

RURAL ECONOMY AND CONNECTIVITY COMMITTEE

DRADT BUDGET 2017-18; BROADBAND

SUBMISSION FROM THE ROYAL HIGHLAND AND AGRICULTURAL SOCIETY OF SCOTLAND (RHASS)

The Royal Highland Agricultural Society of Scotland is for people who live and work in rural Scotland. With its history of encouraging advances in education, science, technology and craftsmanship over two hundred years, the Society's in a strong position to continue its twin roles of building business for Scotland's land-based and allied industries, and of creating a wider public understanding of the management of the land and rural resources.

Each year thousands of people flock to the Royal Highland Show to see, taste and experience the very best of Scottish farming, food and rural life. For four days in June and over 280 acres, the finest livestock share centre stage with Scotland's bountiful larder, spectacular show jumping, countryside pursuits, educational workshops, entertainment, shopping and a host of business opportunities.

The first show was held in 1822 on a site that is now home to the Scottish Parliament. Today, it is Scotland's biggest outdoor event attracting around 190,000 people and regarded as one of Europe's largest agribusiness shows. Contributing almost £47.1 million to the economy in 2014, the Royal Highland Show is more than just a great day out.

Until moving to its permanent home at Ingliston in 1960, the Royal Highland Show moved around the country and it was the responsibility of a Royal Highland and Agricultural Society of Scotland's region to organise that year's Show. The Royal Highland was last held in Stirling's town Alloa in 1953. So each year, to commemorate this heritage, a "President's Initiative" is organised by the nominated region.

The 2015 President's Initiative focused on communications, engaging with the UK's largest communications businesses to highlight the isolation experienced by rural communities with poor telecommunications and limited or no access to high speed broadband. The following report was produced as part of the initiative to provide information on the current experience across rural communities in Scotland.

European Perspective

Phil Hogan, European Commissioner for Agriculture & Rural Development

The challenge for policy makers is to design blueprints for sustaining rural areas in Europe in the years to come - they are key drivers of shared prosperity and sustainable growth.

Rural areas are increasingly viewed as holding many of the solutions to urgent global problems such as food security, renewable energy, environmental sustainability and water provision.

Therefore, genuine connectivity is vital so that rural areas can be full partners in developing these solutions within the agri-food sector, to develop SMEs in rural areas as well as to incentivise and attract rural residents.

Easy access to technology leads to innovation which in turn leads to jobs.

Fast internet connectivity can lead to similar micro cultures developing in remote areas, leading to a new influx of jobs and growth, for example tele-medicine and tele-learning services.

Bringing fibre first to the hardest to reach places, Fibre to the Home (FttH), will stimulate existing providers to invest in their own infrastructure and revolutionise a rural user's experience of the internet as they multi task.

If the telecoms companies can't be steered to make these necessary changes then solutions may be found in rural areas themselves - communities throughout Europe have developed innovative models of cable installation and financing.

Goals are achievable with joined up thinking, enlightened collaboration and funding, using tax payers' money to attract private investment.

One of the aims of the EU Digital Single Market package is to close the digital gap between urban and rural areas, with the ambition of providing fast or ultra-fast broadband across the EU by 2020.

Almost €21.4bn from the five Structural and Investment Funds will be devoted to Information and Communication Technologies of which c. €6.4bn will finance the roll out of high speed broadband. The estimated contribution from Rural Development funding will be between €1.6bn and €2bn. These amounts will be co-financed by investment from other private and public sources.

It may also be desirable to look at developing tailored financial instruments to enable local projects to access loans at competitive rates over a ten to fifteen year period;

the Commission is at present in discussion with the European Investment Bank assessing such options.

The rural right to fast internet connectivity is key to enabling remote working and business from rural areas, ecommerce, creative sectors, precision farming and all the commercial, social and community benefits arising from full connectivity.

Let's make our rural communities the drivers of innovation in the 21st century.

Scottish Perspective

The Right Hon. David Mundell MP, Secretary of State for Scotland

Broadband speed and mobile coverage, especially the ability to access data facilities, are key issues in many parts of rural Scotland and need to be addressed as a priority

Despite large investment and improvements, too much focus has been on improving mobile reception at rural premises, leaving large parts of rural areas, for example farms and roads between farms, without any connectivity or coverage

One of the Scottish Office's priorities will be to press for mobile and broadband projects to be progressed. The impact of investment in rural Scotland has not been big enough and lags behind rest of UK

Investment is required in upgrading mobile data access across large parts of rural Scotland, and we need to encourage innovation and community involvement to reach "The Final 5%". We are committed to working with the Scottish Government, RHASS, BT Scotland and others to deliver.

Everyone has the right to receive high speed communications and we need a process in place to allow this to happen. The UK government is committed to ensuring that everybody who wants broadband and mobile communications is able to receive them

Broadband and mobile are the roads and railways of twenty-first century Scotland fundamental for business to prosper, for our young people to have maximum educational opportunities and for communities to have social and entertainment facilities.

Next Steps for Digital Connectivity

Brendan Dick, Director of BT Scotland.

The Ambition by UK and Scottish governments is to deliver a world class high speed broadband infrastructure of various technologies by:

- providing a fixed line high speed broadband, and
- updating the national deployment

Although this is not without challenges - engineering, labour intensive and expensive - digital connectivity is fundamental to how we go about our lives.

Ten years ago, First Generation broadband was launched, and now we are in a race to deploy infrastructure that is future proof and world class.

It is expensive and demand driven (by technology and video streaming) but it is needed to create a successful population; in Scotland around 50% of microbusinesses are home based part of the time.

But investment in digital infrastructure has been slow whilst the Return On Investment (ROI) in terms of economic impact (i.e. jobs) has been good.

The programme in Scotland is more or less unique in the UK, covering four main areas:

- Infrastructure
- Digital public services
- 25% of Scots are not online at all – a social and economic issue – so the Scottish Government and the Scottish Council for Voluntary Organisations (SCVO) are leading a programme to address this
- Scottish Enterprise and Business Gateway are also leading initiatives to get businesses online and to help them get more value from being online

Programme roll out:

- There is commercial coverage in Scotland from BT, Virgin and others, and it's estimated that high speed broadband reaches around 66% of the population, although these are mainly in urban areas
- Government has intervened and two contracts have been signed - one in the Highlands & Islands and one for the Rest of Scotland, with the aim of increasing this coverage to 95% by end of 2018
- Phase 1 - the building phase - is currently in progress, with a total investment of £410m
- Phase 2 will be modelled soon, and will clarify where BT's coverage will get to and the areas that won't be reached
- Some rural communities are already planning for being in "The "Final 5%" and the real engineering and logistical challenge is reaching the Highlands & Islands. 400km of subsea cables are being laid.

Compared to the rest of Europe, the UK is doing well in terms of population coverage, due to good collaboration with the governments and because as a nation we are high users of the internet.

Over 3400km of cable in the ground, deployment has started in all but 4 of the 32 Local Authority areas and, as of May 2015, over 310,000 homes and businesses are now able to connect to fibre.

BT is raising awareness of this building phase by increasing understanding of what's happening and by engaging with the communities.

The Business View

The Blairlogie Broadband Initiative

Angus Annan, Blairlogie Business Park, Stirling

The vision of the project was to bring fast broadband to the Logie Community for Learning, Leisure and Business.

The community is an area of 20sq km with 70 households, several rural businesses and a developing business park. It is not remote, only three miles from Stirling, but it is thinly populated and 5 km from the nearest BT exchange.

The problem was the BT service could only deliver at 0.4Kb/s to some premises. This was a serious limitation for all users, particularly for business and young people. We knew of at least one business that sent people home to work in order to get better access to the Internet.

The answer was to develop a project with Stirling University, to research the limitations of the present situation and the impact of providing fast broadband on a small mixed rural community. This gave us high speed access to the Internet through a 50Mb/s microwave link from the University to a mast in a field below the village.

The funding came from public spirited early adopters putting up risk money as subscription in advance, our business partner and grants from the Stirling Council Lomond Leader Scheme and the HIE Community Broadband scheme. A volunteer group of four built the system and continues to develop and maintain it.

There are no cable connections. We use low cost wireless equipment mounted in each household or business, and we aim to provide each subscriber with a service of up to 20Mb/s. We charge a monthly subscription, payable annually in advance and we intend to use this funding to engage a local IT contractor to maintain the system and deal with callouts on faults.

Our vision was to bring fast Broadband to the Logie Community for Learning, Leisure and Business, which we achieved, and I hope our experiences will be of value to other rural communities.

Derek Gordon, Dolby Medical

Dolby Medical is a key supplier to the NHS, with particular focus and presence in the dental sector. Our customer base consists of around 800 individual dental practices spread across all Health Boards and regions of Scotland.

In this age of modern communication, customers and businesses expect instant and immediate information availability. To address this, Dolby decided upon a substantial investment in a management system called Netsuite. On system installation, it became apparent that our investment would never reach its full potential due to inconsistent and slow broadband provision.

Enquiries with our supplier on improvements rapidly became frustrating; there was no option or infrastructure then, or indeed now, to bring in higher speeds to our industrial estate. Fortunately, our landlord, Tom Cox of The Alix McNicol-Cox Trust,

recognised the desperate need for faster broadband provision, not just for Dolby, but for all his current and future tenants, and their own business needs.

As a result of our interest, and the other 23 tenants, Blairlogie residents and local businesses, the Blairlogie Broadband Initiative became not just viable but absolutely essential. Following equipment installation and switchover, we now benefit from a stable 32meg speed.

This has allowed us to develop handheld PDA systems for our infield engineers, which guarantees real time return of reports at the end of each customer visit.

The service report is processed instantly without the need for manual intervention, ensuring all customer records and reports are available immediately and all sales orders are processed consistently and without delay. This feeds directly into cash flow improvement and increased bandwidth of people and service; we estimate this represents a real saving of 60% on administration costs.

As a further benefit we have now developed real time tracking of all our engineers, which means we can now allocate the nearest engineer to cover a customer callout. With improvements to both scheduling and efficiencies, our response time has improved from next day to same day in the majority of cases.

Our business is now information rich with instantly accessible customer records.

Efficiency gains help to lower our costs, which we in turn pass on in our products and services to the benefit of our customers and the NHS.

In conclusion, I think it is fair to say that fast broadband is no longer just “nice to have” - it is now a business imperative, vital to the success of individual companies and the future strength and growth of the Scottish and UK economy.

The Community View

Broadband in a Rural Community

David Johnston, Balquhidder community, Stirlingshire

Balquhidder is a mixed community comprising 131 households and 113 businesses ranging from tourism, in the form of hotels and self-catering accommodation, and farms to shops and musicians.

Some of the issues that affect the area that urban communities will take for granted include:

- No Freeview TV Service throughout the glen
- No indoor radio DAB/FM/AM service for many properties
- No landline telephone or internet provision available for many
- Satellite internet the only option for some

Where there is a broadband connection, the slow connection speed means no internet streaming service, Skype video unreliable, and ‘cloud’ services or storage

unworkable.

In March 2014, The Telegraph reported that: *“With growing numbers of people going online to perform tasks ranging from work to grocery shopping and streaming entertainment, good broadband has become critical. Homes without can lose 20% of their value.”*

Connection requirements for farms and businesses are also affected by slow broadband speeds.

Monachyle Mhor Hotel

This is an award winning and internationally renowned hotel whose guests expect good internet connections. Currently the only way of providing such a service is via satellite.

They estimate that the cost of this service is equivalent to an extra member of staff, and the latency issue means that the ‘state of the art’ tills which require ‘cloud’ services cannot be used to their full potential.

The Do Lab

This is a business based on innovation in internet, television and social media technologies. One of its products, ‘Connect TV’, generated £6m in its first year of operation.

Because of the lack of local broadband, the business was forced to move its operational base to London, leaving little economic benefit in the area.

The Villagers – Community Newspaper

A monthly newspaper covering the villages of Balquhidder, Lochearnhead, Strathyre and St Fillans.

Based in Balquhidder it receives all of its copy, photographs and art work through the internet, and uses the internet to upload the final product to its printers. Slow download and upload means that it takes much longer than necessary to produce each edition.

Ironically Balquhidder is the only one of the four villages not on the superfast broadband upgrade scheme.

A report from the House of Lords Select Committee on Digital Skills identifies that broadband is the *“bedrock of digital competitiveness... Every UK business ought to have access to fast and reliable broadband, and the lack of it is holding businesses back... We are concerned about the pace of universal internet coverage and the delivery of superfast broadband.”*

Residents in a relatively remote area

Katy Lamb, Kinlochard Village Hall, Stirlingshire

I represent residents in a relatively remote area, and I hope to provide you with a view of the benefits and problems of everyday living here, as it relates to modern communications.

In November 2011, Vodafone approached Rural Gateway to find suitable communities to bid for their Community Led Mobile Phone Trials. We had little or no coverage from any network.

The Community Council agreed to make an application, and a lot of work went into assessing local opinion and filling in forms. There were many stages, site visits, trials of proposed buildings for coverage, and generally a lot of hoops to go through. Finally, in summer 2013, Kinlochard was chosen over more than 170 other rural communities who put themselves forward for 'open femto' trials, to go "live".

The 'open femto' technology provides a Vodafone 3G signal in areas which traditional mobile coverage of any kind had been unable to reach. The units, each about the size of a small carry-on suitcase, use broadband services to deliver a 3G mobile signal. They have been placed in a number of business and residential locations across the village to give a good spread of coverage.

Instead of transmitting through the "airwaves" like normal phone masts, the signals are converted and sent via broadband through the conventional phone system. To the user, it just feels like a conventional mobile phone call and costs the same.

Vodafone would only go ahead with the trial if the entire community was behind it and there were enough "willing buildings" to ensure all community areas were covered. This particular solution suited Kinlochard, where there was a previous history of division caused by a possible mobile mast being erected. The whole community, however, embraced this initiative, and many have changed to Vodafone, especially those who find it essential to be in contact for work or family reasons.

All mobile users feel safer, as there is now emergency cover for all networks.

A number of residents have to be on call for work and were previously stuck next to their land line. Now, they are safe in the knowledge that work can reach them on their mobile phone.

The young in the community are very happy. Like the youth population in most small rural communities, many friends are based outside the village and thus electronic communication is the norm.

Businesses have much happier customers, and some business clients who would previously not have booked the hotel, for water sports or the hall, can now do so, knowing there will be coverage.

Visitors and delivery drivers are very much happier as they can find places.

All in all it has been a great success.

Broadband in many areas of our community is passable, and certainly better than some of the remote farms round about. Systems assume that you have fast broadband, and when everybody just did a few emails and surfed the net, with a bit of online ordering, all was well with the bandwidth in our area.

Uploading bandwidth can be so poor that it takes forever just to upload a picture onto the Village Hall social media site or to complete essential online forms. These are just two illustrations of how people in rural areas are currently at a disadvantage. A fast, reliable service would give rural residents equal opportunities to promote themselves, and, indeed, to educate themselves as well as residents in areas that have a more reliable service.

Communities that don't have this both in the home and for those on the move, are going to lose out in future years. Eventually, it will also affect the number of people wishing to live in the area

Kinlochard does not feature in any future plans for superfast broadband. We are not alone in this. We and other areas in the same situation will be left behind. Without more commitment from both the Government and the main providers we will begin to wither on the bow.

Conclusion

The seminar has given us a valuable insight into some of the problems faced by rural communities in accessing superfast broadband and strong mobile phone signals, and to some innovative solutions.

There is no question as to the importance and fundamental necessity of access to modern communication networks, for effective business and for everyday life. It is evident that significant investment in both time and resources is being made by governments and communities to establish access to these fundamental services.

That more needs to be done, especially in rural areas, is clear and from what we have heard this morning the commitment to do more is assured.

RHASS has a role to play, beyond the 2015 Stirlingshire Presidency, in ensuring this debate remains both alive and relevant across the organisation's membership and beyond, and to ensure this topic is on agendas at the highest level.

A report of the seminar's proceedings will be produced and distributed widely as a first stage in fulfilling this role.

Rural Scotland has a right to world class digital connectivity, to which the Scottish and UK governments and the European Commission all agree. This will be achieved through both public and private investment, collaboration between corporates and communities, and through innovation.

As the roads and bridges of the 18th and 19th century connected industrial Scotland, so the fibre optic cables and mobile phone signals will do the same throughout the 21st century to connect digital Scotland.

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