

# Acacia Australia Pty Ltd

## Acacia Australia Pty Ltd – NBN Regulatory Submission (June 2008)

### Executive summary

The Australian Government understands the social and economic importance of broadband for Australia. It has shown leadership and commitment to this through initiation of the NBN RFP process. Acacia Australia recognises this and believes that the objectives of the RFP can be delivered in an effective and straightforward manner which eliminates many of the legacy regulatory issues and complications.

The Government has committed to contribute \$4.7 billion to roll-out an NBN.

The NBN will deliver consumer benefits to all Australians through the promotion and development of efficient telecommunications infrastructure and through stimulation and enablement of widespread and innovative competition.

To ensure that these benefits can be achieved, certain regulatory changes will need to be considered.

For example, the requirement that the NBN reach 98% of the Australian population goes beyond what would be achieved by pure market-determined activity. To make it economic to achieve the Government's objectives, the NBN provider will need to avail itself of the Government's \$4.7 billion contribution. This will almost certainly involve some degree of cross-subsidisation between the economic and uneconomic components.

This is *only* effective if the arrangements underpinning the regulatory regime mean that others (other than the NBN provider) cannot "cherry pick" or otherwise frustrate the NBN, as this would undermine the economic viability of the NBN and compromise the attainment of its objectives.

The best way to regulate the NBN will be by using concepts from utilities regulation. In short, the NBN will require new and specific regulation based on workable and equitable principles to ensure the viability of a structurally separate and independent utility provider.

Such an approach is consistent with the policy objective of Australian telecommunications regulation, which is the promotion of the long-term interests of end-users ("**LTIE**"). Fundamentally, the LTIE encompasses: (a) the promotion of competition; (b) economic efficiency; and (c) any-to-any connectivity.

An **NBN LTIE** should incorporate and extend these important principles. Simply stated, this means an internet protocol-based broadband network which delivers:

- *competition*: by being provided by a stand-alone, **independent provider** which **does not face any incentives to discriminate** in favour of a related retail entity. This in turn **promotes the greatest possible competition** amongst retail service providers;
- *economic efficiency*: there are price and social advantages of being a **utility-based asset**. The efficiency requirement aims to make the **most efficient use of scarce national resources**. This in turn means that wholesale services are charged based on cost, plus a reasonable margin, therefore delivering **the greatest possible consumer outcome for all Australians**; and
- *any-to-any connectivity*: by being **available to all Australians across all technology platforms**. The NBN should be based on forward-looking technology.

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## 1. OVERVIEW

### A principle-based approach

Communications regulation is an important instrument of social and economic policy for Australia. The National Broadband Network (“NBN”) proposed by the Australian Government represents an opportunity not only to build a vital piece of national infrastructure for Australia’s future, but also to reflect on the regulatory framework and to ensure that the NBN is constructed, owned and operated in a manner which ensures the greatest social and economic return to all Australians. The Government’s decision to proceed with an NBN offers an opportunity to take a fresh approach to communications regulation, which will apply workable and equitable principles, regardless of who becomes the NBN provider.<sup>1</sup>

### Preliminary comments

Section 10.6 of the Government’s Request for Proposals to roll-out and operate an NBN for Australia (the “NBN RFP”) provides that “separate to the RFP process, the Government is inviting industry and public interest groups to provide submissions to the Government on regulatory issues associated with the NBN, including consumer safeguards.”

This submission responds to that invitation by presenting input on a number of regulatory issues relevant to considering how best to invest \$4.7 billion of public funds, and in assessing the various commercial bids for the NBN.

The discussion and options canvassed in this submission in relation to legal or regulatory measures are intended to be of a general nature only, for the purpose of promoting debate on such issues and will be subject to further refinement as the NBN RFP process progresses.

One important backdrop to the NBN RFP is the recent decision of the High Court in *Telstra v Commonwealth & Ors*.<sup>2</sup> In 2007, Telstra commenced proceedings in the High Court to challenge the constitutional validity of Part XIC of the *Trade Practices Act*. If Telstra had won its High Court challenge, then one crucial element of any successful competitive NBN bid – namely the ability to obtain access to the sub-loop – would have become unachievable. Therefore, Telstra would have enjoyed an unassailable position as the only company capable of rolling-out an NBN. The High Court’s decision in upholding the Commonwealth’s power to legislate for a telecommunications access regime has at least three important ramifications:

1. a *competitive* NBN bidding process can now proceed;
2. the NBN provider may now proceed with *legal certainty*; and

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<sup>1</sup> Throughout this submission, references to an “NBN provider” assume that the NBN will in whole or in part be based on a fibre-to-the-node (“FTTN”) platform.

<sup>2</sup> *Telstra Corporation Limited v The Commonwealth & Ors* 243 ALR 1 (6 March 2008).

3. owners of infrastructure which is necessary for the NBN can be made to comply with an access regime (including access to *services* and *facilities*) which involves *positive obligations to provide access*, and to *expeditiously comply*.

**The current Australian telecommunications regulatory framework is based on social and economic policy**

The Second Reading Speech to the *Telecommunications Bill 1996* (Cth) highlights the social and economic importance of an open telecommunications industry:

Telecommunications services are an essential component of our lives, both at home and at work. The role they play is becoming increasingly important as technological developments not only provide innovations in traditional telephony services, but allow us to reach out to the world via services such as the Internet and to access financial, education, health and similar services.

...

To enable this country to take full advantage of the social and economic opportunities presented by these developments, we must have a telecommunications industry which is constantly challenged to innovate in order to develop new services, increase quality and reduce prices.<sup>3</sup>

Recognizing the interconnected nature of disparate and diverse telecommunications networks and the social interest function of such networks, the *Telecommunications Act 1997* (Cth) (the “*Telecommunications Act*”) and the *Telecommunications (Consumer Protection and Service Standards) Act 1999* (Cth) (the “*CPSS Act*”), together with Part XIC of the *Trade Practices Act 1974* (the “*Trade Practices Act*”), impose a number of obligations on carriers and carriage service providers. These include, for example:

- the universal service obligation;<sup>4</sup>
- the standard telephone service;<sup>5</sup>
- standard access obligations;<sup>6</sup>
- obligations to ensure any-to-any connectivity;<sup>7</sup>
- national interest obligations;<sup>8</sup>
- obligations to provide interception capabilities and to assist agencies;<sup>9</sup>

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<sup>3</sup> See Second Reading Speech to the *Telecommunications Bill 1996* (Cth), pp.1-2.

<sup>4</sup> Part 2 of the *CPSS Act* provides for a universal service regime, the objects of which include that all people in Australia, wherever they reside or carry on business, should have reasonable access, on an equitable basis, to: (i) standard telephone services; and (ii) payphones; and (iii) prescribed carriage services (no carriage services have been prescribed for the purposes of this provision); and (iv) digital data services.

<sup>5</sup> See s.6 of the *CPSS Act*.

<sup>6</sup> See section 152AR *Trade Practices Act*.

<sup>7</sup> See, e.g., para 152AB(2)(d) TPA; Part 7 of Schedule 1 to the *Telecommunications Act*; Division 5 of Part 21 *Telecommunications Act*.

<sup>8</sup> Part 14 of the *Telecommunications Act* includes provisions which require the ACMA, carriers and carriage service providers to give authorities such help as is reasonably necessary for the purposes of: (a) enforcing the criminal law and laws imposing pecuniary penalties; and (b) protecting the public revenue; and (c) safeguarding national security.

- obligations in relation to emergency services<sup>10</sup> and defence;<sup>11</sup>
- and retail price controls on Telstra.<sup>12</sup>

These are each important features which contribute to the fabric and safety of Australian society. Given the Government has committed to contribute \$4.7 billion to building an NBN, it is especially important that similar principles are preserved and enhanced. Two important considerations flow from this. First, the NBN provider must be “socially aware” and must be equipped to provide the NBN in a way which maximizes the social dividend required by the Government’s investment. Secondly, the NBN must be provided in a competitively neutral manner. If the sole objective of the NBN provider is to maximize profits (without due regard to the social imperatives) or if the NBN provider is a vertically-integrated communications operator with the ability to leverage power in related markets, then there is a substantial risk that Australia will lose this “once in a lifetime” opportunity to achieve the optimal social and consumer outcome. The NBN’s role in national security is also an important consideration.

**Effective implementation of the NBN will require ex ante competition regulation**

The importance of *ex ante* regulation in telecommunications was affirmed by Viviane Reding, the European Commissioner responsible for Information Society and Media in her 2006 *Review of EU Telecoms Rules* address:

My general assessment is this: We will reaffirm the key objectives of the existing EU framework, i.e., to promote competition, the internal market and citizens’ interests. The fundamental principles of EU telecom regulation will remain, that is; a market-based approach to *ex-ante* regulation and technological neutrality.<sup>13</sup>

To ensure certainty for the NBN provider (and all other interested persons for that matter), from a competition perspective, an NBN will require attention in three fundamental areas of regulation:

- (a) a *guaranteed and infeasible right of access to necessary facilities* (including the sub-loop and underground ducts);
- (b) a secure right to conduct the business of the NBN in accordance with the ***NBN LTIE***; and
- (c) an *open access regime* for all wholesale customers of the NBN.

<sup>9</sup> Part 15 of the *Telecommunications Act* requires carriers and carriage service providers to comply with obligations concerning interception capability and special assistance capability. Also, carriers and certain nominated carriage service providers must comply with the obligations to prepare and submit an annual interception capability plan.

<sup>10</sup> See Part 8 of the *CPSS Act*.

<sup>11</sup> Part 16 of the *Telecommunications Act* provides that a carriage service provider may be required to supply a carriage service for defence purposes or for the management of natural disasters.

<sup>12</sup> Part 9 of the *CPSS Act* gives the responsible Minister the power to impose retail price controls on Telstra in relation to certain services which use Telstra’s CAN.

<sup>13</sup> Viviane Reding, Member of the European Commission responsible for Information Society and Media, *Review 2006 of EU Telecom rules: Strengthening Competition and Completing the Internal Market*, Brussels, address to the Bibliothèque Solvay, 27 June 2006.

This submission discusses various possible options available to the Government in addressing these issues.

## **2. KEY REGULATORY CHANGES REQUIRED**

### **A guaranteed and infeasible right of access to necessary facilities**

Where an NBN provider requires access to the facilities of another carrier for the purposes of rolling-out the NBN (including copper, underground ducts, fibre and connection points), then it will be necessary to provide a regulatory mechanism for mandated access to such facilities. The *Telecommunications Act* (in respect of facilities, including underground ducts) and the *Trade Practice Act* (in respect of declared services, such as ULLS) already contain access regimes, the validity of which was recently upheld by the High Court.

To date, the declared service access regime under Part XIC of the *Trade Practices Act* has enabled competitive access seekers to obtain access to “building block” services at a wholesale level in order to provide retail services to their customers. In particular, the ULLS has enabled competitive access seekers to provide high speed broadband services.

Similarly, the facilities access regime in Parts 3 and 5 of Schedule 1 of the *Telecommunications Act* has provided a means of carriers obtaining access to exchange space, mobile phone towers and underground ducts.

However, in an NBN context, it will be necessary to develop these access regimes to ensure a *guaranteed and infeasible right of access* to all of the copper or other facilities required by the NBN provider in a timely fashion: this is dictated by the economic efficiencies required for an NBN to be a viable commercial project – that is, to promote the *NBN LTIE*.

The regulatory mechanisms to enable this to occur *already exist* – in fact, they have existed in legislation since the 1991 Telecommunications Act – they will just need some amendment to make them work more effectively.

### **A guaranteed right of access**

Access will need to be *guaranteed* in the sense that the NBN provider will require absolute certainty that it will, for instance, have suitable use of copper, without having to incur a long, drawn out and expensive process with the copper owner. Experience in similar matters has seen infrastructure owners go to extraordinary lengths to delay or even attempt render nugatory the access regime in Part XIC.

This kind of conduct in an NBN context would effectively destroy the ability of the NBN provider to roll-out an NBN in accordance with the requirements in the Government’s NBN RFP. In other words (taking this example), absent an effective mechanism for *guaranteed* access to the sub-loop:

- the NBN provider would be unable to fulfill its contractual obligations to the Government; and

- moreover, the crucial commercial underpinnings on which the NBN provider proposes to build the NBN would be destroyed by any delay or threat to ability of the NBN provider to obtain guaranteed access to the sub-loop.

An important point here is that, although the NBN provider, once selected, may not face competition in the wholesale provision of broadband access in its footprint area, the selection process for choosing the NBN provider (*i.e.* the Government's NBN RFP) is a competitive one. An appropriate and effective regulatory framework for the NBN, to ensure that the contractual pact between the Government and the NBN provider results in the optimal social and economic outcomes for all Australians, will be required.

*Access to facilities can be given effect by legislation*

The current access regimes in Schedule 1 of the *Telecommunications Act* and Part XIC of the *Trade Practices Act* are inadequate to ensure the necessary certainty to enable an NBN provider to roll-out an NBN in accordance with the Government's NBN RFP. Therefore, a number of important changes would need to be made to accommodate the NBN. These might include:

- an *unbundled sub-loop service* would need to be declared and/or a *right of access to facilities* would need to be granted to the NBN provider. This would need to provide for access to the copper required by the NBN provider and physical access to underground ducts and other facilities necessary to provide the NBN in an efficient manner. In short, such measures as are necessary to promote the *NBN LTIE*;

The necessary regulatory mechanisms may be expressly enacted by Parliament, as has previously been done in Part 8 of the 1991 *Telecommunications Act*, Schedule 1 of the *Telecommunications Act* and Part XIC of the *Trade Practices Act*. For example, this was the mechanism used in the case of the transitional arrangements which gave effect to the initial declaration of the PSTN and other services when Part XIC came into effect in July 1997. The Commonwealth's legislative power to do this has recently been endorsed by the High Court;<sup>14</sup>

- the new legislative provisions would need to ensure that the owner of the required facility could not block the NBN provider on the basis of its own requirements, pre-existing contractual arrangements, or obstructive processes;
- "special access obligations" would need to be implemented in respect of the required facilities to ensure that the owner of those facilities maintains and augments those facilities and provides assured service levels, subject to terms to be determined by the Minister or a competent authority. These "special access obligations" are necessary and warranted to provide a secure right to conduct the business of the NBN in accordance with the *NBN LTIE*;
- such rights of access and arrangements would need to remain in force for the duration of the NBN;

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<sup>14</sup> *Telstra Corporation Limited v The Commonwealth & Ors* 243 ALR 1 (6 March 2008).

- if the Government decided to select different NBN providers in different geographic regions, then the new legislative provisions would need to reflect this; and
- the price of access may be determined by way of a Ministerial pricing determination.

*An infeasible right of access*

It follows that the NBN provider will require an *infeasible* right of access to the sub-loop. This essentially means that the grant of access will need to be legally protected and beyond challenge.

*How could this be achieved?*

Any form of regulation ought to be subject to due process and therefore can be challenged on administrative/legal/constitutional grounds. However, what really matters in order to achieve the *NBN LTIE*, is that the Government makes it possible and certain that the NBN provider can achieve its social and economic responsibilities and its commercial objectives in an orderly and timely fashion, with a process to manage service continuity, competition and investment imperatives in the meantime.

Some options for consideration for reducing delays and obstructive conduct in this respect include:

- legislating to ensure merits review is not available in respect of any decision to declare the sub-loop or, if the Government considers that merits review is desirable, having clear limits on the timeframe and materials to which regard may be had in any merits review. A good example of such limits is the merits review process set out in sections 152CE ff of the *Trade Practices Act*;
- limiting any requirement to have regard to procedural fairness in respect of fundamental elements of the regime (for example, in the making of a Ministerial determination as to price). An example of where this tool is already used in Part XIC of the *Trade Practices Act* is sub-section 152CLA(3);
- having a preference for fundamental elements of the regime being codified in legislation, as opposed to being administrative decisions (and therefore subject to judicial review);
- expressly excluding the operation of the *Administrative Decisions (Judicial Review) Act* by including relevant decisions in Schedule 1 of that Act (although this would not oust common law judicial review).

*A secure right to conduct the business of the NBN*

The types of networks which are likely to form (or form part of) a next generation networks (“NGN”) would either come within existing types of network units (as defined in the

*Telecommunications Act*),<sup>15</sup> or in any event may be specified by Ministerial determination.<sup>16</sup> For example, a fibre-to-the-node (“FTTN”) network would consist of multiple line links.

It is important to note the following risk factors

- at present, is nothing to prevent any licensed carrier from subsequently rolling-out its own broadband infrastructure in detriment to the NBN;
- even if the necessary facilities access is granted to the NBN provider, there is a real concern that another provider could still thwart the commercial viability of the NBN;
- an NBN provider would rightly be concerned about certain other types of conduct which could thwart the commercial viability of the NBN, such as:
  - non-price conduct such as delaying access to necessary facilities (especially underground ducts or pillars) or information;
  - investment which attacks or diminishes the value or likely take-up of the NBN, including investments in non-NBN technologies (such as HFC) and predatory use of existing non-NBN assets (such as DSLAMs or wireless); and
  - regulatory “gaming”.

Therefore, effective measures will need to be implemented to address these issues. The guiding imperative here is to provide optimal conditions for the viability and success of the **NBN LTIE**.

This concept is not new: Telstra inherited network facilities which were granted statutory protection until 1991.

Accordingly, the NBN provider will need some kind of equivalent treatment to safeguard achievement of the **NBN LTIE**.

One approach would be, rather than issuing “special licences” for an NBN, to impose certain licence conditions on all carriers (other than the NBN provider). This raises the following considerations:

- the Government could amend the *Telecommunications Act* to specifically prohibit all carriers<sup>17</sup> (except the NBN provider) from rolling-out certain infrastructure. The Commonwealth has previously legislated in a similar fashion. For example, section 94 of the 1975 *Telecommunications Act*: provided that “a person other than the [Australian Telecommunications] Commission: (a) shall not erect, maintain or operate a telecommunications installation within Australia; or (b) attach a line, equipment or apparatus to a telecommunications system”;<sup>18</sup>

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<sup>15</sup> See Division 2 of Part 2 of the *Telecommunications Act*.

<sup>16</sup> See *Telecommunications Act*, section 29.

<sup>17</sup> Noting that under section 42 of the *Telecommunications Act 1997* a person must not use a network unit to supply carriage services to the public unless that person holds a carrier licence.

<sup>18</sup> A contravention of that provision carried a penalty of \$5,000 or imprisonment for two years.

- the notion of special licence conditions is already contained in the *Telecommunications Act*: see, for example, section 62 (in relation to compliance with standard access obligations) and section 63 (which expressly empowers the Minister to declare licence conditions in respect of all carriers,<sup>19</sup> or specified carriers<sup>20</sup>);
- it is also noted that sub-section 67(2) of the *Telecommunications Act* provides that a condition of a carrier licence held by a carrier may remove or restrict a right or privilege that the carrier would otherwise have under a provision of this Act (whether or not in the carrier's capacity as a carrier);
- alternatively, the Minister could exercise his power to determine such a licence condition. However, there are several reasons why this may not have optimal effect: such a determination would be a disallowable instrument;<sup>21</sup> it would require a further consultation process (in addition to the NBN RFP process);<sup>22</sup> and it may be subject to judicial review; and
- the licence condition(s) should remain in place for a sufficient period to enable the NBN provider to make a reasonable economic return on its investment.

### **An effective open access regime for all wholesale customers**

The Broadband Stakeholder Group identified the key elements of open-access networks as follows:

Open-access networks can generally be defined as those that provide services to all interested parties on an equal basis, that is, offering the same products at the same prices (and terms and conditions) to all operators, and provisioned by the same processes.

This model, whereby all service providers can access the network on equal terms, is clearly pro-competition (as illustrated by the multiple service providers using *some* of the open-access networks in our case studies) and is an important aspect of the efficient and effective objective. For this reason, open access is one of the key foundations of EU state-aid guidance... It should be noted that other factors, such as scale, may limit the take-up of the network by multiple service providers, and that open access is not by itself a sufficient condition for creating a network with strong retail competition.<sup>23</sup>

The NBN should be based on an open access regime to ensure that all wholesale customers of the NBN have a right of access on equal terms.

The terms of access to wholesale customers ought to be determined by an independent regulator.

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<sup>19</sup> See sub-section 63(1).

<sup>20</sup> See sub-section 63(2).

<sup>21</sup> See sub-section 63(13).

<sup>22</sup> See section 64.

<sup>23</sup> Analysys Mason, *Final report for the Broadband Stakeholder Group – Models for efficient and effective public-sector interventions in next-generation broadband access networks*, [Ref. 11982-204] at p.34.

### 3. ***STRUCTURAL SEPARATION***

#### ***Overseas experiences in relation to different types of separation***

Governments and regulators around the world have been considering the question of separation of incumbent telecommunications providers, always with the objective of addressing the ability of a vertically-integrated incumbent to leverage its power in one market (typically, but not solely, the local loop) to discriminate against rivals, either in that or related markets.

Notable instances of classes of separation overseas include:

- the United States, where in 1984 AT&T was broken up (*i.e.* in a form of separation) into a series of regional monopolists and a single long-distance carrier. A key lesson from the U.S. experience is that that country now has one of the most competitive communications sectors in the world, as a result of its early intervention in structural reform. This was recognized by the OECD in its report, *Restructuring Public Utilities for Competition*.<sup>24</sup> A fundamental parallel between the U.S. experience and the NBN is that it is possible for the Australian Government to take a proactive approach to structural reform with the NBN, as the NBN is substantially not yet built;
- the EU, where in 1999 the European Commission adopted a Cable Directive (1999/63/EC) which mandated legal separation of cable operators from incumbent fixed-line operators:

Where Member States have granted a special or exclusive right to build and operate cable TV networks, to a telecommunications organisation in the same geographic area where it is dominant on the market for services using telecommunications infrastructure, that telecommunications organisation has no incentive to upgrade both its public narrowband telecommunications network and its broadband cable TV network to an integrated broadband communications network ("full-service network") capable of delivering voice, data and images at high bandwidth.....It would be desirable in those circumstances to separate the ownership of the two networks into two distinct companies since the joint ownership of the networks will lead those organisations to delay the emergence of new advanced communications services and will thus restrict technical progress at the expense of the users.<sup>25</sup>

- Commissioner Reding of the European Commission has been noted for her strong statements in favour of structural separation as a means of dealing with challenging telecommunications competition issues. In her 2006 Review, she said:

I believe that the policy option of structural separation could answer many competition problems that Europe's telecom markets are still facing today. Perhaps we have to be as radical as regulators were in the US in the 1980s to make real progress?<sup>26</sup>

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<sup>24</sup> OECD, *Restructuring Public Utilities for Competition and Regulatory Reform*, France 2001.

<sup>25</sup> The Commission of the European Communities 1999, Commission directive 1999/64/EC, *Official Journal of the European Communities*, 10 July, p. 39-42, <http://portal.etsi.org/public-interest/Documents/Directives>, accessed 7 December 2006.

<sup>26</sup> Viviane Reding, Member of the European Commission responsible for Information Society and Media, *Review 2006 of EU Telecom rules: Strengthening Competition and Completing the Internal Market*, Brussels, address to the Bibliothèque Solvay, 27 June 2006.

- Britain, where BT has undergone a process of functional separation following negotiated undertakings with Ofcom;
- New Zealand, where Telecom New Zealand has also undergone a process of functional separation following the threat of full structural separation by the Government; and
- Singapore, where under new rules introduced as part of a national tender for a next generation network, the Government has mandated structural separation of the network operator that will control the passive infrastructure of the network. In particular, the “NetCo” is required to have no effective control over its downstream operators, such as operating companies and retail service providers, and vice versa. The Infocomm Development Authority of Singapore made the following observations in its *Consultation Paper Issued By The Info-Communications Development Authority Of Singapore Industry Structure For Next Generation Access Networks* (17 April 2008):

In order for the NGNBN to catalyse the development of a vibrant and competitive infocomm industry, regulated non-discriminatory access to the network is critical to ensure that competing telecom operators are able to obtain access to the network at reasonable prices, on a non-discriminatory basis, in order to offer competitive and innovative services to end users. An industry structure that promotes such open access to the network elements and wholesale services on the network has been built into the Request for Proposals for the NGNBN which the Government announced on 11 December 2007. The Minister for Information, Communications and the Arts has clearly explained Government’s policy intent at the launch of the Request for Proposals for Singapore’s NGNBN, stating that –

“IDA’s findings indicate that a next generation broadband network will contribute to Singapore’s continued economic success. It is also critical for the Next Gen NBN to provide effective open access to downstream operators. This will create a more vibrant and competitive broadband market. As a policy, we have therefore decided to adopt separation between the different levels of the Next Gen NBN to achieve effective open access. The RFP to construct the network will therefore provide for structural separation of the passive network operator from the downstream operators. If necessary, the government is also prepared to consider legislation to achieve such effective open access for downstream operators in the next generation broadband market.

... I would like to reiterate that the Next Gen NBN tender will require that the appointed NetCo be structurally separated from downstream operators and vice versa to be consistent with the policy objective of effective open access. The successful bidder in the RFP would have met the requirements of effective open access.”

***The proposed NBN should be structurally separate***

The objectives of structural separation are well summarized by The Infocomm Development Authority of Singapore:

Especially in the area of non-price terms, vertically integrated operators do not have the right commercial incentives to provide quality wholesale inputs to their competitors, and may act in a manner that disadvantages their competitors with respect to their own downstream businesses or their affiliates. Furthermore, the complexities of service provisioning mean that discriminatory conduct could still exist

especially in non-price terms. Structural separation has thus been discussed as a possible measure, to be applied to existing vertically integrated incumbent or dominant telecommunication operators.<sup>27</sup>

There has been a groundswell of discussion and debate in Australia about which form of “separation” ought to apply to the NBN. Recently, notable decision-makers, commentators and experts have expressed the view that the NBN provider ought to be *structurally* separated, generally on the basis that this will remove incentives for the NBN provider to engage in price and non-price discrimination in favour of its retail division to the detriment of its retail competitors. A recommendation of the of the economic stream at the 2020 Summit (2008) was that there should be structural separation of the NBN from retail broadband services.

Earlier overseas experiences provide a useful point of reference as to the value of structural policy considerations. However, NBN consideration should be cognizant of two important factors.

- the NBN will largely consist of new infrastructure; and
- the separation of service and infrastructure is an architectural opportunity in NGN networks not available in earlier technologies..

Given the NBN represents a “new beginning” in network construction and development in Australia, the NBN would ideally be owned by a separate and independent legal entity.

Acacia Australia’s position on the question of “separation” is simple: the NBN provider should be a *wholesale only* provider and therefore *ipso facto* all of the benefits of structural separation would be achieved. There would be no incentive for such a provider to engage in discrimination against its wholesale customers (*i.e.* retail rivals), because it would not have a retail division.

#### **4. CONSUMER SAFEGUARDS**

Section 10.6 of the NBN RFP specifically refers to discussion on “consumer safeguards” in the Submission. This includes the following important social issues:

- the LTIE;
- the USO; and
- any-to-any connectivity.

The regulatory principles set out in this submission will provide a sound basis for ensuring that these important consumer safeguards are protected.

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<sup>27</sup> Infocomm Development Authority of Singapore, *Consultation Paper Issued By The Info-Communications Development Authority Of Singapore Industry Structure For Next Generation Access Networks* (17 April 2008).

### *The LTIE in detail*

As discussed above, the overarching policy objective in relation to an effective and efficient NBN roll-out is the promotion of the LTIE:<sup>28</sup> fundamentally, the LTIE encompasses: (a) the promotion of competition; (b) economic efficiency; and (c) any-to-any connectivity. This will continue to be the correct policy objective to guide competition regulation of the communications industry in Australia.

In the context of the proposed NBN roll-out, the LTIE will be particularly relevant to the following matters:

- determining the terms of access to facilities required for the NBN, including for example the sub-loop and underground ducts; and
- setting wholesale access prices for the NBN.

### *What does the “LTIE” mean?*

An *NBN LTIE* should incorporate and extend these important principles. Simply stated, this means an internet protocol-based broadband network which delivers:

- *competition*: by being provided by a stand-alone, **independent provider** which **does not face any incentives to discriminate** in favour of a related retail entity. This in turn **promotes the greatest possible competition** amongst retail service providers;
- *economic efficiency*: there are price and social advantages of being a **utility-based asset**. This aims to make the **most efficient use of scarce national resources**. This in turn means that wholesale services are charged based on cost, plus a reasonable margin, therefore delivering **the greatest possible consumer outcome for all Australians**; and
- *any-to-any connectivity*: by being **available to all Australians across all technology platforms**. The NBN should be based on forward-looking technology.

This is consistent with what the Australian Competition Tribunal has had to say about the LTIE. The commentary below canvasses the current state of regulatory thinking on what the LTIE actually means and reflects the *NBN LTIE*.

The Australian Competition Tribunal in *Re Application by Seven Network Limited* [2004] ACompT 11 (the “**Seven Network case**”) made the following observations:

Having regard to the legislation, as well as the guidance provided by the Explanatory Memorandum, it is necessary, in our view, to take the following matters into account when applying the touchstone - the long-term interests of end-users:

- \* End-users: in this matter, “end-users” include actual and potential subscribers to subscription television services and other viewers in their households. The term is also likely to include businesses, such as hotels and other places where people congregate, that subscribe or may potentially subscribe to subscription television services;

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<sup>28</sup> See sub-section 3(1) of the *Telecommunications Act* and sub-section 152AB of the *Trade Practices Act*.

- \* Interests: the interests of end-users lie in obtaining lower prices (than would otherwise be the case), increased quality of service and increased diversity and scope in product offerings. In our view, this would include access to innovations such as interactivity in a quicker timeframe than would otherwise be the case; and
- \* Long-term: the long-term will be the period over which the full effects of the Tribunal's decision will be felt. This means some years, being sufficient time for all players (being existing and potential competitors at the various functional stages of the subscription television industry) to adjust to the outcome, make investment decisions and implement growth - as well as entry and/or exit - strategies.

In considering how these elements may combine, it may be the case, for example, that very low prices are in the short-term interests of end-users. Over the long-term, however, sustainably low prices (which may be higher than the "very low prices" referred to above) are more likely to enhance their interests, as the long-term interests of end-users are likely to suffer in an environment characterised by short-lived operators who fall over soon after the customer signs with them, as distinct from one in which reliable service-providers offer competitive, but sustainable, services. Moves that enhance the quality and diversity of service may be subject to a similar analysis.

The use of the "long-term" may also assist in resolving the apparent tension between the criteria in s 152AB(2)(c) and (e). For example, action that promotes competition in the short-term may deter investment and hence, over the longer-term, competition may lessen (resulting in reduction to efficiency and innovation). Moreover, an action may promote competition at the retail level (resulting in more channels offered by more operators), but may deter facilities-based competition, with fewer service providers being prepared to establish delivery mechanisms of their own than would otherwise be the case. Assessed over the long-term, however, there is less likely to be any conflict between the promotion of competition and efficiency. Nonetheless, to the extent that there are mixed effects, we will have regard to the overall or net effect.<sup>29</sup>

And further from the Seven Network case:

The LTIE test was introduced into the Act as part of the new telecommunications regime in 1997. The Explanatory Memorandum for the Trade Practices Amendment (Telecommunications) Bill 1996 provides guidance as to the interpretation and application of the LTIE test. In particular, guidance is provided in relation to the term "end-user". In this respect, the Explanatory Memorandum (under the heading 'Proposed section 152AB - Object of this Part') states:

*"The term 'end-users' recognises that telecommunications networks and services are used both by customers with a direct contractual relationship with a carrier or service provider and other end-users of carriage or content services (such as the members of a customer's household)."*<sup>30</sup>

### Promotion of competition

The exposition of the notion of competition in the case of *Re Queensland Co-operative Milling Association Ltd and Defiance Holding Ltd* has consistently been applied in Part XIC matters. In that case, the Federal Court said:

"In our view effective competition requires both that prices should be flexible, reflecting the forces of demand and supply, and that there should be independent rivalry in all dimensions of the price-product-service packages offered to consumers and customers.

Competition is a process rather than a situation. Nevertheless, whether firms compete is very much a matter of the structure of the markets in which they operate..."<sup>31</sup>

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<sup>29</sup> Seven Network case, paras 120-122.

<sup>30</sup> Seven Network case, para 47.

The Explanatory Memorandum to Part XIC expands on the promotion of competition criterion:

...it is intended that particular regard be had to the extent to which the particular thing would enable end-users to gain access to an increased range or choice of services.<sup>32</sup>

Further, the ACCC said in its LSS Pricing Principles (in the context of whether to declare the line sharing service):

In certain telecommunications markets, specific market characteristics may mean it is more efficient for there to be only one provider of a given service. In these circumstances, however, it may be that there is scope for competition to occur in downstream and/or vertically related markets. Without access to the vertically related service, however, carriers in vertically related markets will be unable to provide a final service to end-users.

Under the Act, declaration of a service can promote competition in listed services by mandating access to those services that are supplied in monopoly-provided vertically related markets. Further, under certain circumstances, the Act enables the Commission to set terms and conditions for access to these services. In turn, this can help ensure that a lack of competition in one market (the market in which the “eligible service” is supplied) does not prevent the development of competition in downstream, vertically related, markets.

In general, therefore, the Commission believes that declaration of an eligible service is likely to promote competition where the following conditions are present:

- the eligible service is an input that is used, or that could be used, to supply carriage services or services provided by means of carriage services (often referred to as ‘downstream services’); and
- competition in the market for the supply of the eligible service is unlikely to be effective in the future and this is likely to have a detrimental impact on competition in markets for downstream services.

In most cases the markets most likely to be affected by declaration are the market(s) for downstream services rather than the market in which the eligible service is supplied (where these markets are separate). This reflects the key rationale for access to essential infrastructure – that of promoting more competitive downstream markets by achieving a supply of inputs upstream at terms and conditions more reflective of competitive outcomes. Further, the aim of promoting the LTIE guides the Commission to be particularly mindful of the impact of declaration on the supply of services at the retail level.<sup>33</sup>

When the question of interpreting the meaning of the “promotion of competition” has arisen, the Tribunal has made the following pronouncements.

In the *Re Application by Sydney International Airport* [2000] ACompT 7 (the “**Sydney Airport case**”) the Tribunal said:

The Tribunal does not consider that the notion of “promoting” competition in s 44H(4)(a) requires it to be satisfied that there would be an advance in competition in the sense that competition would be increased. Rather, the Tribunal considers that the notion of “promoting” competition in s 44H(4)(a) involves the idea of creating the conditions or environment for improving competition from what it would be otherwise. That is to say, the opportunities and environment for competition given declaration, will be better than they would be without declaration.

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<sup>31</sup> *Re Queensland Co-operative Milling Association Ltd and Defiance Holding Ltd* (1976) 25 FLR 169, at 188-189.

<sup>32</sup> *Trade Practices Amendment (Telecommunications) Bill 1996 (Cth)* Explanatory Memorandum.

<sup>33</sup> ACCC, *Final Decision on whether or not a Line Sharing Service should be declared under Part XIC of the Trade Practices Act 1974*, August 2002 (“**LSS Pricing Principles**”), section 4.1.

...

The before and after tender competitive position is not, however, the appropriate focus of the Tribunal's concern in relation to the s 44H(4)(a) test. In reaching a view as to whether increased access "would promote competition", the Tribunal must look to the future on a similar basis to the way it looks at the authorisation provisions, namely the future with or without declaration. Clearly, the Tribunal must have regard to the factual position as it now stands, with the tender process completed and Jardine and Ogden selected. But it must also determine what impact, if any, declaration would have on competitive conditions over and above the post-tender outcomes.<sup>34</sup>

In the *Re Application by Telstra Corporation Limited* (No.3) [2007] ACompT 3 (the "**Telstra ULLS case**"), the Tribunal said:

We consider, with one qualification, that that observation applies to the meaning of "promoting competition" in s 152AB(2)(c) of the Act: *Seven Network Limited* (No 4) [2004] ACompT 11 at [124]. The qualification is that pursuant to s 44H(4)(a) (before its amendment) the Minister (and the Tribunal on review) had to be satisfied that access or increased access "would promote competition" in a market, whereas pursuant to s 152AB(2) we must have regard to "the extent to which" the term or condition is likely to result in the achievement of the objective of promoting competition in relevant markets. The difference in language recognised the different legislative regimes in Pt IIIA and Pt XIC. Section 44H(4)(a) (before its amendment) did not require a consideration of the extent to which access or increased access would promote competition in a market. Now s 44H(4)(a) requires the Minister (and the Tribunal on review) to be satisfied that access or increased access would promote a material increase in competition in a market. When, for example, s 152AB(2)(c) directs the Commission (and the Tribunal on review) to have regard to the extent to which averaging is likely to result in the achievement of promoting competition in rural areas, the Commission (and the Tribunal on review) must consider the extent of the competitive impact of averaging in rural areas and the likelihood of that extent, not only the improvement of the environment for competition.

Competition is a process, rather than a situation: *Re Queensland Co-Operative Milling Association and Defiance Holdings* (1976) 8 ALR 481 at 514-515. It is the way in which firms interact, and respond to each other, to ensure they best achieve their individual objectives. Under traditional economic theories of the firm, firms are normally considered to operate with the objective of maximising profits. In general, it is assumed that firms with this objective will compete to win market share from each other. In turn, competition between firms in this way is desirable from a consumer perspective because it creates incentives for firms:

- to lower their prices towards their costs of production in order to attract more consumers to their business so that they can expand their market share; and
- to seek greater productive efficiencies (now and over time) so that they may lower their costs of production. In turn, this enables them profitably to lower prices for consumers in ways that will attract more consumers to their business in order to increase their share of the market.

It is in the interests of consumers that efficient producers of services survive the process of competition as they ensure that a given service can be profitably produced at the lowest possible cost. In turn, efficient producers are able profitably to provide services to consumers at lower prices. The process of competition allows efficient suppliers to survive and displace less efficient suppliers in well functioning markets. Inefficient suppliers will produce their services at a higher cost than their rivals. They will be unable profitably to lower the prices they set for consumers to the same level as more efficient producers, with the consequence that they will be unable to win consumers and will therefore be forced out of the market. If, however, efficient suppliers are unable for other reasons to remain in the market, prices will not reduce to levels consistent with the costs of the efficient suppliers.

Accordingly, we believe it is important not to confuse the objective of promoting competition with the outcome of ensuring the greatest number of competitors. That is, the Act aims to promote competition

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<sup>34</sup> Sydney Airport case, paras 106 and 111.

because of the benefits that result from the process of competition, such as lower prices for consumers and the displacement of inefficient suppliers by efficient suppliers of services. As the Tribunal observed in *Sydney International Airport* (supra) at par [108]:

*“The Tribunal is concerned with furthering competition in a forward looking way, not furthering a particular type or number of competitors.”*<sup>35</sup>

And in *Re Application by Services Sydney Pty Ltd* [2005] ACompT 7 (the “**Services Sydney case**”), the Tribunal said:

The aim is not to ensure that the greatest number of competitors – irrespective of their level of efficiency – can enter and successfully remain in relevant markets. Rather, it is to ensure the existence of the conditions necessary to promote effective competition.<sup>36</sup>

The *NBN LTIE* is consistent with all of these pronouncements.

### *Efficient investment in infrastructure*

In order to satisfy the LTIE test, the prices should be based on the forward-looking efficient cost of providing the service.

The ACCC made the following observations in its LSS Pricing Principles (again, in the context of declaration of the service):

Many of the submissions argued that a LSS would promote the more efficient use of infrastructure, and is thereby in the LTIE. The Commission agrees that the key advantage of a LSS is that it promotes optimal use of copper loops. For example, the simultaneous provision of services on one line by two separate providers will obviate the need to install a separate line for consumers wishing to be supplied data services by one service provider and voice services from a different service provider.

...it is not clear that the terms and conditions, including price, upon which Telstra currently intends to supply a LSS, are reasonable. Further, in the absence of declaration (or the threat thereof) it is also unclear whether Telstra would have an incentive to agree to terms and conditions consistent with the LTIE into the future. To the extent that Telstra might have an incentive to set terms and conditions in a fashion different to that which one might expect in a competitive markets for this service, declaration can serve to provide a means to remedy this form of market failure. This is particularly important as the Commission believes any moves by an access provider to set terms and conditions differently to those that would arise in competitive markets would be likely to prevent participants in downstream markets from competing with Telstra effectively in those markets. This would be likely to reduce allocative and dynamic efficiency in these markets since it will impact on competitors’ ability to offer innovative and higher quality products to consumers and limit the extent to which the prices of final services consumed by end-users reflect the efficient costs of their production.<sup>37</sup>

In the *Re Application by Telstra Corporation Limited* [2006] ACompT 4 (the “**Telstra LSS case**”), the Tribunal stressed the pivotal requirement that an access provider establish that the charges in its access undertaking are based on *efficient* costs:

...we would point out that whenever an access provider seeks approval of an access undertaking from the Commission which involves a consideration of a price term by comparing it with costs, it would be

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<sup>35</sup> Telstra ULLS case, paras 96-100.

<sup>36</sup> Services Sydney case, para 136.

<sup>37</sup> ACCC, *LSS Pricing Principles*, section 6.1.

necessary, in order to satisfy the statutory framework, that the access provider establish that its costs are efficient costs.<sup>38</sup>

In the Seven Network case, the Tribunal noted that encouraging investment by access providers may be at the expense of investment by access seekers that would otherwise occur.

Efficient investment, however, implies the right mix. That is, efficient outcomes mean that optimal buy/build decisions are being made, as assessed from the perspective of end-users. By 'optimal' is meant providing the best outcome in terms of prices, quality and diversity.

...

Furthermore, caution must be exercised to ensure that the access price attaching to infrastructure is not excessive, as this would be unlikely to encourage efficient use of investments. Where certain infrastructure has excess capacity but is overpriced, further investment in infrastructure (designed to avoid the excessive access price) may not - from an end-user's perspective - be efficient. Accordingly, a balance must be reached between allowing a reasonable, but not excessive, return to access providers. Reaching this balance will assist in encouraging both the efficient use of, and investment in, infrastructure. Such balance, in turn, is likely to promote competition in the long-term.<sup>39</sup>

Again, the *NBN LTIE* is consistent with all of these pronouncements.

### *The USO*

The universal service obligation is about providing geographical equity. The proposed NBN roll-out offers the possibility of expanding the current notion of universal service beyond what has traditionally been a limited group of basic communications services (the standard telephone service, payphones and a digital data service) to more Australians.

ACIF (now Communications Alliance) has commented on the social policy relevance of the USO in a next generation network environment:

Some members of the ACIF NGN Project see there is a need to consider the introduction of digital divide legislation or additional universal service provisions in legislation to assist end-users who because of geography, economic circumstances, disability or other reasons might not otherwise have the opportunity to access new services in the future.<sup>40</sup>

Australia faces the question as to whether the USO ought to be expanded having regard to emerging technologies and information transmission capabilities. In next generation networks, voice, data and video will just be different types of traffic. However, the main policy issue will be the question of funding allocation and responsibilities amongst network providers and service providers.

### *Any-to-any connectivity*

"Any-to-any connectivity" and "interconnectivity" are central conceptual features of the Australian telecommunications regulatory framework. Any-to-any connectivity serves two primary functions: first, to ensure that end-users of a telecommunications service may

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<sup>38</sup> Telstra LSS case, para 46.

<sup>39</sup> Seven Network case, paras 130 and 134.

<sup>40</sup> See ACIF (now Communications Alliance), *ACIF Next Generation Network Project NGN Framework Options Group – Policy and Regulatory Considerations for New and Emerging Services*, p.10.

communicate with other end-users of the same or similar service,<sup>41</sup> and secondly, to support the development of competitive services.<sup>42</sup>

Whilst it is unlikely that any specific amendments to the regulatory framework will be required in relation to ensuring any-to-any connectivity in the NBN context, it is nevertheless important to recognize and preserve the unifying function which such a notion imports:

Interconnection is the most important concept in the competitive telecommunications environment, as much in transition markets as in those that are entirely competitive, because it ensures that all users benefit from the positive externalities derived from a large number of interconnected users. All PSTN concessionaries are subjected to interconnection obligations. The IP transport policy, which includes voice transport, is essentially the same, except for the fact that net externalities derive from the interconnection of both users and of resources.

Likewise, one of the key aspects of the telecommunications market opened to competitiveness refers to conditions for interconnection among all local providers of the services. Other important aspects of the issue are access to individual elements of the “local loop”, integration of Internet and IP services with the switched-circuit nets of established operators and new operators. These, will make the local environment very complex.<sup>43</sup>

### **Conclusion on consumer safeguards**

An NBN which has all of the characteristics of the *NBN LTIE* would provide the best outcomes for all Australian consumers. In particular, it would satisfy all of the regulatory requirements of the LTIE, as set out in the *Telecommunications Act* and the *Trade Practices Act*. Moreover, the structural benefits of the NBN being provided on a utility-based model by a standalone, independent wholesale provider would lead to low, cost-based wholesale prices and therefore a competitive, vibrant and innovative communications market for Australia.

## **5. CONCLUSION**

The Australian Government understands the social and economic importance of broadband for Australia. It has shown leadership and commitment to this through initiation of the NBN RFP process. Acacia Australia recognises this and believes that this can be delivered in an effective and straightforward manner which eliminates many of the legacy regulatory issues and complications.

The Government has committed to contribute \$4.7 billion to roll-out an NBN.

The NBN will deliver consumer benefits to all Australians through the promotion and development of efficient telecommunications infrastructure and through stimulation and enablement of widespread and innovative competition.

To ensure that these benefits can be achieved, certain regulatory changes will need to be considered.

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<sup>41</sup> See, e.g., *CPSS Act*, sub-section 6(2).

<sup>42</sup> See, e.g., *TPA*, section 152AB and sub-section 152CR(5).

<sup>43</sup> CITEL, Inter-American Telecommunications Commission, *Study On Characteristics Of Voice Based Networks Using IP*, September 2005, p.33.

For example, for the NBN to reach 98% of the Australian population goes beyond what would be achieved by pure market-determined activity. To make it economic to achieve the Government's objectives, the NBN provider will need to avail itself of the Government's \$4.7 billion contribution. This will almost certainly involve some degree of cross-subsidisation between the economic and uneconomic components.

This is *only* effective if the arrangements underpinning the regulatory regime mean that others (other than the NBN provider) cannot "cherry pick" or otherwise frustrate the NBN and, as this would undermine the economic viability of the NBN and compromise the attainment of its objectives.

The best way to regulate the NBN will be by using concepts from utilities regulation. In short, the NBN will require new and specific regulation based on workable and equitable principles to ensure the viability of a structurally separate and independent utility provider.

Such an approach is consistent with the policy objective of Australian telecommunications regulation, which is the promotion of the long-term interests of end-users ("**LTIE**"). Fundamentally, the LTIE encompasses: (a) the promotion of competition; (b) economic efficiency; and (c) any-to-any connectivity.

An *NBN LTIE* should incorporate and extend these important principles. Simply stated, this means an internet protocol-based broadband network which delivers:

- *competition*: by being a provided by a stand-alone, **independent provider** which **does not face any incentives to discriminate** in favour of a related retail entity. This in turn **promotes the greatest possible competition** amongst retail service providers;
- *economic efficiency*: there are price and social advantages of being a **utility-based asset**. This aims to make the **most efficient use of scarce national resources**. This in turn means that wholesale services are charged based on cost, plus a reasonable margin, therefore delivering **the greatest possible consumer outcome for all Australians**; and
- *any-to-any connectivity*: by being **available to all Australians across all technology platforms**. The NBN should be based on forward-looking technology.