Project PROBE Case Study
A case Study of Project PROBE, delivering broadband to rural schools
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Overview

In its 2002 Budget the government announced an objective of ensuring that all 900 isolated rural schools in NZ had access to broadband Internet services.

The announcement followed work on rural broadband (RB) over the previous 18 months by both the Ministry for Economic Development and the Ministry of Education.

The latter wanted to provide rural schools with fast access to existing digital teaching resources located in the cities and offshore, with the objectives of

- Improving administrative efficiency and teaching effectiveness
- Enhancing the professional development of teachers
- Expanding e-learning ... and
- Providing a wider curriculum choice and teacher expertise, including two-way video-conferencing.

With those objectives in mind, the Ministry had already tentatively explored the provision of RB services with Telecom but had received a lukewarm response, the company believing that provincial services were a financial liability. Its proposed budget of $28 million was also beyond the Ministry’s financial resources.

For its part, MED had a complementary set of objectives. Its ambition was to strengthen the rural by economy by

- Enabling local authorities, tourist organisations, the health sector and businesses to have high-speed access to the Internet
- Generating a competitive telecommunications market outside the main cities. MED’s concern was that provincial NZ would languish without high-speed, price-competitive Internet access.

The government’s launch of Project PROBE, with an initial budget of $39 million integrated the objectives of both Ministries.

Following the evaluation of project management tenders by the PROBE Steering Group (PSG), a trans-Tasman ICT consultancy, Amos Aked Swift Ltd (AAS), was chosen to implement the project.
PROBE was essentially complete by the end of 2005, having successfully provided broadband access to 891 schools at a final cost of $45 million.

**Governance**

The project was led by the PROBE Steering Group with two representatives each from the two lead ministries and a single representative the Department of Prime Minister and Cabinet, State Services Commission, Ministry of Health and Caravel (a specialist project management company which provided audit services).

Its starting point was a Project PROBE Charter, written in August 2001, which scoped the concept and proposed a project path.

After a PSG analysis of some thirty responses to Requests For Information (RFI), Cabinet approved a budget extension to $49 million.

The RFI responses also prompted the establishment of a smaller steering group (three members of the PSG and two regional representatives) when it was recognised there would be difficulty in achieving on-going and comprehensive participation by the entire Steering Group. Additionally, it had become apparent there was also a need to

- ensure greater regional participation
- directly engage with those people who had the skills in detailed planning, issue resolution and project management.

Although it was not anticipated in the initial planning, the steering group established fourteen Regional Broadband Liaison Groups (one for each of the regions covered by the project) to provide

- a conduit into the regions
- local information on potential demand, particularly local industry initiatives (such as tourism) which would benefit from the availability of broadband services
- liaison with key local participants and potential users
- coordination with local government
- communication and publicity about the projects and the regional benefits ... and
- assist with resources consents when they might be required (e.g. new transmission facilities which might require local government/RMA approval)

**Project Implementation**

After the analysis of the FRIs, a short list of 9 providers was selected to tender for the projects in fourteen regions, along with a fifteenth to be provided with broadband
access by satellite. This unanticipated “region” covered those isolated rural communities throughout the country into which the delivery of wireless broadband or wireline broadband (ADSL) was impractical.

Standard contracts were prepared by a national law firm. Each tenderer was required to

- meet service specifications and pricing for a period three years from the completion of the service installation contract
- meet specified milestones during the rollout
- conduct test service performance parameters
- establish regional partnership programmes (where required by the regions) to leverage PROBE for optimum regional outcomes, including the exploration of telecommunications infrastructure beyond the scope of PROBE
- be willing to work with the Ministry of Health to provide connections with general practitioners (“Health Link”).

Although the original intention was that each project would be let by the PSG, three regions proposed and it was accepted that they should proceed in their own right – Southland, Northland and Wairarapa-Tararua. The cost of their projects was still met from the PROBE budget.

Southland had been working on broadband access for the region for some time and appeared to be more advanced in its preparation than the PROBE project team. Consequently, it was the first to let a tender, which was won by the wireless carrier, Woosh.

MED’s objective of generating a competitive provincial environment for broadband was almost immediately achieved by the letting of the Woosh contract, as Telecom subsequently demonstrated a much higher degree of interest in regional telecommunications in general and broadband delivery in particular.

In the event, the rollout of the Woosh network in Southland was seriously delayed, as the company was required to obtain resource consents from scratch for its infrastructure.

WOOSH also came close to winning the contracts for Northland, Canterbury and the Wairarapa-Tararua but withdrew at the last moment, substantially because of capacity constraints. In contrast, Telecom, which took over all three these contracts, not only had sufficient capacity but was able to move quickly as it required only incremental additions to its existing telephone infrastructure. Further, Telecom’s technology was cheaper to implement, which saved the project around $4 million.

The remainder of the contracts were let by the PSG with Telecom winning all but three – Auckland, which went to Counties Power; Nelson/Tasman/Marlborough which was won by Pacific.Net; and the satellite contract, which went to ICONZ.
Important Issues

Post-project analysis has identified the success factors as:

- A tight fit between the objectives of MED and MinEdu
- The PROBE Charter which properly conceptualised the project, identified the objectives and described the principles and processes for implementation
- A collaborative relationship between the PROBE team and the Regional Broadband Liaison Groups
- Strong “buy-in” and support from the responsible Ministers
- The progressive release of contracts (rather than simultaneous), which maintained the competitive pressure on potential bidders

Inevitably, a number of issues could have been managed in the better fashion:

- The early evaluation processes of the PSG were too slow
- An attempt to catch up for lost time resulted in insufficient detail work on the initial planning documents
- Constrained MinEdu resources to prepare schools and to add valued-added services
- A full range of support programmes for video-conferencing were not immediately available, which slowed the uptake.

Nevertheless, at December 2005 the use of video conferencing had expanded rapidly with 80 schools involved in delivering or receiving video-conferencing enhanced courses. In 2006, 130 courses will be available.

- There was an excessive expectation of additional funding from local government – their planning/budget cycles were too slow and they were unable to allocate funds in sufficient time.
- The quality of input from the regions was highly variable and in some cases entirely inadequate. This required a good deal of assistance by PROBE staff, which cost the project as much as 12 months.

Despite these latter issues, Project PROBE was a very successful cross-agency IT project. Although it was large and complex, including multiple contracts across the entire country, it was completed not far ahead of the original budget and below the final budget. All but a couple of the contracts were completed on time and the primary objectives – to provide broadband services to provincial schools, local government and business interests and to generate a competitive IT environment - were completely achieved.
Additionally, a number of regions - West Coast, Nelson/Marlborough/Tasman, Auckland and Waikato – have maintained their regional groups and they continue to work on broadband issues.

The three regions (Southland, Waiaarapa and Northland and Taranaki) which had broadband initiatives ahead of PROBE, are also continuing their roles.