



23 May 2008

## Submission on Digital Strategy 2.0

These comments are submitted by the Trustees of **The Wellington Loop Trust**, a consortium of six Wellington inner-city secondary schools, established:

*"to create a collaborative learning environment facilitated by fibre optic infrastructure for schools in the Greater Wellington Region and their students and communities" (para 4. Trust Deed)*

### **The Wellington Loop Vision**

Our vision is to connect all 216 school communities and 70,000 students in the greater Wellington area to a high speed fibre loop and gain the benefits of aggregated Internet access, shared ICT infrastructure (e.g. server farms), collaborative learning opportunities, national and international networking using KAREN, the high speed advanced research and education network, and strengthened engagement with tertiary providers and the business community.

### **Community Partnership Fund**

As a beneficiary of the second round of the Community Partnership Fund, the Trust is appreciative of the support already received from the Government's Digital Strategy (\$413,000 + GST) and from our project partners (\$463,000). This has enabled us to appoint a project manager for an 18-month fixed term contract and invest in shared server infrastructure and applications as well as provide training for teachers in the six establishment schools.

### **The 2008 Budget**

The Government's announcement as part of the 2008 Budget that they will be investing \$500 million over five years in a **Broadband Investment Fund** is indeed welcome. We note with interest that this includes "facilitating high speed broadband to businesses and local authorities, universities, schools and hospitals in urban centres". The inner city Wellington schools have been particularly fortunate in that much of the fibre investment had already been made by CityLink and the Wellington Loop has been able to benefit from that. This contrasts with schools in other urban areas such as Christchurch, Nelson and Auckland where they have relied on the Government's Broadband Challenge fund to roll out fibre infrastructure. But this investment fund will be critical in reaching out beyond the inner city area served by CityLink.

### **Sustainability**

At the conclusion of the CPF and partner funding in June 2009, our expectation is that the Wellington Loop participating schools will take shared responsibility for the common infrastructure and services. The challenge we face is to expand membership of the Wellington Loop to a scale where the sustainability costs do not create too great a burden on any single school. The rate of expansion will be determined to a large degree by the availability of affordable fibre connections and as noted above, the Government's new Broadband Investment Fund is expected to help.

However, the establishment of reliable network infrastructure requires much more than just pulling in some fibre cables. High performance electronic equipment is required to light

the fibre and deliver reliable services, highly skilled IT staff are required to ensure schools get the full benefits from the new interconnected environment and, perhaps of greatest importance, teachers and school administrators require professional development and support to leverage on new collaborative virtual learning opportunities.

Digital Strategy 2.0 must respond to these needs.

### Digital Strategy 2.0

The new **Connection Goal** calls for the *“widespread availability of fast and affordable broadband meeting the needs of New Zealanders”*. For schools, this is a necessary but not sufficient condition. The connections must also be **reliable**. Schools are now dependent on their IT systems and infrastructure to provide a quality education and increasingly teachers are becoming dependent on Internet resources for curriculum delivery. ICT is no longer an add-on optional extra; and as schools migrate into collaborative shared ICT infrastructure made possible with fibre loop networks, they will become increasingly dependent on third party providers. This is risky territory for schools that have spent the last 20 years building robustness into their self-governing and self-managing environments. It will require much support to build confidence in new collaborative networks; the emphasis will need to be on service and support. When schools start to receive a higher level of service than is currently delivered from their on-site ICT infrastructure and technicians, then they will start to develop trust. Only then can schools be expected to start substituting shared infrastructure and new collaborative methods of working for their dedicated systems.

It is somewhat surprising that despite nearly \$20 million of investment by the Government and matching funding from industry in urban fibre loops as part of the Digital Strategy Broadband Challenge, this receives no mention in Digital Strategy 2.0. And in particular there is no mention of the **school fibre loops** in Christchurch, Nelson, Wellington, Hamilton nor the North Shore. While we can expect the Budget announcement of \$500 M to take care of future investment in school fibre loops for the foreseeable future, the Digital Strategy must make provision for operationalising this infrastructure, especially during a transition phase which we predict will take as long as 10 years. The most critical element will be staff to manage and support the new shared infrastructure. We recommend a full-time project manager, full-time curriculum manager and full-time technician for each urban school fibre loop. With overheads that is an investment of \$0.5 M per fibre loop per annum. Schools will not be able to afford this until they can see some direct cost savings as a result of working in the collaborative environment.

The new **Confidence Goal** calls for *“digitally capable and confident New Zealanders transforming our economy, strengthening national identity and enhancing sustainability”*. The related actions refer to “digital literacy”. We would like to suggest that this doesn’t go far enough – what we need are “information literate people and communities”, i.e. people who not only know how to use digital technologies but also how “to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals”.<sup>1</sup> In this regard libraries and schools have a special responsibility in ensuring future generations are truly information literate. **Aotearoa New Zealand People’s Network** will be important in achieving this outcome and we encourage strong linkages between this evolving network of digital libraries and library resources available through school fibre loops.

### Our Proposal

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<sup>1</sup> Alexandria Proclamation, *“Beacons of the Information Society”*, High level Colloquium on Information Literacy and Lifelong Learning, Bibliotheca Alexandria, Egypt, November 2005 776270

Create a contestable *Broadband Capability Fund*, matching the Broadband Investment Fund

Government support is needed for:

- Establishing a contestable **Broadband Capability Fund**; as a minimum this should be set at 10% of the Broadband Investment Fund, i.e. \$50 million over the first 5 years;
- Encouraging collaboration and sharing amongst school fibre loop initiatives; this could range from support for an annual "Superloop Convention" to funding for a Superloop Team that could develop standards and promote applications (similar to JISC or BECTA in the UK); an annual budget of \$1M is suggested;
- Facilitating school loop connections to and membership of KAREN (noting that explicit provision has been made for this in Budget 2008);
- Strengthening the role of libraries and schools in creating information literate people and communities.