



**Shortlist: Clackmannanshire Council with ClacksMax**

**The Challenge**

Rural areas of Clackmannanshire and Stirling Councils have long been identified as suffering from poor communications infrastructure. Clackmannanshire was placed 12th worst in the UK by a recent Ofcom report for the % of population who did not have at least 2Mbits/s broadband. BT estimated £1M+ to lay fibre to service 4 villages. Low population density and topographical challenges mean the areas are deemed not to be commercially viable for fibre optic cable and would not merit their investment without external funding. As a result, we investigated the potential of emerging and other technologies that might be capable of meeting the needs of our rural communities in a more innovative, economic and sustainable way, at a cost to end users comparable to other broadband providers. Our challenge was to find a commercial partner who had the vision and technology, and could deliver our aspirations, which we have called **ClacksMax**.

**The Solution**

Further to research and building on existing wireless expertise in Clackmannanshire Council, Wimax was identified as a potential low cost solution. Networks by Wireless (NbW) were identified as a potential technology partner and they agreed to provide 3.5 GHz Wimax installations for a proof of concept project, funded in part by an innovation grant from the UK Technology Strategy Board. In a partnership agreement, the Council provided access to buildings in strategic positions for NbW to mount antennae on, and access to backhaul to provide high speed internet connection. NbW met the remainder of the £65k technology costs and so we achieved the first live Council Wimax installation in the UK, at no cost to the Councils. ClacksMax was born!

The successful delivery of ClacksMax over Wimax infrastructure allowed us to make a bid to Forth Valley & Lomond LEADER as part of the Scottish Government's Rural Broadband Challenge Fund. As one of only 5 successful bids in Scotland, we were awarded £186k to develop the pilot project into a commercial service covering 4 high priority rural areas. These areas had been identified as having businesses who were being restricted in their growth due to inadequate broadband and communities who were similarly disadvantaged for educational, recreational and social use of high-speed broadband.

**The Achievement**

Having been awarded funding to develop ClacksMax, we advertised on the Scottish Procurement Portal for an innovative solution to deliver high-speed broadband to our rural areas within the constraints of the grant funding. It was made clear that while the funding was available to pump prime the initiative, the model we wanted was that the commercial return that the successful partner would get from subscribers in the pilot areas would be used to expand the network further, at no additional cost to the Councils. We also made it clear that while the trial had used Wimax, other technologies that could provide a cost effective, sustainable and scalable solution were encouraged and would be favourably received.

Over 40 companies registered an interest and Briskona was the successful bidder. Briskona consists of BriskNet, an Irish Wireless ISP and Eurona, a Spanish Telecoms company. Both of them have experience in delivering a commercial return in low population density areas using wireless technologies. Briskona also identified NbW as the technology supplier, building on and exploiting their technical expertise and local knowledge built up during the trial. Briskona have proposed £1.2M of investment to roll out the commercial offering across the wider Clackmannanshire and Stirling rural areas.

We are confident that the ClacksMax model that we have developed as outlined above, will not only be applicable to our Council areas, but could also be used in other low population density areas. By providing Council buildings as strategic wireless base sites, we have developed a partnership model that pairs Council assets with commercial investment to the betterment of both business and domestic broadband users. ClacksMax will also cause minimal infrastructure disruption (no road works!) and can be deployed very quickly with easy to install Customer Premises Equipment (CPE). By providing access to Council assets, we will reduce the cost of service provision thereby allowing Briskona to provide high-speed broadband at comparable rates to "traditional" suppliers.

We have done this to date with no additional cash investment from the Councils. By securing the initial pump priming grant and identifying a suitable commercial partner who realises the opportunity and is prepared to commit further investment to build a wide area Wimax network, we have created a scalable and replicable model that we hope will deliver a paradigm shift in rural broadband delivery, which in turn could stimulate the rural broadband market across the UK. By the time of the awards ceremony, the first ClacksMax users should be preparing to go live on the network and enjoying high-speed broadband from across the bents and glens of rural Clackmannanshire and Stirling. We therefore believe that we have demonstrated innovation in assembling, managing and leveraging the financial resources needed to deploy advanced digital access networks for our communities.