



Angus Council are one of Scotland's thirty two unitary local authorities, located to the north of Dundee and bordered by the authority areas of Aberdeenshire to the north, Perth and Kinross to the west and Dundee to the south. It serves a population of approximately 110,000 citizens and covers an area of approximately 843 square miles.

The Council's IT department have been using wireless technology since the turn of the century and readily see the potential in terms of cost savings, particularly in a semi-rural environment, and increased flexibility that it offers. They currently use a mixture of licensed and light/license-exempt wireless systems for connectivity to schools and other council owned/leased buildings.

In the late summer of 2010, Angus Council had a particular requirement for the provision of a high speed connection for one of it's primary schools. After obtaining several quotations, the cost to provision this site using a traditional leased line was deemed to be prohibitive, so the council, already well versed in the potential that wireless technology had to offer looked to their incumbent supplier for for a solution.

This supplier, however, struggled to provide a solution that was fit for purpose, as they were recommending a slightly older, less spectrally efficient wireless system that couldn't provided a sufficiently fast and stable over the required distance and were therefore unable to provide the proposed connection that they had quoted for, won and were contracted to supply.

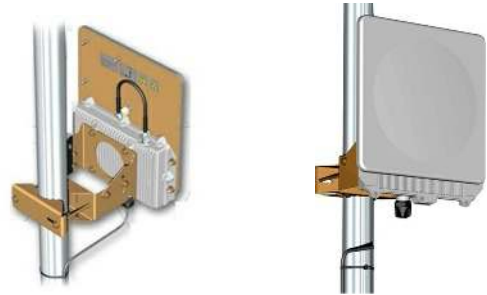
The incumbent came to Rapier Systems for help with this project.

Using our knowledge of the available equipment types and their individual characteristics, we desktop planned and simulated the the link. We proposed a solution based on a different manufacturer, with equipment far more suited to the distance and poor LOS (Line of Sight) dictated by the local terrain and environment, when compared with the equipment selection made by the incumbent supplier.

In collaboration with the incumbent supplier, we supplied and configured the equipment to meet the customer's required operational parameters.

With in-house training and consultancy from Rapier Systems on the safe installation, assembly, deployment and optimisation of the radio hardware, the incumbent supplier was able to mount the 5.8GHz 'lite licensed' radio equipment specified at a height of 80 metres above the ground on a 3rd party owned mast structure, in order to get a reliable connection at a distance in excess of 18km.

The radio system was aligned and commissioned with remote support from our engineering team and performed exactly as planned, meeting all customer requirements in very difficult LOS and environmental conditions.



As a result, Angus Council were able to connect the school as promised by the incumbent supplier, giving the school it's much needed high speed connection to the outside world. The council saved having to install a prohibitively expensive leased line, with a very long lead time and the equipment installed performed over and above the required technical specification, delivering approximately one and a half times the required bandwidth to the school, this increasing the service life of the installation.

There is no doubt that our assistance helped the incumbent supplier escape having a potentially embarrassing conversation with it's customer too!

"It's all about selecting the right technology, product and manufacturer for the customer's requirement, rather than trying to sell the the highest margin or favourite manufacturer's equipment whatever the situation. Our ethos is to understand the customer requirement and recommend the correct solution"

Stuart Wilson, Technical Director - Rapier Systems

About Rapier Systems

Formed in 2003 Rapier has unrivalled expertise in the design, delivery and support of wireless (including WiFi) networks and systems; the company is a value added integrator of best-in-class wireless products.

Whether within or between buildings, upgrading or replacing existing networks, or designing and installing new wireless systems, Rapier's experience in environmental analysis and network design ensures complete coverage and optimal performance.

Rapier works with world leading wireless system vendors, including Ruckus, Alvarion, Airtight, Cambium/Motorola, Ceragon, SAF Technika and several more. The company has reached the highest level of accreditation with each of its partners and understands which vendor and product is best suited for each environment.

Rapier has grown dramatically on the back of a surge in demand for wireless networks, which it has designed and installed in a wide variety of challenging environments from colleges and oil rigs to business parks and theatres.

Rapier maintains Scotland's largest Wireless Network, covering Dundee City, Angus and Perth & Kinross Councils, which comprises around 250 sites.

The company has designed and delivered some of the most innovative wireless solutions in the UK, including the largest metropolitan area wireless network in Scotland and one of the largest county-wide wireless networks in England. Rapier delivered the 1st fully licensed Gigabit wireless link in the UK.

The company's headquarters is located in Fife, Scotland and it has offices in St Neots, Cambridgeshire, England.

Rapier has a UK wide customer base in sectors that include Local Government; Transport, Renewables, Oil and Gas, Retail and Leisure.

For further information please visit www.rapiersystems.com

