Introduction

Scottish Enterprise (SE) is pleased to submit evidence to this important inquiry into broadband infrastructure in Scotland. This submission focuses on those areas of the inquiry which concern the current spread of broadband infrastructure, the future shape of broadband coverage, and progress towards targets.

Coverage, Availability and Uptake

When considering broadband infrastructure in Scotland it is important to differentiate between:

- current generation (basic) broadband and next generation (superfast) broadband
- fixed landline and mobile network services delivering broadband

In doing so, consideration has to be given to the coverage and capacity of the network infrastructure and the availability and uptake for each class of service.

Technology trends indicate that fibre based landline networks and 4G mobile are now the de facto standard required for next generation broadband networks.

Ofcom’s 2010 Communications Market Report and 2011 Broadband Speed Report into relative broadband performance across the different geographies of the UK, give a good insight into the spread of service availability and uptake. 99.8% of the Scottish population has access to basic broadband but service performance can vary by up to a factor of 50 between urban and rural areas. Generally, for the SME sector, urban areas enjoy greater choice of supplier and better quality service delivery, but have lower proportional uptake, while rural areas have limited supplier choice and lower quality service availability but proportionally greater uptake. This could indicate the greater reliance in rural areas on using technology to overcome distance challenges that are less of an issue in urban areas. Consumer market uptake is generally the other way round (with the notable anomaly of Glasgow) possibly reflecting the poorer availability and quality of service in rural areas.

Superfast next generation services, on landlines are only just starting to become available on a handful of mainly city centre exchanges on the BT network. Although the whole Virgin Media network offers superfast service, its geographical footprint is limited to the central belt and Dundee area. Other operators like Cable & Wireless and SSE Telecom, as a business model, focus on premium customers.

Figures from Ofcom’s 2010 Communication Market report show that 41% of Scottish postcode areas had 3G mobile, offering the equivalent of basic broadband (with at least 90% coverage, within those areas). These are almost exclusively in urban areas and compares with a UK average of 76% of postcode areas. It is encouraging that the UK Government has recognised the need for better coverage and in October 2011 pledged £150m to assist with this.

4G spectrum licences will be auctioned next year by Ofcom, but it is likely that deployment will follow established market channels and go first to areas of high population density. Indications are that while at least four licences will be preferred to ensure competition, only one will carry an obligation to ensure 95% or 98% population coverage. It is unclear whether the division of the available spectrum between the licences will ensure the network capacity to support the superfast potential of 4G in practice. As currently proposed, the licences may only permit service of about 10Mbps rather than the 100Mbps potential of 4G.

Progress towards Targets

Scotland should be close to the EU target of 2mbps service availability for all by 2013 due to the investment in basic broadband by the Scottish Government prior to 2010. The Scottish Government’s recent Digital Future Strategy, and the work progressing to shape its delivery, is a welcome routemap towards delivery of next generation services.

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1 Difference between the most basic Exchange Activate solution at 0.5mbps on some small rural exchanges and ADSL 2+ at up to 24mbps on unbundled and BT upgraded exchanges.
2 Defined by Ofcom as >24mbps.
3 Up to 2Mbps.
Progress towards the 2020 target for superfast broadband cannot yet be assessed given the early stage of infrastructure development, including both BT investment plans and public sector interventions such as the projects led by Highlands and Islands Enterprise and the South of Scotland Alliance. BT is engaged in a rolling programme to upgrade exchanges reaching up to 66% of the UK population. It was announced in November that this programme would now be accelerated to deliver by 2014 instead of 2015. To date 41 Scottish exchange areas (see http://www.openreach-communications.co.uk/superfast/where-and-when/) have been programmed for this work, either already underway or beginning by 2012.

The market penetration (uptake) in Scotland of services provided by any of the main operators at next generation levels is not known to SE. At the UK level, BT’s superfast product is claimed to be available now to 6 million premises, while uptake stands at 300,000 subscribers. Both figures are expected to grow quickly as BT’s roll out programme is accelerated (to the first two thirds of the population), and its superfast product is being offered at the same price as current broadband.

Conclusion

 Broadband is increasingly an integral part of the competitive infrastructure that is essential to economic growth in Scotland, both in terms of attracting inward investment and in growing our domestic base of strong companies able to compete internationally. Development of superfast broadband is a fast moving field and investment, both public and private, is critical to ensure that Scotland’s broadband infrastructure is well placed to keep pace with growing business need. The rapid growth of the digital economy is increasingly driving demand for enhanced connectivity.