

Submission to: 2011-2012 Regional Telecommunications Review:

11 Dec 2011.

Key Point: Addressing the national inefficiency of Demographic Imbalance.

My key point of the value of the NBN is for achieving better demographic balance between city/metro and country areas as a way to lift national efficiency and productivity.

For this point see utube video at: <http://youtu.be/r7Pc6hUAkZk?hd=1>
[Windows version .wmv - 5 mins.]

Many in city areas would like to move to regional areas, but do not because of lack of employment options. The NBN opens up a wider range of employment options to be relocated in regional areas, including self employment in internet based activities.

I see three primary benefits.

Better demographic balance for the nation, and consequent efficiencies with National and State infrastructure spending. I think there should be a financial assessment of this aspect.

Younger families having kids, starting a business, moving to regional areas for lower cost access to owning a home, with work opportunities enabled by the NBN. Better quality of life for them and their children and the means to a more balanced mix for the ageing population occurring in regional Australia.

More diverse rural and regional economies, softening the boom bust economic hardship with drought vs good years. Building more economic resilience into regional economies.

Other points:

NBN as currently proposed - some concerns for regional areas.

From experience I present that wireless and satellite as proposed by the current NBN will not prove "inclusive" for many individuals and households for internet participation for many internet activities.

As the NBN is established for the majority of citizens in city, metro and major centres (the 93%), and as common internet practices migrate to what the new capacity of this network can do, those on currently proposed wireless network (eg 12 Mbps or satellite) will not be able to participate in the same form and will be again left with connections that will be exclusive of effective access and participation within 5 to 10 years.

The committee should feel free to engage with me on my historical experience and basis for this view, having basic technical understanding and living in regional Australia. I have other material that I have not been able to complete in time to conceptually present the basis for this concern.

In practice there are lots of limitations of both wireless and satellite as proposed in regional areas. In particular, delay times with satellite limited by the speed of light, and hilly terrain, limited tower sites, and diminished signal and performance with distance for wireless internet services.

Below is an adaption of a response to an article sent to me about a town developing a wireless network recently that expands on this point of concern.

Provision of a wireless network for small town is more of the short term gain, but medium to longer term 'put regional Australia back in the same telecommunications hole we are in now' solution.

Yes it is cheaper doing a wireless network than putting fibre optic cables in the ground. In the short term it will deliver faster internet speeds than what people have now in those towns, year 2011. Such networks also rely on having a good fibre connection at some point to the NBN.

The problem comes in 5 to 10 years, where in the capacity of this wireless network will be nothing compared to what people will receive and adapt to with the NBN fibre network. Main stream society (on the new NBN fibre) will migrate their practices to what works on the faster NBN network, leaving those with poorer connections like this left out in the cold for all but (what will be by then) limited and more basic internet functionality.

So this solution will provide a level of improved internet access for a few years, but this will end up the equivalent of what dial up is now to city broadband ADSL services currently, a ratio of about 1 to 10 in connection speed, with the same quality of constraint and limitations for general participation that exist now for most in regional Australia.

As manner of example, some old teletext machines still work fine today. The problem is no one else is using them! So no longer a means of effective participation for business. So the limitation is how broad society practices and usage change with increased capacity, not what is technically possible. A distinction many advising on NBN solutions for regional areas are not in a position to appreciate.

To my assessment, the NBN proposed wireless network for regional areas at 12 Mbps, while better than what we have now, is a similar short term solution to the above town setting up a wireless network.

All wireless connections present at say 12 Mbps (megabits per second) when tested in set up off the tower, and hence what will be presented to the public and in the press, will show as 12 Mbps. However, once you put lots of users on that tower, available deliverable performance decreases substantially, and so most customers get 3 to 5 Mbps out of the 12 Mbps.

There is also, determined by basic physics, diminishing performance with distance from the tower. The level of signal drops by the distance squared. So twice the distance $1/2 = 1/(2^2) = 1/4$ the signal. If your 4 times further away from the tower you get $1/16$ th the signal. The strength of the signal limits the amount of information that can be conveyed per second.

While I disagree with the city centric technical advisors to the NBN and alternative Coalition models of "wireless is a no brainer solution for regional areas", I give credit to Telecommunications Minister Conroy who, to my understanding, has set the criteria for 12 Mbps wireless network performance for regional areas as to be the minimum data rate at the customer end. That is, the NBN regional wireless network is to provide genuinely at least 12 Mbps to regional customers at the customers house when in daily use. This is specifically in view of the failure of the past with actual delivered performance as explained above.

All the same, I remain questioning if this level of service being achieved. The number of new towers for a start, unless they put many more people on satellite which is even more limited for many internet activities. To deliver to all customers on a tower a minimum of 12Mbps, then the capacity of the technology will need to be around 20 to 50 Mbps to my technical understanding, for customers up to 10's of km's away. That would have to be very new technology. It exists, 4G for example, but still very new.

A further issue is that if only existing towers are used to provide such wireless internet in regional areas, the same people fall into the same shadow areas for large parts of the rural and regional Australian population in hilly range land areas. That is, The Great Dividing Range (Qld, NSW, Vic), south west WA, Flinders Ranges SA, etc.

Unfortunately, lots of people will fall for the argument re the NBN - of what a wasteful govt, rolls royce - do wireless much cheaper.. see this delivers better than what we get now in regional areas arguments.

Such arguments in the short term look very good, but they knowingly put regional areas back into an ongoing telecommunications black hole within 5 to 10 years, and hence nullify the productivity effects expected for the NBN in large parts of regional Australia.

Let me add, wireless is not going to keep up with the capacity of the NBN fibre network.

In terms of a fibre optic backbone network to wireless towers using 4G wireless technology as being proposed in regional areas, I still question if this arrangement of a wireless/fibre connected network serving say 10 to 20 households per wireless unit would be better rolled out in the city/metro areas. Saving cost of fibre to the premises (FTTP) in many instances.

The reasons for this view are several.

Firstly, given house density in city metro areas, the diminishing of performance effects with distance will not apply.

Secondly, in regard to tower sites there are no problems in city areas. 4G wireless units can go on telegraph poles, sides of buildings, etc, amble number of existing sites.

Thirdly, in terms of cabling fibre underground, I would think it is a lot cheaper to put a km of fibre in regional areas through a few paddock fences, than for the same distance in a suburban or CBD city block, and to each premises. Footpaths, driveways, retaining walls, underground gas, electric, water and sewerage mains.

Hence why I think a fibre to the node (FTTN) model with wireless to the premises may be a better model for city/metro than regional areas, with a fibre to the premises (FTTP) network in regional areas except for the last 2% of genuinely remote. So the reverse of the current approach.

Having made this point of counter intuitive solutions to what is currently proposed with the NBN, I do think the fibre to the premises FTTP in city/metro areas will in the longer term be a better overall investment and valued for money solution in the longer term of 2 to 4 decades. I just think the same FTTP is even more relevant to large areas of regional Australia. That is my point.

For the above reason, I encourage in the longer term, the option of rollout of NBN fibre down to regional areas to include small towns and villages. Not just the larger regional centres.

In the interim time, I think consideration should be given to formation of a fund for grants for interested and pro active communities to apply to connect the fibre network to their community where the proximity of a fibre connection is practical, but NBN roll out plans do not currently plan for such. As example, In my case, optic fibre is less than 3 km from the village, but there is no interest or means to have it brought to our rural village.

What would I do with a better internet connection?

For a range of circumstances, residing in regional Australia, my opportunities are likely to be ones I build from home. Decent telecommunications greatly assist the range of opportunities.

As just one example, there is an immediate project over the next 3 years that makes a reliable and higher speed connection desirable.

I have a sister, MVA and ABI, in a Sydney nursing home. One of the young people in nursing homes.

I am heavily involved with initiatives to move her out and oversee a program of intervention on the impact of her abuse in aged care, as well as opportunity for rehabilitation and recovery, as was evidently present after her car accident within the first 2 years, now 12 years ago.

The failures in aged care has taken up in large part a decade of my and other family members lives, as well as the additional life time injury and emotional trauma to my sister. It is a shocking situation. (See SI Aged Care 2004)

In this program of intervention we (family of three members) hope to achieve long term saving of public cost over her lifetime from around \$8 million to \$2 to \$4million, amongst several goals. To oversee that program I need reliable video conferencing capacity between home and Sydney. Partly for communication with other involved parties, and partly for the opportunity to build in monitoring the situation and progress of the program and interventions on a daily basis.

As the family member in regional NSW, I am a key person to this whole process, helping drive much needed change in this sector, and having already played a significant part with dedicated efforts of all family members in achieving changes in the national recognition of young people in nursing homes and issue of ABI and adults with severe disabilities. I am looking forward to the NDIS and better policy and approaches all round.

I can not relocate to Sydney for this venture over the planned 3 year intervention program given I must remain here with my son, with shared post separation child arrangements, and for other reasons.

With recent improvements to my wireless internet access this year (generally operating around 5Mbps, download, and 0.5 Mbps upload) such should be possible. Technically, my connection is adequate.

This opportunity and capacity has, however, been called into question in recent months. A product of general dismissive telcos for those in regional areas, and the challenge of identifying technical problems: Where they are and who is responsible for them. As well as possibly issues relating to the overall network capacity - set to be improved with the NBN in coming years.

Like many regional customers, when performance of my connection changed suddenly so that video was no longer reliably accessible, or even accessible at all, I was repeatedly assured by front line telco representatives that such incapacity to access videos is an inherent part of the limitation of my and any wireless internet connection, and hence I should learn to accept this problem as "normal" and learn to live with it. (Records kept.)

Fortunately, unlike many regional customers, I knew better so I was not lead to accept this repeated and firmly stated presentation. After some months of protracted difficulties and the dial up level of downloads with videos 90% of the time, I spent a full 10 days of my time testing, exploring causes by elimination, and documenting the problem, and to then insist on a higher level of recognition of this issue as a possible fault. I had to resort to spend this amount of time and being very determined to achieve this. This time the Telco was Optus.

For an average wage earner on \$50,000 per year, let me point out this 10 day - no choice but dive in and persist until resolution found - is \$2000 of lost productive time just to access a normal functional internet service in this respect. The uncertainty created in terms of future reliability of accessing and handling video data at home puts a serious question over the full intended 3 year program in Sydney. How can I make commitments in Sydney, when this capacity is so in question?

While this issue of video access has improved, it is still not fully resolved and the cause remains unknown. It is also one of the reasons for this considerably reduced, and nearly late submission to this inquiry.

The cost of poor telecommunications in regional areas is under assessed in terms of the cascade effects such as exemplified here. Few people in regional areas have the level of technical understanding to question what they are told by telco front line staff, to pursue issues effectively, to then identify and raise repeat and systemic issues as broader issues for regulators to address.

Further, the experiences of poor and dismissive services and complete lack of accountability over a decade (since the full privatisation of Telstra) has lead to a general state of disconnect and avoidance by most people in regional areas to raise issue. In repeat powerlessness, they have become conditioned to accept switch off and put up. You can not win so why waste time fighting with issues. Just hand out more money and hope luck will be better next time.

It is for this reason I would not be surprised if the response to this inquiry has been lower than expected.

Policy Issues re Telcos:

Support by ISP's for multiple Operating Systems:

Telcos and ISP's with customers of more than say 10,000 customers should be required to provide technical support to the top three or four major operating systems and versions. Top three are Windows, Apple, Linux.

It is not acceptable for large companies like Telstra to say, if you have Windows we offer technical support. If you have something else, you can join up but we do not provide technical support and you are on your own.

Telco late fees:

Whatever a late fee is (eg \$15 with Telstra currently), if a customer has their bill paid up in advance so that they owe no money when their next bill comes, that same late fee should be required to be credited to that customer's account in view of the financial benefit of the monetary loan and efficiency benefit to the Telco. Works both ways. (Or at least it should!)

Telecommunications - essential service:

Telecommunications should be recognised as an essential service to a higher level than they are with current legislation.

Cost of NBN vs Cost of Telstra - liabilities.

If the above story re Optus and video access seems problematic. This pales into insignificance next to the routine marginalisation and response of Telstra.

This last 12 months I have spent 9 months seeking to change a mobile phone number over to a new prepaid mobile phone for my son. I have spent more than 14 hours of direct talk time to Telstra representatives seeking to achieve this simple goal.

Unfortunately this is not at all untypical.

I could access all recordings from Telstra and submit the 14 hours for committee members to listen to. As committee members I suspect you would all feel you do not have the time. Funnily enough I do not feel I have this level of time to waste either just to achieve a simple access to a service. Yet this long protracted ordeal is the consistent experience when engaging with Telstra to do or have anything work.

I note that while Telstra can not perform this customer need within 9 months, Telstra was able to send me a bill for this transferred number (even though the phone is a prepaid and not a legitimate fee) within 10 working days. So Telstra's systems had no difficulty seeking to extract money from me, and under false pretences when no charge was actually owing within 10 days, but to meet the customer need to have the phone active and usable on this new number took 9 months and 14 hours of talk time on the phone to Telstra. (Records kept.)

At one point I queried the possibility of being personally targeted by Telstra with any service I engage from somewhere in the echelons of Telstra, perhaps in view of my critical comments on radio over some years raising issues in this region.

I know of another individual where it was established they were being deliberately targeted by a Telstra employee and compensation was eventually paid, and the customer was told that employee was terminated (but who knows?). This could be part of corporate tactics to suppress exposure of failings and by targeting the few individuals able and willing to speak up, shape the public debate to their own interests. Such practices are not unprecedented in the corporate world. However, while my experiences may be a little more regular and protracted than others with Telstra, on broader inquiry I am assured by many that what I have experienced is the ongoing quality of service and challenges they also typically experience from Telstra. (And other telco's as well to a lesser extent.)

My experience here over 2011 occurs 12 months after major press releases by Telstra that they recognise the problem of their failed service standards to customers, and will be undertaking a major revamp to focused on better customer service. No change in the service culture observed here. Much worse than any government department I would like to add!

I note that throughout this ordeal, even though my home service is with Telstra, as a major communication company privatised to be lean and mean for efficiency at delivering competitive customer satisfaction, Telstra appear incapable of phoning me on that phone when there are problems with fulfilling that which they said they would do.

I also note unwillingness to offer reasonable compensation for my lost time etc for what has been their failing, repeatedly for over 9 months, including to my son looking forward to using his new mobile phone with friends using his old phone number. He abandoned the phone altogether for some months. What message does this send to young people saving up hard earned dollars for such, and the reasonable expectations of service for money paid?

In contrast, if I am a little late with my phone bill Telstra will charge me \$15 extra because of the impact of late payment on their business. Where is the equivalent recognition and compensation for my 15+ hours of lost time for their much more extensive failure to deliver and impact on my daily financial existence?

I have no means to challenge the second, and no legal means - without risking losing house and property in a legal battle, to seek reasonable recognition and compensation from Telstra. Telstra has no interest in offering such recognition of its own accord. Don't mention the TIO please. Useless! They just keep stats and refer. We all know this.

How is this situation been allowed by two main political parties in government. Telstra in general predates upon its customer base, not render stated services for a fee.

This may seem off topic to the inquiry, but it is related. It relates to how I think the proposed NBN, including structural separation of Telstra, will benefit regional Australia given the above unchanging culture of Telstra for more than a decade.

Reviewing my interactions with Telstra over the last decade, I estimate Telstra costs me \$1000 minimum a year in lost time beyond a reasonable time to address issues. In comparison, a friend of mine turning over \$40,000 a month in his business in a major capital city affirms his annual loss with Telstra in similar fashion would be about 8 times this, so \$8,000 per year on average. Meanwhile, any mention of Telstra, and similar stories abound in everyone's life you speak to. This leads me to conclude \$1000 loss per year is a reasonable minimum estimate in liability.

Conservatively, assume Telstra has 10 million customers nationwide. Taking the figure of conservatively \$1000 cost per year, that is a national liability of \$10 Billion annually in lost national productivity. If this needless waste was corrected with better regulation by government of their appalling and wilful standard of behaviour and service delivery to their customers, that would be a productivity gain equivalent to the cost of the entire NBN in 4 to 5 years.

These are conservative figures.

I suggest the committee give serious consideration to this liability.

There is a broader point.

The corporate culture of telcos is increasingly to hold customers to ransom, playing on technical complexity as a source of intimidation and excuse to essentially scam customers. It has reached the level of extortion in many instances in my view. Deliberate, planned structures and strict scripts with front line workers when engaging with customers to extract money from confused customers. Such rife practices are stronger for regional customers as they often have less choice, and hence can be held to ransom more easily.

An industry self regulated body like the TIO has not worked. If self regulation is going to continue for telecommunication companies - then lets see the unemployed be their own regulating body for access to social security. They too can keep stats on how many people abuse social security and provide annual notification.

If this notion is uncomfortable, then why do we still have an industry funded TIO. Fail!

I have also raised serious issues with the ACMA. Including stat dec's of Telstra charging for services systemically it was not planning to provide in adequate form. Despite persistent queries in follow up to my submitted complaint I was not allowed to know the outcome, or even the names of those handling the

matter. In the end, total silence. I have found no effective means to advocate or seek address in any way or form.

Given Telstra's general wilful behaviour with its customer base (universal for city/metro and regional/remote customers), as well with its own employees, and govt - I am left asking why this company still has a telecommunications licence to operate at all?

I am quite serious! With respect to its unrelenting conduct, this question needs to be raised.

If I was an electrician, plumber, doctor, almost any other profession, and performed and conducted myself in similar fashion, with similar disregard to the lives and welfare of my customers, I would have had my licence to operate removed. Tough luck to any consequences financially to myself. I am seriously suggesting that consideration should be given to raising the possibility of cancelling this company's telecommunications licence in view of its ongoing conduct. As witnessed by, I would guess, 90% of the Australian population.

Not that hard to set up a new company, transfer assets, front line workers, customers and share holdings. Start again!

The committee is welcome, upon request (and in camera) to have access to all my notes over 10 years of seeking to maintain basic service in a rural area with Telstra. Notes kept. Frustrations at times candidly evident. Welcome review and investigation as a case study re service standards, behaviour, performance for regional customers. Journal notes include comments from Telstra representatives like: "if you want telecommunications, you need to move to the city." To which I replied - should the same apply for food and water?

I look forward to the improved service from a genuine competitive playing field of Telcos operating over a single common network. For a country of our size and population, common sense.

Cost of access to services and functional participation in a modern world.

I currently pay (in part to support normal participation for a 14 yo) - \$130 per month for 9 GB of wireless broadband (prepaid). I then pay another \$90 to \$120 for a landline with no limit on local or STD calls. I also have a prepaid mobile for occasional travel. (It does not work reliably where I reside leading to many missed calls and lost opportunities if the number is given out.) Add my son's mobile for texting and contact-ability, about another \$20 per month.

In total, about \$250 per month to access what is today basic telecommunications accessibility for normal participation in society.

In comparison, city plans including landline phone with equal no limit on local or STD calls, and 160 GB per month of internet download at much faster internet connection speeds costs around \$60/month as a full and combined package. (Optus). Add two prepaid phones at \$20 per month.

So annually: \$3,000 vs \$1200.

And in regard to internet, for a considerably lesser service.

Such price differential is limiting. More so for lower income earners with perhaps more to gain from better telecommunications access.

Some would argue that I choose to live where I do.

Yes, I chose, or have had reasons that dictate living where I do in regional Australia. I accept in so doing I will not have access to many publicly funded services others in the city enjoy and possibly take for granted. Cultural, theatre, festivals, cricket, major libraries, tertiary on campus studies, higher job markets, career prospects, and greater social opportunities. I accept many of these tradeoffs to live where I do. I have taken the choice, driven by circumstance to increase my life health and employment prospects by moving from Sydney to regional NSW. I also get more fresh air, less traffic jams, lower cost for accessing housing, and opportunity to re-build a future from a low income base.

Given all these considerations, and given our contemporary and rapidly evolving internet world as essential daily fabric to our way of life, I believe telecommunications like roads and electricity are essential services that need to be fairly universal in access cost.

That in sharing the means for self improvement and opportunity across Australia this is of net community benefit way above the cost in the shorter term of the proposed NBN.

Concluding:

I commend the current government with the NBN for seeking a single network to which telcos compete. Separation of Telstra when privatised, retail from wholesale is a universally recognised common sense action in the name of genuine market competition that should have happened with Telstra's original full privatisation. A view held by most I speak to on both sides of political persuasions. An almost universal view. City and country.

I commend the current government with the NBN for seeking similar costings for household access to broadband services across the network for all customers.

I strongly commend the current government on its initiative of the NBN. It is a necessary and excellent initiative for national productivity gain for Australia as a nation over the next 3 to 5 decades.

I remind and recommend the video be viewed as it contains additional significant points to "Demographic Imbalance" and why the NBN is a unique long term solution (in the audio).

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