Buzzy Award Nomination: On the Frontier

Ministry of Education: **Project PROBE**

Project PROBE was conceived in early 2002 as the means of government subsidising the extension of broadband internet access to remote areas of the country that otherwise would never be served by commercial service. This was to be achieved by ensuring that all 2700 (approx) state schools would be able to receive broadband service, and further that the technology used to serve the schools would also make broadband available to the surrounding community.

Roll out of high speed internet connection to all schools is a precursor to maximising schools' use of ICT for administrative efficiency and teaching effectiveness. As a result of the rollout, high-speed internet access will be available and affordable for all schools.

High-speed bandwidth gives additional access, particularly for remote and rural schools and kura kaupapa, to:

- existing digital resources, such as those on TKI;
- the digital learning objects jointly developed with Australia;
- online communication and professional development for teachers;
- participation in education projects, such as the Ministry's e-learning projects and e-administration initiatives;
- the expansion of e-learning; and
- access to wider curriculum choice and teacher expertise, including through video-conferencing.

Provision of quality internet connection to schools will also make connectivity available to others in the community, either through direct use, or indirectly via connections at community centres such as marae and libraries. This will support the retention of young people in rural communities and positively impact on community and business development. The people in schools, businesses and homes to gain most benefit from this digital opportunity will be those in rural areas currently lacking digital access.

A grant in the form of capital grants from the government reduces the commercial risk for suppliers of building infrastructure to provide access to broadband services in remote areas where there is little or no possibility of a sustainable commercial return.

Uniquely these dual objectives; service to schools and coverage to communities, led to the project being jointly funded and managed by the Ministries of Education and Economic Development.

The project structure was also unique in having considerable involvement of local government and the local community to ensure that local economic and social development needs could be accommodated as far as possible. The country was divided into fourteen regions, with a nominal fifteenth region for very difficult to service areas where satellite was the only viable technology. Each of the regions formed a Broadband Liaison Group that worked with the PROBE project team to aggregate demand and ensure regional specific requirements were taken into account both in selecting the regional service provider and ensuring coverage was prioritised in line with regional requirements.

Two regions, Southland and Northland, chose to operate the supplier selection process themselves. They were eligible for PROBE funding to meet the costs of delivering the government objectives of minimum school and community coverage.

A dual RFI/RFP process was used to select preferred suppliers for each of the regions. The regional tender process was intended to ensure regional needs were taken into account. While Government's requirements were two fold – ensuring schools and communities get high speed Internet, it was recognised that the costs for particular regions will vary, for example, the more remote a community is the more costly it will be to supply. The aim was to minimise the costs, on an ongoing basis. These factors along with the size of the population covered, the size of the geographic area, and the available technologies were all considered in the tender process.

Once the suppliers were confirmed those schools and communities that were best suited for satellite service were identified and a preferred supplier for region fifteen was selected.

This process resulted in five suppliers: Telecom, Woosh, The Pacific.net, Counties Power/Wired Country and ICONZ. The technologies being deployed involve a mix of wireline based DSL, wireless – using both unlicensed and licensed spectrum, including the band reserved by the government for community use, and satellite. In the case of the satellite service, wireless is being used where appropriate to extend the satellite service from the school to the surrounding community.

The supplier contracts were signed progressively between March and October 2004 and are now substantially complete, with the project on track for a June 2005 completion. At the end of April 2005, 90% of schools had access to broadband.

The rollouts have been actively managed to ensure the maximum coverage is achieved within the already established budget. In cases where, for example, schools have been merged or closed, equipment has been redeployed in consultation with the regional Broadband Liaison Group to areas of greatest need. It is noted that the project was never intended to provide 100% community coverage.

In cases where unique community requirements were identified by the Broadband Liaison Group and additional local funding was available, the PROBE coverage has been extended beyond the project scope. Examples include Chatham Islands and Haast.

Since PROBE was launched, and in many respects as a result of PROBE, there has been substantial change in the telecommunications market with the result that Telecom New Zealand now claims that ADSL coverage extends to 92% of existing telephone lines, compared with about 62% when PROBE was launched.

This change can be attributed to several factors including increased competition in the telecommunications market, technology changes which have reduced the cost of ADSL deployment, and a clear signal (through PROBE) to telecommunications service providers of the Government's recognition that broadband is an important factor in ensuring regional economic development.

The Broadband Liaison Groups themselves will continue after PROBE and have reformed themselves under the e-regions banner to now concentrate on building demand for broadband through the development of broadband applications and services.

PROBE is part of a wider Ministry of Education initiative to enhance the use of ICT within schools. Other initiatives in the area include software licensing for schools, provision of a video conferencing bridge, laptops for teachers and principals, and the provision of virus protection and internet content filtering software and services.