

Diocese of Broken Bay



Enabling the Digital Education Revolution

Challenge

- A cost effective solution able to provide high quality connectivity over a large coverage area.
- Single supplier to provide thought leadership, scalable design and fully managed service.

Solution

- Complete design and build of a Next Generation Network.
- Scalable Layer 2 Ethernet services providing scalable and resilient design.

Value

- Solution delivered on time and to specification
- Guaranteed bandwidth delivering all applications and services.
- Facilitated the implementation of organisational strategies with scope for future projects.
- Provided CoS (Class of Service), carrier availability and scalable bandwidth.

"The Diocese of Broken Bay is committed to providing our pupils and staff the very best environment to further develop their education and life skills. The Next Generation Network solution developed by Vertel is an important ingredient in our mission to deliver a modern and collaborative approach to education within our community"

Tomas Machacek, Network and Security Specialist

Business Challenge

The Diocese of Broken Bay (DBB) covers an area of 2,763 sq km's from the upper North Shore to the Central Coast. The DBB provides guidance, support and direction for 36 primary schools, 7 secondary schools, 8 independent Catholic schools and 14 facilities that offer vocational support and community services.

A progressive and well considered vision for the use of broadband technologies in improving the quality and effectiveness of teaching had been created by the leaders within the Diocese of Broken Bay.

The Diocese engaged a number of carriers to design and provide a proposal for the creation of a Next Generation Network (NGN) to connect some 50 school and office locations. None of these carriers were able to meet the time and financial parameters set out by the DBB as they were using fibre as their primary access technology.

Vertel was recommended to the DBB by one of the fibre carriers (themselves a user of Vertel's Etherwave services) and commenced works on the creation of a highly innovative carrier grade network that was capable of delivering high bandwidth and quality services across a large geographical area.

Our Solution

- Consultative approach for the creation of an innovative network architecture and overall design that met DBB objectives.
- Full network build of a dedicated NGN including data centre connectivity, diverse backhaul and multiple access services.
- Each school has a 20Mbps of Layer 2 Ethernet (scalable to 80Mbps without hardware change) connectivity service for a point to point connection into the DBB core network and applications
- Overcame significant terrain challenges and site issues in delivering a network to budget and with comprehensive on-going support arrangement.



Value Proposition

On Budget, To Specification

- Met DBB's internal KPI's for project milestones and Return on Investment.
- Guaranteed bandwidth delivering all applications and services via Layer 2 Wireless Carrier Ethernet.

Facilitates Existing Vision

- Allowed for the successful launch of operating environment and teaching applications.
- Created an excellent platform for internal support for future projects.

Future Proof Network

- Global standard for packet 2 network connectivity and interoperability.
- Scalable bandwidth with full quality and class of service (CoS) to handle any and all future applications and services.



"The scalable network designed by Vertel provides us with a platform which is easy to manage whilst deliver the group on-going operational efficiencies"