

Rural Broadband – Response to call for evidence

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Stakeholders consulted:

Helen Anderson, South Witham Broadband:

www.wireless.southwitham.net/

www.adsl.southwitham.net

[www.itprofessionals.co.uk/reviews\(South-Witham-Broadband-Ltd\)_1794.htm](http://www.itprofessionals.co.uk/reviews(South-Witham-Broadband-Ltd)_1794.htm)

Simon Berry (now Head of Third Sector Team, Defra):

See: http://beamends.typepad.com/simons_blog/2007/12/the-trouble-wit.html

Matthew Corbett, CBN

www.broadband-uk.coop/

Chris Conder, Wennet, Wennington, Lancashire:

www.wraycomcom.org.uk

www.youtube.com/watch?v=UsLv3NsGr0

Nick Hall, Clannet, Selby

www.clannet.co.uk

Richard Jackson, Martley Webmesh, Worcestershire:

www.martley.org.uk/broadband/webmesh.htm

Guy Jarvis:

www.fibrestream.co.uk

www.openfibre.co.uk

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1 Introduction

ruralnet|uk has brought together this information in an extremely short timescale (2 days) from interested parties named above, in response to a call from RSN Online, received 20/03/09.

ruralnet|uk co-founded the Community Broadband Network and has been working to improve access to rural services (including via broadband) for over 7 years.

2 Questions and responses

- **Is the lack of availability of broadband universally in the UK hampering public service delivery in rural areas. We assume it is but do you have any evidence to back up this assumption?**

"The Villages of Ashby De La Launde (including the Civil Defence Supply Unit, which has now had to install a satellite dish) and Braceby in Lincolnshire have NO ADSL broadband availability and mobile broadband is dire".
Helen Anderson, South Witham Broadband

All stakeholders consulted confirmed that public service delivery is adversely affected by poor or non-existent availability of broadband. This excludes rural people living in so-called 'not-spots' from accessing even the simplest public services, affecting both business and home life. Examples include:

- access to information and services via Direct Gov
- access to local authority information and services
- access to online tools, services and reporting needed by the farming community

"Access for farmers to Defra sites and services – eg CTS online to keep the databases and passports up to date are vital. Missing a deadline means animals have to be destroyed. Yet these services can be unusable in rural areas".
Chris Conder

Problems range from:

- no access (often requiring car journeys to the nearest town to access postal or advice services such as CAB, Tax Office etc – where these exist)
- poor/slow access – making information and service sites un-usable
- unreliable access – eg line dropping half way through a transaction.

'Online banking, vat, self assessment and many other services are unavailable causing unnecessary journeys and increasing carbon footprint, as well as wasting time and money'.
Chris Conder

Case study 1 Northlew:

'99% of all UK homes and businesses can already get broadband. Most people in Northlew cannot'.

www.northlew.com/broadband.html

A survey in Northlew, Devon, of 80 households found that only 16% had successfully enabled ISDN/ADSL (256/512 kbps). Of the rest, 16% were sharing phonelines, preventing access; 7% were 'incompatible' and a huge 37% reported unspecified 'line problems' – typical in rural areas – which meant that it is highly unlikely that access can be enabled over the current infrastructure, even when the exchange is enabled.

Northlew is now enabling a microwave link, which, it is hoped, will deliver speeds of up to 10 Meg. Northlew is a good example of a rural village and provides the following statistics (based on 2001 census, since which time the village has grown):

"There are 592 people in the Parish, 448 of which are between 16 and 74
There are 261 dwellings within the parish.
Out of 295 people who work, 130 work from home.
There are 80 Children between the ages of 5 and 15
There are 112 people past retirement age.
There are 105 people with long term illness'
There are 23 households without any mode of transport.
There are 243 people without any formal qualifications.

Therefore, in terms of internet connectivity:

130 Need it to work from home.
80 Children need it for inclusion within the national curriculum
112 people could use it to avoid social exclusion
105 people could use it to avoid social exclusion
23 (60 people) do not have access to any mode of transport.
243 people could use life long learning to improve their qualifications.

As an average, that is 100% of the village would make some use of the internet through business, education or vocation. Quite clearly, those statistics show a real need from broadband, but as a reflection of other rural economies, shows in fact how desperate we all are for 100% broadband coverage within the UK, and not just investment into faster urban networks. Equality, that is the key..."

Northlew is now hoping for financial support from their Local Authority.

(Source – Northlew Survey, Helen Anderson; www.northlew.com)

Case Study 2 – Isolated customer

"I've been helping one potential customer – a single mother in the Dartmoor area who needs access to advice and services - for more than 8 months to get her line connected. In this case – not unusual – it is the PSTN (voice) line that is the main contributing factor in lack of broadband access. Her line had voice fault. There were remote efforts to fix the line, with DACS removed. Her broadband was then activated but didn't work. We then get a catch-22 where the broadband engineer won't attend until the voice fault is fixed. This can take months, as this line – again not unusual in rural areas - has a way leave agree-

ment with the neighbouring farmer. This means for example you have to wait for him to get harvest in, then wait on replacement armoured cabling. There can be physical access problems: in this case they can't get the truck over a small bridge. When all this was done, the voice fault was still registering. It can take weekly calls to get these basic faults fixed. In this case, their solution was put a DACS on the line again, as all other attempts to rectify the voice fault have failed. Voice has priority over broadband – and here is the customer, back to square one. The voice fault is registered now as cleared, but broadband won't work.

The latest in this saga is that the financial planning department have sent a letter to the customer pointing out that the total cost of replacement of cabling will be in excess of £40,000. They are asking the end user to pay above the £20,000 base that they are paying. And still there would be no guarantee of a service working.

Bear in mind that to get to this impasse has taken eight months. Some [commercial] ISP's will bill the customer from the point when they sign up, until the time comes when the line is written off as not being able to provide a service. That is a huge deterrent for some rural people even to start investigating their choices. And it shows some of the additional (non-recuperable) customer service costs that community ISPs have to bear when they try to serve these more isolated customers."

Helen Anderson, South Witham Broadband

● **What services cannot, or are not, being delivered due to the infrastructure constraints - both in terms of current speed/bandwidth and looking towards more bandwidth intensive services - and if so, what are they?**

Stakeholders consulted pointed out that:

- Many rural communities are still struggling to get reliable coverage at very basic speeds of 256/512
- ADSL does not support VOIP (Voice over IP), which needs need symmetry of connection
- Quality and usability and lower speeds prevent efficient/reliable use of digital technologies by businesses
- Rural UK is falling behind most developed and many developing countries.
- There was general agreement that CBN's 'Not-spot' survey from 2006 is still relevant today.

Case Study 3 Martley Webmesh

"There is a chicken and egg here. People with no broadband availability have no use for it. As soon as they are connected then within a few months it becomes indispensable. Our traffic figures reflect this increasing use on relatively fixed number of connections. There is an increasing pressure by companies and public bodies that an individual or company has broadband. If they do not then they are penalized – for example they lose customers or contracts. I would argue that to use online financial transactions one is required to have broadband otherwise you will almost certainly NOT have all the security patches which are required to 'protect' your transactions.

We have seen a surge in video usage which gobbles up bandwidth. I should love to be able to provide unlimited bandwidth so that people could use video conferencing etc and work from home.

Connections remain unreliable: we have a business only 50 metres from an exchange where under his previous provider he suffered 20-30 min disconnections and only a slow connection speed. A number around here have an ADSL connection that is all but useless at times (when they require it!). These people are normally quite away from an exchange; now so many people have an ADSL connection the 'slower/further' people 'drop off' the branch."

Richard Jackman

- **Where is the innovation in services and what infrastructure will be needed to deliver this?**

Comments on innovation fall into:

Technical innovation

Examples cited include:

Fibre: Some insist that fibre to the home is the only efficient solution to delivering next generation communications and should be standard; efficiency savings would offset investment as fibre put in today would last (at least) to mid-century.

Femto: mini mobile phone mast that serve a house or several houses in a shared network

Mesh Technology: Local installations providing a 'patchwork quilt' of coverage.

'Innovation is happening, but rural areas are constantly left behind. For example, BT have released the news today of 29 exchanges being enabled for fibre: the gap between the haves and the have nots looms ever wider'.

Chris Conder

Socio-economic innovation

This is arguably even more important than technical innovation and has potential for delivering the most cost effective solutions most quickly to 'not-spots' through social/community endeavour.

Community broadband initiatives such as those interviewed for this response show the mix of innovation, determination and understanding of the issues (including sometimes complex technical issues) that is needed to make broadband connections work in rural areas. A great deal of their work is voluntary or subsidised by voluntary effort. A significant number (perhaps 50-60) of these initiatives are still struggling, and often rely on one or two community champions who work in their spare time. A modest amount of proper funding – eg support to help them exchange experience better; funding for small scale trials and demonstrations; funding for publicity - could ensure a more substantial and concerted impact to make broadband a reality for the last '1%' of homes and businesses.

A point strongly made was the need for research to make the case for funding – but the research itself is costly and can be highly technical. It is hard for community

initiatives to carry this out themselves with no funding, even when they have the technical expertise.

'There is real potential in using the new CIC structure – but it's complex and people need support and advice to get it right and make a sustainable social business'
Guy Jarvis

'Web 2 services came into being when critical mass and global take-up created the right environment for them to thrive. The same is true of community broadband – the technology is there, its spread needs proper support.'
Guy Jarvis

Legislative innovation

"Why will the government not move to require BT wholesale (or whoever) to commit to decent fibre links into the 5600 exchanges. If they then let independent parties use them, then we would see much more community based innovation?"
Richard Jackman

- **What efficiencies have been obtained by increasing online/digital delivery? Has any value of broadband/connectivity been worked out? We are thinking here about both services and the economy.**

All respondents pointed out that they could provide hard data given time, and ideally a small amount of funding. A framework to allow comparison would also be useful.

'A rule of thumb for, say, accessing Local Authority services is that a contact that costs £1 by telephone would cost £10 for face to face but only 10p for an internet-based service – the costs change by an order of magnitude.'
Guy Jarvis