

# Connecting Cities, Connecting Services, Connecting People

Case Study - Rhondda Cynon Taf





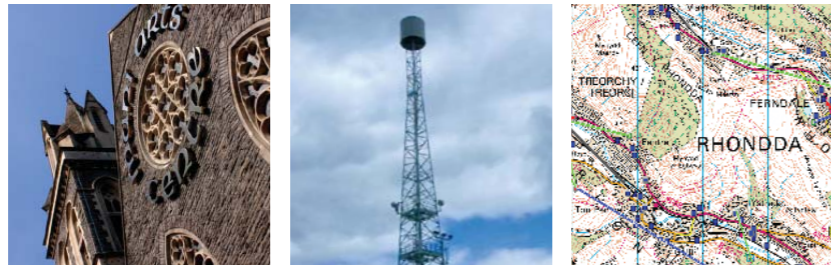
# Easy Networking

## Meeting the Challenge

Networks by Wireless Ltd (NbW), systems specialist in fixed and mobile IP infrastructure solutions, was awarded the contract to deliver broadband connectivity to over 350 public sector establishments throughout the county borough of Rhondda Cynon Taf.

Located over a large region in South Wales, the sites to be connected consisted of corporate, educational and library facilities, many of them dispersed over very rough and rural terrain.

NbW designed and implemented the network with future flexibility in mind, being upgradeable both in terms of bandwidth and area of coverage. Upgrades to the core backbone network from 155Mbps up to and including gigabit capacities and at end user sites from 2Mbps to 20Mbps are all immediately available.



## Providing the Solution

### How it works

Networks by Wireless Ltd commenced work on the design and implementation of the broadband network in April 2003. This has created a 155Mbps core IP wireless backbone that provides network service points enabling light licensed radio systems to cost-effectively deliver end user capacities of either 2Mbps or 8Mbps, as dictated by individual site requirements.

"The terrain lends itself to wireless because it's so undulating; a wireless network far outweighs any cabled network in such an environment," says George Webb, NbW's Regional Manager for Wales and the South West.

"Of course, our wireless fixed infrastructure solutions work equally as well in urban environments, as demonstrated by our successes for councils such as Thurrock, Leeds and Milton Keynes," he continues.

To deliver the network, the company took the decision to open a permanent base in the region. Its engineering and project management teams initially worked from council premises, but are now based in their own premises at Taffs Well.

Phase One of the project saw the creation of the 155Mbps core IP wireless backbone facilitating connections for nursery, primary and secondary schools across Rhondda Cynon Taf in addition to sports centres, libraries and all council buildings. The building of a 51m tower in the north of the county was also a key part of this phase of the project, enabling 27 end user site connections via wireless.

NbW is currently delivering the next phase of the network, Shape-It.org. This will enable community groups across the county borough to join the authority's wireless wide area network. Some 329 community groups, charities and clubs will have access to broadband, allowing them to host their own web pages on the council's portal, which is located at NbW's Taffs Well offices.

Leigh Gripton, Service Director for Customer Care and e-Government at Rhondda Cynon Taf County Borough Council says that NbW has delivered a highly reliable and cost effective broadband infrastructure.

He adds: "I would not hesitate to recommend other councils or any other public sector body to engage with NbW to deliver their ICT priorities in a cost effective, professional and pro-active manner".

The network solution provided by NbW has revolutionised digital communications across Rhondda Cynon Taf, enabling students and teachers to access and share educational services and resources, which was not possible before and allowing council departments to benefit from enhanced business practices.



## → Who we are

NbW has spent many years developing industry-leading IP solutions and processes in wireless technology and has designed and implemented some of the largest and most complex high-capacity networks in operation in the UK today.

NbW is at the forefront of converged fixed-mobile broadband infrastructure solutions and has access to a unique portfolio of products and services to ensure delivery of converged IP applications such as voice, video, data and CCTV solutions.

The company's track record is also inspiring confidence overseas, where it has been licensed to build a national wireless network in the Ukraine. In a highly-competitive and fast-moving industry, NbW remains on the cutting edge.

## Full Turnkey Service for Bespoke Solutions

- WiMax Solutions & Services
- Wi-Fi Solutions & Services
- IP CCTV Solutions & Services
- Licensed Radio Solutions & Services
- UPS Solutions & Services



## → Networks by Wireless™

T: 0845 123 1500

F: 0845 123 1538

E: [sales@nbw.net](mailto:sales@nbw.net)