



25th February 2011

Mr Stephen Palethorpe
Committee Secretary
Senate Environment and Communications Legislation Committee
Parliament House
CANBERRA ACT 2600

Dear Mr Palethorpe,

I am writing to express my concerns regarding the Telecommunications Legislation Amendment (National Broadband Network Measures—Access Arrangements) Bill 2010.

Firstly, I would like to be clear that I strongly support the deployment of fibre infrastructure further and further into our community. Fibre infrastructure is the backbone of communications throughout the world. As Co-Founder and CEO of PIPE Networks, I personally oversaw the construction of Australia's third largest metro fibre network and the \$200m Sydney to Guam submarine cable called PPC-1. I feel that I have significant and unique insight into the economics and practicalities of deploying fibre infrastructure, particularly competitive carrier infrastructure.

I have also publicly expressed doubts and concerns regarding some fundamental facts surrounding NBN 2.0. When NBN 2.0 was announced by then Prime Minister Kevin Rudd, it was explained that:

1. the network would cost \$43B
2. provide 90% FttP connectivity to 90% of all Australians
3. would provide a commercial return (being 10%+) to the Government
4. provide guaranteed 12Mb/s wireless/satellite connectivity to a further 8% of Australians
5. would be largely funded by private equity and the issuance of "Aussie Infrastructure Bonds"
6. the maximum tax-payer contribution would be \$8.7B - \$11B
7. Can be completed without the assistance of Telstra
8. Open and transparent process
9. Cheaper broadband access to all Australians

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Obviously, over time many of these items have not been upheld. It is now recognized NBN will only provide wireless up to 12Mb/s to users. It will now be fully funded by the Government. It is doubtful that Aussie Infrastructure Bonds will ever be issued to fund the project (hence 100% Government funded). I have explained early on that NBN 2.0 cannot make a commercial return and I have reservations it will not even be capable of provide a bond yield. This is a serious issue, because if NBN 2.0 cannot obtain a bond yield, then the project no longer qualifies as an investment and therefore be an off-budget investment. A serious issue for a Government committed to return the budget to surplus in the next few years. And by NBN Co's recent disclosure, the NBN business case shows a yield perilously close to a bond yield, the tipping point at which it becomes an on-budget investment.

Critically, NBN Co. shareholders (Australian Government) have plenty at stake. But they also have plenty of areas in which it can exercise substantial market power to support the NBN business case:

- Ability to influence carriers access to spectrum for competing 3G/4G technologies
- Ability to threaten non-friendly or NBN competitive carriers with withdrawal from spectrum auctions
- Ability to provide NBN with access to spectrum capacity which would otherwise provide greater market efficiency and benefit to competing carriers
- Ability to directly award existing Government contracts to NBN Co. or to NBN friendly carriers
- Ability to withdraw Government telecommunication contracts to non-compliant competing carriers
- Ability to fund infrastructure investment at less than a commercial return essentially stopping private investment in telecommunications in those areas
- Ability to put forward legislation designed to make it commercially impractical for competing carriers to expand or upgrade their network

The Telecommunications Legislation Amendment (National Broadband Network Measures—Access Arrangements) Bill 2010 whilst having origins which were well intended, the current drafting essentially prohibits or at the very least creates a substantial economic penalty for competing carriers to expand or even upgrade their existing networks.

A network unit that belongs to a telecommunications network (other than the national broadband network) must not be used to supply a fixed-line carriage service if:

- (a) the network is used, or is capable of being used, to supply a superfast carriage service to customers, or prospective customers, in Australia; and
- (b) no Layer 2 bitstream service is available for supply to those customers or prospective customers using the network; and
- (c) the network came into existence, or was upgraded, after 25 November 2010; and
- (d) the network unit is not used wholly to supply carriage services to a single government or corporate end-user.

Upon reading, this Bill doesn't appear to be about cherry-picking, it appears to be about completely removing competition altogether.

- What is an upgrade or an existing network?
- Is it the upgrading of switches and equipment as is the case in the normal whether it be for maintenance or improvement in technology?
- What is an extension?
- Is it having a 1,000km network and extending it a further 10km?
- Is an extension having fibre out the front of a building and later installing a leadin to a customer?
- Does the bonding of two (2) ADSL services together thus creating a superfast broadband service which is 25Mb/s+ of download capability?
- Is the act of even just having the **ability** to bond 2 x ADSL circuits a breach?

NBN Co. is an institution with risk-free access to capital (tax payer), a sole shareholder that is able to exercise extraordinary market and legislative power (as demonstrated above) and its business case requires the need to stop the construction, expansion or even upgrading of competing networks, regardless of how small or efficient they are?

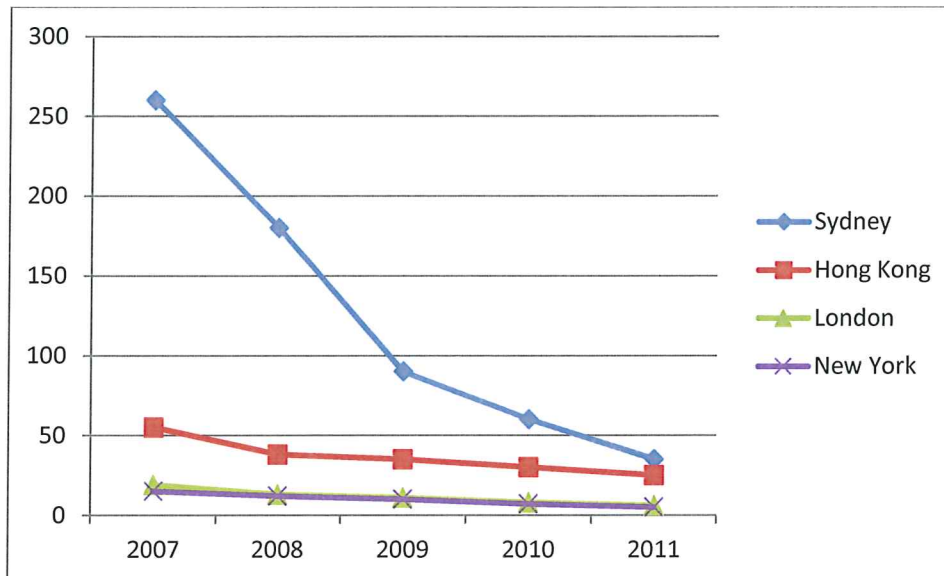
This is the same logic used for the Sydney Cross-City Tunnel. The business case was made based upon optimistic adoption (traffic) rates and through the forced road closures to streets to essentially force traffic into the tunnel. I urge members not to go down that road again.

The Benefit of Competition and “Australia’s collapsing cost of bandwidth/IP Transit”

Most of this century Australia’s international internet capacity requirements have mostly been provided via Southern Cross Cable (SCC) and the Australian-Japan Cable (AJC). Over the years these operators seemed to land on a base price for international capacity to Australia and as a result the cost of transit to Australia was consistently around the \$300/Mpbs/month. This equates to \$300,000 per month for a dedicated Gigabit internet connection. It was widely acknowledged that Australia is a country with an unhealthy and uncompetitive international capacity marketplace with costs being 5x higher than Hong Kong, and 10x more than London and Hong Kong.

It wasn't until PIPE Networks announced the launch of its Sydney to Guam submarine cable project (PPC-1) leading to the creation of the first competitive threat to the international capacity market place did the price of transit fall and continue to fall - dramatically. PPC-1 was announced as a project in January 2007, signed off for commitment to proceed in January 2008 and completed in October 2010. Over that time both SX and AJC introduced a number of new initiatives and services such as upgrading to allow Ethernet interfaces rather than STM-1, STM-4 and STM-16, multiple drop rings etc.. They also drastically reduced pricing. A 10Gbps 15 year IRU on SX was around US\$75M in 2007 whereas today it stands at less than \$20M with protection. AJC has improved service offerings and dropped prices along similar lines.

The graph below in Figure 1 shows how inefficient bandwidth pricing in Australia was prior to competition (looking based upon volume of 1Gbps). This was restricting the Australian internet industry and ultimately users through the requirement to implement very tight user quotas to align use with bandwidth costs.



.Figure 1: Drastic price reduction in IP transit pricing as a result of competition through PPC-1

This reduction in pricing continues today through competition. Transit pricing for that **1Gbps service has dropped from \$300,000 per month in 2006, to just \$40,000 per month today. This price has dropped almost 50% in just 12 months and 85% in 3 years with competition.**

I urge the Committee to understand and recognise that there will be little incentive for NBN Co. to innovate and become more efficient in a market where there is no competition. In fact, with the collapsing price of transit in Australia through competition it is quite possible that within a few years that it will be **cheaper to get bandwidth from Iraq to Sydney, than from Sydney to Sydney** (NBN Co is looking to charge \$20/Mbps for house to PoI bandwidth aggregation from Premises to the PoI).

NBN Co. has the protection of unlimited tax-payer support, legislative capability through its shareholders, why does it need protection from competing infrastructure carriers (think other than Telstra)? There is **no Government or market in the industrialised world** that is contemplating **removing competition as part of the advancement of Broadband in their country** – and for good reason.

I respectfully urge members to read the US "National Broadband Plan" available at <http://www.broadband.gov> . Read the sections that relate to the importance of competition and wireless (and in particular spectrum). I also urge members to take stock and reflect upon the serious structural impacts on restricting competing carriers, whether practically or via forcing Standard Access Undertakings, undertakings not designed for small carriers to provide a service, but for a company that intends to implement a new monopoly. If competing carriers are not able to make normal economic decisions to invest in competing infrastructure then expect to see an increase in the cost of accessing the internet and possibly become uncompetitive due to the increase in cost, lack of innovation and lack of investment due to the inability to compete effectively.

The National Broadband Network will absolutely have a number of benefits and assist in the development of applications to many Australians, however we need to ensure that these benefits do not come at a greater cost to all Australians. Our future depends on it.

I would be happy to be available to the committee to provide further detail on why the restrictions contemplated in this Bill are simply not in the long-term interests of this country and should be completely removed.

Yours faithfully,

Bevan Slattery
CEO - NEXTDC Ltd