Broadband access

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The UK needs to get up to speed on broadband to avoid a digital divide

A broadband internet connection is increasingly viewed as a vital utility at work and home – the electricity of the 21st century.

A largely deregulated market means that broadband services are competitively priced. However, it also makes the provision of these services a commercial decision by Internet Service Providers (ISPs), often favouring the denser urban areas.

The previous Government advocated broadband access for all and support for the rapid uptake of next generation services, providing superfast broadband, to ensure that the UK's digital economy remains competitive as new applications and devices require increasing bandwidth. These aims have cross-party support. However, market forces cannot guarantee this on a particular timescale across the country so the question more hotly debated is what government intervention, if any, is appropriate, and when?

WHO'S MISSING OUT?

In the 1990s the talk was of a large urban/rural digital divide based on broadband access. By 2003, 95% of urban centres had access to broadband, compared to just 7% of rural villages and 1% of remote rural areas. By 2005 this gap was closed with expansion of the BT network and a £30 million government Broadband Fund.

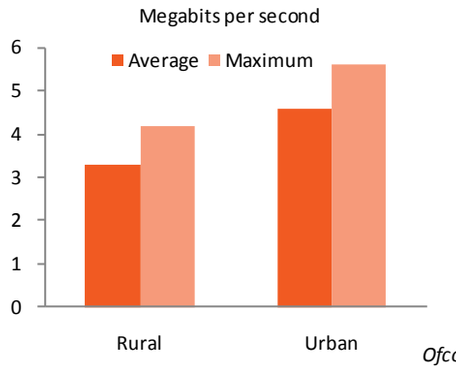
In 2009 over 99% of UK households were connected to a broadband enabled exchange. However, around 1.5 million households, often clustered in rural areas, still have little or no broadband availability for technical reasons. Of the 10.2 million adults in the UK who have never even used the internet, 4 million (9% of the population) are also considered socially excluded. Digital divides are in danger of opening again.

SPEED IS OF THE ESSENCE

The speed of a broadband connection dictates how quickly you can see pages on a website or download large files such as films, or whether you can use certain services such as online TV. A speed of at least 2 megabits per second (Mbps) allows you to do these things relatively easily. However, 2.75 million people, mostly in rural areas, have broadband speeds of less than 2 Mbps, often because of long distances from an exchange.

Slower speeds can confer competitive disadvantages on businesses, e.g. affecting on-line booking services and provision of wi-fi services. For citizens, it affects working from home or internet shopping. For both, it may determine where they locate.

Broadband download speeds are slower in rural areas



Ofcom

A UNIVERSAL COMMITMENT

The Labour Government's 2009 digital economy strategy, *Digital Britain*, set broadband access targets to avoid the economic and social costs of a digital divide:

- A Universal Service Commitment (USC) for broadband at 2Mbps for all by 2012
- 90% of the UK to have superfast broadband by 2017 (i.e. greater than 24 Mbps)

Broadband Delivery UK was established in March 2010 to deliver these ambitions with a potential £1 billion budget using the under-spend in the Digital Switchover Help Scheme (for the USC), and revenue from a controversial landline levy to finance the roll-out of superfast broadband to the less commercially attractive "final third" of the country. This levy was "lost" from last session's Finance Bill with strong Conservative opposition. The Conservatives favour a market-based route of requiring BT and other infrastructure providers to allow access to their assets by other operators - measures which Ofcom, the communications regulator, has already proposed. They would also tap into the digital switchover element of the BBC licence fee if necessary. The Liberal Democrats support government funding for superfast broadband if it targets the "final third" first.

Any government has to be careful that public funding isn't offered where private investment may have been forthcoming. A tricky call. Commercial investment in next generation networks is already underway. BT has invested £1.5 billion in a fibre-based network to cover 40% of the UK by summer 2012, with £1bn available to extend this to 60% by 2015.

Virgin Media's 50 Mbps cable service covers 46% of the population and the operator is trialling the use of telegraph poles in rural areas to extend this service. Some people will leapfrog to better services but less than 1% of areas may still pose technical obstacles too expensive to overcome.

COMMUNITIES ARE DOING IT FOR THEMSELVES

Some remote, rural communities have already set up their own broadband schemes with shared community ownership. The Community Broadband Network (CBN) is a co-operative of such schemes and it is now looking to purchase and sell services jointly across the UK. Smaller, conventional service providers are also starting to specialise in providing rural, next generation broadband services and catalysing local action to support local networks. Regional Development grants and European funding can support this investment.

AVOIDING ANOTHER DIGITAL DIVIDE

Broadband brings a new government potentially exciting opportunities for economic growth, new services and social change. Superfast broadband could support telemedicine and new ways of organising data (cloud computing), and increasingly people will access these from their mobile phone. However, these exciting developments also bring the challenges of supporting network investment and avoiding digital exclusion. No-one knows exactly what impact next generation services will have on the nation, but no government wants to risk being too slow to find out.