

Connected Communities – Questions from Peter Peacock 20 June 2008

Q1. How many broadband connections to individual private customers does ConCom provide in the Western Isles?

As of 30 June 2008 there are 1309 subscriber orders with 978 already connected. Of these 806 are residential subscribers and 172 are business subscribers some of whom operate from a residential address.

Q2. How many exchanges have a BT broadband service on the Western Isles and when were these introduced?

There are 34 telephone exchanges in the Western Isles. BT has enabled 14 of these to provide ADSL broadband. ADSL was enabled as follows:

STORNOWAY	May	2004
GARRABOST	July	2005
BENBECULA	June	2005
PORT OF NESS	July	2005
BACK	July	2005
LOCHBOISDALE	July	2005
SHAWBOST	July	2005
CASTLEBAY	July	2005
CROSSBOST	July	2005
HARRIS	July	2005
BORVE	July	2005
GRAVIR	July	2005
CALLANISH	July	2005
BALALLAN	July	2005

These exchanges are listed in descending order by number of households and together contain some 76% of the households of the Western Isles. No public funding was given to BT to enable these exchanges.

The exchanges without ADSL are:

TIMSGARRY
CARLOWAY
NORTH TOLSTA
LOCHEPORT
LEVERBURGH
BAYHEAD
BARVAS
LOCHMADDY
SCALPAY
GREAT BERNERA
NORTHBAY
CARNAN
MANISH
GROGARRY
SOLLAS
BERNERAY
ERISKAY

SCARISTA
BORNISH
SCARP

Again the exchanges are listed in descending order by number of households. At the time BT was rolling out ADSL these exchange areas each contained fewer than 250 households.

Q3. Is ConCom part of HIE, or does it have a separate legal status?

Connected Communities is a local public sector led project which has been managed by Highlands and Islands Enterprise (HIE) on behalf of local public agencies. Currently the project and the accompanying "hebrides.net" service have no separate legal status. The future ownership of the network is under discussion.

Q4. Does HIE have any partners in the operation of ConCom?

HIE's main partners are Comhairle nan Eilean Siar and NHS-Western Isles.

Q5. Which bodies constitute "Connected Communities"?

The project board of Connected Communities is made up from representatives of HIE, Comhairle nan Eilean Siar and NHS-Western Isles. They are assisted in the operation of the network by the Managing Agent, Atkins, and a number of sub-contractors.

Q6. Why was the Connected Communities project developed?

Due to significant advances made in creating knowledge economy jobs in the Outer Hebrides over a number of years it was felt that the area would not be able to continue capitalising on this new way of working if the infrastructure was unable to support the provision of services into the most remote communities. Coupled with this there was a need for the public sector bodies to connect rural schools and health centres. As a result of all of the above the Community Planning Partnership agreed on both the provision of a suitable infrastructure to allow the subsequent deployment of new public sector services over the network. At this time BT had no plans to deliver broadband to these rural communities.

Q7. Can you provide a brief outline of how the project has developed?

An industry class backbone network was built over 2004/5 and a wireless access network was then built to bring the service into communities with first ISP services being connected in December 2005. Due to budget restrictions it wasn't possible to bring services into every community and in 2007 proposals to add around 40 relay sites which could take the same level of service to every community was completed. The final funding for this phase was secured in March 2008 with completion expected to be by December 2008.

Q8. How much money has been invested in the project and how has this been spent?

Phase 1 of the project was costed at £5.15M and delivered within budget. The Phase 2 relay sites project is costed at £1.35m and is in progress. Phase 1 costs breakdown to approx £3.8m for infrastructure and spares holding with the balance being for a range of costs including land acquisition, mast sharing and legal fees, design and testing, professional fees and working capital.

Phase 2 costs breakdown to approx £960k for infrastructure with balance for mast share, installation and commissioning, legal and professional services fees and Business Development Manager.

Q9. Why has it taken so long to roll out the Connected Communities service?

Delays in implementation of the second phase of the project have been due in the main to delays in securing the necessary funding, legal agreements with landowners and mast share agreements with other operators and timescales for the provision of power to remote sites.

Q10. Did the existence of the Connected Communities project put barriers in the way of BT enabling the remaining WI's exchanges?

The 21 exchanges not enabled for ADSL were (and are) classed by BT "unviable" – it considers that the cost of upgrading and operating the exchanges for ADSL outweighs any financial return it may make from selling broadband services. However, BT has chosen to enable "unviable" exchanges if it received public funds to support the cost of the capital investment and has therefore successfully bid in a number of tenders issued by public bodies across the UK.

In the Western Isles the public agencies chose to use their funds to install a wireless network to deliver broadband to both public and private sector users. This decision was made following an open tender to which BT chose not to respond. The decision to invest in Connected Communities was made before the Scottish Executive's decision to issue an open tender for broadband coverage in the exchanges without ADSL in the rest of Scotland. Consequently the Scottish Executive excluded the Western Isles from its tender, which was subsequently won by BT.

It is therefore the case that the public agencies have done nothing to prevent BT enabling the 21 exchanges but by deciding to install a wireless network in early 2004, the Western Isles were excluded from the later Scottish Executive project which, after an open tender, resulted in BT enabling all the "unviable" exchanges in Scotland except those in the Western Isles.

Q11. What are the advantages of Connected Communities to the Western Isles?

Subscribers can get a service regardless of how far they are from a telephone exchange (subject to a local relay being available and with 40 new relays in various stages of construction it is expected that Outer Hebrides will have coverage as good, if not better, than any rural area in Scotland). Subscribers don't have to accept lower bandwidths due to distance from an exchange. The service is already a symmetric service meaning upload speeds are the same as download speeds. Service contention is lower than through wired exchange services meaning fewer people having to share the same bandwidth.

Q12. What broadband internet service providers can provide services over the ConCom network?

The ConCom network is configured as a wholesale network and any ISP can choose to provide services over the network.

Q13. What are the technical limitations to the speed of connection within the ConCom network?

The network offers very high bandwidth within the Outer Hebrides and the subscriber equipment being installed at subscriber premises is software upgradeable to 26Mbps symmetric service. A further upgrade of bandwidth is proposed to support the schools Pathfinder project. This means the infrastructure will be able to deliver services as proposed with ADSL2+. The main limitation to this is capacity and cost of the links from the Outer Hebrides to the International Internet Gateway in London.

Q14. What scope exists to improve the speed of ConCom broadband connections?

There is no technical restriction for the provision of higher speeds. The connection to the Internet Gateway in London has been doubled in capacity in June leaving sufficient overhead for expansion in the medium term. It should be recognised that at peak times the Internet is slow and that these variations are not caused within the ConCom network and affect all ISPs. ConCom Network subscribers already get the advertised speeds however independent consultants are currently engaged to advise on product speed and pricing of packages. This includes comparative analysis to other similar services available from other providers..

Q15. What advantages over ConCom will the BT 21CN programme offer?

BT is currently undertaking a major upgrade of its national network which is known as its 21st Century Network Programme. This programme will affect all BT's exchanges and the links between exchanges (the core network) but will not affect the links between exchanges and customers (the access network). All 34 exchanges in the Western Isles will be part of the programme, although not until 2011 when the most of the Highlands and Islands network will be upgraded.

In tandem with its 21st Century Network Programme BT is upgrading to the next generation of DSL technology – ADSL2⁺. HIE understands that all exchanges will be enabled for this service, even those currently “unviable”.

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