Monday,24 September 2007

TSO Review
Information Technology & Telecommunications Policy
Ministry of Economic Development
PO Box 1473
WELLINGTON

BY EMAIL

Dear TSO Review Personnel,

Submission on Telecommunications Service Obligations Regulatory Framework – Discussion Document (August 2007)

1. This letter is Canning & Associates Limited's submission on the TSO framework discussion document, released by the Ministry on 20 August 2007. I feel very privileged to be part of this TSO discussion and look forward to the new TSO agreement for remote rural users
2. Having read through the TSO documents plus having been to the Local Government NZ rural workshop on 18 September I acknowledge that there are several aspects to the existing TSO which I have no knowledge of, so I shall only comment on those areas we have experience as part of providing a truly rural solution
3. WIZwireless is a broadband infrastructure network provider and an internet service provider (ISP) primarily for rural and remote users who can't get DSL and in many cases can't get satellite. We are the fourth fastest ISP in New Zealand and Masterton is the fastest town in NZ due to our network, so we are able to provide wireless broadband to businesses with specific needs not well covered by DSL speed and data limits
4. What actually is a "rural" user – is it based on Commerce Commission model which includes all the towns in Wairarapa or is it the Census definition of rural - traditionally been residual areas not included in the urban definition (Independent urban communities are urban areas - other than main urban areas- where less than 20 percent of the usually resident employed population's workplace address is in a main urban area - amongst other definitions) or something else. I think there needs to be a new category of "truly" rural or remote rural and these are the areas of NZ who can't get DSL nor mobile services and only options are wireless or satellite and in many cases can't get satellite either which leaves wireless as the only true broadband option
5. It is acknowledged that satellite doesn't provide broadband cover for all of NZ and this is especially so as you go further south in the South Island as the angle is too difficult to get a successful connection plus there are issues with buildings, trees and hills obscuring the view to the North West horizon. If satellite is relied on as the rural solution it will not encourage infrastructure investment in remote rural areas as Telco's will struggle to reach the last 2 users at the end of the road that are inaccessible to "lined" or satellite options.
6. If Telecom continues to say it is uneconomic to provide services to TSO customers at the current agreed levy rates then they should terminate their agreement to be the TSO provider and let others provide this service. Vodafone has said they cover 70% of the TSO area so they should be the TSO provider in this area - rather than developing their own network then having to pay Telecom as well. They would be far better to

allow this payment to be used within their own network to either extend their current coverage or increase speeds and data caps. Under this model Telecom should be paying Vodafone for their coverage areas under the TSO assumptions not the other way around.

7. TSO definition of commercial non-viable needs to be reassessed because in some cases Telecom is being paid as the TSO provider but there may be two or more commercial providers eg Telecom DSL, World Exchange and Vodafone.
8. The existing TSO model calculation done by Commerce Commission has a number of anomalies and now is the time to redo this rather than further adjustments to meet each network providers wishes! As mobile and wireless technologies have been identified as cheaper than existing copper wire technologies then these need to be acknowledged as viable options for TSO providers and they therefore will bring the TSO cost down not up as is currently happening
9. Each region has its own existing infrastructure providers and issues relating to their area – including geographical, social and economic issues. One consideration is to allow network providers to apply to be the TSO provider on a regional basis not 1 national provider.
10. The Government has run a variety of programmes like Broadband Challenge and Project Probe including Probe extension and businesses have developed networks using this funding so the areas still to be covered are not economic to cover even with Government grant schemes. Now the Government needs to commit to cover the rest of NZ with no other commercial viable options. If this is left to satellite then there will still be areas not covered but the per user cost will be astronomical. I would suggest using a set date like in the existing TSO in relation to the Local Service TSO which requires that Telecom makes local telephone service as widely available as it was in December 2001 but move that date to December 2007 so it doesn't affect existing initiatives but gives certainty to new network developments
11. Government and Local Government Authorities are responsible for infrastructure being roading, sewage and water and have good procedures to administer these, so now do they need to administer broadband infrastructure as well especially in commercially non-viable areas and work with network providers rather than waiting for the market model to prevail. That way the infrastructure stays in public hands and contractors would apply to do network development, R&M, customer services etc. This is already happening in some areas e.g. Tararua District Council to deploy fibre between each council "outpost" within the Region and connect other anchor tenants on the way plus businesses. Hopefully there will be a model to build some rural infrastructure as well!
12. Commitment for any network to be Open Access and any ISP can "rent" data and speed from the infrastructure provider using good faith bargaining
13. Doing a very simplistic calculation of the total number of rural users who are likely to buy a broadband connection we have worked out that there is likely to be 500 users per region using the 14 Project Probe Regions as the basis for this. (refer to http://www.istart.co.nz/index/HM20/PC0/PVC197/EX245/AR25326) Telecom has stated that it costs $4,500 per customer per annum so let's use that as the basis for contribution to any chosen TSO provider for these 500 users. So annual contribution for users who can't get DSL, nor mobile nor extend services would be $31,489,434 which is significantly less than the $59M quoted by Telecom for TSO users

TSO discussion document				
People living in rural areas (TSO document)		564,000	13%	NZ population
Number people per household (Tararua DC)	2.3	245,217		
Telecom DSL (TSO document)	50%	122,609		
Vodafone coverage existing TSO commercial non-viable area (currently paid to Telecom)	70%	85,826		
Balance of rural remote users with no DSL nor mobile coverage		36,783		
Customers who will buy broadband if it is offered. Value and cost limiting (Telecom)	25%	9,196		
Project Probe Regions	14	657		
Less other broadband options- like xtra Extend **		157	2,198	Nationally
Balance left needing wireless connection (estimated average per Region)		500		
Telecom say cost per commercial non-viable user (per Region)	$4,500	$2,249,245		
Estimate for National Project (all regions)		$31,489,434.78		

** http://www.nzherald.co.nz/section/story.cfm?c_id=5&objectid=10432446

14. Government has stated it wants to see 100% coverage of NZ and with everyone getting 5mbps by 2010 so may need to offer a contestable grant scheme for next two years then phased out over say the following five years when it could become a bank security type system. This should be based on speed and use a global speed checking software like http://www.speedtest.net/ a suggestion could be:
    i. 5mbps and over get 100% grant; as wish to get everyone here by 2010
    ii. 4mbps and up to 5mbps get 75% grant of infrastructure budget
    iii. 3mbps and up to 4mbps get 50% grant of infrastructure budget
    iv. 2mbps and up to 3mbps get 25% grant of infrastructure budget
    v. 1mbps and up to 2mbps get 10% grant of infrastructure budget

    Below 1mbps none as this should be the minimum set in TSO

    We could aim for a 100mbps system within 10 years as per our National urban plan.
15. Telecom has stated that only 25% of users who can get broadband do actually buy a monthly plan so there needs to be incentives for users ie reasons are usually perceived value and cost. So there needs to be a "cheap" step for users to get them off dial-up to a starter broadband plan (set at minimum TSO level of 1mbps) and set at say $10 – to $15 excl for 1GB and then resell high plans. There needs education as to what can be done with broadband and it is more than checking emails and using the Internet. I see this percentage increasing as more young people go into business as they assume they will have a fast connection to do what they want especially now more schools are on fibre and cable networks
16. Telecom plans to replace their exchanges with Next Generation Network (NGN) from analogue existing system to a digital service and the old telephone exchanges will not be technically supported beyond 2012, then dial-up modems will not be able to be used so what is being done to encourage users to move to some form of broadband. Data from Stats NZ report released August 2007 "At 31 March 2007, the number of subscribers using analogue (dial-up) connection technology was 739,700, down 4.1 percent since September 2006. However, **analogue is still the predominant connection**

technology with 50.5 percent of total subscribers, down from 55.8 percent six months earlier. The number of non-analogue (broadband) subscribers has increased by 18.5 percent from 30 September 2006, to reach 724,600 subscribers."

17. Everything discussed so far is in relation to the infrastructure costs but another limitation for satellite and wireless providers is the additional costs for the subscribers and this needs to be addressed as well. Perhaps something like the scheme in Australia where each subscriber is able to use a voucher which is redeemed by the ISP but it would need to be only for subscribers who have no or limited options otherwise it will impede other ISP's providing commercial plans. My suggestion is that the user has to acknowledge that they live in a commercial non-viable area and that there is no other provider or only satellite and there are speed and data expectations the provider has to meet including monthly fees. There would need to be coverage maps available for users to check what is available in their region. Current costs range from $500 excl to $2,000 excl GST plus labour installation.
18. With the breakdown of Telecom into three parts being network services, wholesale services and retail services it will be just as important for them to have the best service as for other providers and as long as everyone has the same conditions as Telecom wholesale and retail divisions do, then most of the unbundling issues will have sorted themselves out in an open commercial "world"
19. There needs to be a Universal Service Obligation (USO) for voice services with its own commitments including battery backups during power outages. This is especially important with electricity agreements for service supply provisions falling due in 2013. I should like to see a similar broadband data USO but feel we need to get 100% coverage first. This also includes continuing to offer the option of free local calling for residential customers
20. As digital services and Voice over Internet Protocol (VoIP) services become the standard, each ISP will need to have an arrangement for emergency calls with Telecom's third party operator Sitel as Telecom no longer considers this function to be part of its core business and has outsourced this operation to the call centre and suggest Telecom to stay as the 'gatekeeper' for emergency calls in New Zealand as they have arrangements already in place. This would need to include all calls over all networks. Point 103 in TSO document needs to be sorted though – "Concern has arisen that Telecom may not be able to guarantee the availability of NEAX switch capability to a standard in line with international norms, prior to it transferring all residential telephone service users to an NGN based voice call technology service platform. In view of this concern there may be a case for enhancing service quality measures in respect of switch infrastructure availability and increasing the penalty provisions covering any non performance"
21. Ministry needs to think about ways to get cheaper International data to ISP's as this will be the next bottleneck. Apparently the Southern Cross Cable paid for itself in its first year. Southern Cross announced new sales of US$310m for the last 6 months of 2006 and plans for a major network upgrade to cope with a continuing upsurge in the demand for capacity. Plus we have Telstra Clear also developing its own international cable
22. We would be prepared to be part of the next stage of the TSO review and provide a Request for Concept proposal

Yours sincerely

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If you have any questions, or would like further information about the issues raised in this submission, please email me or for more technical issues please contact Scott Bensemann - scott@wizbiz.co.nz or call 0274 888 493.

So in summary ideas covered in our submission:

- Ministry needs to identify what is a "rural" user covered by TSO
- Satellite is less successful the further south you go especially in South Island
- Telecom to terminate its current agreement as TSO provider
- TSO needs to be for only commercially non-viable customers not one for subscribers who have different ISP options
- Commerce Commission to redo its TSO model calculation
- Need Regional TSO providers based on the 14 Project Probe Regions
- Government to commit to remaining commercial non-viable areas rather than expect market model to exist
- Local Government Authorities have broadband infrastructure administration role similar to roading, sewage and water
- All networks built with public funds to be Open Access
- Use Telecom's calculation of $4500 per user, estimate 500 users per region or approx $2,250,000 per region
- 100% coverage for NZ
- Aim to reach 5mbps by 2010 with minimum 1mbps speed plan and perhaps 1GB data cap to start with then up to 100mbps being the urban "ideal" then the rural people will have all the advantages of the urban businesses can get. Otherwise it has the effect of limiting usage which slows realisation of broadband usefulness
- Contestable fund for network provider to apply for funds to build infrastructure to remote rural users
- Education to get dial-up users onto broadband before they are forced to in 2013 when Telecom activates its new digital service
- Voucher for subscriber house installations in TSO area
- Telecom now has three parts: Network services, wholesale and retail services
- USO for voice services including: free local calls and battery backups
- Network providers, ISP's and household need to have battery backups for voice and data connections
- Emergency calls free to telecom's "gateway" network and each voice provider needs arrangement with provider
- Ministry to look at international plans
- TSO review Request for Concept request