Testimony of
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New Zealand Parliament

Before the
Subcommittee on Telecommunications and Internet
Committee on Energy and Commerce
United States House of Representatives

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Mr. Chairman,

Thank you and the members of the Sub-Committee for inviting me to participate in this hearing related to international perspectives on the provision of broadband services. My name is Paul Swain and I have been a Labour member of the New Zealand Parliament for nearly 17 years. During my tenure, I have held a number of ministerial positions including the Minister of Communications and Information Technology where I introduced a number of substantial changes to New Zealand's telecommunications policy and regulatory environment. Today I welcome the opportunity to provide the Committee with an overview of New Zealand's experience with broadband policy and deployment.

New Zealand Telecommunications Market – A Snapshot

Currently, New Zealand's telecommunications market is characterised by the following:

Fixed Services Market: The incumbent, Telecom New Zealand, has national coverage including the 'local loop' (about to be unbundled). A second tier carrier, TelstaClear, provides national backhaul, coverage in the city centres and around 20 percent of residential customers in two major cities. Small service providers depend on access to the fixed network wholesale services.

Mobile Services Market is a duopoly – Vodafone and Telecom – with approximately 50 percent market share each.

Market Share by Revenue has Telecom New Zealand with around 65 percent, with Vodafone holding 14 percent, TelstraClear 9 percent and all others making up the remaining 12 percent (including 57 ISPs).

Internet Market: There is 93 percent broadband **deployment** via xDSL, and the remaining 7 percent via wireless and satellite. Broadband **penetration** is 11.9 percent with New Zealand currently ranked 22nd out of 30 OECD countries. Overall internet subscription, including dial-up and broadband, is 33 percent. The dial-up market is still quite strong due mainly to price given free local calling areas.

International Price Comparison is difficult, but prices for residential low grade (128kbs upload, 1-2mbs download) are relatively low (2nd in OECD) but prices for higher grade small business services (512kbs upload, 2mb download) are around the OECD average. Both services have data caps imposed.

As can be seen, there is still a long way to go before New Zealand catches up with the rest of the world leaders in broadband usage.

Telecommunications Prior to 2001

Telecommunications development in New Zealand was originally a government endeavour that was operated in conjunction with the postal services and banking. In the late 1980's, telecommunications activities were separated from postal and banking and the telecommunications operator was commercialized in the form of Telecom Corporation (Telecom). In 1990 Telecom was privatized and the telecommunications sector was opened to competition. At that time, the government decided not to create specific telecommunications regulation (apart from a Universal Service Obligation (USO) of free local calling) and instead opted to take arguably the most light-handed regulatory approach in the world, relying largely on generic competition legislation and the Commerce Commission – an economy wide anti-trust regulator.

During the 1990's, partial competition developed in the **fixed line services** with the entry of Clear Communications (now Australia-owned TelstraClear) while competition of **mobile services** developed with the entry of Bell South (now Vodafone). Other small service providers emerged.

Competition in infrastructure tapered off in the late 1990s, due to, among other things, the cost of deployment, the reduction in global telecommunications investment, the size of New Zealand's population and its geography.

There was also growing resentment from competitors at the inability of the generic competition regulator to deal with issues such as interconnection and wholesaling arrangements and number portability. An incoming Labour-led Government in 1999 resolved to deal with these issues, and I was appointed Minister in charge of overhauling the regime

Shift to Sector Specific Regulation – the Telecommunications Act of 2001

An industry specific regulatory regime was introduced in 2001 by way of the Telecommunications Act. The development of this Act was driven by a number of principles, including long term end user benefit, preference for commercially negotiated outcomes, flexibility for the regulator to resolve disputes at the request of the parties, transparent formulation and operation of regulations, consistently applied to provide certainty for industry, maintaining incentives for investment, compliance with international rules on telecommunications, and technology neutral regulation.

The first of these principles has primacy and is the basis of the purpose statement in the 2001 Act. All decisions made by the regulator or the Government have reference to the purpose statement.

The 2001 Act established a Telecommunications Commissioner in the Commerce Commission (the FCC equivalent), and identified three types of regulated services: a) **designated services**, with pricing principals, such as interconnection and wholesaling Telecom's retail offerings; b) **specified services**, with no pricing principals but where access was required, such as cell-site co-location and national cellular roaming; and c) **designated multi-network services**, such as number portability. In addition, the Act established a dispute resolution process, a Telecommunications Carrier Forum, and the cost allocation of the Telecommunications Services obligations (primarily free local calling) which is New Zealand's equivalent of a universal service framework.

It was decided **not** to unbundle the local loop (LLU) at that time, but required the Telecommunications Commissioner to undertake a review of LLU by 2003.

A Government Broadband Initiative – Project Probe

It was recognised that the post-2001 reforms would not deliver the broadband outcomes quickly enough for all consumers, given the geography of New Zealand (two thin islands with mountain ranges down both) and small populations in provincial/rural areas outside the main centres (given New Zealand's agricultural base).

It was clear that the business case for nationwide broadband deployment was difficult to make, so the government introduced a major initiative – Project Probe – which made available **$NZ45m** of taxpayer funds to speed up the delivery of broadband services. A government purchasing/demand aggregation model was used, and regional tenders were sought to provide 512kbs access to all 3000 schools in New Zealand. The objectives of the project were to increase deployment, (which has risen from 70% to 93% coverage of population), to lower prices (which resulted in what is now considered to be low grade broadband being more affordable in the regions) and to promote greater competition. While 4 of the 15 tenders were awarded to non-incumbent providers, new facilities–based competition, particularly wireless, did not emerge.

The Regime under Review (2001-2005)

While the 2001 reforms had had a positive impact on competition issues such as interconnection and wholesale pricing, and Project Probe had improved deployment, there was growing concern at the penetration of broadband in New Zealand. Given New Zealand's geographic distance from major markets, broadband is rightly seen as the equivalent of the introduction of the first freezer ship 125 years ago, which allowed New Zealand's beef and lamb to be delivered to the British market. Broadband penetration was low relative to other countries due to, among other things, the lack of facilities-based competition, no local loop unbundling and poor price and service quality relative to dial up.

In 2002 -2003, a major investigation was undertaken by the Telecommunications Commissioner into local loop unbundling. At the conclusion of this investigation the Telecommunications Commissioner advised **against** implementing full local loop unbundling (LLU) and instead recommended the introduction of a limited speed Unbundled Bitstream Service (UBS). The Government reluctantly agreed with this recommendation so as not to delay the process further, on the basis that the decision would lead to the development of a competitive broadband wholesale market, and would provide incentives for Telecom to deliver greater penetration rates and to quickly deploy its Next Generation Network (NGN).

During the same period, the Government issued "The Digital Strategy", which sets out enhanced development of e-content, user confidence and telecommunications connectivity, as necessary parallel requirements for a world class information and communications technology (ICT) environment.

The Prime Minister’s ‘Speech from the Throne’ (similar to the U.S. State of the Union Address) in November 2005 set out a broad goal of ensuring that New Zealand enjoyed a competitive, world-class telecommunications environment, and emphasised the need to make up lost ground in broadband penetration relative to OECD peers.

An investigation of the processes under the 2001 Act, and a stocktake of the New Zealand telecommunications sector, revealed problems with the regime. These included difficulties of access to the regime by small players because of cost, the gaming of the regime by the incumbent, the lack of enforcement provisions, the failure of the incumbent to meet its voluntary penetration and investment targets, and the low broadband penetration rates relative to other OECD countries. It was clear more reform was needed.

The Need for More Reform (the 2006 Act)

Bearing in mind the need to strike a balance between facilitating increased competition in service provision (by improving access to Telecom’s network and in particular the ‘last mile’ of the copper-based network) and retaining incentives for investment in new facilities such as fibre, wireless and satellite, a comprehensive package of measures to improve New Zealand’s performance on the availability and uptake of telecommunications services, particularly broadband, was introduced. The key component of the package, which resulted in the Telecommunications Amendment Act 2006, included the introduction of **local loop unbundling**, the removal of the constraints on the regulated unbundled Bitstream Service (UBS), including providing for “Naked DSL”, and the **requirement for Telecom to establish operationally separate access network, wholesale and retail groups**, with strong equivalence of inputs (EOI) regulations, similar to the model adopted in the UK by OFCOM and British Telecom.

The detail of these arrangements are currently being progressed, with agreement to be reached before the end of the year. We are anticipating more competition, faster speeds and lower prices for New Zealand broadband consumers as a result.

Conclusion

Broadband deployment and penetration is as fundamental to all countries as was the development of roads, railroads and electricity in bygone eras. Open, competitive economies are dependent on it for growth. We are all searching for the best ways to provide for greater investment in, and competition between, facilities and non-facilities based providers. Competitive pricing for consumers, based on competition, with regulation where necessary is, in my view, the best way to drive broadband uptake.

The type of regulation required will need to be determined according to local conditions. For example New Zealand, with a relatively low-level of facilities based competition, has gone from government ownership prior to 1990, extreme deregulation following privatisation from 1990 to 2001, and has been moving towards international orthodoxy since 2001.

The United States, or the other land, which enjoys high levels of facilities-based competition, appears to have moved from a heavier handed approach with local loop unbundling and other measures from 1996 and is now pursuing a lighter handed regulatory path since 2004. What is appropriate for one county is not necessarily so for another.

However, if consumers are to be the ultimate winners, regulation needs to remain an option, given entrant benefit is a necessary, but not always sufficient, condition for consumer benefit, and incumbent facilities-based providers will be seeking new ways to protect and promote the interests of their shareholders, and not always the interests of all consumers. In other words, incumbents do what incumbents always do.

On some occasions it may be necessary for governments to partner with the private sector (Project Probe) to achieve outcomes that cannot be delivered through the market model.
In an environment where technology is changing rapidly governments need to be vigilant that regulation of those markets does not restrict innovation and competition. On the other hand, markets need to be monitored constantly to ensure that government objectives are being met. If new regulation is required, early signals are important so that markets, which require certainty, are able to adjust accordingly.

The provision of broadband to any nation is a critical and complex issue. Thank you for the opportunity to share New Zealand’s broadband experience at this hearing, and I wish you well with your endeavours.