

Cambium Increases Bandwidth for Dundee



“We continually look at ways to enhance our systems and provide a high level of service to our customers and the citizens of Dundee. Investing in our wireless broadband network is an essential part of this process. Cambium Networks and Rapier Systems have provided a cost effective solution that meets our current needs, while providing a scalable platform for the future,” said Graeme Quinn, IT Network Manager, Dundee City Council.

SITUATION

As Internet user habits evolve and the explosion of bandwidth-hungry applications continues, Councils across the UK are under increasing pressure to deliver reliable digital services to their citizens, staff and remote offices. Dundee City Council is one of Scotland’s 32 unitary authorities providing much needed essential and lifeline services to the population of around 153,000 citizens, covering 21 square miles. As part of its continual investment into the City, the Council recognised that it needed to update its outdoor wireless broadband network in order to deliver a reliable connection, particularly as the demand for increased bandwidth proliferates.

Dundee City Council needed to provide a wireless connection that would enable the delivery of high-speed broadband to its user community, enabling access to a wide selection of online services, quickly view web pages, and stream video applications.

Having previously worked with the Council, Rapier Systems Limited needed to provide a solution that would replace the outdated existing system, and one that would support all network connectivity, including file transfer, VoIP, CCTV, terminal services and all future ICT service demands. Rapier Systems looked to its wireless access partner, Cambium Networks, to

supply wireless broadband connectivity that would deliver increased bandwidth speeds, while being cost effective and conforming to standards-based security and encryption methodologies.

SOLUTION

Rapier used Cambium’s Canopy PMP (Point-to-Multipoint) 450 fixed wireless broadband access solution, which is specifically designed to deliver the capacity and performance service providers and private network operators require to meet today’s demanding and growing need for bandwidth.

The PMP 450 utilises a combination of high throughput, low latency and GPS synchronisation that enables the rapid deployment of new services and increases revenue and profitability. The first phase of the refresh project deployed PMP 450 Access Points and Subscriber Modules to existing sites, with Subscriber Modules also being deployed for the additional new site connectivity.

The addition of GPS synchronisation gives the Council a scalable platform that provides the capacity for growth and expansion, and will be able to cope with increasing network demands, without the need for expensive additional upgrades.



CUSTOMER PROFILE

Dundee is at the heart of Scotland’s road and rail networks putting the rest of the country, and the UK, within easy reach. The Council is committed to helping people and improving prosperity for all of its citizens through the delivery of efficient services. In 2008, the Council was presented the ICF (Intelligent Community Forum) Founders Award, which is given to organisations that transform life in broadband and identify best practices and sustained programs. Recognition went to Dundee for its Digital Observatory strategy, which is building collaboration among all sectors of the community to deliver a broadband wireless infrastructure to continue to enable Dundee to become a “factory” for information, products and services.



RESULTS

Dundee City Council has benefitted from a stable network that provides a large number of users with reliable ICT services. Since its deployment, the solution has made a significant impact, providing three times more available bandwidth than its legacy system, giving users a superfast connection to vital online services. Cambium's and Rapier's connectivity also has the potential to improve innovations, the environment and social cohesions, helping communities and individuals to enhance their wellbeing by accessing digital technology through improved access to services and learning and skills training. Based on this first phase to refresh the network, the Council may look to replace more technology while looking to incorporate new subscriber sites.