



9 November 2010

Joshua Davies
Communications Group
Australian Competition & Consumer Commission

By email to joshua.davies@acc.gov.au and nbnpoiconsultation@acc.gov.au

Dear Mr Davies

**Re: National Broadband Network Points of Interconnect
ACCC Discussion paper**

We refer to the above discussion paper and thank the Commission for this opportunity to share PIPE's views on this very significant issue. The number and location of Points of Interconnect (**POIs**) for the proposed National Broadband Network (NBN) is a contentious issue and if handled poorly has the potential to cause serious damage to the state of competition and many participants in the Australian telecommunications industry, including PIPE.

About PIPE

PIPE is a licensed telecommunications carrier which owns and operates the third-largest metropolitan fibre-optic network in Australia. PIPE's network connects most of Australia's major data centres and a significant number of Telstra exchanges in PIPE's core markets.

PIPE was incorporated in 2001 and was granted a carrier licence in July 2002. Since PIPE's first major network build was completed in early 2007, PIPE has constructed a fibre-optic network (**PIPE's network**) in Brisbane, Sydney, Melbourne, Hobart, Adelaide and Perth which includes over 1,400 km of fibre-optic cable,¹ which reaches into over 200 Telstra exchanges, and over 600 other buildings across Australia.²

PIPE provides dark fibre circuits for backhaul purposes to many other carriers and ISPs, including most major Australian ISPs who do not own their own backhaul networks. The backhaul services provided by PIPE have allowed these companies to engage in infrastructure-based competition with Telstra, by interconnecting the DSLAMs and similar equipment deployed in numerous Telstra exchanges (and which are connected to ULLS and LSS services supplied by Telstra) with the rest of their network. This in turn has significantly increased competition in retail markets for Internet and land-line telephony services,³ to the

¹ As of 1 June 2010.

² As of 1 November 2010.

³ The importance of backhaul to the uptake of declared CAN services such as ULL and LSS is recognised by the ACCC in the Regulatory Impact Statement for the Infrastructure RKR at p 6 – 'it may be uneconomic to take-up a declared CAN service ... if Core network services are unavailable.'

point where the regulation of several declared services supplied by Telstra is being wound back in some areas due to high levels of infrastructure-based competition.⁴

PIPE views itself as an innovator and market leader in the provision of carrier neutral, competitive backhaul services and believes it is uniquely placed to comment on the matters raised by the ACCC in the Discussion Paper.

POIs in the current market

In the current marketplace, Telstra PSTN exchanges form natural points of interconnection for carriers and CSPs engaging in infrastructure-based competition with Telstra. Because these exchanges are the 'hubs' of Telstra's existing copper network, it is at these locations where such carriers and CSPs must interconnect their DSLAMs and other access hardware with the ULL and LSS services acquired from Telstra. Those carriers and CSPs then acquire backhaul services from PIPE or another carrier to connect the exchanges to the rest of their network.

Effect of POI placement on the backhaul market

A diverse market of backhaul providers has developed organically since infrastructure-based competition with Telstra became possible from a regulatory, technical and commercial perspective. Competitors in the backhaul market have made significant investments in developing their respective networks, with the expectation of a commercial return on those investments in future.

The current NBNCo 'composite model' proposal, in conjunction with the migration away from and eventual abolition of the Telstra copper network, will strand the majority of these backhaul networks, with the exception of inter-capital backhaul and backhaul between the CBD of the capital cities and the NBNCo POI sites. We also note that the NBN Implementation Study acknowledged a risk that excessive consolidation of POIs would strand significant lengths of competitive backhaul.

Given that many of the largest ISPs and CSPs in the country engage in infrastructure-based competition with Telstra in numbers of exchanges which reach into three figures, it is not immediately apparent why NBNCo has proposed such a centralised model for POI sites.

The Discussion Paper refers to the ACCC's previous consideration of POI locations in the context of its assessment of FANOC Pty Ltd's Standard Access Undertaking in 2007. In particular the ACCC noted that:

- the fact that access seekers using ULLS/LSS are currently able to interconnect efficiently at existing local exchanges suggests that they will be able to interconnect efficiently to a replacement bitstream access service at or near those exchanges;

⁴ See the Australian Competition Tribunal's 2009 LCS Individual Exemption Order, 2009 WLR Individual Exemption Order and 2009 PSTN OA Metropolitan Individual Exemption Order.

- it does not appear justifiable to restrict interconnection to points higher in the network where greater aggregation of traffic has occurred;
- many access seekers have existing investments in backhaul at those places - interconnection near existing investments will facilitate a smooth migration and is a relevant factor to be taken into account both in considering the promotion of competition and the interests of persons who have a right to use the service; and

We agree with the ACCC's views on these issues. In particular we note that many of PIPE's customers have long-term commitments to acquiring backhaul capacity to existing Telstra exchange locations. Obtaining those long-term commitments was a commercial imperative for PIPE to ensure a sufficient return on the significant sunk capital cost of PIPE's network deployment.

In PIPE's experience the level of competition in CBD areas is very high, and the level of competition in metropolitan areas is high, with many competitors including PIPE available and competing aggressively on price and non-price features of their various services. The level of competition in regional and remote areas is low, owing to insufficient demand and natural monopolies.

NBNCo's preferred aggregation models, which in effect *give away* free backhaul for NBN services, will remove the bulk of telecommunications traffic in the country from commercial backhaul offerings and would act as an insurmountable barrier to entry and would be likely to cause the development and expansion of existing backhaul networks to cease.

Location of POIs on the NBN and provision of related services

To be clear: PIPE has no issue with the aggregation of NBN traffic from areas which are uncompetitive for backhaul services back to POIs located in areas which *are* competitive for backhaul services – i.e. the 'low consolidation' model proposed by NBNCo. What PIPE *does* object to is the unnecessary stranding of its network by excessive and unwarranted aggregation of NBN traffic in a way which strands the majority of PIPE's network.

In this respect the 'composite model' at this point in time appears indistinguishable from the 'high consolidation model' owing to the lack of clarity surrounding the circumstances under which a retail provider would be able to connect to an NBNCo CSA. We also question why, if NBNCo was essentially supplying free backhaul to a capital city POI, a service provider would *want* to connect to a CSA unless there were characteristics of the 'free' NBN backhaul that would justify paying for an alternative.

In PIPE's view, POIs should be located in the network out to the edge of competitive backhaul services. In this respect we suggest that a minimum of three infrastructure-based backhaul providers (i.e. having their own fibre-optic cables in the ground, and not merely resellers) within a 5km radius of a location would be a suitable criteria. We note that NBNCo have apparently adopted a 20km radius as their benchmark – we question the validity of this given the significant build costs required to install 20km of fibre-optic cable.

In the event that NBNCo does supply inter-POI backhaul to service providers, we submit that it should either do so at market prices, or if supplied at 'below market' rates, subject to a restriction that it may not be used otherwise than for NBN backhaul. This may mitigate the competitive harm which would be caused to existing backhaul providers.

We take no position on whether NBNCo should offer backhaul as dark fibre or L2 Ethernet, although we note that the distances involved in areas which are not competitive for backhaul may preclude the use of dark fibre, and the only alternative being L2 Ethernet would preclude the use of more sophisticated and reliable technology such as SDH.

Changes to POIs

We question the likelihood of significant future changes to POI locations under the NBN. Once the NBN is deployed, it is likely to create a chicken-and-the-egg problem: there will not be a business case to extend competitive backhaul to a location if it is not an NBN POI, and it will not become an NBN POI without such competitive backhaul. This makes it all the more important that the process of selecting the POI locations be done right the first time.

Uniform National Wholesale Pricing (UNWP)

We frankly view the approach taken by NBNCo to the location of POIs – i.e. they should be located in capital cities and that the only drawback to so doing would be *technical* reasons that a service provider might want to interconnect deeper into the network – as fundamentally flawed and driven by an obvious policy imperative to deliver UNWP (as NBNCo define the term) without regard for the legitimate commercial interests of other backhaul providers who have constructed competitive backhaul networks over a period of years, at significant expense and risk, and typically without government handouts.

This policy goal could be accomplished by other methods – such as subsidising the wholesale cost of NBN services in regional areas, to ensure that (to the extent possible) the cost of NBN wholesale access in regional areas plus the cost of any necessary backhaul was equivalent to the cost of NBN wholesale access in metropolitan areas. This would avoid stranding backhaul infrastructure and undermining the businesses of competitive backhaul carriers, and may in fact promote competition in backhaul markets.

If NBNCo's composite model has no price differentiation between connecting to a capital city POI (i.e. free backhaul) and a more remote CSA location (in which case the service provider must pay for their own backhaul), in PIPE's view the ability to interconnect at the CSA would be largely useless, except possibly to service providers who have their own existing backhaul with low or negligible avoidable cost of continuing to use it.

Accuracy of NBNCo's data on the state of competition

We note that much of the data about the presence of competitive backhaul providers in Appendix A to NBNCo's position paper does not align with PIPE's view of the markets. As previously mentioned in this submission, we question whether 20km is an appropriate benchmark for the nearness of competitive backhaul providers. As 10 out of the proposed 14 POI locations are less than 20km from the centre of the relevant city, these figures will include backhaul providers who have very small networks based only in the CBD of the

relevant city and which do not extend to any meaningful extent into the suburban areas, and who may not have the means to extend their network to the proposed NBNCo POI. In these 10 cases, NBNCo's use of this criteria seems to imply that any location within 20km of the CBD of those cities is as good as any other location within the same distance – this is all the more surprising given the unexplained counter-intuitive locations which have been proposed for the POIs. Numerous opportunities exist to establish POIs within the CBD areas of each city. It seems strange that NBNCo proposes to strand vast amounts of competitive backhaul infrastructure by providing free backhaul to designated POI locations in capital cities, and then locating those POIs as much as 41km away from the city itself?

Conclusion

In PIPE's view the approach to POIs taken by NBNCo in its position paper is fundamentally flawed, fails to take into account the reasonable commercial interests of competitors in backhaul markets, and will inevitably strand significant amounts of competitive backhaul infrastructure. This would discourage the economically efficient use of this infrastructure and remove significant incentives for investment in such infrastructure in future. NBNCo's approach would for this reason be contrary to the long-term interests of end users.

The government policy objectives which have dictated NBNCo's approach could and should be achieved by measures which would not cause such unwarranted interference in backhaul markets.

We trust that this submission makes clear PIPE's position on these issues and we again thank the ACCC for the opportunity to make it. We would be pleased to give the ACCC any further information or assistance that it may require.

Yours sincerely,

PIPE NETWORKS PTY LIMITED

