



Borderlands

Inclusive Growth Deal

Digital Borderlands Infrastructure Strategy



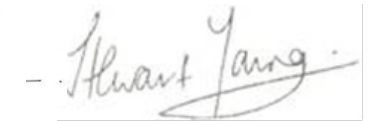
1. Foreword

Digital Borderlands is a key component of the Borderlands Inclusive Growth Deal as an enabler of the broader programme as well as underpinning economic recovery and growth. Delivery of this strategy is therefore critical to the region, not just from a digital inclusion perspective, but also to allow people to live and work in a connected world.

The COVID-19 crisis of 2020 has reinforced the need for high quality digital connectivity for all. This strategy is therefore of paramount importance within the Borderlands Partnership as a springboard to recovery and has our full support and commitment to delivery.



Cllr John Mallinson
Leader of
Carlisle City Council



Cllr Stewart Young
Leader of Cumbria
County Council



Cllr Elaine Murray
Leader of Dumfries
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Cllr Peter Jackson
Leader of
Northumberland
County Council



Cllr Shona Haslam
Leader of
Scottish Borders Council

2. Introduction

The Borderlands has a special place in the hearts of the people who live, work and play here. And to ensure the future connectivity of this region improvements to digital infrastructure are required. The 4th Industrial Revolution offers opportunities to transform the way people work in rural areas, but without the requisite mobile and fixed line connectivity and/or digital skills, there is a continued risk of rural areas being left behind.

The Borderlands region is a large rural area at the centre of the UK covering 9,000 square miles and 10% of the UK landmass. Remote rural areas are disadvantaged by a lack of access to services with 92.3% availability of superfast infrastructure above 24Mbps download compared to 96.5% for the UK as a whole and 55.8% 4G geographic coverage from all four Mobile Network Operators compared with 66% for the UK as a whole. (See Table 1 in Section 4.)

Recognising the challenges facing rural economies, the Borderlands Partnership has been formed by the five local authorities of Carlisle City Council, Cumbria County Council, Dumfries and Galloway Council, Northumberland County Council and Scottish Borders Council. Through this collaborative cross-border partnership, the UK and Scottish Governments have agreed to invest £350m in the Borderlands Inclusive Growth Deal in order to help transform the local economy. The Digital Borderlands programme is a central part of the Deal and underpins other projects and initiatives.

Facilitating Covid-19 recovery is now a key objective of the strategy as well as preparing for a more digitally enabled world following the coronavirus crisis. The strategy recognises and anticipates the possibility of future pandemics.

The Borderlands Partnership has established the Digital Borderlands Project Board that will have oversight on the delivery of this Digital Borderlands Infrastructure Strategy.

3. Vision

“We have a shared ambition for the Borderlands to be a vibrant place attracting, rewarding and retaining people to live, work, visit and invest here, by offering a high quality experience in beautiful, well-connected surroundings.”

Digital Borderlands is a transformational digital infrastructure project to deliver future proofed connectivity improvements that will enhance rural productivity and achieve inclusive growth. Our ultimate ambitions is to ensure all properties in the area have access to full fibre connectivity, complemented with 4G and 5G mobile connectivity. The Borderlands represents a challenging market location and we recognise our ambition must be pursued progressively. The coronavirus crisis strengthens and reinforces the importance of digital connectivity across the region.

Our strategic objectives are three-fold:

- ✦ Borderlands to catch-up and match UK levels of connectivity
- ✦ Equitable coverage across the Borderlands, with no place left behind
- ✦ Deliver the connectivity to enhance business productivity and to allow Borderlands to secure and retain globally excellent digital activity into the future

This strategy focuses on digital infrastructure, but we recognise the importance of working with other partners in relation to digital skills provision, a key component in the delivery of digital inclusion to ensure that no one is left behind.

4. Strategic Context

There is now widespread recognition that digital infrastructure is central to supporting local economies and is critical in keeping people and places connected. The UK Government policy is set out in the Future Telecoms Infrastructure Review published in July 2018. This describes an ambition to step-up investment in digital infrastructure for the whole of the UK. This has been taken forward in the conservative party manifesto in December 2019 with Budget announcements in March 2020 that committed to:

- ✦ Make £5bn available for gigabit capable connections to the hardest to reach 20% of premises by 2025. This commitment has been reiterated in light of the Covid-19 pandemic.
- ✦ 95% UK landmass 4G coverage by 2025/6 through the Shared Rural Network agreement incorporating the Home Office Emergency Services 4G network.
- ✦ Funding for 5G research and development so that the UK becomes a market leader in the availability of this technology and the associated benefits.

Digital infrastructure is also a key priority for the Scottish Government as set out in their digital strategy and policies including:

- ✦ The Reaching 100% Broadband programme (R100) to ensure that every premise in Scotland is able to access broadband speeds of at least 30 Megabits per second by 2021.¹
- ✦ The Scottish 4G Infill programme (S4GI) investing £25 million to deliver future-proofed mobile infrastructure and services in up to around 50 to 60 complete mobile ‘not spots’.

The COVID-19 crisis increases the strategic importance of digital infrastructure to allow everyone who can work from home to do so effectively through access to digital applications, services and data.

Borderlands is a rural area with population of just over 1 million dispersed over an area larger than Wales. The key challenges facing the area are:

- ✦ The need for population growth
- ✦ The need to improve productivity
- ✦ Achieving inclusive growth

Connectivity is one of the most significant barriers to addressing these challenges.

Borderlands is perhaps seen as a peripheral location, but with improved digital connectivity perceptions of remoteness can be changed. The full fibre connectivity and mobile connectivity in the Borderlands lags behind other parts of the UK and it is therefore critical that this is addressed.

Table 1: Borderlands access to digital infrastructure²

| | Cumbria | D&G | Northum-berland | Scottish Borders | Borderlands | UK |
|--|---------|-------|-----------------|------------------|-------------|-------|
| Superfast coverage >24Mbps | 94.1% | 86.0% | 94.3% | 87.8% | 92.3% | 96.5% |
| Full fibre coverage (gigabit capable) | 5.3% | 2.9% | 4.2% | 4.0% | 4.5% | 14.6% |
| 4G geographic coverage from at least one MNO | 90.4% | 90.7% | 88.0% | 84.4% | 88.7% | 91.0% |
| 4G geographic coverage from all four MNOs | 55.9% | 54.0% | 60.1% | 53.7% | 55.8% | 66.0% |
| 4G indoor coverage from at least one MNO | 97.2% | 97.0% | 98.3% | 97.9% | 97.6% | 99.2% |
| 4G indoor coverage from all four MNOs | 57.5% | 60.9% | 72.7% | 78.5% | 63.1% | 77.2% |

¹ The Scottish Government updated its website on 09 March 2020 to say that the “majority of the build [will be] completed by the end of 2023”. In those areas where R100 is not expected to be delivered by 2021, Scottish Government will promote, later in 2020, superfast vouchers.

² Superfast coverage from www.thinkbroadband.com, 06 March 2020 4G coverage from Ofcom data released September 2019.

5. Digital Borderlands Outcomes

Investment in transformational digital infrastructure is critical to tackling the barriers to longer-term inclusive growth. The dispersed population of the Borderlands requires a differentiated approach to investment in, and delivery of, digital infrastructure with the Borderlands area starting from a more challenging position than the majority of the UK. This strategy focuses on the infrastructure as the enabler that is required to support human activity. Improved digital connectivity will therefore provide the foundation for complementary activity across the Borderlands economy and contribute towards the following productivity and well-being outcomes:

- ✦ More home working with fewer journeys to work
- ✦ Better access to customers and markets for businesses and residents
- ✦ Increased levels of business investment in productivity enhancements
- ✦ Enhanced levels of entrepreneurship and growth in new start-up businesses, particularly in the manufacturing and creative industry sectors
- ✦ Greater access to the jobs, particularly where flexible remote working is an option
- ✦ Enhanced digital and wider skills due to access to digital learning opportunities
- ✦ Offering visitors a higher quality and better connected experience
- ✦ Deliver digital inclusion for all to ensure access to online services including healthcare technology and well-being benefits.

Digital infrastructure connectivity will best position our villages, towns and our city, as active and agile places where innovation can flourish, thereby making many of our places significantly more attractive in which to invest and visit. Linked to this investment in full fibre will support physical and virtual learning facilities connections that could help release the region's human capital potential. As the economy moves to more mobile ways of operating, with increasing numbers of remote workers, the Borderlands region can support the agile and transformational business process that will attract investment and drive future growth. In this way, future-proofing of the area's digital infrastructure can enable businesses and residents to compete by adopting new working practises, using the latest education tools and engaging with solutions that tackle remoteness. These drivers for change have become of greater strategic importance as a result of the Covid-19 pandemic.

Digital Borderlands is a key enabler of the other Borderlands programmes and their outcomes including:

- ✦ Quality of place
- ✦ Destination Borderlands
- ✦ Business infrastructure programme
- ✦ Rural innovation
- ✦ Energy investment company

Digital Borderlands will ensure that the area accelerates the reach of its digital connectivity and lays future-proof foundations for economic growth, by:

- ✦ Driving business productivity
- ✦ Supporting investment & trade
- ✦ Improving our offer to the world and contribution to UK prosperity
- ✦ Ensuring inclusion of existing communities and places
- ✦ Supporting knowledge exchange
- ✦ Enhancing the quality of our public services

6. Our Priorities

While the Local Authorities that make up the Borderlands Partnership have worked hard across the region to support improvements in connectivity the levels of services in the region are considerably poorer than in other areas of the UK. To address our challenges and to achieve our outcomes, this strategy has identified the following priorities:

Strategic Priority 1: Extending gigabit capable connectivity to all premises

The priority is to deploy full fibre gigabit capable connectivity across the whole region.

Going forward all broadband investment will be full fibre. Recognising the market failure in rural areas, we will work with UK and Scottish Governments to enable the following priorities to be progressed:

- ❖ Complete the superfast contracts with BT to deliver circa 93% coverage across the Borderlands by March 2021.
- ❖ Use RGC funding to connect hub sites in superfast not-spot locations in Cumbria and Northumberland and so stimulate further commercial deployment or voucher supported community schemes during 2020/21.
- ❖ RGC funding will also be used to deliver full fibre connections to 35 schools in Dumfries and Galloway.
- ❖ Use RGC top-up vouchers to support communities in not-spot locations in Cumbria and Northumberland to install full fibre infrastructure in the period up to March 2022.³
- ❖ Delivery of the R100 programme across the South of Scotland by 2023
- ❖ Secure UK Government investment (the 'F20' programme) in the non-commercial areas to achieve 100% gigabit capable connectivity by 2025
- ❖ Ensure Local Plan policies are up-dated to require developers to provide full fibre to the premise in all new developments

Strategic Priority 2: Boosting mobile infrastructure for 4G and 5G coverage

Mobile infrastructure is a critical component of the digital infrastructure strategy particularly in more remote rural areas. Mobile infrastructure can provide the necessary connections for 4G in areas with few premises to support the land management sector, visitor economy and logistics. Mobile 4G infrastructure is also required to enable future deployment of 5G. The Borderlands region is keen to be an area for testing and trialling of 5G technology in a rural context. We will work with UK and Scottish Governments to enable the following priorities to be progressed:

- ❖ Monitor the evolving Shared Rural Network (SRN) 4G programme to assess coverage in the Borderlands
- ❖ Secure funding and mobilise the Digital Borderlands 4G infill programme to complement the SRN and ensure that no place is left behind
- ❖ Work with partners on 5G research and development projects

Strategic Priority 3: Creating Digital Hubs

Digital Hubs can fulfil a range of functions, with the most common features including internet access, providing meeting and networking space, and giving opportunities to test new technologies. They have potential to improve digital skills for individuals and businesses as well as foster business and community development. The digital infrastructure strategy, working with local partners, will underpin the following priorities:

- ❖ Develop the new University of Cumbria campus in Carlisle as a Digital Hub⁴ through provision of the new Digital Skills Academy with business networking space and community learning.
- ❖ Establish digital hubs in each town within the Borderlands Place programme to enhance the provision delivered through libraries and digital learning hubs across the region.
- ❖ Work with South of Scotland Enterprise Agency and Skills Development Scotland and with Cumbria LEP and the North East LEP to increase the delivery of digital skills provision for businesses and communities.

These strategic priorities should be considered within the Covid-19 economic recovery plans and new ways of working, carrying out business and delivering services.

³ Dumfries and Galloway and the Scottish Borders also have access to the existing RGC voucher scheme.

⁴ Other education hubs in the Borderlands may also be developed.

7. Action Plan

The Digital Borderlands Project Board will have oversight of the priorities in this strategy and has identified the following actions to be progressed:

| Priority | Action | Outcome | Lead Organisation |
|--|---|--|----------------------------------|
| Extending gigabit capable connectivity to all premises. | Complete the superfast contracts with BT. | 93% of premises in the Borderlands to have access to a minimum 24Mbps download by March 2021. | Digital Borderlands |
| | Use RGC funding to connect hub sites in superfast not-spot locations in Cumbria and Northumberland. | Extend full fibre infrastructure in the period up to March 2022. | NCC |
| | Use RGC funding to connect 35 schools in Dumfries and Galloway | Provide full fibre connectivity to these sites and stimulate the extension of full fibre within these communities. | D&G |
| | Use RGC top-up vouchers to support communities in not-spot locations in Cumbria and Northumberland. | Stimulate further commercial deployment or voucher supported community schemes during 2020/21. | CCC |
| | Delivery of the R100 programme across the South of Scotland. | Close to 100% of premises to have access to a minimum 30Mbps download by 2023. | Scottish Government ⁵ |
| | Secure UK Government investment (the 'F20' programme) in the non-commercial areas | 100% gigabit capable connectivity by 2025. | BDUK |
| | Ensure Local Plan policies are up-dated. | Developers to provide full fibre to the premise in all new developments. | Digital Borderlands |

| Priority | Action | Outcome | Lead Organisation |
|---|---|---|---------------------|
| Boosting mobile infrastructure for 4G and 5G coverage | Monitor the evolving Shared Rural Network (SRN) 4G programme | 95% UK landmass coverage from at least one MNO, (<95% in the Borderlands) | BDUK |
| | Secure funding and mobilise the Digital Borderlands 4G infill programme | Complement the SRN and ensure that no place is left behind and deliver as close to 100% Borderlands landmass coverage by 2025 | Digital Borderlands |
| | Work with partners on 5G research and development projects | Ensure that the Borderlands can take advantage of this technology as it evolves | CCC |
| | Assess the feasibility of public Wi-Fi in strategic town centres | Develop the town centre public Wi-Fi strategy | CCC |
| Ensure that the infrastructure is available to enable the creation of Digital Hubs | Develop the new University of Cumbria campus in Carlisle | A Digital Hub for the region: a new Digital Skills Academy with business networking space and community learning | Carlisle CC |
| | Borderlands Place programme | Establish digital hubs in each town within the Borderlands Place programme | Digital Borderlands |
| | Work with South of Scotland Enterprise Agency and Skills Development Scotland and with Cumbria LEP and the North East LEP | Increase the delivery of digital skills provision for businesses and communities | SBC |

⁵ Note that the R100 programme is a Scottish Government initiative facilitated by Dumfries and Galloway and the Scottish Borders within the Digital Borderlands programme.

8. Summary

Digital infrastructure is a critical component in the delivery of the strategic drivers set out within the Digital Borderlands Growth Deal initiative. This strategy document demonstrates how fixed line and mobile infrastructure can be improved in the Borderlands with the aim of ensuring that no place is left behind. It recognises that there are significant challenges because of the rural nature of the area and the funding constraints imposed on local bodies. However, without improvements to digital infrastructure, economic opportunities will not be fully realised in key economic sectors such as agriculture and tourism. In addition, local authorities' broader digital strategies that set out how services will be delivered in the most cost effective manner using technology would be compromised.

All of these strategic drivers have been made even more important and urgent as a result of the Covid-19 pandemic during the crisis, within recovery and into a new environment beyond.

