

FTTH Empowers Scottish Housing Cooperation

The installation of FTTH on greenfield sites gave Scotland's West Whitlawburn Housing Cooperative control over deployment, services and cost, and ensured a wide take up of high-speed broadband among its tenants.

When Scotland's West Whitlawburn Housing Cooperative (WWHC) built 100 new homes on the outskirts of Glasgow between 2007 and 2009 it chose FTTH as the communications infrastructure for its greenfield site.

By laying and managing its own network, WWHC set out to offer tenants triple-play communications services at lower rates than those of national communications service providers, according to Paul Farrell, director of West Whitlawburn Housing Cooperative, which provides affordable accommodation to lower-income families on the edge of Glasgow.

Funding for the new estate came from both the Scottish government and loans to the WWHC from the Co-operative Bank.

"The scale of the housing development was huge; and we had no existing infrastructure such as water or telecoms. Laying fibre added around 2% to the total cost; it was not significant," says Mr Farrell, adding that "the highest building is two-storey, so technically it wasn't too difficult."

WWHC remains the sole telecoms infrastructure provider on the site and in 2009 it set up a legally independent consumer cooperative, called Whitcomm, to provide and manage the FTTH access and triple-play service. Whitcomm also sets a monthly tariff based on the services tenants choose to use.

The estate's tenants have the opportunity to be members of Whitcomm and therefore decide both pricing and service evolution. In April 2012, for example, the cooperative upgraded broadband speed to 50Mbps.

General Information

Location:

Cambuslang on the outskirts of Glasgow

Type of project:

Greenfield FTTH/GPON

Partners:

West Whitlawburn Housing Cooperative

Population:

lower-income families

Network status:

Operational

Business Case

Investment:

Financed by WWHC and the Scottish government

Network owner:

(WWHC) owns and operates the open-access network.

Since it was starting from scratch WWHC was able to lay ducts for its GPON fibre network as part of its overall construction project. This meant that equipping the 100 dwellings with FTTH added little to the total 13.5 million GBP cost of building the 100 dwellings.

Whitcomm sets pricing and does not seek a return on investment in its FTTH infrastructure. "Whitcomm's capital position is neutral. We need to watch our fees," says Mr Farrell. For line rental and fibre broadband, up to and often exceeding 50 Mbps, Whitcomm charges £24.70 per calendar month. For both broadband and telephone service customers pay £30.69, which includes anytime calls to UK landlines.



Nevertheless, WWHC calculated that Whitcomm needs to attain a 50% penetration rate in order to be viable – a threshold that it has surpassed.

Deployment

Size of network:

100 homes connected – 78 subscribers

Technology/architecture:

GPON

The cooperative, which manages first- and second-line support of the network itself, provided a triple-play service. But like many small high-speed broadband service providers, Whitcomm discovered that content provisioning would be its biggest challenge.

“We learnt a harsh lesson with content,” says Farrell. “Open access became complicated with TV. A number of people said they wanted Sky, and that Freeview was not enough. Then some wanted Sky and didn’t want Internet access.”

The cooperative now offers telephony and Internet access only. The FTTH network also enables the cooperative to provide home help alarms and run a CCTV security service.

Today, fully 78% of the 100 homes on the greenfield site have subscribed to FTTH. A further 20% have opted to do without a landline for phone calls and rely solely on mobile.



This compares favourably with an overall Internet adoption rate of 39% in those dwellings managed by WWHC that do not have FTTH.

WWHC, which houses many families with children and relatively few elderly people on the new site, has found that tenants use the FTTH service in particular for gaming, as well as online banking, video streaming services like BBC iPlayer, and helping with children’s homework.

FTTH may not be the primary reason tenants choose to live in Cambuslang, but three years after embarking on the FTTH project, WWHC believes that high-speed broadband infrastructure has added value to the service it provides, and helped overcome digital exclusion.

End-user Services

50 Mbps for £24.70/month for line rental and fibre broadband. £30.69/month for both broadband and telephone service.



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Photos provided by WWHC
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