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## **Kinmuck Community Broadband – Case Study.**

### *Community Challenge*

The Aberdeenshire village of Kinmuck, just a few miles North West of the City, certainly drew the short straw when it came to Broadband Internet access speeds. Over normal BT lines, while most areas of rural Aberdeenshire can expect speeds of between 3 and 6 Mbps, Kinmuck residents found that they were lucky to get 512K or even 256K. Worst still some found that they were served using what BT terms “DACs” which allow BT to deliver two telephone services over one twisted pair. While great for saving cable, as DAC prevents any broadband being provided.

The villagers decided they had had enough, and a Community project was born to deliver higher speeds to the village.

The Community Project, lead by local specialist Caleycom, approached Network DNA for assistance with the networking and security aspects, while they concentrated on the other challenges.

### *Solution*

Caleycom identified suitable sites in Aberdeen City and around the village, and determined that delivery by wireless would be possible. A long-haul link was to be commissioned from Northfield to a farm overlooking Kinmuck, then shorter wireless links would reach strategic parts of the village and finally yet another wireless system would connect the residents’ houses.

Networks of this sort can be complex, and Network DNA worked together with specialist wireless engineers Sitenett to ensure that it all worked together. Cost is also an issue in a Community project, and Network DNA and Sitenett both made sure that the most cost effective components were selected, without compromising performance or security.

Network DNA deployed Cisco security equipment at Northfield where the high-speed Internet connection was provided. At all the main points of the network Cisco managed switches were deployed to connect the various wireless elements together. Finally the switches, router and wireless were all configured to control Internet traffic to and from the residents while protecting against unwanted access, and applying controls to maintain fair bandwidth usage. Where possible Network DNA used Cisco Re-Furbished parts which are fully warranted and maintainable, but offer a saving over normal prices.

### *Results*



Kinmuck residents can now enjoy the benefits of high speed Internet access. Not just for social and entertainment, several are now working from home or running their own businesses, which would have been impossible prior to this project.

Network DNA's involvement did not end with completion of the project either. As the benefits became apparent there was demand from outside the village and several extensions have been created to the initial network. And throughout the process the whole network is monitored from Network DNA's Management Centre so that any fault will be immediately detected and addressed without undue delay.

For additional information including company background, case studies and other details please visit our website or email [info@network-dna.com](mailto:info@network-dna.com).

<http://www.network-dna.com>

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