Introduction

Highlands and Islands Enterprise (HIE) is the economic and community development agency for an area covering more than half of Scotland’s land mass stretching from Shetland in the north to the southern tip of Argyll and including almost 100 inhabited islands. In line with the Government Economic Strategy, HIE’s purpose is to generate sustainable economic growth in every part of the Highlands and Islands. Our vision is for the Highlands and Islands to be a highly successful and competitive region in which increasing numbers of people choose to live, work, study and invest.

HIE organises its activities under four priorities:

- Supporting businesses and social enterprises to shape and realise their growth aspirations
- Strengthening communities and fragile areas
- Developing key sectors, particularly distinctive regional opportunities
- Creating the conditions for a competitive and low-carbon region

The Importance of Digital Connectivity to the Highlands and Islands

HIE considers that modern digital connectivity is one of the essential components of creating a successful region. Its importance is recognised by our partners, our businesses and our communities and is arguably the single most common theme raised by our clients, partners and politicians.

Ubiquitous access to high quality, affordable broadband services underpins all HIE’s strategic priorities. For businesses and social enterprises it enhances productivity and drives innovation. In our communities and fragile areas it has the potential to boost economic development, retain young people and attract new residents. Connectivity, both fixed and mobile, is central to the successful development of emerging sectors such renewables, digital healthcare and cloud computing but also to more traditional sectors such as tourism or business services which are increasingly digital in nature. It is also a prerequisite for any region that aspires to remain competitive in today’s network-based knowledge economy or move towards a low carbon economy.

HIE wants everyone in the Highlands and Islands to access and benefit from Next Generation Broadband. Although it will be challenging we are confident that over time this will be achievable. However, we are determined that the region enjoys an early rollout of the new high-speed services and that action is required now to prevent even our major population centres falling behind the rest of the country. In a region such as ours, which the market sees as uneconomic, we do not believe that “do nothing” is a realistic option.

However, being a truly digital connected region is not just about the physical infrastructure and competitive services. It is essential that our businesses, communities and citizens understand the potential benefits that can be achieved through improved connectivity and have the necessary information and skills to realise these benefits. In policy terms the importance of digital connectivity is recognised at Scottish, UK and European levels.

Key areas of remit

- to assess the coverage, availability and uptake of broadband across Scotland.

There has been significant private and public investment in the Highlands and Islands over the last 10 years which has led to good coverage of basic broadband across the region for businesses and communities. Also, the Pathfinder North project has provided high quality connectivity to schools and Council offices.
Around 95% of premises in the Highlands and Islands can access ADSL broadband, with the remaining 5% able to receive a broadband service through the Connected Communities wireless project in the Outer Hebrides and the Scottish Government’s Broadband Reach satellite project. Whilst availability is good when compared with many other European countries, it is lower than the UK average. Over 60% of premises have a broadband connection. This is similar to the Scottish figure but lower than UK levels. Take-up levels in Scotland have remained at 61% since early 2009, whereas UK take-up levels have continued to increase to 74%.¹

Broadband speeds achieved in the region, however, lag significantly behind the UK average of 6.2Mbit/s². Indeed, research conducted in 2009 showed that broadband speeds in Inverness averaged just 2.5Mbit/s, compared with over 6Mbit/s in Edinburgh and Glasgow. Rural exchange areas are often large in comparison to the urban equivalents and many premises at the edge of the area are out of reach of ADSL or receive low speed and/or unreliable service. In addition, the use of Exchange Activate technology in 63 of the region’s smallest exchanges provide a maximum speed of only 0.5Mbit/s. It is estimated that around 28% of premises in the region do not receive a 2Mbit/s service, compared with only 11% of UK premises not receiving this speed. In addition, fewer than 20% of all phone lines in the Highlands and Islands can access faster ADSL2+ services (which deliver up to 20mbps speeds), set against national availability of 80%.

Coverage of 2G mobile services is comparable with other rural parts of the UK, although some parts of the region (including the Outer Hebrides and Shetland) are among the worst served in the country. Furthermore, whilst 95% of the UK population can access 3G mobile broadband services, coverage in the Highlands and Islands is restricted to a few of the main population centres.

- to consider the ways in which different local areas are working to promote access to broadband in Scotland and how good practice might be shared.

HIE has long been a pioneer in using public funds to address market failure in the delivery of telecommunications services. HIE continues to prioritise the importance of digital connectivity as we consider it is a major driver for achieving many of the outcomes set out in the Government Economic Strategy and our Operating Plan. To highlight connectivity issues, HIE has spent the last two years engaging in discussions with key stakeholders and partners from across the region. These sessions have brought together industry groups, local authorities, academic partners, and community groups to develop a shared understanding of the importance of digital connectivity. These discussions were distilled into a draft Connectivity Roadmap which provides five strands of activity that need to be progressed to ensure the region remains digitally competitive. The activity strands were endorsed by the Convention of the Highlands and Islands in October 2010.

The five strands of activity are:

- Optimising current connectivity;
- Incremental improvements, including progress towards 2Mbit/s to all by 2015;
- Improvement to mobile connectivity, both 2G and 3G;
- Next Generation Access, including securing early pilot(s) or rollout;
- Influencing on behalf of the region.

In July 2010, Broadband Delivery UK (BDUK) announced that it would undertake a small number of trials in the UK to test how next generation broadband projects could be delivered in rural areas and to help shape the UK Government’s wider plans for the country. Through the discussions that had already taken place to develop the Connectivity Roadmap, HIE was well placed to put forward a project of strategic importance for the region. This project aimed to deliver next generation broadband to around 40% of the region’s population. It was

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² Ofcom press release March 2011.
announced in the Comprehensive Spending Review 2010 that the Highlands and Islands was one of four projects to receive initial funding.

Following this announcement, HIE undertook a further round of discussions with over 15 telecoms infrastructure providers to ensure that our plans were fit for purpose and were likely to achieve our desired outcomes. The result of these are that HIE has chosen to undertake a single procurement which aims to meet Scottish Government, UK Government and EU targets.

In June 2011, HIE launched a procurement for a suitably experienced partner to co-invest in the provision of Next Generation Broadband (NGB) services throughout the region. The rollout is expected to be delivered in phases beginning in late 2012. The following milestones have been provided to suppliers as a potential rollout plan for the region, however the final rollout phases will not be confirmed until after contracts have been signed:

- **2013** – NGB connectivity and backhaul Points of Presence (PoPs) to as many settlements as possible but with coverage to at least two settlements within each local authority (LA) area;
- **2014** – Minimum of 50 settlements connected and receiving NGB services. PoPs established across the Highlands and Islands area;
- **2015** - 20km radius covered from each of a minimum 50 settlements + 2Mbps coverage to all. Note that the total coverage achieved at this stage is expected to meet Scottish Government targets;
- **2017** - NGB coverage progress check; and
- **2020** - NGB to all.

It is estimated that the total value of the contract could be in the region of £200m to £300m (this includes both public and private sector funding). Initial public funding will come from BDUK, HIE and ERDF. HIE is working to identify additional sources of funds in Scotland, the UK and Europe. The timescale for delivering the phases outlined above will be dependent on the availability of funding.

HIE’s wider ambition is to make the Highlands and Islands a truly digital region. Connectivity is the crucial first step however by itself it is not enough. Therefore in addition to its normal engagement through account management of businesses, social enterprise and communities, through its initiative, Digital Highlands and Islands, HIE will address issues such as stimulating the digital economy, digital skills and digital participation. In much of this activity we are closely engaged with other public agencies such as Local Authorities, Business Gateway, Scottish Enterprise and Skills Development Scotland.

We are also working with Pathfinder North as they consider options for re-tendering and are exchanging information with the South of Scotland on our respective approaches to NGB. We are through BDUK in touch with the other NGB procurements across the UK and have visited both Cornwall and Northern Ireland to learn from their experience. We shall be pleased to pass on what we have learned to other parts of Scotland.

- **to consider what work is required by the Scottish Government, infrastructure providers and others in order to expand Scotland’s digital infrastructure.**

HIE believes that the best way to expand Scotland’s digital infrastructure out into the rural areas is to encourage the private sector to provide wider coverage of the technologies, products and services that it provides on a commercial basis in urban areas through appropriate use of public funds. We have experience of projects at our own hand where assets are retained in public ownership and we can retain a greater level of control over services provided to end users. However, the telecoms sector is fast changing and it is difficult to predict with any certainty how the market might change and how long we must
maintain our direct involvement. We have also found that in the main both businesses and consumers like the choice and keen pricing of mass market packages rather than bespoke local offerings.

On balance therefore, we favour a “gap funding” style of intervention rather than direct provision. However, we do rely on the telecoms industry being prepared to invest along side us rather than simply selling us a service. The industry also needs to recognise a shared responsibility to stimulate demand for the new services through appropriate awareness raising and general promotional activities.

HIE is also very supportive of the idea of aggregating public sector broadband requirements as proposed in the McClelland Review, and believes that these plans could, over time, lead to real savings. However, based on our previous experience careful consideration needs to be given to any attempt to combine the purchase of public sector network (PSN) services and NGB in a single procurement. This could be overly complex and there is a risk that a PSN procurement would not automatically bring about sufficient improvement in the availability of NGB for small businesses and households to meet current Government targets.

We consider that our project will provide significant benefits to the region’s public sector organisations when they come to re-tender for their own broadband services. Although there are some concerns as to whether our project will bring benefits in time for the first of these re-tenders (Pathfinder North plans to have its new contract in place by March 2014) HIE is confident that its project will extend the availability of high bandwidth services across the Highlands and Islands and bring prices more in line with urban centres.

HIE is committed to working closely with the Scottish Government to assist with the development of the Next Generation Broadband Infrastructure Plan and the other aspects of Scotland’s Digital Future. We value the Scottish Government role in liaising with the Department of Culture, Media and Sport and Ofcom to ensure that Scotland’s interests are heard at a national level. In particular, current deliberations on the future use of radio spectrum are potentially of great importance in encouraging development of commercially attractive wireless services for delivery of broadband in areas where fibre based services would be too expensive even with public support.