

# A Horokiwi case study,- on “Rural” Telecommunication Service Obligation

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**Abstract:** The Telecom chairman has stated that they have no interest in improving broadband services to Horokiwi. The Telecom monopoly derive optimal revenue by providing a sub-optimal service. Telecommunication is a core service, and there is a Government responsibility to ensure that a reasonable quality service is delivered.

## No Broadband in Wellington, New Zealand

I live about 12km from the centre of the capital city of New Zealand (about 15km by road). Horokiwi hardly seems rural. If there is no traffic, it would take me about 25 minutes to drive to the Beehive.

Anyway, this story starts many years ago (about 8 years). I phoned and asked NZ Telecom for broadband in Horokiwi. Telecom told me that broadband will be available in Horokiwi in about 6 months time. In subsequent years I asked Telecom for broadband every six months. In the first years the answer remained a promise of broadband in six months time. Telecom is not promising anything any more. Over the years, I have tried other solutions. I have not found a viable alternative (I have not pursued satellite, as it is slow and very expensive).

*Apparently the local loop into Horokiwi is not broadband (ADSL) capable.*

At the moment I have two phone lines and a (dial-up) service provider. These three services cost me more than broadband plus a phone line would cost!

*Charging me for two phone lines provides a better revenue stream to Telecom than broadband would.*

The infrastructure Telecom provides has frustrated my ability to work from home. As a matter of fact, I have lost revenue as a direct result of the lack of infrastructure (I've had to give up contracts).

Horokiwi residents have recently decided to explore feasibility of funding our own broadband infrastructure in Horokiwi.

So far Telecom has not co-operated in providing us with information on how we can achieve this. The Telecom chairman (Wayne Boyd)<sup>1</sup> has stated Telecom have no interest in providing broadband to Horokiwi until (quote) “the existing equipment has reached the end of its economic life”. Mr Boyd also stated that if we provide them with a “significant contribution” they would consider setting up broadband in Horokiwi (in which

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<sup>1</sup> Letter from Wayne Boyd to Hon Peter Dunne dated 11 June 2007, copy available on request

case they own it and they charge us for the use of it). This seems very arrogant. So far, Telecom have not been forthcoming in providing us with information of the interconnection requirements to set up and own our own broadband infrastructure.

## **Broadband alternatives in Horokiwi**

### ***Demographics***

There is no (ADSL) broadband in Horokiwi. There are about 70 to 80 families living in Horokiwi. I have had conversations with most of the households. At least half of the households would buy broadband immediately. Almost ten Horokiwi families already have some solution (mostly wireless, two satellite connections and one 3G mobile connection). The connection speeds of these families are mostly at slow broadband speeds.

### ***Satellite***

You need clear line of sight to the West to utilize satellite (about 15 degrees above the Western horizon). Setup costs are typically over \$500. Satellite broadband generally provides slow speeds (256kb/s). The problem with satellite is latency (delays). Monthly charges are typically \$130.

### ***Mobile (3g)***

Most of Horokiwi is 2g enabled, but very few areas in Horokiwi are 3g enabled. 3g is targeted towards the laptop market. Typical plans are for around \$50 per month and are capped to 1 or 2 Gb (There are typically extreme penalties for going over 2Gb). 3g delivers typical download speeds of 256-500 kb/s. Upload speeds are slower.

## Wireless

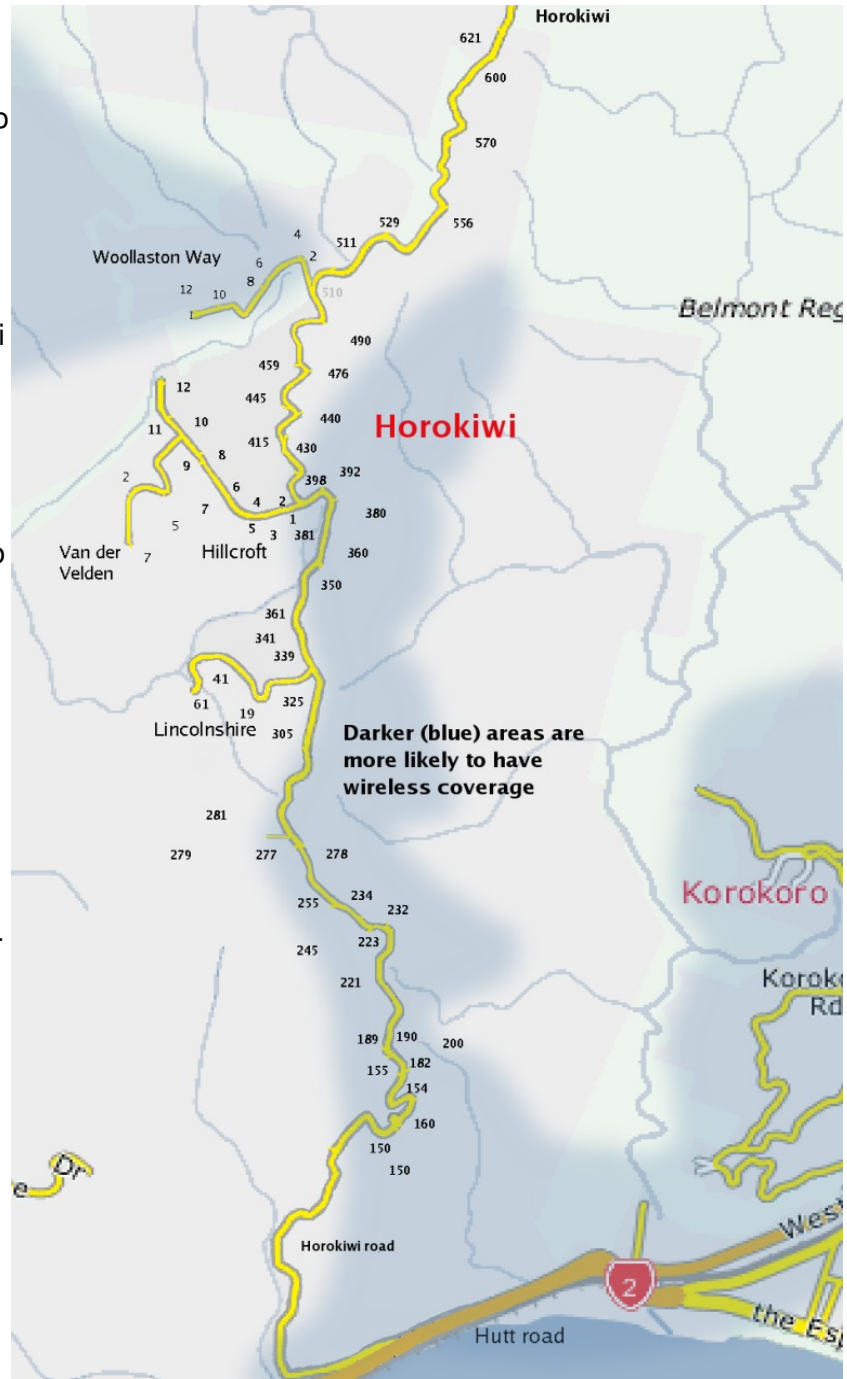
This is the most viable alternative. The map shows areas that may have access to wireless. I suspect that a quarter to a third of Horokiwi residents may be able to utilize wireless.

Wireless coverage in Horokiwi is largely accidental. The transmitter in Woollaston Way targets Johnsonville. Other residents receive coverage when they have line of sight to the transmitter on Somes island.

Wireless achieves speeds of 500kb/s. Plans start around \$50. Installation costs a few hundred dollars or more.

Wireless services have not been reliable in Horokiwi, but the service has improved over time.

Wireless is not the answer as coverage is by accident and not by design. From conversations with service provider staff it seems that that wireless will not expand significantly in hilly Horokiwi (unless by accident)



# **My submission**

## ***Lack of investment***

There are always scenarios where it is in the interest of a monopoly to provide a sub-optimum service (See the above example where a consumer pays more for Telecom services where broadband does not exist).

The Ofcom<sup>2</sup> survey indicated that the British Telecom separation did not result in immediate infrastructure improvements [see Martin Cave, Six degrees of separation]. This may be an indication that telecommunications providers prefer not to invest in capital improvements.

## ***Core assets and the lessons we have learned***

Telecommunications is an important strategic asset. It is strategic in the sense that our economic growth depends on it. Most people agree that we currently lack a sound telecommunications infrastructure. Government should not abdicate responsibility for telecommunications, just as it would not abdicate responsibility for roads and health to multinational corporations. The well-being of New Zealand citizens will increasingly depend on a sound telecommunications infrastructure.

We have pertinent history we should learn from. The power industry went through a similar separation. The structural problem in the power industry is that electricity transmission remains a natural monopoly (Transpower). The structural problems in the power industry are around transmission infrastructure.

## ***Government obligation***

The Government should own the local loop and make the infrastructure available to service providers at cost. We would then have operational and accounting separation in the telecommunications market. The Government have no profit incentive, so the infrastructure pricing can be provided at true cost. This also solves the problem where there is a tendency for telecommunications providers not to invest in capital improvements.

If the Government does not see owning the local loop as palatable, then the Government should regulate the levels of service on the local loop. Everything else is a waste of time, as we will be stuck with an unworkable local loop.

Arguing about the price of broadband is irrelevant when it is not available.

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<sup>2</sup> Office of Communications is a regulator for communication industries in the United Kingdom.