

INVESTING FOR CHANGE CONNECTIVITY



INTRODUCTION

Digital connectivity has transformed the opportunities available to rural business. It is now possible to locate a business that trades goods and services across the globe in the heart of the English and Welsh countryside. However this potential is only partially fulfilled. Despite a major programme of public investment 1 in 5 rural business owners cite having to make their own investments in order to get a connection that meets their needs. A digital divide remains, and whilst the political will to end it is clear a continued focus is required.

The CLA's (Country Land & Business Association) ambition has always been to ensure the universality of broadband coverage. We have been campaigning for effective, reliable

and affordable broadband for all rural areas since 2002 and are the main rural organisation to champion the issue of rural broadband, both for CLA members as well as the wider rural economy.

Government and the industry can work together in laying the foundations for a forward thinking digital roadmap that is fit for the 21st century. That is why we are putting forward a series of recommendations that, we believe, will ensure universal broadband is delivered and that the digital revolution can promote greater productivity and growth for the rural economy.

RURAL BUSINESS 2030 PROGRAMME

Throughout 2016 the CLA has been holding its Rural Business 2030 programme which concludes with the 2016 Rural Business Conference. As part of this programme the CLA has held a number of seminars, including one on connectivity, which took place on 8 June 2016.

The seminar brought together leaders from the industry to discuss the future of connectivity and the opportunities for investment in it. This report brings together the discussion, debate and thinking that took place at the seminar and more widely with industry experts and rural businesses.



THE CONNECTIVITY NEEDS OF RURAL BRITAIN



The importance of universal connectivity to rural business

The ability to digitally connect is vital today for rural business and as technological innovations take place access to effective and affordable broadband is a prerequisite for any new or growing business. Broadband acts as an economic driver, leading to growth and higher levels of productivity.

Universal broadband connectivity, whether it be fixed line, mobile or wireless, is also integral to the social fabric of the country. Broadband has become the fourth utility which means that everyone must have a legal right to proper connectivity.

Leading to growth and prosperity

CLA commissioned research shows that 24% of rural businesses have made investments in connectivity¹. These range from putting in place bespoke wifi networks, fibre optic cabling direct to business premises through to creating innovative, new technology companies that are able to exploit the opportunities afforded through broadband. The research also shows a willingness to maintain that level of investment².

However, in order to capitalise on the immense opportunities that superfast broadband offers, the Government has to be able create the right conditions and provide the right strategic framework for this investment potential to be realised.

In 2010 the Buckminster Estate established a suite of offices within a number of barn conversions in Buckminster. In order to attract businesses to the area the estate required high speed broadband links. Due to the very poor broadband speed in and around the Buckminster Estate, they invested in the latest high speed domestic and business broadband and phone line service. This is delivered via a state of the art fibre optic and wireless network.

The residents in the surrounding villages were also getting very poor broadband speeds of typically 1Mbps, leaving individuals with slow downloads and jittery streamed services such as iPlayer or YouTube.

Over the last five years the Buckminster estate has installed the required connecting technology and have been able to offer this fast broadband to a number of villages around Buckminster, including Coston, North and South Saxby and Stapleford. There are packages designed to suit both domestic and business users.

^{1 & 2} DJS research

THE CONNECTIVITY NEEDS OF RURAL BRITAIN



Government Policy for a superfast Britain

The Government has recognised the need to develop a broadband network. Following the publication of the Government's strategy in 2010 "Britain's Superfast Broadband Future", some £1.7 billion has been invested with the aim of securing fixed line connectivity to 95% of homes by the end of 2017.

Irrespective of whether this ambition will be realised by 2017, this will still mean that at least 5% of homes will not be able to secure superfast broadband connectivity. If universal coverage is to be secured, alternative technologies and networks must be allowed to play their part.

The CLA is not wedded to the idea of solely relying on a universal fibre network as the best solution, although we do believe that significantly more needs to be done regarding the extension of Fibre to the Premise (FTTP). What is required are the ability and incentives to use alternative technologies, including satellite and wifi, to meet universal coverage.

Mobile Britain

Part of this solution is the role played through mobile connectivity and the Mobile Network Operators (MNOs). According to the regulator Ofcom levels of mobile coverage in rural areas continue to be lower than in urban areas. This reflects the higher costs-per-user of providing coverage in less densely populated areas.³

But it is essential that all Mobile Network Operators meet the commitments agreed with the government in 2015 and ensure 90% geographic coverage by the end of 2017. This will certainly increase connectivity in rural areas.

The key will be the implementation of the revised Electronic Communications Code in delivering far greater mobile connectivity. What will be essential is that market disruption is kept to a minimum. This can be achieved if those involved – the site providers, operators and infrastructure providers – work together, particularly where disputes may arise.

Partnerships in rural areas

A new era in telecommunications is about to begin. What the market has seen since the beginning of the century is a rapid increase in consumer demands for greater bandwidth. Whereas broadband ten years ago was seen as fast at 10Mbps, today societal needs dictate that speeds need to exceed 100Mbps to be seen as fast.

This means that for rural communities to be able to reap the benefits offered by advances in technology it needs access to the most appropriate infrastructure and communities working together. As such, rural community broadband partnerships which are able to aggregate demand will become more important. That is why the Government needs to incentivise these communities to work together, using the most appropriate infrastructure.

³ Ofcom: *Connected Nations Report 2015*, p.31

TOWARDS AN INTEGRATED NETWORK



The importance of an integrated network

The most recent data from Ofcom shows clearly that more people than ever have access to digital connectivity. However, this progress has been painfully slow with a lack of co-ordination that is necessary to ensure universal coverage. This is not only the case with different technologies but also a conspicuous lack of joined up thinking within government, both at central and local government level.

Given the importance of broadband today is clearly the time to put forward an alternative approach to current government thinking, an approach that is clear sighted, forward thinking and technologically driven.

A clear and sustainable policy framework

The next year presents the Government with a unique opportunity to consider its future role and policy regarding digital connectivity. By the beginning of 2018 it would be hoped that 95% of premises will have access to superfast broadband and 90% of areas in the UK will be able to access a mobile connection. However, this does not equal universal coverage and more still needs to be done.

The introduction of a Universal Service Obligation by 2020 and the new 700Mhz spectrum auction need to be seen as marking a new beginning in digital policy. A new strategic framework is required to set out clearly the role of government and the regulator. Policy must incentivise the industry.

Technologically driven

In order for rural businesses to benefit from new and emerging technologies they will need effective broadband access. This can be provided through any form of connectivity that is available for the business. This approach allows for considerable flexibility, in addition to adding competition within the market.

Whilst we recognise that there may be limitations to certain forms of connectivity, that does not mean that they should be prevented from playing a vital role in meeting the universal coverage principle. For example, it is accepted that satellite has limitations but the provision of satellite broadband can play a significant role in the rollout of connectivity in remote, rural locations.

There isn't infrastructure that can provide a one size fits all solution. Indeed, the major infrastructure providers see no realistic economic case to rollout broadband to areas where there is little or no return. In addition, there are numerous different players and sub-sectoral interests in the telecommunications market which makes such a model very difficult to implement effectively. A major concern would be that this could limit competition and by doing so, fail to capitalise on investment.

Therefore, a hybrid approach is required that is able to embrace the best of all available technologies and an approach that actually meets the needs of consumers. This approach is best applied through an integrated network and within a co-ordinated and well defined strategic policy framework.

A NEW RURAL CONNECTIVITY ROADMAP



The UK is in a position to exploit the opportunities of the digital revolution. Without effective co-ordination within a strategic policy framework and without a far greater consensual approach by the industry, the ability of rural businesses and rural communities to add to economic growth and prosperity could be lost for a generation.

What is clear is that this period will mark a watershed. What is required is a clear sighted and pro-active policy framework from Government that garners the full support of the industry. This means that there need to be well defined goals and targets set out in an all embracing roadmap which is underpinned by universal coverage.

The Universal Service Obligation

Ending the rural-urban digital divide:

It is vital that the rural – urban digital divide that has existed for so long is ended. We believe that the Government's objective of establishing the principle of universal coverage as a legal right and at an initial benchmark of 10Mbps is a welcome step and represents a major breakthrough for CLA lobbying.

But having established this principle, measures need to be in place to ensure that the minimum speed requirements keep pace with the ever changing technological environment.

The CLA recommends that:

- Ofcom should undertake a review of the necessary minimum speeds every five years.
- A universal service target for mobile connectivity is adopted by Mobile Network Operators based on covering the entire landmass of the UK should be implemented as soon as possible.

New approaches to funding connections

The minimum connection speeds set out in the Universal Service Obligation are far behind the kind of speeds that are available today, let alone in 2030. The opportunities presented by faster connections will grow exponentially. This means that securing investment required for the next wave of connections will be the challenge that must be met.

Mobile connectivity: rural coverage and 700Mhz

The release of the 700Mhz spectrum will undoubtedly open up new opportunities and has the potential to significantly extend mobile coverage for rural areas. In order to do this, Ofcom has to ensure that the Mobile Network Operators can meet the conditions imposed in a properly constructed timetable.

The CLA recommends:

- The placing of stringent conditions that are agreed in consultation with the industry on Mobile Network Operators as part of the tender process for the 700Mhz spectrum auction to ensure maximum mobile coverage in rural areas.

Better targeting of investment

For the market to grow and for the industry to meet the needs of consumers, there has to be adequate investment. Previous levels of private investment show that there is an appetite to put in place infrastructure that will not only aid rural businesses but also rural communities.

The Government has a role to play in incentivising the industry. We have seen that the voucher schemes for connected cities and to put in place a minimum broadband speed have worked and shows the success of a more targeted approach. The introduction of the USO in 2020 is an opportunity for further targeted support that provides clear value for money so that the premise of broadband for all can be realised.

The CLA calls on Government:

- To introduce a wide ranging voucher scheme that encourages property owners in rural areas to buy their own connectivity. The scheme should encourage recipients to collaborate and aggregate demand in a rural community to realise the maximum benefit.

A NEW RURAL CONNECTIVITY ROADMAP



Applying an integrated network

Ensure local businesses can become internet suppliers

Where rural businesses have invested in fibre connections for their own premises there should be incentives to encourage mobile network operators to rent these connections in order to secure sufficient backhaul that provides the necessary bandwidth and enables them to build more extensive data networks in rural areas. With the likely widespread roll out of 5G technology in the near future we see this as a way of reducing operator costs whilst extending coverage.

The CLA calls on Ofcom to:

- Ensure Local Businesses Can Become Internet Suppliers – encourage rural business owners that invest in putting in place their own broadband connection such as fibre-to-premises to become local suppliers using technologies such as local wifi networks and ensure their position in the market is secure.

Establish new investment models

In the past, broadband partnerships in rural areas have been few and not particularly successful. However, it is clear that such partnerships can provide a unique way of both aggregating demand and extending coverage. Indeed, there have been a number of examples, such as Buckminster Estate in Leicestershire, where private networks can meet the needs of the local community. But there is a need for more and it is for the industry through private enterprise to encourage estates to see community networks as a business opportunity. That is why it is necessary to encourage rural business owners that have invested and will do in the future to put in place their own broadband connections, such as FTTP, to become local suppliers using alternative technologies to ensure effective market coverage.

Fibre to the Premise (FTTP)

Fibre to the Premise or Home (FTTP/H) is seen by many to be the ultimate objective in terms of the provision of digital connectivity. We can see the strength of this argument but we also believe that, given the current state of infrastructure build, this situation is still some way off. However, that should not prevent targets being set which can be measured to extend the provision of FTTP.

The CLA recommends that:

- Targets should be set with achievable benchmarks for the more extensive deployment of FTTP.

Alternative networks

For there to be an integrated network, there are significant opportunities for alternative network provision. It is vital that these different models are more widely used as they can often provide connectivity where present infrastructure build is simply not possible.

A new policy dynamic

The role of Government

The ability to extend connectivity across the UK so that all can benefit is crucial. The creation of an integrated policy and technical network to deploy and ensure universal coverage is just as crucial. **The future role of Government must therefore be to put in place the right conditions that can overcome the barriers faced by rural business and encourage greater investment through increased competition.**

The role of the Regulator

Along with Government, Ofcom, as the telecoms regulator, will have a vital role to play in harnessing the needs and wants of consumers with what the industry can deliver. Such a role is integral to the adoption and execution of an integrated network.

The CLA calls on Ofcom to:

- Set out how the demands of consumers can be harnessed by the industry through a policy framework outlined by government.

A National telecommunications skills programme

The CLA recognises the immense advantages effective connectivity gives to rural businesses and rural communities. However, these can only be exploited if there is a willingness and an ability to maximise the potential of a broadband connection. All too often we have seen commercial opportunities missed by rural business simply due to a lack of a suitable knowledge base and training provision.

The CLA calls on Government to:

- Introduce a national telecommunications skills programme, free and available to all, that can allow businesses to make the best of digital connectivity.

A NEW RURAL CONNECTIVITY ROADMAP



A new integrated partnership

This report makes a series of recommendations based on the need for universal coverage within an integrated digital network. We recognise that some of these recommendations are ambitious but we also recognise that they are fundamental to putting in place sensible and realistic targets for the future. However, it is essential that for this new policy and technical structure to work there is an industry consensus given that its effective implementation will require the support of Government and the industry in providing the necessary momentum and direction.

That is why the CLA is calling, through this report, on government and industry representatives to agree a clear way forward for the future so that the undoubted benefits available through the digital revolution can be realised by everyone.

