

9 October 2007

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TSO Regulatory Framework – Response to Discussion Document

I live and work in ‘heartland’ rural New Zealand. This response to the Telecommunications Service Obligations Regulatory Framework Discussion Document (August 2007) is provided in a private capacity as one of many tens of thousands of people directly affected by what has been an ineffective TSO when it comes to rural telecommunications.

A widening rural digital divide was well established more than a decade ago, at a time when the primary sector was restructuring as a major component of GDP and exports. It was evident this divide stemmed from inherent rural copper network limitations and underinvestment in new access infrastructure.

It seemed incomprehensible to me back then that our rural sector could be truly globally competitive in the ‘Information Age’ without ubiquitous access to broadband and associated first-world telecommunications. Concern for the state of rural telecommunications subsequently became a catalyst for private investment in next-generation telecommunication services for all rural New Zealand. This initiative is represented by the BayCity Group of Companies that I founded and is a separate respondent to the TSO Discussion Document.

Though providing broadband service is a challenge everywhere, the obvious economy of scale in cities and towns makes providing broadband service relative low-hanging fruit for providers there. It is a greater challenge to provide broadband access in the country's rural and remote regions. However, committed private investment operating without the benefit of a TSO or any other subsidy has successfully faced this challenge. The BayCity Group is today delivering ‘world-leading’ broadband access and telecommunication services into every corner of New Zealand using advanced Ka band satellite and terrestrial wireless technologies.

In my view, the TSO dilemma arising from the Discussion Document is not about broadband access everywhere. This has already been accomplished. The real issues are –

- determining how rural broadband access can be supported by a TSO to achieve relative price parity with urban and metro services; and
- applying the TSO to ensure on-going investment in relevant infrastructure so that rural telecommunication services never again fall short of customer requirements.

Getting these issues right is important. Rural-wide ubiquitous connectivity is essential to enable the critical rural specific content and applications needed by our rural dependant economy.

It is important the customer is central to any telecommunications service delivery. Unfortunately the current TSO has failed rural people in this regard. Whatever the outcome of the TSO discussion, certainty and decisiveness is vital. Rural people and service providers deserve to know whether rural services will be supported by a TSO or not, and if so what conditions will apply.

The single biggest inhibitor to a faster uptake of rural broadband and infrastructure investment is not a matter of cost, but continuing uncertainty around government intentions.

Internet access can no longer be viewed as an adjunct to a basic voice service. High speed internet access is at the core of today's telecommunication services and a critical element of farming and lifestyle activities. Any discussion as to whether broadband should or should not be a component of the TSO review is posturing. Affordable broadband access for all New Zealanders everywhere must be the over-arching objective.

It is a fact, broadband access is more valuable to people in remote and rural communities than elsewhere. Travel is difficult and expensive, limiting access to libraries, health care and educational opportunities. With broadband, residents of rural and remote communities can continue to experience the culture and community of rural life while enjoying equal access to health, education and government services provided online. Further, access to such services and opportunities is becoming increasingly important in attracting and retaining the essential human resources necessary for rural sector prosperity.

Carbon dioxide (CO²) emissions are the common type of greenhouse gas being released into the atmosphere. Broadband access on every farm nationwide has the potential to substantially reduce present day road transport dependency across the rural sector. The aggregated year-on-year savings in road-miles by eliminating just one round trip each week between every farm and the nearest 'service centre' can be calculated in the order of 500 million kilometers or 120,000 tones of carbon emissions....and that is just for starters!

Broadband connectivity across the entire rural sector has other national benefits that are not equally realised from metro/urban connectivity. A report on Integrated Farm Management Systems published by NZTE in 2003 stated that the ability to collect and manage real time data to trace outputs and inputs at the farm level was the minimum requirement to enable compliance with regulatory controls and meet market expectations. The report further concluded that world leadership in this field had enormous value potential.

The case for rural broadband is a compelling one. Widespread adoption of broadband throughout the rural sector will deliver immediate and significant economic benefits to the nation as a whole.

Economic benefits to New Zealand from rural broadband can be accrued in a variety of different ways from enhanced health services, through to bio-security and higher value primary produce. Analysis of any one of these makes a compelling case for

TSO support of rural broadband, especially in an economy where more than a third of GDP and the majority of exports come from the rural sector.

However, the benefit from carbon emission savings alone is a 'stand-out' compelling proposition for rural broadband in this age of climate change concerns. These benefits are potentially so significant that a credible response to sustainable agriculture and climate change concerns would, in a heart-beat, have every farm in New Zealand connected to broadband.

I do not support the TSO in its present form. Apart from it not delivering a 'level playing field' for investment, it is based on outmoded "copper-world" assumptions and lacks essential customer focus. In rural telecommunications, the rules of the game have changed. A new generation TSO is required.

Rural telecommunications is a fast changing environment. Mobile telephones outnumber land lines and innovative examples of convergence are emerging down on the farm. Responding to the needs of this unique, small but economically critical sector of the telecommunications landscape will always be specialised. Throughout the world, rural telecommunications delivery is invariably more capital intensive per customer, but this does not mean it is uneconomic when considering the benefits to the nation's economy.

In my view, the TSO can best be applied as a uniform contribution to each rural dweller subscribing to a 'TSO qualifying service', which must include broadband. The price differential between regulated LLU wholesale charges for urban and rural is a useful benchmark on which to determine such a contribution. This approach embodies a number of benefits, including –

- rural dwellers can choose to use their TSO in the most effective way; and
- service providers responding to customer needs have long-term incentives for infrastructure investment and innovation.

In my opinion, the TSO as it exists is a legacy instrument no longer effective in a convergent data world. The rural sector is best positioned to determine the evolving shape and composition of its telecommunications services and apportion relevant cost/benefits. This includes redundant power supplies.

It is important the TSO is applied to foster the necessary levels of customer service and innovation needed to power New Zealand's rural economy into the future. Such an initiative could be the first step towards a truly world-leading agri-science and rural business sector, and for the economy to reap long-term and reoccurring benefits.

Rural-wide broadband will deliver immediate and quantifiable benefits to the nation as a whole. The TSO must be applied to support this outcome.

Yours sincerely,

Barry Payne