



Senate Standing Committee on Environment and Communications
**Inquiry into the National Broadband Network Companies Bill 2010
and the
Telecommunications Legislation Amendment (National Broadband
Network Measures – Access Arrangements) Bill 2010**

Submission of PIPE Networks Pty Limited

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1. Executive summary

PIPE Networks Pty Limited (**PIPE**) thanks the Committee for this opportunity to make a submission on this important legislation. Although PIPE is not opposed to the policy goal underlying the 'anti-cherry picking' regime in Part 3 of the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010 – i.e. ensuring 'national uniform wholesale pricing' for NBN Co – we submit that the Bill as it presently stands will significantly harm investment in and future competition created by fixed-line telecommunications networks, and that the government's objectives can be achieved without creating a de facto statutory monopoly in favour of NBN Co. In particular, PIPE submits that:

- the anti 'cherry-picking' regime is conceptually flawed and would be inappropriate to apply to competing fixed-line networks;
- the government objectives behind the anti 'cherry-picking' regime can be achieved by less harmful means;
- the anti 'cherry-picking' regime should not proceed; and that
- if the anti 'cherry-picking' regime does proceed, a number of amendments are required to address uncertainty created by drafting defects in s 141, and that it should not apply to backhaul and transmission networks, nor to networks which wholly or predominantly target corporate and government customers.

2. Scope

This submission deals only with Parts 1 and 3 of the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010 (**the NBN Access Bill**), and does not take a position on the other parts of the NBN Access Bill or on the National Broadband Network Companies Bill 2010.

This submission has been approved by the CEO of PIPE.

3. About PIPE Networks

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 [REDACTED] of fibre-optic cable,¹ which reaches into [REDACTED] data centres, [REDACTED] Telstra exchanges, and [REDACTED] other buildings across Australia.²

PIPE uses this network to provide dark fibre and Ethernet services for backhaul and resale to many other carriers and ISPs supplying fixed-line services, including [REDACTED]. The backhaul services provided by PIPE have allowed these companies to engage in infrastructure-based competition with Telstra, which has significantly increased competition in retail markets for Internet and fixed-line telephony services,³ to the point where the regulation of several declared services supplied by Telstra is being wound back in some areas due to high levels of competition.⁴

PIPE also supplies⁵ services for backhaul to wireless carriers including [REDACTED] and Vodafone Hutchison Australia (VHA). PIPE's 15 year agreement with VHA, which was publicly announced on 17 November 2010, is for the supply of dark fibre backhaul services to a significant number of VHA base stations in Queensland, New South Wales and Victoria, and will require the expansion of PIPE's fibre network by a further 900 km of fibre-optic cable.⁶

PIPE's customer base consists of corporations, governments and government departments, educational institutions, and other carriers and carriage service providers.

4. The anti 'cherry-picking' regime and its objectives

The NBN Implementation Study acknowledges that achieving the government's policy objective of national uniform wholesale pricing 'implies providing an implicit cross-subsidy to higher cost-to-serve areas from lower cost-to-serve areas.'⁷ It identifies a risk that alternative network providers could engage in 'cherry-picking, in which providers seek to serve only the most profitable areas and households.'⁸ The Implementation Study and the Explanatory Memorandum to the NBN Access Bill identify cherry-picking as a threat to many of the government's policy objectives for the NBN, especially the objective of national uniform wholesale pricing.

To address the risk of cherry-picking, the Implementation Study proposed that measures to be taken to create a 'level playing field for all superfast broadband networks,'⁹ and the NBN

¹ As of 16 February 2011.

² As of 1 February 2011.

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.'

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.

⁵ Or is contracted to supply and is currently in the process of delivering.

⁶ PIPE Networks, 'PIPE and VHA sign 15 year telecommunications agreement' (Media release, 17 November 2010) <http://www.pipenetworks.com/docs/media/VHA_PIPE_Announcement.pdf>.

⁷ McKinsey & Company and KPMG, *National Broadband Network Implementation Study* (2010) <<http://data.dbcde.gov.au/nbn/NBN-Implementation-Study-complete-report.pdf>> 463.

⁸ Ibid 435.

⁹ Ibid 463.

Access Bill contains a number of measures which the Explanatory Memorandum says will create a 'level playing field' amongst operators of such networks.¹⁰ These measures include:

- Requiring that the ACCC declare that Layer 2 bitstream services are a declared service – meaning that the price and non-price conditions of supply of those services are subject to regulation by the ACCC;
- Requiring that operators of superfast fixed-line networks which were built or upgraded after 25 November 2010:
 - Provide a Layer 2 bitstream service using the network – that is, they must provide wholesale services to other carriers and carriage service providers;
 - Supply the Layer 2 bitstream services on a non-discriminatory basis – including by not discriminating in favour of themselves; and
 - Comply with technical standards in relation to those Layer 2 bitstream services as determined by the Australian Communications and Media Authority (**ACMA**); and
- Allowing the ACMA to regulate the design features of and performance requirements to be met by optical fibre lines and associated facilities, and the characteristics and performance requirements of carriage services supplied using optical fibre;

The government also announced on 20 December 2010 that it would introduce amendments to the NBN Access Bill to

require new fibre networks built after 1 January 2011 for residential and small business purposes to be **wholesale-only** as well as offering a Layer 2 service on an open-access basis.¹¹ [emphasis added]

By comparison, this level of regulation is greater than the highest level of regulation ever applied to Telstra since the deregulation of the telecommunications industry in Australia.

5. PIPE's position on the proposed regime

5.1. A critical examination of 'cherry-picking'

Cherry-picking, as defined in this debate, is simply put the practice of a competing network operator building its network in areas where it is profitable to do so, and not building its network in unprofitable areas. Notwithstanding the pejorative terms used to describe this behaviour, such as 'opportunistic cherry-picking',¹² this behaviour in fact reflects the simple commercial reality that businesses – in telecommunications or in any other market – will only compete in a particular area if it is profitable to do so.

¹⁰ Explanatory Memorandum, Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010, 47.

¹¹ Department of Broadband, Communications and the Digital Economy (Cth), 'NBN Rollout: Statement of Expectations' (Media release, 132077, 20 December 2010)

¹² Above n 10, 47.

There are many geographic areas of the country – especially in regional and remote areas – where it is uncommercial to invest in competing fixed-line infrastructure, for reasons including insufficient demand and excessive costs or other barriers to entry. In economic terms these markets are natural monopolies. For this reason, investment in competing fixed-line telecommunications infrastructure has historically focussed on metropolitan areas and on providing interconnection between those areas. This pattern reflects the natural economics of competition in telecommunications markets rather than morally culpable, ‘opportunistic cherry-picking’ which should be legislated against.

If building fixed-line networks in metropolitan areas but not regional areas constitutes cherry-picking, then *PIPE and every other telecommunications carrier with infrastructure in the ground in Australia* is guilty of cherry-picking.

5.2. The regime will not produce a ‘level playing field’

It is evident from the Explanatory Memorandum that the government’s position is that firstly, it is necessary and desirable to ensure a ‘level playing field’ between NBN Co and its potential competitors; and secondly that subjecting potential competitors to the same technical, commercial and operational regulation as apply to NBN Co will bring about that result.

In PIPE’s view this is far from the case and ignores the immense benefits which will flow to NBN Co by virtue of its position. These benefits include:

- The significant funding – estimated at \$26B – which will be given to NBN Co by the government, when government investment will not be available to its competitors;¹³
- The significant economies of scale which can be achieved in such a massive network deployment;
- The potential for preferential access to Telstra’s facilities, such as space within Telstra exchanges and underground ducts;
- The significant level of bargaining power which NBN Co enjoys with its suppliers or potential suppliers which will enable it to obtain essential inputs at lower prices than are available to competitors; and
- The ability, under ‘opt-out’ legislation being contemplated in some states, to connect premises to the NBN network, whether or not the premises will at that point be acquiring NBN services, and without the consent of the land owner or occupier.¹⁴ Such powers are not available to any other carrier.

The regime in its current form will create a playing field which is weighted *against* competitors, who will not enjoy the benefits which accrue to NBN Co but will be burdened

¹³ Department of Broadband, Communications and the Digital Economy (Cth), ‘Landmark study confirms NBN vision is achievable and affordable’ (Media release, 6 May 2010) <http://www.minister.dbcde.gov.au/media/media_releases/2010/040>

¹⁴ See, e.g. the National Broadband Network (Tasmania) Bill 2010 (Tas).

with the same level of regulation, including a 'wholesale only' obligation which will require them to structurally separate their operations.

5.3. The regime gives NBN Co a *de facto* monopoly

In PIPE's view the proposed anti 'cherry-picking' regime will give NBN Co a *de facto* monopoly on future competition in fixed-line telecommunications networks in Australia. The very reason that competitors invest in telecommunications network infrastructure (whether fixed-line or not) is to gain a competitive advantage over their competitors who lack such infrastructure. Those advantages may include (for example) a lower cost base over time, the ability to offer new, innovative and unique services to the market, or faster deployment time for new connections.

The very *purpose* of the proposed anti 'cherry-picking' regime is to deny network owners the benefits that flow from network ownership. It will require network owners to supply wholesale services to third parties, on the same terms that they supply them to themselves, and thereby put network owners in the same competitive position as resellers. In this way it will disincentivise investment in competing fixed-line telecommunications networks, leaving NBN Co with a *de facto* monopoly.

The NBN Implementation Report supports this conclusion, stating that

so long as NBN Co operates efficiently and responsively, it is doubtful that third parties will build significant networks when forced to offer open and equivalent access to wholesale services¹⁵

This monopoly is apparently consistent with the government's policy intent that NBN Co will 'transform[] the industry structure'¹⁶ and be a 'monopoly national fixed line network.'¹⁷ In short, the government apparently intends to stimulate competition in *retail* telecommunications markets by preventing competition in *wholesale* telecommunications markets. The NBN Implementation study notes that the long-term implications of competition at the wholesale layer 'may, however, be difficult to judge' and that 'today's duplication may be tomorrow's network-based competition.'¹⁸

The Implementation Report also notes that the deployment or potential deployment of competing fixed-line networks will 'be important to apply discipline to NBN Co and provide it with an incentive for innovation' (which PIPE agrees with) but only after the NBN deployment is complete (which PIPE does not agree with).¹⁹

If NBN Co obtains this *de facto* monopoly over superfast fixed-line telecommunications infrastructure, it follows that NBN Co will not have the incentives to innovate, improve its products, or reduce its pricing which would otherwise exist in a competitive market. It also

¹⁵ Above n 7, 466.

¹⁶ Department of Broadband, Communications and the Digital Economy (Cth), 'NBN Rollout: Statement of Expectations' (Media release, 132077, 20 December 2010)

¹⁷ Letter from Senators Penny Wong and Stephen Conroy to Mr Harrison Young (Chairman, NBN Co), 17 December 2010.

¹⁸ Above n 7, 439.

¹⁹ Above n 7, 466.

follows that it would have the capacity to charge supra-competitive pricing or monopoly rents for access to NBN wholesale services. The likely result for competition is that resellers of NBN Co services will be paying more, receiving less, and having no other sources of supply as would exist in a competitive marketplace at the wholesale level.

5.4. NBN-level regulation is unjustified for competing networks

The justification for the significant regulation which has in the past been applied against Telstra, and will in future be applied against NBN Co, is that a higher level of regulation is necessary in the case of monopoly network providers because of their positions of market power. In PIPE's view there is no sound reason for applying the same level of regulation to companies which will be constructing or upgrading competing, non-monopoly networks, using private funding. This is especially the case when the proposed level of regulation is far in excess of any regulation ever applied to Telstra at any stage during the deregulation of the Australian telecommunications industry. The regime as it presently stands would be overkill if applied against smaller potential competitors to NBN Co as they lack NBN Co's level of market power and do not enjoy the benefits of NBN Co's position – especially the investment of billions of dollars by the Commonwealth.

5.5. The regime will leave wireless networks unregulated

The regime as it currently stands applies only to fixed-line networks. Operators of wireless networks (including satellite and mobile networks) will therefore be relatively unfettered by regulation and will be able to compete with NBN Co on competitive conditions which are more advantageous than those enjoyed by owners of fixed-line networks. The Explanatory Memorandum states that:

The reference to 'line' in proposed paragraph (c) of the definition of 'Layer 2 bitstream service' makes it clear that that term is not intended to capture services provided through mobile, satellite or wireless networks. It would not be appropriate to capture these networks because the objective of the provisions is to provide a more level regulatory playing field in relation to superfast carriage services, defined as providing a download transmission speed of more than 25 Mbps, provided over fixedline networks. Moreover, as these technologies do not generally provide the threshold download speed of more than 25 Mbps being applied on a dedicated basis, it has not been considered necessary to capture them.²⁰

In PIPE's view, the justification of exempting wireless, satellite and mobile networks from the regime on the basis that 'superfast carriage service' is defined as using a *line* to supply the service is unsupportable as the decision to draft the definition in this way is unexplained and apparently arbitrary. Emerging wireless technologies such as 3GPP Long Term Evolution (LTE) have been tested in Australia and have reached download speeds in the field of 69.3 megabits per second – well above the 25 megabits per second threshold required for a fixed-line service to qualify as 'superfast'.²¹ Telstra has also recently reported acceleration in the

²⁰ Explanatory Memorandum, Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010, 164.

²¹ Nick Broughall, *LTE Trials in Melbourne hit 149.4Mbps Download Speeds* (14 December 2010) Gizmodo <<http://www.gizmodo.com.au/2010/12/lte-trials-in-melbourne-hit-149-4mbps-download-speeds/>>

growth of mobile broadband (i.e. wireless) customers from 150,000 new customers in the fourth quarter of the 2010 financial year, to 254,000 new customers in the second quarter of the 2011 financial year.²²

Although opinions vary as to the substitutability of high-speed wireless data services for fixed-line services,²³ it is certainly possible that competition from wireless services could 'cherry-pick' metropolitan areas, yet this market is inexplicably not proposed to be regulated.

5.6. Ensuring the supply of telecommunications services in unprofitable areas is not a new problem

The situation which NBN Co will face – that is, they will be obliged to supply services in regional and remote areas of the country in which it is unprofitable to do so – is conceptually no different to the obligation which Telstra has borne for many years to supply basic telecommunications services in unprofitable regional and remote areas. Telstra's costs of so doing are subsidised by the Universal Service Obligation (**USO**) levy, which is imposed on the 'eligible revenue' of all telecommunications carriers, Telstra included. In the 2009-2010 USO claim period, the total USO subsidy amount for the supply of those services was slightly over \$145M.²⁴

It should be noted that the existing USO scheme differs significantly from the levy considered by the NBN Implementation study. The former applies to the 'eligible revenue' of all carriers whereas the latter would apply only to 'carriers building or upgrading to new fixed-line superfast access networks in Australia' and importantly would be 'calculated on a basis inversely related to the breadth of coverage in less attractive areas.' The focus of the USO scheme is on subsidising the supply of services in unprofitable regional and remote areas, whereas the focus of the levy considered by the Implementation Study was to punish or deter 'cherry-pickers'.

The government's announcement of 20 December 2011 supports the conclusion that the levies in contemplation are punitive or deterrent in nature, rather than compensatory, stating that

[t]he Government has already indicated it will consider the introduction of a levy, if necessary, to prevent opportunistic cherry picking.²⁵

PIPE submits that the proper focus of any levy should be on *subsidising* the supply of unprofitable services by NBN Co rather than *preventing* the emergence of competitors to NBN Co.

²² Telstra Corporation Limited, *2011 Half Year Financial Results* (10 February 2011) <<http://www.asx.com.au/asxpdf/20110210/pdf/41wpm02zgxr8v.pdf>> 4.

²³ See, e.g. Clancy Yeates, *NBN chief denies super-fast wireless threat* (23 February 2011) Business Day <<http://www.theage.com.au/business/nbn-chief-denies-superfast-wireless-threat-20110222-1b42n.html>>

²⁴ Australian Communications and Media Authority, *Universal Service Assessment 2009-10* <http://www.acma.gov.au/webwr/telcomm/universal_service_regime/universal_service_obligation/costing_funding/2009-10_universal_service_assessment.pdf>

²⁵ Department of Broadband, Communications and the Digital Economy (Cth), 'NBN Rollout: Statement of Expectations' (Media release, 132077, 20 December 2010).

In PIPE's view there is no reason why the supply by NBN Co of services in less-profitable areas cannot be subsidised by a continuation or adaptation of the USO levy scheme.

5.7. The proposed regime should not proceed

In conclusion, PIPE views the proposed regime as conceptually flawed, unsuitable and unjustified if applied to smaller privately-funded competitors to NBN Co, and unnecessary given that the government's policy objectives can be achieved by means which are less harmful to competition. **In PIPE's submission the proposed regime should not proceed.**

If the government is of the opinion that the NBN cannot succeed without imposing such a crippling level of regulation on all other operators of fixed-line networks in the country, in PIPE's view this calls into question the overall viability of the NBN in its current incarnation.

In the event that the government still proposes to enact the regime in some form, and without in any way detracting from PIPE's opposition to the regime as a whole, PIPE has some specific submissions on deficiencies in the regime as presently drafted which if addressed would go some way to mitigating unnecessary harm to the fixed-line telecommunications industry.

6. Specific deficiencies in the proposed regime

6.1. The precise scope of the regime is unclear

PIPE submits that the current drafting of the proposed new s 141 of the *Telecommunications Act 1997* (Cth) is unclear and deficient in a number of ways. Section 141(1)(e) provides that the obligation to supply L2 bitstream services (which is the basic obligation from which most other obligations in the regime flow) applies where:

- (i) the network came into existence after 25 November 2010; or
- (ii) the network was altered or upgraded after 25 November 2010 and, as a result of the alteration or upgrade, the network became capable of being used to supply a superfast carriage service to customers, or prospective customers, in Australia.

PIPE's network, which existed well before 25 November 2010, and was already capable of being used (and was being used) to supply superfast carriage services to customers. On that basis, one reading of s 141(1)(e) is that the regime would not apply to PIPE's network at all, because it existed and was capable of supplying superfast carriage services before the relevant cut-off date.

We understand from consultation with the Department of Broadband, Communications and the Digital Economy (**DBCDE**) that the government's policy intent is that physical *expansions* of pre-existing superfast networks will be caught by the scheme, but that it will only apply to parts of the networks which are built after 25 November 2010. The present wording of s 141 does not give effect to this intention.

Similarly, because the obligation in the current drafting of s 141 applies to *all* network units which are 'part of the infrastructure of a telecommunications network in Australia', a

pessimistic reading of s 141 is that the obligation to supply L2 bitstream services would apply across the *whole* of a telecommunications network, even if it were only expanded or upgraded in part.

PIPE submits that the drafting of s 141 should be amended to clarify the extent to which it applies to post-25 November 2010 extensions of existing superfast networks.

6.2. Backhaul and transmission networks should be exempt

Backhaul and transmission networks will form a vital part of the delivery of NBN products to end-users. These services will be acquired by NBN resellers to interconnect the NBN Co Points of Interconnection (**POIs**) with the rest of the reseller's network, and to the Internet. The importance of maintaining competition and investment in backhaul and transmission networks cannot be understated. The NBN Co CEO Mr Mike Quigley recently stated that some Tasmanian customers experienced lower than advertised download speeds on their NBN connections due to the relevant reseller (Internode) having insufficient backhaul capacity connecting to the relevant POI.²⁶

If networks constructed for backhaul and transmission purposes are subject to the anti 'cherry-picking' regulatory regime, this could:

- apply technical standards to those networks which may be relevant for NBN-style 'access' networks but are entirely inappropriate for backhaul or transmission networks;
- force the operators of those networks to alter the underlying technology to facilitate the delivery of L2 bitstream Ethernet services;
- allow third parties to obtain L2 bitstream services for backhaul purposes, probably at prices which would be below the network operator's cost to supply those services; and
- chill investment in the deployment of or upgrading of backhaul and transmission networks for the foregoing reasons.

In PIPE's submission, backhaul and transmission networks should for this reason be specifically exempted from the regime.

6.3. Networks targeting corporate and government customers should be exempt

PIPE also understands from consultation with DBCDE that it is the government's intention that the regime should catch 'NBN style' networks which target residential markets and offer ubiquitous access to all premises within their service area; and that networks which wholly or predominantly supply corporate and government customers are not intended to be caught. Section 141 as currently drafted does not give effect to this intention.

²⁶ Josh Taylor, *Blame backhaul, not NBN, for slow speeds* (23 February 2011) ZDNet <<http://www.zdnet.com.au/blame-backhaul-not-nbn-for-slow-speeds-339310117.htm>>

Although s 141(1)(f) creates an exemption where the network unit is 'used wholly to supply carriage services to a single end-user, where that end-user is ... a public body; or ... a company', PIPE reads this as applying only to discrete cables linking particular sites, which are installed at the behest of a particular company or public body and which are only used by that body. This exemption would not apply to networks such as PIPE's where the 'backbone' portions of the network are used to service *multiple* customers – whether or not those customers are all public bodies or companies. Limiting the exemption to 'companies' would also exclude customers such as Universities (typically statutory corporations rather than companies), incorporated associations, and foreign corporations from the exemption.

Networks, such as PIPE's, which instead target corporate and government customers are designed and constructed very differently. Because they do not offer – and do not seek to offer – ubiquitous access at all premises, they often run over comparatively large distances to service a relatively small number of premises and their cost per premises served is necessarily higher. As an example, in late 2010 PIPE installed approximately [REDACTED] of new fibre in Brisbane, at a cost of approximately [REDACTED] from [REDACTED] to supply services to a *single Queensland government customer* [REDACTED]

If other service providers could in future compel PIPE to supply them with wholesale NBN-style products at NBN-level pricing across PIPE's very different and much more expensive infrastructure, it would allow competitors of PIPE to free-ride on PIPE's substantial investment in building and expanding its network, would not offer PIPE an acceptable level of certainty of recouping its investment in expansions of its network, would have a chilling effect on further network expansion. It would also likely cause an increase in the cost of services to end-users as PIPE could not subsidise its installation costs with the ongoing revenue which the infrastructure would otherwise produce over time.

Because networks targeting corporate and government customers will typically supply very different telecommunications services to networks targeting residential users, the equipment and technology used in those networks is also very different. For example, the Optical Network Terminals (**ONTs**) used by NBN Co in customer premises include telephony ports for the connection of standard telephone devices.²⁷ The equivalent devices used throughout PIPE's network do not. Many corporate and government customers who acquire 'dark fibre' services from PIPE do not *have* a device equivalent to an ONT installed because they are not required to use dark fibre services and their use would in fact completely defeat the point of such services. PIPE's ONT-equivalent devices are also significantly more expensive, sophisticated and reliable than NBN ONTs, and offer features often demanded by corporate and government customers such as dual 240V power supplies, 10G Ethernet ports, capacity for simultaneous full line-speed usage of large numbers of gigabit Ethernet ports, and provision for external -48V DC battery power.

The continuing availability of carriage services to corporate and government customers which are **not** delivered by the NBN will also be a matter of great concern to those classes of customers. PIPE's customers will often acquire services from multiple carriers such that an outage or catastrophe which affects the network of a single carrier will not result in a failure of all their telecommunications services. For this reason, and regardless of representations

²⁷ James Hutchinson, *Coming to a wall near you: Meet the NBN ONT* (12 July 2010) Computerworld <http://www.computerworld.com.au/article/352822/coming_wall_near_meet_nbn_ont/>

made by NBN Co about the reliability and robustness of its network, in PIPE's view there will be a significant and ongoing demand for the supply of services delivered by non-NBN networks, whether as a substitute for or in addition to NBN services. This is especially the case if NBN Co, by virtue of its market power in fixed-line networks, has little incentive to innovate to meet the demands of corporate and government customers.

In conclusion, PIPE's network, and other carrier networks which target corporate and government customers, are fundamentally different beasts from networks such as the NBN.

PIPE submits that networks which wholly or predominantly target corporate and government customers should be exempt from the anti 'cherry-picking' regime.

6.4. Technical regulation by the ACMA should not apply to exempt networks

As we explain in section 6.2 and 6.3 above, backhaul and transmission networks, and networks targeting corporate and government users are fundamentally different in design and topology. Even if there is a case for regulating the technical aspects of competing NBN-style networks, no such case exists for regulatory interference in the design, deployment, and performance specifications of backhaul, transmission, and corporate or government networks.

PIPE submits that the ACMA's power to regulate technical aspects of fibre networks should not apply to backhaul and transmission networks, and networks which wholly or predominantly target corporate or government customers.

7. Conclusion

PIPE again thanks the Committee for this opportunity to express its views on this most important topic. In PIPE's view, the NBN Access Bill will create significant and unnecessary harm to competition and investment in fixed-line telecommunications services in Australia. The level of over-regulation which it threatens to impose on competitors to NBN Co will leave NBN Co with a de facto monopoly, and will reverse much of the progress made since the deregulation of the telecommunications industry in Australia.

PIPE would be pleased to provide the Committee with any further information or assistance that it may require.