry is that rural areas will experience the same lack of coverage with 5G as they have with fixed line broadband and mobile coverage and cannot utilise the ground-breaking opportunities these services can offer.

In terms of access to postal services, the NFU believes that the delivery of the DCMS / Ofcom objective to secure sustainable and efficient [universal postal service](#) must extend to the maintenance of the rural Post office branch network. As a result, small businesses should be able to quickly transfer basic banking facilities to their nearest post office branch, including depositing both cash and cheques as well as accessing change. More awareness needs to be made of the services available at Post Office branches.

Introduction

The NFU represents 55,000 members in England and Wales involved in 46,000 farming businesses. In addition, we have 55,000 countryside members with an interest in the countryside and rural affairs.

Our trade association is the largest farming organisation in the UK, providing a strong and respected voice for the industry and employing hundreds of staff to support the needs of NFU members locally, nationally and internationally. We work with government departments across government, including agriculture, rural affairs, environment, energy, climate change, science, business, employment and transport issues. Our aim is to direct policy into real economic opportunities for farming, rural diversification and job creation. The NFU champions British agriculture and horticulture, to campaign for a profitable and sustainable future for our farmers and growers.

With 72 per cent of UK land area in the agricultural sector, NFU members represent the bedrock of the rural economy, with a diverse range of business interests in addition to food production. Our vision is for farming to grow and create wealth through a wide variety of goods and services for the UK economy, centred upon but not limited to food production.

Farming underpins Britain's largest manufacturing sector: food and drink. The overall contribution of agriculture to the UK economy has been estimated recently at £46.5 billion. This is spread across every part of the country, with agriculture playing a central role in rebalancing the economy. Farmers also produce renewable raw materials for the emerging bio economy, and clean energy including wind, biomass and solar power, with around 10 per cent of the nation's electricity now generated on agricultural land. Furthermore, the UK relies upon on farm businesses, as land managers, to provide a wide range of environmental goods and services.

Response to the consultation

In providing a response to this consultation, the NFU will focus on addressing three of the four Strategic Priorities:-

Section 1: World-class digital infrastructure and Section 3: Secure and resilient telecoms infrastructure

The NFU welcomes the objective to provide nationwide full-fibre gigabit-capable networks by 2033 (with deployment to the majority of the country by 2027). We also welcome the approach to provide full capability across all of the UK and to ensure that no areas are systematically left behind. The [Future Telecoms Infrastructure Review \(FTIR\)](#) will allow public investment in full fibre for rural areas to begin simultaneously with commercial investment in urban locations and we would assert that this objective must be maintained. The [Digital Infrastructure Toolkit](#) which forms part of the FTIR which will allow mobile networks to make far greater use of Government buildings to boost coverage across the UK.

Whilst this bold objective looks to the future, it is our concern that many of our members (principally in rural communities) are being denied access to even basic fixed line broadband and mobile coverage at the present time. Our members increasing see full connectivity as being necessary to being able to run successful businesses, comply with legislation and to improve farm productivity and to offer opportunities for diversification.

Why farming and the rural economy needs full connectivity

The voice of British farming

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Full digital connectivity is important for the wider UK economy, to help deliver the Industrial Strategy and to ensure businesses can thrive in rural areas. Quality mobile voice connections are essential, but also is the access to applications to enable online only regulatory services (such as Self-Assessment and Making Tax Digital) to be complied with.

The problem is usually but not always a rural one. Coverage issues can also often be as problematic at the edge of major cities just as much as they are in wider rural areas and National Parks. Many organisations, including Defra and the Rural Payments Agency (RPA) contact farmers by phone. Environmental and crop protection, animal welfare and an increasingly popular countryside used by the public for health and wellbeing are becoming more dependent on access to mobile connectivity. Life in the countryside relies on people being available by phone, to talk, to exchange data and get rapid access to the services they need.

The NFU would emphasise that it is also essential for better services to be introduced as soon as possible, given that the economic landscape for farming is changing now. Our trade with other countries, both within and increasingly outside the EU will be vital and new trading partners will expect our digital communications to be comparable and fit for purpose to compete in this global market. To illustrate this point, data from [OpenSignal](#) using data from Mobile Network Operator (MNO) performance ranks the UK in 30th place globally for mobile download speed at 19mbps. This is behind countries such as Romania, Greece and France and significantly behind the global leader South Korea (46mbps).

Recent statistics from Defra describe the [disparities](#) in broadband between urban and rural areas. For example, 7% of premises overall in rural areas were not able to access a decent broadband services and speeds, compared with just 1% in urban areas. The report highlights that the situation is much worse in rural hamlet and isolated dwellings (35% unable to access a decent connection). Many of our members live in these locations and the NFU broadband and mobile survey (described below) highlights the connectivity issues experienced by many farmers.

Farmers with superfast broadband (whether mobile or fixed) are more likely to invest and expand their farm businesses, become more productive and be able to take advantage of wider business opportunities. There are significant productivity gains for farmers who are better connected, in addition to the wider benefits of connected rural communities.

In order to best exploit new technologies, particularly those that are increasingly data driven, a high standard of rural connectivity is essential. As a result of a lack of access to a reliable mobile connection experienced by many farmers – this in turn acts as a constraint to capital investment on farm. Productivity is strongly linked to technology take-up and improved management practice. If farming is to become more competitive, then access to this essential infrastructure is paramount.

Many farmers are also looking to reinforce their businesses using diversification, which again is being encouraged by wider Government as this provides further support to the economy by providing energy and rural services. Diversification can also help mitigate the reduction and eventual elimination of Direct (farm support) Payments as outlined in the Agriculture Bill. Sixty four percent of farmers hosted diversified activities in 2017. The ability to go further is being constrained by poor mobile phone coverage. It is a particular issue for renting out premises for business uses and rural tourism (such as bed and breakfasts); without coverage businesses cannot operate and tourists will not return.

There are wider social community benefits as a result of full connectivity in rural areas. Rural visitors expect to receive the same broadband service as they do in urban locations. Many people use the countryside for access and leisure and to experience food and drink and other rural services. Improved connectivity can assist with reducing social isolation and making it easier to access online social and medical help and training. Improved connectivity also has a role in reducing the level of accidents and fatalities, and significant challenge in the farming sector.

The NFU broadband and mobile survey

To highlight the problems in respect to mobile and broadband encountered by our members in the rural communities in which they operate, since 2015 the NFU has undertaken an annual broadband and mobile survey. It is encouraging that the latest 2018 results suggest that there has been some recent improvement in terms of broadband service and mobile coverage among farmers in rural communities, particularly with access to 4G services and an increase in those receiving super-fast broadband.

However, with only 17% of those surveyed receiving a reliable mobile signal in all locations on farm, and 45% still not having access to sufficient broadband speeds, better coverage is required to support farmers to maximise the opportunities that digital technology can provide for their businesses and to improve productivity.

The table below (Figure 1) summarises the key statistics from the surveys undertaken since 2015. There is a clear pattern of improvement for both mobile and broadband connectivity, although there is still a significant gap between what farmers are receiving now, and full universal coverage.

	2015	2016	2017	2018
Mobile				
Reliable indoor signal (all locations)	15%	18%	16%	19%
Reliable outdoor signal (all locations)	15%	15%	15%	17%
Smartphones with access to 4G	26%	72%	80%	83%
Broadband/ Internet Access				
Access to internet via a mobile or any computing device	96%	95%	97%	96%
Estimated download speeds of 2 Mbps or less	58%	55%	50%	42%
Estimated download speeds of 24 Mbps or more	4%	6%	9%	16%
Standard broadband - type of internet connection used	86%	83%	80%	73%

Figure 1: Table showing key statistics from the survey years 2015-2018.

Survey results 2018 - mobile services

The 2018 survey reveals that 97% of farmers surveyed own a mobile phone. Out of those who own a smartphone, 83% could access 4G on their devices, as depicted below in Figure 4. This has increased from 25% in 2015.

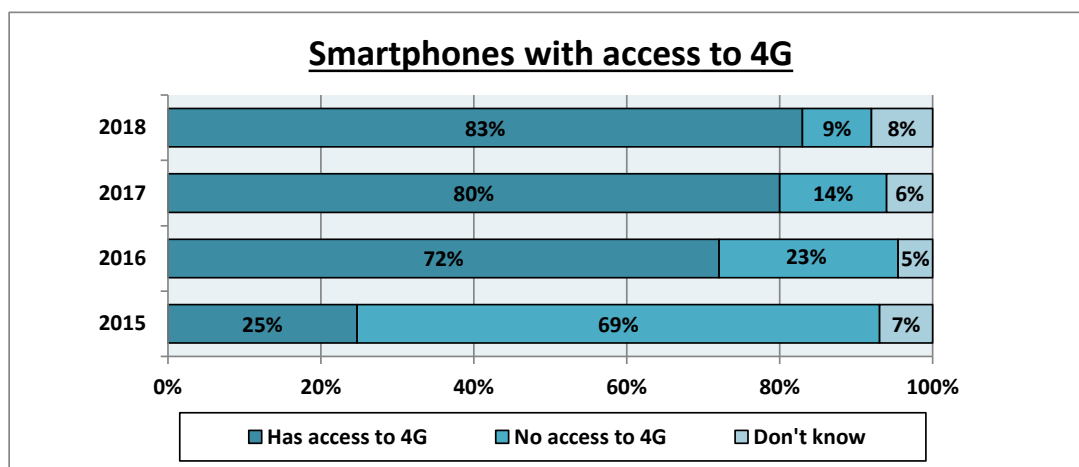


Figure 4: Graph showing the percentage of farmers whose smartphones access 4G over the survey years 2015-2018.

This year's survey also highlights an improvement in mobile signal coverage over time. As shown in Figure 5, 42% of farmers are able to get a signal in most outdoor locations in 2018 compared to 29% in 2015.

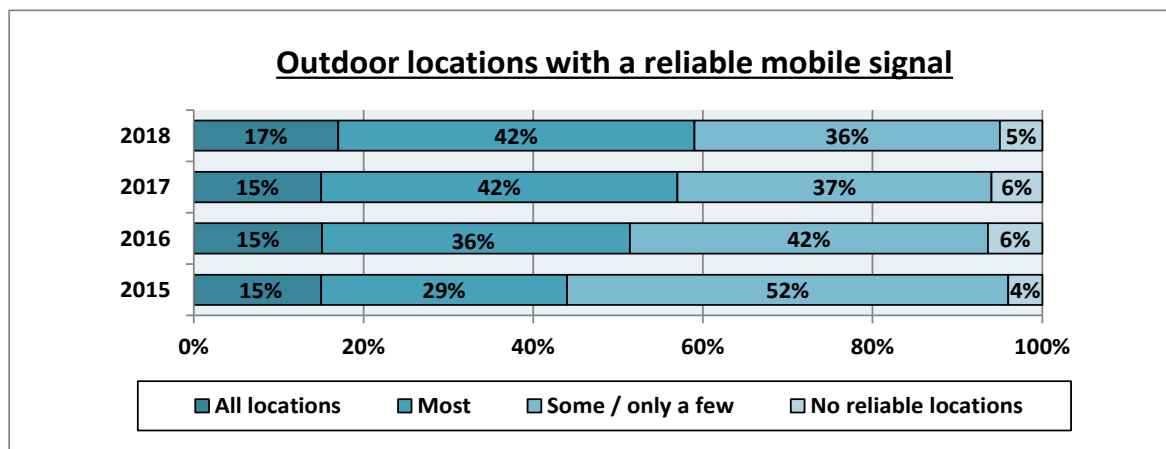


Figure 5: Graph showing the percentage of outdoor locations with a reliable mobile signal over the survey years 2015-2018.

However, Figure 5 reveals that only 17% of farmers get a reliable signal in all outdoor locations and 5% reported no reliable locations anywhere on the farm. These figures have changed little since 2015 and are a cause for concern since mobile telecommunication is essential for health and safety in a potentially hazardous industry, with farmers often working alone in remote areas.

Overall, the 2018 survey highlights areas of improvement for mobile connectivity with an increase in access and use of 4G services. Despite this, poor and unreliable mobile coverage, particularly outdoors on farm, remains a recurring constraint and improved accessibility to mobile provision is required.

Mobile infrastructure

The Digital Economy Act 2017 introduced the [Electronic Communications Code](#) which was designed to facilitate quicker and wider mobile and broadband coverage. One of the ways this was to be achieved was through changing the valuation method of sites used to host communications equipment to produce lower rents. Unfortunately some mobile and broadband operators have a very different interpretation of the legislation around valuation compared to landowners and negotiations have stagnated.

The [DCMS Impact Assessment](#) of the new method of valuing rents has resulted in a 40% decrease on average. The NFU however is witnessing decreases in proposed new rents on existing sites of up to 99%. In addition, the NFU is really only seeing site renewals being instigated as opposed to procurement of new sites. This seems to be defeating the overarching objective of the ECC and thus adding little comfort to our members. There are a number of other issues that have arisen in relation to rights that operators are seeking over sites on which currently host apparatus. These mainly relate to much broader rights than listed under the Electronic Communications Code and which operators are attempting to give to themselves.

Currently there are a few cases (mainly site renewals) in the Tribunal Service system waiting to be decided in relation to valuation and other rights. It seems that operators are waiting for the outcome of these before going ahead with other sites. This means that there is very little in terms of growth of rollout and may not be for some time until parties are confident that there is evidence on which to base negotiations. These issues will need to be resolved before the market is able to go forwards under the proposals under the FTIR.

Roaming

The NFU survey highlights the lack of mobile connectivity in rural areas. One way of mitigating this is for Ofcom to consider whether to offer roaming services to consumers when licencing spectrum. This would vastly improve mobile coverage in these locations, and would significantly reduce the infrastructure cost on mobile operators if a ubiquitous service can be provided on at least one network, whilst meeting statutory obligations. Research by [Ofcom](#) has concluded that introducing rural wholesale access would cost £5-15m per operator and annual operational expenditure of £2-3m per operator. This compares very favourably with the costs (estimated at between £3bn and £6bn) of addressing the 'total not spots', where no operators are present and 'partial not spots', where at least one, but not all, operators are present.

The Ofcom consultation, “[Improving Mobile Coverage](#)” proposed that mobile operators would be able to meet coverage requirements in part by striking roaming agreements with each other, or with third parties. This would increase the incentives for them to co-operate. We very much look forward to the formal outcome response to this consultation which could allow infrastructure sharing and roaming opportunities for operators in the countryside.

Survey results 2018 - Fixed line broadband

The 2018 survey highlights that 96% of farmers had access to the internet via a mobile phone or computing device. Of these, 89% believe that broadband is an essential tool for their business.

The majority access the internet via a copper wire telephone line (73%). It is also encouraging to see a rise in the number of farmers benefitting from a fibre optic connection (15% in 2018 compared to 8% in 2016) as well as using other methods to connect: e.g. fixed wireless, satellite or cable connections.

Another positive trend the survey illustrates is the significant increase in farmers accessing superfast download speeds of 24 Mbps or more over the past four years, as shown in Figure 2. This reflects the increasing availability and take up of superfast broadband services and supports our evidence that once farmers receive a superfast connection, their usage, importance and reliance on the service for their business increases.

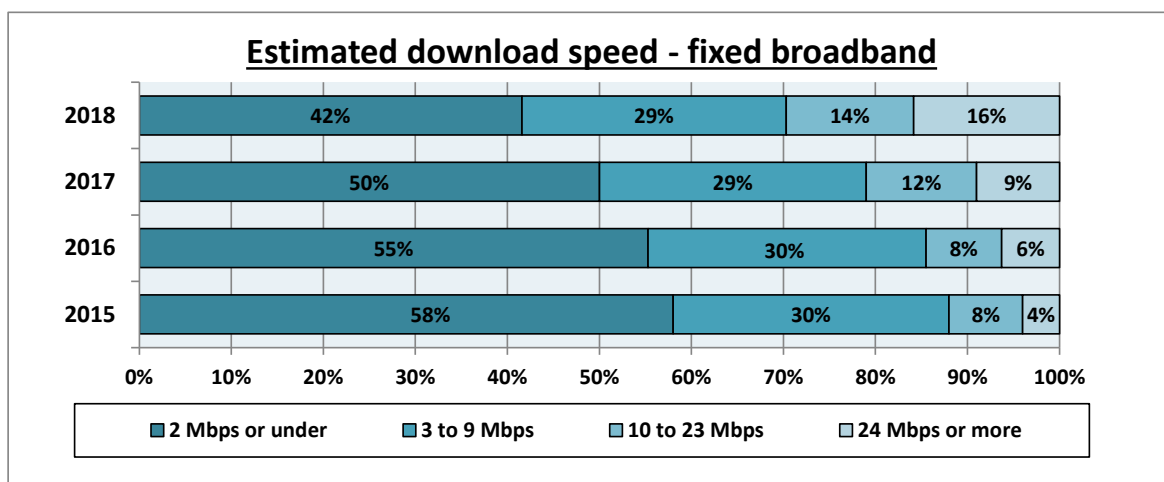


Figure 2: Graph showing the estimated download speed for fixed broadband over the survey years 2015-2018.

However, Figure 2 also indicates that a notable proportion of farmers surveyed in 2018 (42%) continue to experience the slowest download speeds of 2 Mbps or less, although this has fallen from 58% in 2015.

Overall, the 2018 survey highlights areas of improvement in relation to broadband services and connectivity among farmers in rural communities. Despite this, the survey identifies slow broadband speed and poor

bandwidth as the most significant barrier in preventing farmers from using digital technology. Additional barriers include unreliable internet and mobile connections (Figure 3).

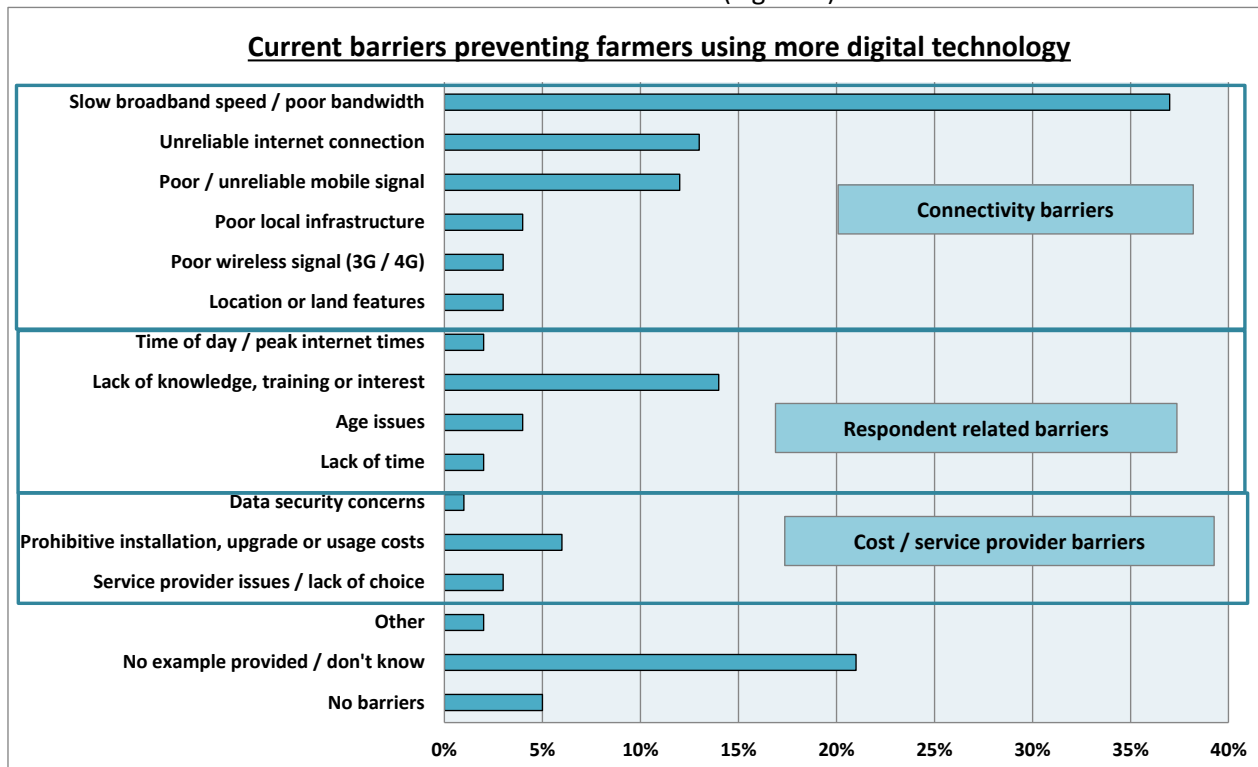


Figure 3: Graph showing the current barriers preventing farmers using more digital technology.

Broadband Universal Service Obligation (USO)

The broadband universal service obligation (USO) will give people in the UK the right to request a decent broadband connection. Under the USO, eligible homes and businesses will be able to request a connection (>10mbps download speed), where the cost of building it is no more than £3,400. We are concerned that by setting the cost threshold so low it will only be applicable to the easiest places to connect and therefore interfere with the development of a wider broadband market. Fundamentally, it could exclude the most difficult to connect, leaving those without resources with an inferior service or no service at all. The NFU has received reports from members of costs of connecting farm businesses ranging from £10,000 in order to be connected, and in some cases up to £100,000 for fibre connections or more for community broadband schemes. In another example (from the [Guardian](#) newspaper), a farm business was quoted £16,000 to get connected. To illustrate the significance of these costs and the barriers to entry that they create - the average income for a UK grazing livestock farm was £16,000 in 2017/18. Because of this, our concern is that the threshold is set too low to permit the USO to be delivered to many farm properties. The costs involved to enable connections are prohibitive to some NFU members and as a result access to full broadband connectivity for our members has not been addressed.

We have further concerns that the Statement of Strategic Priorities highlights that approximately 10% of properties in the FTIR where it will not be commercially viable to employ gigabit capable networks. We believe that a significant number of our members will belong to this minority and we therefore call for more detail on how the “outside in” strategy to support the deployment of networks in the hard to reach, or commercially unviable areas will work to guarantee and safeguard the provision of these services.

Fifth generation (5G) networks

The lack of comprehensive rural broadband poses a big problem for 'smart-farming'. Fifth generation (5G) mobile networks and associated technology can provide speeds of 10Gbps and very low levels of latency. As a result, it offers even greater opportunities for agriculture to embrace new abilities to monitor, track and automate systems which will give rise to smart-farming. It has the potential to make some farming practices highly innovative whilst promoting efficiency savings and productivity improvements.

A recent paper from the [University of Surrey](#) discusses the challenges to the 5G coverage issue in rural areas (e.g. mast density and mast height). Furthermore, deployment of 5G wireless services will depend on fibre deployment. Rural 5G wireless services also require installing radio masts at approximately 1,000 – 3,000 ft. intervals – all needing fibre and electricity connections.

The NFU has significant concerns that 5G will become a predominantly urban service provision with population density (and related data usage) being the determinant for the necessary commercial investment. We therefore would ask for more detail about how Ofcom intend to monitor the investment in 5G and what the appropriate options are should the market not be delivering 5G investment at sustainable levels. Our worry is that rural areas will experience the same lack of coverage with 5G as they have with fixed line broadband and mobile coverage and cannot utilise the ground-breaking changes these services can offer.

Section 4: Postal services

Post Offices have always been particularly important for rural communities, despite the recent decline in mail use and the growing use of digital communication. The Post Office has a requirement to provide branches in all parts of the UK in line with national access criteria set by government, and to date the government has protected rural post offices. However, the number of [rural](#) Post Offices has fallen from over 9,000 in 2000 to around 6,100 today.

For people living in rural areas, essential services are becoming inaccessible because local outlets have closed due to loss of viability. This includes education, health, retail, leisure and specialist services for children and older people. In relation to banking and financial services, people in rural communities are less able to access bank branches and less likely to use internet banking. According to the Financial Conduct Authority's (FCA) [Financial Lives Survey](#) (2017), access to financial services is a particular issue in rural areas. Of UK adults who never use the internet, 70% (or 3.7 million people) live in rural areas. 48% of UK adults living in rural areas are 75 or over, have health issues that affect their day-to-day activities a lot, and/or do not use the internet at least most days. The take-up of mobile banking by adults with a day-to-day account in rural areas (23%) is nearly half that of adults in urban areas (45%). This is probably in part, as evidenced in our NFU broadband and mobile survey due to poor connectivity.

There has also been a decline in access to financial services in rural areas, as a result of branch closures. The report comes shortly after consumer group [Which?](#) reported an "alarming" acceleration in bank branch closures, with about 60 closing every month. It found that 2,868 branches will have closed between 2015 and the end of 2018. The bank closures will have devastating consequences for rural businesses and local communities. Looking at the solutions, the Post Office needs to create a standardised service that matches the specific needs of businesses in rural areas. But it is often the case that many people are not aware of the services offered by the Post Office. As a result, the recent [five-point plan](#) has been developed by the finance industry and the Post Office working with the Treasury and government officials. It promotes the awareness of the day-to-day banking services that bank and building society customers can access at 11,500 Post Office branches across the UK.

Some 99% of personal account customers and 95% of business account customers can withdraw and deposit cash, deposit cheques and check balances at any of the Post Office's branches. Many bank customers already

visit Post Office branches to access their business and personal accounts – but there is still limited awareness of these vital services.

As a result the NFU believes that the delivery of the DCMS / Ofcom objective to secure sustainable and efficient [universal postal service](#) must extend to the maintenance of the rural Post office branch network. As a result, small businesses should be able to quickly transfer basic banking facilities to their nearest post office branch, including depositing both cash and cheques as well as accessing change.