National Broadband Network

Independent Cost-Benefit Analysis and Review of Regulation

Submission of NBN Co to Expert Panel in response to the Consultative Paper for the Purposes of Section 152EOA of the Competition and Consumer Act 2010

NBNCo
Bringing broadband to life

Contents

1 Executive Summary

NBN Co welcomes the opportunity to respond to the Consultation Paper for the purposes of s152EOA of the *Competition and Consumer Act 2010* (Cth) (***CCA***). This submission provides NBN Co's response to the issues raised in the Panel's Consultation Paper concerning Part XIC of the CCA.[1] In summary, NBN Co submits that the overarching rationale for the operation of Part XIC remains applicable today. Although some uncertainty may have arisen in relation to the application of Part XIC, particularly insofar as it concerns services supplied by NBN Co, this was due to the NBN Co specific aspects of the regime being relatively new and NBN Co's unique mandate. NBN Co considers that the regime is now well understood by industry and significant commercial decisions have been made on the basis of the current regime. On the whole, Part XIC operates effectively and wholesale changes to the regime are not required at this stage.

There are, however, some areas where amendments to the regime may be appropriate in order to assist its practical operation. NBN Co deals with these areas for reform. In NBN Co's view the key area for reform is the non-discrimination obligations in Part XIC. NBN Co submits that these provisions should be less restrictive in their operation:

1. NBN Co's mandate is to operate on a wholesale only, open access basis. It does not, therefore, have the same incentive as a vertically integrated operator to discriminate in a manner which is likely to adversely affect competition in downstream markets.
2. Discrimination may, in many cases, be efficiency enhancing. To the extent Part XIC prohibits all forms of discrimination, it is not therefore in the long-term interests of end-users.
3. The non-discrimination prohibition applies not only in respect of the terms and conditions on which NBN Co supplies declared services, but also when engaging in a broad range of circumstances. This has significant unintended consequences and has led to many operational difficulties and inefficiencies for NBN Co.
4. The fact that discrimination may in some circumstances be efficiency enhancing was envisaged in the exceptions that appeared in the original drafts of the relevant provisions. The current non-discrimination obligations contain no such exceptions and, as mentioned, have led to operational difficulties and inefficiencies for NBN Co.

NBN Co submits that the non-discrimination obligations should therefore be subject to an efficiency exception and that the prohibition on non-discrimination in s152AXD should be repealed in full. NBN Co deals with these propositions in this submission and also relies on the attached expert report prepared by Castalia Strategic Advisors.

For the reasons set out in this submission, NBN Co submits that the non-discrimination obligations in Part XIC should be amended regardless of whether NBN Co acts as a monopoly wholesale provider. However, to the extent NBN Co faces infrastructure based competition, including as a result of any legislative changes arising from the Panel's recommendations, NBN Co submits that additional amendments need to be made to Part XIC to reflect the change in NBN Co's status. There should also continue to be an emphasis on ensuring that NBN Co competes on a level playing field with its competitors.

This submission has been prepared on the basis of NBN Co's current situation: that is, that NBN Co faces limited competition from vertically integrated fixed line infrastructure providers. We do not make any detailed recommendations about what changes to Part XIC may be required if NBN Co were to face infrastructure based competition.

[1] Part XIC exists alongside Part XIB, a regulatory regime that is also specific to the telecommunications industry and which deals with anti-competitive conduct and record-keeping. We assume that the Panel is not examining Part XIB, and note that such an examination might form part of the 'root and branch' review of Australia's competition laws (see Competition Policy Review Terms of Reference, 27 March 2014).

That said, NBN Co acknowledges that the question of infrastructure based competition is being considered by the Panel. While NBN Co understands that this is a policy matter for Government, it is important to emphasise that infrastructure based competition in major urban areas would undermine NBN Co's ability to fund affordable universal access to broadband infrastructure via an internal cross subsidy (i.e. via uniform national wholesale pricing). Any change to existing arrangements would require the Panel to consider alternative models of funding, such as subsidy mechanisms and industry levies. Further – and critically – any introduction of infrastructure based competition would necessarily impact upon the appropriateness of the entire regulatory framework, which is premised on the assumption that NBN Co will operate as a monopoly wholesale provider. Should the Panel intend to recommend a market structure in which there will be infrastructure based competition, NBN Co would urge the Panel to consider whether the existing framework, and its individual provisions, would remain appropriate.

2 Structure of Submission

This submission is structured as follows:

Section 3 addresses the role of NBN Co. It discusses NBN Co's mandate and objectives, the establishment of NBN Co, the regulatory regime to which it is subject and the current competitive landscape.

Section 4 outlines the establishment and subsequent reviews of Part XIC and its current operation. The section addresses NBN Co's activity to date under Part XIC and submits that maintaining Part XIC facilitates industry certainty.

Section 5 explains why Part XIC is more fit for purpose than Part IIIA.

Section 6 outlines the practical experience of NBN Co with Part XIC to date, and those areas that have worked well.

Section 7 addresses aspects of Part XIC which have given rise to not readily anticipated operational difficulties and inefficiencies, and in respect of which amendment should be made, including the non-discrimination obligations.

The **Annexure** summarises NBN Co's response to questions asked by the Panel in its Consultation Paper.

3 The role of NBN Co

This section outlines the Government's objective in establishing NBN Co and the regulatory regime created to enable NBN Co to fulfil its mandate. Any consideration of legislative change necessarily invites an assessment as to whether such change will enhance or detract from NBN Co's ability to achieve that mandate.

3.1 Mandate and objectives

NBN Co was created as a commercial undertaking charged with building, operating and maintaining the national broadband network (***NBN***).

To achieve that mandate, the Government determined that a corporate form (rather than an agency of government) was required and NBN Co was established as a public company limited by shares incorporated under the *Corporations Act 2001* (Cth).

The Government's policy objective for NBN Co was clear from NBN Co's inception: NBN Co was to operate on a wholesale-only, open access and non-discriminatory basis and, by doing so, fundamentally reshape the structure of the Australian telecommunications sector and provide a platform for robust competition. The wholesale-only mandate has been given effect to in the constitution of NBN Co.[2]

Under the constitution of NBN Co its directors have the power to cause the company to build, operate and maintain a national wholesale broadband network, but may only cause the company to do so consistent with Government policy as communicated to NBN Co by the Government from time to time.

[2] NBN Co Constitution, rule 4

3.2 Monopoly national fixed line network: regulatory regime

NBN Co was 'planned as a monopoly national fixed line network (with the exception of existing fixed line infrastructure) as far as practical from the points of interconnect to the premises'.[3] The regulatory regime under which NBN Co operates currently reflects this, and as a consequence NBN Co operates in a highly regulated environment.

The *Telecommunications Act 1997* (Cth) and the CCA regulate all telecommunications industry participants, including NBN Co. NBN Co is also regulated by the specific requirements of the *National Broadband Network Companies Act 2011* (Cth) (the ***NBN Co Act***).

(a) NBN Co Act

To ensure that NBN Co remains a wholesale-only operator, the scope of NBN Co's commercial activities is constrained by the NBN Co Act. This legislation imposes restrictions on NBN Co's business activities (sometimes referred to as line of business restrictions), including provisions that have as their object:

- to ensure that the supply of services by NBN Co is effectively wholesale-only;[4]
- to ensure that NBN Co does not supply a content service;[5]
- to ensure that NBN Co does not supply services other than an enumerated list of services;[6] and
- to ensure that NBN Co does not supply non-communications goods.[7]

Consequently, NBN Co can only supply services to:

- carriers and carriage service providers; and
- specified utilities, in which case the NBN Co services may only be used for the utilities' own use and must not be resupplied.

The Communications Minister also has the power to require NBN Co to supply, or not supply, particular services.

(b) Part XIC of the CCA

To ensure NBN Co operates on an open access basis, amendments were made to Part XIC of the CCA to regulate all of NBN Co's supply related activities. Relevantly, Part XIC provides that all eligible services supplied by NBN Co must be declared services for the purpose of Part XIC. NBN Co's services are subject to supply and non-discrimination requirements, and oversight by the ACCC including pricing oversight.

Part XIC and its application to NBN Co is discussed further below.

3.3 The future of NBN Co

To support the establishment of NBN Co, the Government amended the telecommunications regulatory framework by introducing new legislation and amending existing legislation, including Part XIC of the CCA.

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[3] Minister for Finance and Deregulation and Minister for Broadband, Communications and the Digital Economy, *Statement of Expectations*, December 2010, p 4
[4] NBN Co Act, s9
[5] NBN Co Act, s17
[6] NBN Co Act, ss5 and 18
[7] NBN Co Act, s19

The expressed aim of the legislative reform was to 'facilitate a competitive and well-functioning telecommunications sector and assist NBN Co to fulfil its mandate'.[8]

As the Panel is aware, recent developments suggest that NBN Co may face more competition from other network providers than was originally anticipated. TPG has announced its intention to roll out fibre to the basement (***FTTB***) infrastructure to premises and apartments in 'high value' suburban areas. Other network providers have stated that if TPG progresses with this plan, they too may roll out FTTB networks in competition with NBN Co. This activity will obviously have a material impact on NBN Co's business case which, absent other regulatory and policy reforms, will adversely impact the achievement of the Government's broader policy objectives.

If NBN Co is to face infrastructure based competition, including of the kind NBN Co potentially faces from TPG, NBN Co submits that it follows inevitably that:

- NBN Co itself should not be regulated as a national monopoly wholesale-only provider. For example, there arises a compelling case for removing the non-discrimination obligations in their entirety and for removing the obligations requiring NBN Co to supply only declared services; and
- If NBN Co is subject to regulation, then other competing providers should face the same regulatory framework as NBN Co, in order to create a level playing field and ensure that the long-term interests of end-users continue to be met. In such a scenario, for example, other providers should be subject to the same Standard Access Obligations as NBN Co and required to offer services on a wholesale basis.

NBN Co points to the submission made by Treasury to the Panel's Regulatory Issues Framing Paper.[9] That submission highlights the potential problems faced by NBN Co in responding to infrastructure based competition during the build phase of the NBN. In particular, the Treasury submission notes that NBN Co's capacity to respond to competition that may emerge in particular geographies is constrained by its mandate to provide universal access to certain minimum standards, within its budget. The Treasury submission concludes that the costs of unfettered competition outweigh the benefits during the build phase of the NBN, and the existing regulatory arrangements and policy commitments in relation to the NBN reflect this.[10]

The situation may be different post-build, where NBN Co may be in a better position to respond to competitive entry or the threat of entry. However, analysis on this basis is only speculative at this stage.[11] A review of regulatory arrangements in a post-build environment would be consistent with the Panel's working assumption that regulation should be subject to periodic, transparent and independent review to ensure its benefits exceed its costs.

NBN Co also submits that any recommendation by the Panel that NBN Co should face infrastructure based competition must recognise that such competition is incompatible with the current regulatory settings, whereby the provision of broadband infrastructure in uneconomic-to-serve locations is funded via a cross-subsidy which is internal to NBN Co. Infrastructure based competition in major urban areas would undermine NBN Co's ability to fund affordable universal access to broadband infrastructure via an internal cross subsidy, such that a new model of funding may be required. So much has been recognised in a number of submissions responding to the Panel's Regulatory Issues Framing Paper. Specifically, the submissions by Treasury and Opticomm, and the joint submission by John de Ridder and Robert James, all recommended that infrastructure in high cost to serve locations be funded by an industry levy or 'excise-tax'. Treasury stated that implementing such a funding model would be challenging, but not impossible, and that it would

[8] Minister for Finance and Deregulation and Minister for Broadband, Communications and the Digital Economy, *Statement of Expectations*, December 2010, p 2

[9] Treasury, 'Submission to the independent cost-benefit analysis and review of regulation for the National Broadband Network: Regulatory issues framing paper', 19 March 2014, pp 7-11

[10] Treasury, 'Submission to the independent cost-benefit analysis and review of regulation for the National Broadband Network: Regulatory issues framing paper', 19 March 2014, p 11

[11] The Government has stated its expectation that it will retain full ownership of NBN Co until after the roll out of the NBN is complete. Privatisation can only occur after the Minister declares the NBN to be built and fully operational: NBN Co Act, Part 3

bear similarities to the model used to give effect to Telstra's Universal Service Obligation (***USO***).[12] Opticomm, and de Ridder and James, went a step further, arguing that such a funding model should be implemented by revising the current USO arrangements.[13]

Accordingly, how and the extent to which NBN Co should be regulated in the future requires a decision to be made on whether NBN Co will continue under its current mandate and mode of operation. This decision will in turn require a decision about how the Government's wider broadband policy objectives will be achieved. In this submission NBN Co provides its view of Part XIC as it applies to NBN Co's current situation.

[12] Treasury, 'Submission to the independent cost-benefit analysis and review of regulation for the National Broadband Network: Regulatory issues framing paper', 19 March 2014, p 9-10

[13] OptiComm, Letter to the NBN Regulatory Review, 14 March 2014, p 9; John de Ridder and Robert James, 'Submission to the NBN Regulatory Review', March 2014, p 6

4 Part XIC is relevant and appropriate

The rationale for introducing Part XIC was to provide an access regime for the telecommunications industry designed to accommodate the unique characteristics of that industry. Part XIC reflects telecommunications specific policy objectives, with a focus on the long-term interests of end-users. Part XIC has been the subject of continuing review and reform.

The rationale for the regime remains applicable today. The regime is operating more effectively than it has previously and it is now well understood by industry.

4.1 Part XIC is an established regime that has been subject to extensive review

(a) Purpose of introducing Part XIC

When Part XIC was introduced into what is now the CCA, the telecommunications industry was described as a 'complex, technically detailed network industry', attended by 'particular policy interests'.[14] These factors were reflected in the mechanisms imported by Part XIC. The Second Reading Speech to the Trade Practices Amendment (Telecommunications) Bill 1996 (Cth) (the ***1996 Bill***), which introduced Part XIC, explained Parliament's approach as follows:

> '*[T]he government's philosophy in preparing the telecommunications access regime has been to follow an approach based on part IIIA of the Trade Practices Act as far as practicable – nevertheless, to introduce some additional refinements to ensure that the arrangements will work effectively for the telecommunications industry*.'[15]

The discrete regime introduced by Part XIC reflected:

- **A unique objective**: the objective of Part XIC is expressed to be the promotion of the long-term interests of end-users (***LTIE***).[16]
- **The rapid rate of technological change**: this sets the telecommunications industry apart from other industries that exhibit natural monopoly characteristics and requires a regime sufficiently flexible to respond to technological developments.

  > *'The Second Reading Speech to the 1996 Bill noted '[t]he fast pace of change' and recognised the need for a dynamic, responsive regulatory framework 'within which the industry can develop additional arrangements to improve the efficiency with which access is supplied'.17 It also pointed out that carriers and service providers 'must be given the flexibility to engage in normal competitive conduct' and that 'Australian consumers will not benefit from regulation that unnecessarily hampers the ability of operators to respond to the market*.'[18]

- **The particular significance of network effects**: Part XIC provides that, in applying the LTIE test, regard must be had to the objective of achieving any-to-any connectivity. As the Second Reading Speech to the 1996 Bill noted, 'this any-to-any feature – and the Government's commitment to promote the diversity of carriage and content services available to end-users – requires an access regime that includes additional features to those contained in the general access regime in part IIIA'.

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[14] Explanatory Memorandum to the Trade Practices Amendment (Telecommunications) Bill 1996 (Cth)
[15] House of Representatives, *Hansard*, Trade Practices Amendment (Telecommunications) Bill 1996 (Cth), Second Reading Speech, 5 December 1996, p 7804
[16] *Competition and Consumer Act 2010* (Cth) (***CCA***), s152AB
[17] House of Representatives, *Hansard*, Trade Practices Amendment (Telecommunications) Bill 1996 (Cth), Second Reading Speech, 5 December 1996, pp 7804-7805
[18] House of Representatives, *Hansard*, Trade Practices Amendment (Telecommunications) Bill 1996 (Cth), Second Reading Speech, 5 December 1996, p 7803

(b) Productivity Commission review 2001

The need for an industry-specific access regime was reiterated by the Productivity Commission in its 2001 report concerning telecommunications competition regulation.[19] The Productivity Commission recommended that Part XIC be retained, despite the views of some industry participants that Part IIIA provided a sufficient regulatory framework. The Productivity Commission concluded that:

> '*[There] is a good case for an access regime to apply to telecommunications.*
>
> *With appropriately set access prices, such an approach is more likely than other measures to increase efficient competition in final markets with gains, such as, lower retail prices, greater innovation and product differentiation, and heightened incentives for cost cutting by the incumbent.*
>
> *While there are few policy relevant features that are unique to telecommunications, the overall combination of features does appear to make telecommunications different from other regulated utilities in some policy relevant dimensions. These include the speed of market and technological change, and the relevance of network effects.*'[20]

(c) Reform of Part XIC

Subsequent to the Productivity Commission's review, a series of reforms to Part XIC were introduced:

- In 2002, two changes were made that aimed to facilitate investment in new telecommunications infrastructure by extending the existing provisions relating to exemptions and undertakings:[21]
    - an extension of the ability of the ACCC to grant exemptions from standard access obligations in respect of services not yet in existence; and
    - amendment of the provisions relating to access undertakings by permitting the ACCC to accept undertakings from both existing and potential access providers, irrespective of whether the services concerned had been declared or were yet in existence.

  Further, the objects clause was refined to refer to promoting the economically efficient use of, and the economically efficient investment in, the infrastructure by which listed services are supplied.
- In 2005, further amendments were made to facilitate faster, more predictable processes for the ACCC's consideration of access exemption applications, access undertakings and access disputes, and to provide enhanced enforcement options. The object of these changes was 'to encourage greater investment in telecommunications infrastructure and to increase the effectiveness of the regime'.[22]
- In 2010,[23] an amendment was made to take into account industry concerns about the operation of the access regime in particular the 'negotiate/arbitrate' model.[24] Under the negotiate/arbitrate model, if parties could not agree on the terms of access to a declared service, either party could refer the dispute to the ACCC for arbitration.[25] In the industry's experience the model did not operate effectively. The model was abandoned and in its place, a mechanism was introduced for the ACCC to set up-front prices and non-price terms which would act as a default benchmark if agreement on terms could not be reached.

[19] Productivity Commission, Telecommunications Competition Regulation, Inquiry Report, Report No 16, 20 September 2001
[20] Productivity Commission, Telecommunications Competition Regulation, Inquiry Report, Report No 16, 20 September 2001, p 243
[21] Regulation Impact Statement, Telecommunications Competition Bill 2002 (Cth)
[22] Explanatory Memorandum to the Telecommunications Legislation Amendment (Competition and Consumer Issues) Bill 2005 (Cth)
[23] *Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Act 2010* (Cth)
[24] Explanatory Memorandum to the Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2010 (Cth)
[25] Explanatory Memorandum to the Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2010 (Cth)

This change formed part of a package of legislative reforms directed at enhancing competitive outcomes and strengthening consumer safeguards in the Australian telecommunications industry.[26] Measures were also introduced preparing for the introduction of the NBN. The amending legislation also introduced changes associated with the structural separation of Telstra.

- In 2011, Part XIC was further amended.[27] The 2011 amendments, coupled with the NBN Co Act, were designed to give effect to the Government's vision of NBN Co operating on a wholesale-only, open access basis.[28] The detail of these legislative reforms has already been discussed in section 3.2, above**.**

(d) Current regime

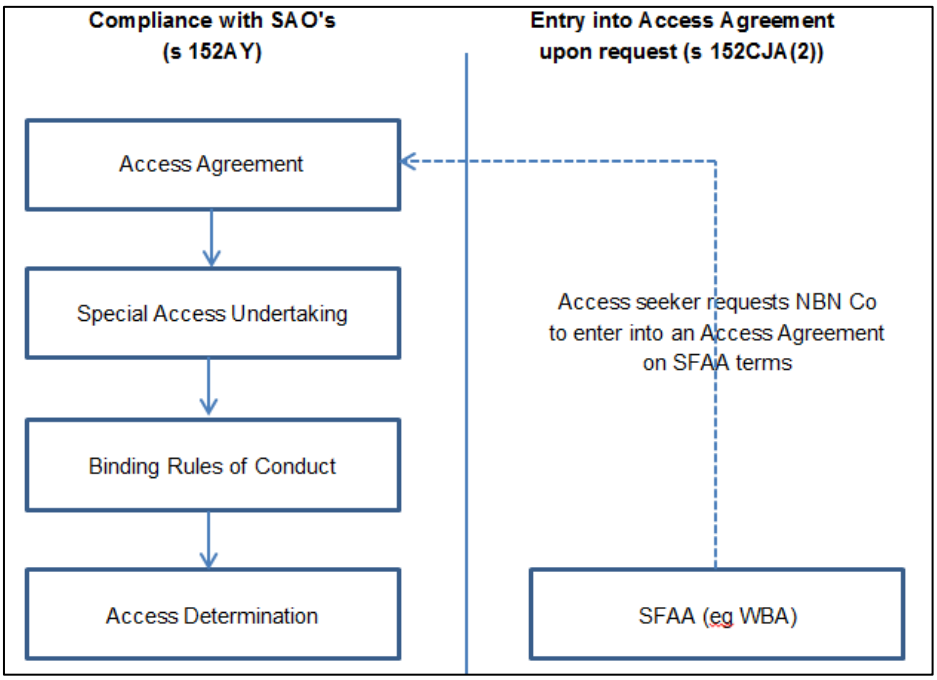
The essential elements of Part XIC as they apply to services provided by NBN Co are as follows:

- NBN Co can only supply eligible services which are declared, or non-communications goods that are for use in connection with the supply of an eligible service.[29]
- As NBN Co's services are necessarily declared, it is required to comply with standard access obligations,[30] known as Category B Standard Access Obligations (***SAOs***).[31]
- The terms and conditions upon which NBN Co supplies services may be contained in a number of regulatory instruments, namely, access agreements, Special Access Undertakings (***SAU***), Binding Rules of Conduct (***BROCs***) and Access Determinations.[32] The first two of these instruments are created by NBN Co and are subject to ACCC oversight. The latter two constitute a means by which the ACCC can establish regulated terms and conditions of access to services supplied by NBN Co.
- NBN Co may publish open offers to provide access to its services, known as Standard Form of Access Agreements (***SFAAs***).[33] If it does so, NBN Co must upon request enter into an access agreement on the terms and conditions contained in the SFAA. Therefore, once executed, the SFAA becomes an access agreement and is governed by the applicable SAOs.[34]
- Given the many means by which terms and conditions can be specified, Part XIC provides a hierarchy which would apply in the case of inconsistency. That hierarchy is: (1) access agreement (including SFAAs upon request by an access seeker), (2) SAU, (3) BROC, (4) Access Determination.
- NBN Co is subject to a non-discrimination obligation,[35] and is permitted to engage in certain authorised conduct.[36]

[26] Explanatory Memorandum to the Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2010 (Cth)
[27] *Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Act 2011* (Cth)
[28] Explanatory Memorandum to the National Broadband Network Companies Bill 2010 (Cth) and the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010 (Cth)
[29] CCA, ss152AL and 152CJA(1); NBN Co Act, s19
[30] CCA, ss152AZ and 152BA
[31] CCA, s152AXB
[32]CCA, s152AY
[33] CCA, ss152CJA(2)(b) and 152CJF
[34] CCA, s152CJA(2)
[35] CCA, ss152AXC and 152AXD
[36] CCA, s151DA

The hierarchy of terms is diagrammatically pictured in Figure 1 below:[37]

Figure 1



4.2 NBN Co's activity to date under Part XIC

(a) SAU

NBN Co's SAU was approved by the ACCC in December 2013 after a robust process involving a significant period of industry consultation and engagement between NBN Co and the ACCC.

Among other things, the SAU regulates key aspects of NBN Co's products and pricing. NBN Co faces the constraint of long-term price controls in the context of very substantial up-front capital commitment, with cost recovery dependent on users migrating to higher speed services with higher data usage.

(b) SFAAs

As required by Part XIC of the CCA, NBN Co publishes SFAAs that relate to the supply of products and services to its customers. The principal SFAA for the provision of access services is currently the Wholesale Broadband Agreement, or WBA.

NBN Co currently has the following SFAAs:

Standard form of access agreement	Scope of agreement	First published
Wholesale Broadband Agreement 2.0	Provision of services via fibre and fixed wireless	13/12/2013
Satellite Wholesale Broadband Agreement	Provision of services via NBN Co's interim satellite service	16/05/2012
Test Agreement	Testing of services prior to commercial launch	05/08/2013

[37] Australian Competition and Consumer Commission, *NBN Co Special Access Undertaking Final Decision*, 13 December 2013, p 26

4.3 Rationale for Part XIC remains applicable

In NBN Co's view, the rationale behind Part XIC remains as applicable today as it was on enactment. As outlined above, Part XIC was created to, and does, address specific issues that arise in the telecommunications industry, namely:

- the fast pace of technological change;
- the monopoly characteristics of the market; and
- significant network effects.

4.4 Maintaining Part XIC facilitates industry certainty

Industry and the ACCC understand Part XIC well. In particular, there is broad acceptance of the usefulness and meaning of the LTIE test, being the objective of Part XIC by reference to which the ACCC makes its decisions in relation to the Part's operation.

Given the period for which it has been in place, and the numerous ACCC and Australian Competition Tribunal decisions which have applied the LTIE test, it is now well understood by industry stakeholders.[38]

[38] See, for example: *Seven Network Limited (No 4)* [2004] ACompT 11, [120]; *Application by Chime Communications Pty Ltd (No 2) [2009] ACompT 2* (27 May 2009), pp 12-14; and ACCC, Assessment of FANOC's Special Access Undertaking in relation to the Broadband Access Service – Draft Decision, December 2007, pp 32-33

5 Part XIC is more fit for purpose than Part IIIA

The Panel's Consultation Paper refers to a number of alternatives to Part XIC, including the general access regime in Part IIIA of the CCA.[39] In NBN Co's view, Part IIIA does not provide an appropriate access regime for a number of reasons, among them the fact that Part IIIA is currently in a state of flux and any transition away from Part XIC would introduce an unacceptable level of uncertainty.

5.1 Part IIIA is in a state of flux

There is room for incremental improvements to Part XIC, and some principles, such as permitting efficient price discrimination, which are included in Part IIIA[40] should be introduced to Part XIC as described further below. However, NBN Co is concerned that any move to relying on the more general Part IIIA regime would undermine the regulatory certainty which Part XIC currently provides to the industry.

Part IIIA is itself in a state of flux and uncertainty. In particular:

- Part IIIA has seen limited use,[41] such that many of its provisions remain relatively untested;
- Important aspects of Part IIIA have been the subject of lengthy and contentious disputes, the most evident being those relating to Pilbara rail access,[42] with remaining uncertainties around how declaration criteria should be interpreted and the operation of directed extension powers;[43]
- Part IIIA has been the subject of a recent Productivity Commission inquiry,[44] which recommended changes to important aspects of the regime such as the declaration criteria, including overturning a recent interpretation of the High Court; and
- Part IIIA and the Productivity Commission's recommendations now form part of the 'root and branch review' of Australia's competition laws,[45] such that the Government's response to the Productivity Commission's recommendations will not be known until after the root and branch review panel's recommendations (scheduled to be made within 12 months).

The application of Part IIIA to the telecommunications industry is likely to introduce uncertainty with potential consequences to chill investment and cause disputes in what is currently a period of dynamic investment and innovation.

5.2 Part IIIA is not tailored to the telecommunications industry

Part IIIA and the National Gas Laws and State access regimes based on Part IIIA, have traditionally been used to regulate access to rail lines, gas pipelines, ports and water and sewerage infrastructure.

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[39] *Cost-Benefit Analysis and Review of Regulatory Arrangements for the National Broadband Network – Telecommunications Regulatory Arrangements Consultation Paper for the Purposes of section 152EOA of the Competition and Consumer Act 2010*, March 2014, p 22

[40] CCA, s44ZZCA(b)(i)

[41] Productivity Commission 2013, *National Access Regime*, Inquiry Report No. 66, Canberra , pp 51 – 53

[42] Including *The Pilbara Infrastructure Pty Ltd v Australian Competition Tribunal* (2012) 246 CLR 379; *Pilbara Infrastructure Pty Ltd v Australian Competition Tribunal* [2011] FCAFC 58; and *Re Fortescue Metals Group Limited* [2010] ACompT 2

[43] See for example, Productivity Commission 2013, *National Access Regime*, Inquiry Report No. 66, Canberra, pp 151-152, 171 and 257-259

[44] Productivity Commission 2013, *National Access Regime*, Inquiry Report No. 66, Canberra

[45] Item 3.3.6 Competition Policy Review Terms of Reference, 27 March 2014

Those industries are typically less dynamic than the telecommunications industry. They are characterised by technology that is older and the relevant infrastructure typically provides a single service, with terms provided to customers often only differing materially between customers in terms of quantity and the point of origin and destination.

The fact that Part IIIA is designed to address infrastructure of a fundamentally different nature is evidenced by the following examples:

- the negotiate-arbitrate model arguably works more effectively in Part IIIA (where there are often more discrete and fewer issues which a regulator has to prescribe in an arbitration) than it ever did in the telecommunications industry until 2010 when it was removed from Part XIC; and
- the declaration criteria are expressed as rigid hurdles and with far less focus on interaction with other infrastructure and outcomes for end-users than is appropriate in the telecommunications industry (as reflected in the differing language and flexibility incorporated in the LTIE Test).

The Productivity Commission has recognised that industry specific regimes can be appropriate and that 'because of its special characteristics and history, the telecommunications sector has its own access regime that reflects unique features'.[46]

While there is, and will continue to be, a degree of commonality in the economic regulatory principles applied in Part IIIA and Part XIC, the process for acceptance of NBN Co's SAU demonstrated that there is currently sufficient discretion left to the regulator to draw on such principles where considered appropriate.[47] Any attempt to impose Part IIIA more generally on a telecommunications industry to which it is ill-suited would unfortunately be seeking to insert a 'square peg in a round hole' and would risk losing features of the regulatory framework which have been customised to address the recognised special features of Australia's telecommunications industry.

[46] Productivity Commission 2013, *National Access Regime*, Inquiry Report No. 66, Canberra, p 268

[47] As show in the reasoning apparent in Australian Competition and Consumer Commission, *NBN Co Special Access Undertaking Final Decision*, 13 December 2013 and NBN Co Limited, *Supporting Submission NBN Co Special Access Undertaking*, 28 September 2012

6 NBN Co's experience with Part XIC

6.1 Part XIC generally works well

NBN Co believes that the access regime in Part XIC generally works well.

In the following sections of this submission NBN Co describes its practical experience of Part XIC. Section 6 outlines areas that have worked well. Section 7 addresses those aspects which have given rise to not readily anticipated operational difficulties and inefficiencies.

6.2 Hierarchy of regulatory instruments is well understood

The Panel has asked for the industry's view on whether the current hierarchy of regulatory instruments is appropriate and whether the SFAA processes are working effectively. Currently, the hierarchy of regulatory instruments is as set out above in section 4.1. The Panel has also asked whether SFAAs should be given a formal place in the hierarchy, logically below access determinations.[48]

The hierarchy of regulatory instruments that govern NBN Co's provision of services is now well understood and, broadly speaking, works well. Despite some early difficulties stemming from the fact that the regime was initially not well understood, industry participants are now familiar with how the hierarchy operates.

NBN Co submits that SFAAs should not form part of the hierarchy. The SFAA has a clear and understood function under Part XIC. It operates, upon request by an access seeker, as an access agreement, which sits atop the hierarchy of legislative instruments shown in figure 1, above.

NBN Co submits that Part XIC should continue to give primacy to commercial agreements. The current model promotes certainty for both access seekers and access providers, who would otherwise be unsure of whether their negotiated agreements would be re-opened.

In addition, a regime that prioritises negotiated agreements has a number of advantages that were identified by the Productivity Commission in its 2001 report concerning telecommunications competition regulation:

The potential advantages of commercially negotiated contracts over arbitration are that they:

- allow parties to negotiate terms and conditions appropriate to the particular circumstances of the parties;
- preserve any proprietary information inherent in such negotiations; and
- may permit a more decentralised and light-handed regime by letting private parties determine terms and conditions, rather than requiring the regulator to prescribe these.[49]

The most obvious alternative to a hierarchy that gives primacy to commercial agreements would be a dispute resolution system akin to the negotiate/arbitrate model that formerly existed under Part XIC and was marred by a large number of protracted and costly access disputes.

Another alternative would be to adopt a model similar to the model which applies to 'covered' gas pipelines under the National Gas Law (in the absence of a light regulation determination), where the Australian Energy Regulator (the ***AER***) is required to approve access arrangements which set out the terms and conditions on which third parties can access the pipeline.[50] That model involves the AER undertaking public consultation

[48] *Cost-Benefit Analysis and Review of Regulatory Arrangements for the National Broadband Network – Telecommunications Regulatory Arrangements Consultation Paper for the Purposes of section 152EOA of the Competition and Consumer Act 2010*, March 2014, p 21

[49] Productivity Commission, Telecommunications Competition Regulation, Inquiry Report, Report No 16, 20 September 2001, p 351

[50] Section 132 of the *National Gas Law* as established by the *National Gas (South Australia) Law 2008* (SA) and application legislation in other participating jurisdictions

on the terms of the access arrangement before approval and a draft decision being made by the AER, followed by further consultation before any final decision on approval is made[51] (and requires re-approval by the AER in the event of any subsequent changes)[52]. It is a process designed to provide stable terms for a stable infrastructure service where the technology is not changing and the spectrum of reasonable terms is well understood by industry participants and the economic regulator.

NBN Co considers that the time-consuming and rigid nature of the access arrangement regime in the National Gas Law would be ill-suited to an industry as dynamic as the telecommunications industry and that the additional regulatory burden not justified by any better outcome for consumers. In contrast, under Part XIC as it currently stands, ACCC intervention, in the form of an access determination, can occur to deal with the situation where agreement cannot be reached. If prompt action is required, the ACCC can act swiftly by issuing BROC.

The Panel has also asked whether NBN Co should be permitted to make SAUs in relation to declared services. For the reasons identified by the Panel itself at page 9 of the Consultation Paper, NBN Co considers that the SAU model is an appropriate methodology (used as part of the hierarchy of regulatory instruments) for regulating and setting terms and conditions of access to NBN Co's services, and accordingly it is not necessary to consider an alternative methodology or approach to determining prices at this stage.

6.3 Duration of declarations

In respect of the ACCC's power to declare services the Panel has sought comments on whether there are services that should be declared on an enduring basis. Declarations are currently required to expire on a specific date.[53]

As a general proposition, NBN Co believes that the mechanisms in Part XIC that limit the duration of a declaration are appropriate.[54] They strike a balance between the need to provide long-term certainty and the need to preserve the flexibility necessary to respond to changes in the industry.

NBN Co further submits that allowing an access provider to submit a long-term SAU (such as NBN Co's SAU) is consistent with maintaining this balance. NBN Co's SAU, which was accepted by the ACCC on 13 December 2013, will endure for a 30-year term. The rationale behind this long overall term is to provide certainty in regard to NBN Co's long-term cost recovery framework, which needs to account appropriately for the unrecovered costs that will accumulate over the course of the rollout and the early years of the NBN's operation.[55] At the same time, the SAU incorporates a modular structure that will enable regulatory terms and conditions to evolve, as required, over the course of the SAU's term.[56]

A report by Synergy Economics Consulting identified the following factors in support of NBN Co's long-term SAU:

- it strikes an appropriate balance between allowing sufficient scope for investors to recover their costs, and the risk associated with the size of the investment given the low level of likely initial uptake relative to the eventual capacity of the NBN;
- longer-term undertakings are necessary to foster efficient outcomes for major new infrastructure projects characterised by demand risk and long investor payback durations;

[51] National Gas Rules, ss58-62
[52] National Gas Rules, s65
[53] CCA, s152ALA
[54] CCA, s152ALA
[55] On this point, see NBN Co's submission in support of the NBN Co Special Access Undertaking, 28 September 2012, p 43; and see further section 4.3 of that submission
[56] See NBN Co's submission in support of the NBN Co Special Access Undertaking, 28 September 2012, p 44

- the terms and conditions in the SAU that are prescribed at the outset for the full term reduce regulatory risk;
- in so far as there is a risk that costs and prices will deviate from efficient levels, the SAU contains safeguards that can reasonably be expected to prevent this; and
- the modular structure, which differentiates between the network roll-out and mature phases of NBN operation, allows the terms of the SAU to adapt efficiently to changing market circumstances in the future.[57]

In accepting NBN Co's SAU, the ACCC noted that this was the first time that the ACCC had accepted an undertaking of such a duration. The ACCC went on to state:

> '*However, the ACCC considers that the length of the SAU is appropriate given the modular structure of the SAU, which allows for different matters to be 'locked in' for different periods*.'[58]

6.4 Scope of NBN Co's supply and dealings with third parties

(a) Supply of eligible services on a wholesale-only basis

NBN Co submits that the requirement that NBN Co supply only to carriers and carriage service providers is an appropriate means of giving effect to its wholesale-only obligation. The definitions of 'carrier' and 'carriage service providers' are well understood within the industry and easy to apply. The restriction is working well in practice to preserve NBN Co's status as a wholesale-only provider.

Even where large corporate customers do purchase services from NBN Co for their own internal use, that is, not for retail purposes, NBN Co remains a wholesale-only provider, as its products are not sold in a form suitable for end-user consumption (except in a small subset of cases). Corporate customers which are prepared to meet the requirements of being a carrier or a carriage service provider are entitled to become a customer of NBN Co and to compete with other entities meeting those requirements, increasing the level of retail competition in the market.[59]

(b) NBN Co's ability to supply to utilities

The CCA requires that the statutory review of the telecommunications industry access arrangements address sections 11-16 of the NBN Co Act, which allow NBN Co to directly supply services to a number of utilities: s152EOA. As stated in the Consultation Paper, these exceptions to NBN Co's wholesale-only obligation were designed to assist utilities with the management of their networks, recognising the practical synergies that the NBN can provide utilities and the fact that several of these utilities would, but for statutory exemptions, be required to obtain carrier licences.

While these provisions have not yet been used, the rationale for their inclusion in the regulatory regime still exists. NBN Co submits that the provisions remain appropriate, and do not require alteration.

6.5 Part XIC and the concept of 'significant market power'

NBN Co submits that Part XIC should continue to be of general application, and should not focus solely on parties with significant market power. The Consultation Paper asserts that the concept of significant market power is well understood in broader competition law, without acknowledging that defining the circumstances in which a party has significant or substantial market power is a difficult and complex task. Building this

[57] Synergies Economics Consulting, 'Advice on NBN Co Ltd's Special Access Undertaking', September 2012, p 4
[58] Australian Competition and Consumer Commission, *NBN Co Special Access Undertaking Final Decision*, 13 December 2013, p 8
[59] See NBN Co's comments to the Senate Environment and Communications Legislation Committee on 9 March 2011 in Sydney

additional requirement into Part XIC would increase the level of regulatory uncertainty associated with Part XIC.

Instead, the power to determine whether particular access providers (for example, access providers without market power) should be exempt from the SAOs should rest with the ACCC. This could be achieved by the ACCC being able to grant an exemption. The ACCC is already able, in an access determination, to provide that any or all of the SAOs are not applicable to a provider,[60] and to restrict or limit the application of the SAOs to a provider.[61] The ACCC can also provide that an access determination applies differentially to certain providers or classes of providers.[62]

6.6 Vectored VDSL services: efficient monopoly provider

The Panel's Consultation Paper asks whether the existing provisions are sufficient to deal with issues arising from the provision of vectored VDSL FTTN services.

NBN Co notes the submission of the ACCC to the Panel's Regulatory Issues Framing Paper, which recognised that infrastructure based competition may not promote the LTIE where competitive supply is not technically feasible, for instance where the existence of multiple providers degrades technical quality. This was also addressed by the Communications Alliance, which stated:

> '*To reap the maximum performance benefits of vectoring and prevent service instability (e.g. dropouts) no more than one provider can offer vectored services within each cable sheath. This effectively means that there can only be one provider of VDSL2 network services in a node serving area or within a multiple dwelling unit or business centre development*.'[63]

6.7 Functional Focus of Part XIC

NBN Co submits that the status quo should remain. Part XIC is currently sufficient to deal with lower level functionality.

This is because:

- the definition of 'eligible services' is sufficiently broad to cover those services (particularly the reference to 'a service that facilitates the supply of a carriage service'); and
- the SAOs deal with facilities access to some extent (insofar as it facilitates interconnection).

This is no better demonstrated than by the declaration of the ULLS, the terms of NBN Co's SAU in so far as it relates to the AVC and CVC, and the deemed declaration of Layer 2 bitstream access services. NBN Co therefore agrees that the current regime has already struck the right balance between resale and quasi-infrastructure.[64]

6.8 Restricting NBN Co to the supply of Layer 2 services

The Panel has asked whether NBN Co should be limited by law to operating at the lowest possible layer of functionality in the OSI stack. In NBN Co's submission, this restriction is already sufficiently dealt with by means of Government policy and ACCC oversight.

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[60] CCA, s152BC(3)(h)
[61] CCA, s152BC(3)(i)
[62] CCA, s152BC(5)
[63] Communications Alliance, 'Vertigan Review Panel: Regulatory Issues Framing Paper: Communications Alliance Submission', March 2014, p 3
[64] *Cost-Benefit Analysis and Review of Regulatory Arrangements for the National Broadband Network – Telecommunications Regulatory Arrangements Consultation Paper for the Purposes of section 152EOA of the Competition and Consumer Act 2010*, March 2014, p 6

In relation to Government policy, NBN Co received a revised statement of expectations on 8 April 2014. That statement provides (at page 1):

> '*The Government intends the NBN to be a wholesale-only access network, available on equivalent terms to all access seekers, that operates at the lowest practical levels in the network stack*.'[65]

NBN Co's scope of activities is circumscribed by the statement of expectations, which constitutes communicated Government policy for the purposes of NBN Co's constitution. If NBN Co were to operate at a level in the OSI stack above the lowest practical level, not only would the directors of NBN Co face liability for acting beyond power, the company would be in breach of the Equity Funding Agreement with the Commonwealth that requires the company to comply with the statement of expectations.

In relation to ACCC oversight, subject to the operation of NBN Co's SAU[66], the ACCC may declare eligible services that NBN Co is supplying, **or capable of supplying**. Carrier licence conditions could also be used to set the parameters of NBN Co's scope of activities if necessary.

Accordingly, NBN Co's operational footprint is already adequately constrained, so as to stimulate wider industry investment and innovation, but can be expanded if necessary and appropriate.

[65] Minister for Communications and Minister for Finance, *Statement of Expectations*, 8 April 2014, p 1

[66] Attachment A (Service Description) to the *NBN Co Special Access Undertaking given to the ACCC in accordance with Part XIC of the Competition and Consumer Act 2010 (Cth)*, varied on 18 November 2013

7 The practical operation of Part XIC could be improved

As outlined above, NBN Co believes that Part XIC remains the appropriate mechanism for access regulation in the telecommunications industry. However, in NBN Co's practical experience there are some ways in which Part XIC could be amended to operate more effectively.

7.1 Every eligible service provided by NBN Co must be declared

The effect of the Part XIC regime is that, before NBN Co can supply an eligible service, for whatever purpose or however small, the service must be declared. This regime ensures that NBN Co, in providing core access services as a monopoly provider, operates on an open-access basis and is subject to regulatory oversight, and that the obligations set out in any accepted SAU apply. In practice, however, the requirement that all eligible services supplied by NBN Co must be declared services has resulted in inefficiencies and operational difficulties for NBN Co in some circumstances.

For a service to be declared, one of the following must have taken place:

- the ACCC has declared the service to be a declared service under ss 152AL(3) or 152AL(8A) of the CCA; or
- the ACCC has accepted a SAU from NBN Co. The services that are the subject of the undertaking will then become declared services under ss 152AL(7) or 152AL(8E) of the CCA; or
- NBN Co has created and published an SFAA in respect of the service. Services that are the subject of the SFAA become declared services under ss 152AL(8D) of the CCA.

The rationale for this requirement is well understood and, in the vast majority of cases, appropriate. However, there are three key areas where this requirement has been problematic for NBN Co: conducting small-scale trials, providing services related to integrating other networks into the NBN, and providing non-bottleneck services. We deal with each of these areas below.

(a) Trials and test services

The requirement that trials must either be conducted under an SAU, or a specific SFAA created for each and every trial, has proved unduly burdensome for NBN Co. It has impacted NBN Co's ability to conduct trials as the application of the non-discrimination rules to trials means that often trials cannot be limited to target them to the most appropriate partner, or number of participants. As a result, trials have tended to be larger in scale than they would otherwise have needed to be, with increased costs and longer timeframes, and significant additional 'red tape'. These difficulties are likely to become more pronounced as NBN Co seeks to implement the optimised Multi-Technology Mix recommended by the Strategic Review.

For example in March 2013, NBN Co offered access seekers the opportunity to participate in a trial to test the performance of a version of NBN Co's Multicast feature. The purpose of the trial was to evaluate the performance of the feature in 'real world' conditions, and to verify core aspects of its delivery and performance within MDUs and over a managed backhaul link. The trial was undertaken at a Greenfields estate at Rhodes in New South Wales until November 2013.

Due to technical constraints, the trial could only accommodate a maximum of three participants. However, having regard to NBN Co's obligations under ss 152AXC and 152AXD of the CCA, the opportunity to participate in the trial was made available to all access seekers via the publication of an invitation for Expressions of Interest which specified minimum eligibility criteria required in order to participate. The trial

version of the Multicast feature was then made available under NBN Co's Standard Test Terms, an SFAA published on NBN Co's website in accordance with section 152AL(8D) of the CCA.

In line with NBN Co's expectations, only two access seekers elected to participate in the trial. Despite this expected outcome NBN Co was required to devote additional resources to developing and publishing an SFAA as well as complying with the associated lodgement requirements in accordance with s152BEA of the CCA.

(b) Services related to integrating other networks into the NBN

The restriction on NBN Co from supplying an eligible service that is not declared includes services offered as part of transitional arrangements to facilitate the integration of third party fibre or HFC network infrastructure to the NBN where live services are provided to end users. It is not necessary or efficient for such services to be declared given their transitory nature and the delay that declaration of these services causes in the rollout of NBN Co's network. In addition, were such services to be declared, it is unlikely that other network providers would seek access to these services.

(c) Non-bottleneck services

There may be services where NBN Co does not operate as a monopoly provider but operates in a competitive environment in competition with other service providers, providing non-bottleneck services that do not meet the traditional criteria for declaration. The requirement for services of that nature provided by NBN Co to be declared puts NBN Co at a competitive disadvantage.

For example, NBN Co is currently assessing the merits of developing a cell site access service. This access service would involve connecting to the NBN fibre network to wireless cell sites operated by mobile network providers. Importantly the market for mobile voice and data services is a competitive market which is served by a number of fibre network providers, including Nextgen, PIPE Networks, Telstra and Optus. Some of these fibre network operators are horizontally integrated into the provision of retail mobile voice and data services. Currently the provision of access connectivity services to cell sites is not a declared service.

The provision of a cell site access service would potentially be an efficient use of NBN Co's fibre network as it takes advantage of the economies of scope inherent in the network. Further, the entry of NBN Co into this market is likely to have pro-competitive effects which would be in the long term interests of end-users.

A cell site access service supplied by NBN Co would be required to be declared service under Part XIC. This is notwithstanding the fact that a decision by NBN Co to offer a cell site access service would likely have a pro-competitive effect and the fact that the provision of the equivalent service by NBN Co's competitors is not subject to regulation. The consequences of declaration are:

- NBN Co cannot refuse a request by an access seeker to access that service;
- NBN Co must publish its SFAA in respect of that service on its website, thereby making available its terms and conditions to its competitors; and
- NBN Co is required to supply the service to all access seekers on a non-discriminatory basis and to undertake related activities (such as providing information about the service or any activity which is ancillary or incidental to the supply of the service) on a non-discriminatory basis.

This means that even though NBN Co will face competition from several network operators in the provision of a cell site access service, NBN Co will be limited in its ability to operate in a normal commercial manner and to respond to competitive behaviour. NBN Co submits that this is inconsistent with the Expert Panel's working assumption that NBN Co will operate on a commercial basis.

NBN Co's suggested amendments to Part XIC

The requirement that all eligible services supplied by NBN Co must be declared services has resulted in inefficiencies and operational difficulties for NBN Co in some circumstances. NBN Co submits that, to the extent it conducts or supplies services for trials and tests, or services related to the integrating of other networks into the NBN, such services should not be subject to regulation under Part XIC.

NBN Co acknowledges that it would be a more complex task to identify at the outset non-bottleneck services for exemption from the declaration requirements. However, NBN Co submits that this could be appropriately addressed by granting NBN Co the ability to apply to the ACCC for an anticipatory exemption of a non-bottleneck service from the declaration requirements. In granting such an exemption, the ACCC would be promoting competition in an already competitive market.

7.2 NBN Co service obligations: non-discrimination

As mentioned above, NBN Co's non-discrimination obligations formed part of legislative reforms designed to enshrine NBN Co's mandate as a wholesale-only, open access provider. The obligations are twofold, consisting of a principal obligation under s152AXC and a supplementary obligation imposed by s152AXD.

The non-discrimination obligations in the form originally envisaged by their legislative drafters were less restrictive on NBN Co operations, as they allowed for some limited variation in NBN Co's service offering in certain circumstances. However, the non-discrimination obligations as ultimately enacted contained no such exceptions, and as a consequence have led to a range of operational difficulties and inefficiencies for NBN Co.

NBN Co submits that the non-discrimination obligations contained in s152AXC should be subject to an efficiency exception. In formulating the content of that exception, lawmakers could commence with the exceptions as formulated in the original draft legislation (discussed in more detail below). In redrafting the exceptions, regard should also be had to NBN Co's recent experience (also described below).

Further, NBN Co submits that s152AXD should be repealed in full, or in the alternative, amended to include the exceptions contained in the original draft legislation regarding pilots, trials, and the provision of information about a service (discussed below).

(a) The current provision

NBN Co's principal non-discrimination obligation relates to its supply of declared services and is governed by s152AXC of the CCA. This section provides relevantly that:

> *(1) An NBN corporation must not, in complying with any of its category B standard access obligations, discriminate between access seekers.*
>
> *(2) The rule in subsection (1) does not prevent discrimination against an access seeker if the NBN corporation has reasonable grounds to believe that the access seeker would fail, to a material extent, to comply with the terms and conditions on which the NBN corporation complies, or on which the NBN corporation is reasonably likely to comply, with the relevant obligation.*
>
> *(3) Examples of grounds for believing as mentioned in subsection (2) include:*
>
> *(a) evidence that the access seeker is not creditworthy; and*
>
> *(b) repeated failures by the access seeker to comply with the terms and conditions on which the same or similar access has been provided (whether or not by the NBN corporation).*

NBN Co is also subject to a supplementary non-discrimination obligation which requires it to carry on related activities on a non-discriminatory basis. This obligation is enshrined in s152AXD of the Act, which provides relevantly that:

> (1) *An NBN Corporation must not, in carrying on any of the following activities, discriminate between access seekers:*
>
> *(a) developing a new eligible service;*
>
> *(b) enhancing a declared service;*
>
> *(c) extending or enhancing the capability of a facility or telecommunications network by means of which a declared service is, or is to be, supplied;*
>
> *(d) planning for a facility or telecommunications network by means of which a declared service is, or is to be, supplied;*

(e) an activity that is preparatory to the supply of a declared service;

(f) an activity that is ancillary or incidental to the supply of a declared service;

(g) giving information to service providers about any of the above activities.

(5A) If conduct is authorised under section 151DA for the purposes of subsection 51(1), the conduct is taken not to be discrimination for the purposes of this section.

Definition

(6) In this section:

***eligible service** has the same meaning as in section 152AL.*

(b) The initial formulation of the non-discrimination obligation

Section 152AXC of the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010 (Cth) (the ***Access Bill***) went through several iterations. In the exposure draft of the Access Bill of 12 February 2010 s152AXC contained additional subsections, significantly an **efficiency exception** to the non-discrimination obligation:[67]

(3) *The rule in subsection (1) does not prevent discrimination if:*

(a) the discrimination aids efficiency; and

(b) all access seekers with like circumstances have an equal opportunity to benefit from the discrimination.

Following its release, 21 submissions were received on the exposure draft.[68] By the time of the first reading of the Access Bill in November 2010, a provision for **volume discounts** had been added to the **efficiency exception**[69]:

(4) *The rule in subsection (1) does not prevent discrimination if:*

(a) the discrimination aids efficiency; and

(b) all access seekers with like circumstances have an equal opportunity to benefit from the discrimination; and

(c) in a case where the discrimination involves a discount, allowance, rebate or credit given or allowed, or offered to be given or allowed, on the condition that the access seeker acquires, or agrees to acquire, a particular volume, number, quantity or amount of goods, services or other things:

(i) a special access undertaking given by the NBN corporation is in operation; and

(ii) the discount, allowance, rebate or credit is in accordance with terms and conditions specified in the undertaking.

Section 152AXD was originally drafted in the Access Bill with **exceptions for pilots or trials**, and an **exception for the provision of information about a service**:

(2) *The rule in subsection (1) does not prevent discrimination if:*

(a) the relevant activity relates to a pilot or trial of:

(i) a new eligible service; or

(ii) an enhanced declared service; and

(b) if:

[67] Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010 (Cth), Exposure Draft, 12 February 2010

[68] Environment and Communications Legislation Committee, National Broadband Network Companies Bill 2010 and Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010, [3.6]

[69] Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010 (Cth)

(i) a determination is in force under subsection (3); and

(ii) the determination is applicable to the pilot or trial;

the number of days in the anticipated period of the pilot or trial does not exceed the number of days that, under the determination, is the maximum allowable duration of the pilot or trial.

(3) *The Commission may, by legislative instrument, determine that, for the purposes of paragraph (2)(b), a specified number of days is the maximum allowable duration of a specified pilot or trial.*

(4) The rule in subsection (1) does not apply to discrimination in favour of an access seeker if:

(a) the relevant activity consists of giving information to the access seeker about:

(i) the development of a new eligible service; or

(ii) the enhancement of a declared service; and

(b) the access seeker requested:

(i) the development of the new eligible service; or

(ii) the enhancement of the declared service;

as the case may be.

(c) The purpose of the exceptions as articulated in the Explanatory Memorandum

The potential efficiency gains flowing from price discrimination were recognised by the Productivity Commission in its 2001 report concerning telecommunications competition regulation.[70] The Explanatory Memorandum to the Access Bill articulated the rationale for an efficiency exception as follows:

> '*The concept of differentiation that aids efficiency already exists under Part IIIA of the CCA, and has been reflected in a number of undertakings made under that Part. It recognises that a blanket requirement to offer equal treatment to all access seekers can lead to inefficient outcomes. For example, some service providers may want to make small changes to standard services to reflect their existing products and processes, and being required to re-engineer these could be both costly and disruptive*.'[71]

The Explanatory Memorandum noted, in relation to the efficiency exception in s152AXC:

> '*The concept of 'efficiency' under proposed s 152AXC(4) is intended to be read broadly and to facilitate discrimination based on normal commercial considerations, such as taking account of supply and demand conditions…*'[72]

In relation to the volume discounts exception, the Explanatory Memorandum explained that:

> '*The Access Bill intentionally uses words of wide import for the purposes of capturing any permutation of discount that an NBN corporation, as access provider, may offer or allow to an access seeker. The provision is intended to capture any form of volume discount…*'[73]

In relation to the trials exception in s152AXD(2), the Explanatory Memorandum noted that the exception sought 'to balance the objective of non-discrimination with the need to facilitate innovation and competition in

[70] Productivity Commission, Telecommunications Competition Regulation, Inquiry Report, Report No 16, 20 September 2001, pp 34-35

[71] Explanatory Memorandum to the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010 (Cth), p 11; Revised Explanatory Memorandum to the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2011 (Cth), p 12

[72] Explanatory Memorandum to the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010 (Cth), p 144; Revised Explanatory Memorandum to the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2011 (Cth), p 147

[73] Explanatory Memorandum to the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010 (Cth), p 145; Revised Explanatory Memorandum to the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2011 (Cth), p 148

the supply of new services by competing access seekers.'[74] The Explanatory Memorandum further explained that without the exception for provision of information in s152AXD(4), NBN Co and access seekers 'may be reluctant to engage directly to discuss product development because the NBN corporation would be required to release information that may reveal the access seeker's commercial strategies.'[75]

The non-discrimination obligation was among the issues considered in public hearings convened by the Environment and Communications Legislation Senate Committee as part of its inquiry into the Access Bill and the National Broadband Network Companies Bill 2010 (Cth).[76] Addressing the Committee in March 2011, the ACCC argued that price discrimination should be allowed where it aids efficiency. In relation to volume discounts, the ACCC said:

> '*conceptually we might be able to see where volume discounts could be something you would consider. I do not think we would underestimate the significant information requirements in convincing us that such discounts aided efficiency or did not have an impact in downstream retail markets*.'[77]

Following the public hearings the Senate Committee recommended that the Access Bill, including the exceptions to ss 152AXC and 152AXD, be passed. The Committee found that s152AXC as drafted struck the right balance between allowing price discrimination in limited circumstances where it aided efficiency, and noted that if NBN Co reached an agreement on different terms to the standard terms it was required to advise the ACCC.[78] In relation to the volume discounts exception, the Committee concluded that given NBN Co could not offer discounts without the ACCC approving the arrangements as set out in an SAU, there was sufficient oversight such that volume discounts would only be offered in special circumstances.[79]

However, despite the conclusions of the Senate Committee, the exceptions to both ss 152AXC and 152AXD were removed from the final Access Bill. The exceptions passed through the House of Representatives but were removed in the Senate. The Independent Senator Nick Xenophon argued that the exception for volume discounts would result in Telstra and Optus dominating the telecommunications market while smaller providers were marginalised.[80] He also regarded the efficiency exception as problematic, citing the difficulty of quantifying or proving 'efficiency', and noting that larger telecommunications providers were better suited to demonstrate that an arrangement aided efficiency.[81] Greens Senator Scott Ludlam also argued that the volume discounts exception threatened to 'return us to the bad old days where a monopolistic incumbent favoured one provider over another with volume discounts. These deals always seem to end up favouring the large over the small and end up consolidating market power in fewer and fewer hands.'[82]

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[74] Explanatory Memorandum to the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010 (Cth), p 147; Revised Explanatory Memorandum to the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2011 (Cth), p 150

[75] Explanatory Memorandum to the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010 (Cth), p 148; Revised Explanatory Memorandum to the Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2011 (Cth), p 151

[76] The Committee's membership was as follows: Senator Doug Cameron (ALP) (Chair), Senator Mary Jo Fisher (LP) (Deputy Chair), Senator Scott Ludlam (Greens), Senator Anne McEwen (ALP), Senator Judith Troeth (LP) and Senator Dana Wortley (ALP). Participating members were Senator Simon Birmingham (LP) and Senator Ian Macdonald (LP).

[77] Michael Cosgrave, ACCC, appearing at a public hearing forming part of the Senate Environment and Legislation Committee Inquiry into National Broadband Network Companies Bill 2010 and Telecommunications Legislation Amendment (National Broadband Measures – Access Arrangements) Bill 2010, 9 March 2011

[78] Environment and Communications Legislation Committee, National Broadband Network Companies Bill 2010 and Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010, [3.24]

[79] Environment and Communications Legislation Committee, National Broadband Network Companies Bill 2010 and Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010, [3.38]

[80] Senator Xenophon, Second Reading Speech, 21 March 2011, p 1227

[81] Senator Xenophon, Second Reading Speech, 21 March 2011, p 1227

[82] Senator Ludlam, Second Reading Speech, 21 March 2011, p 1218

NBN Co does not agree with these arguments, and refers to the attached expert report by Alex Sundakov of Castalia Strategic Advisors, '*Economic Effects of Non-Discrimination Provisions for NBN Co*'.[83] In his report, Sundakov concludes that:

- an almost blanket restriction on discrimination by NBN Co is inefficient and is likely to be against the public interest. There would be an economic benefit in amending Part XIC to enable NBN Co to discriminate between access seekers;
- there are fundamental differences between the incentives of a vertically integrated monopoly and an vertically unbundled monopoly, such that the incentives of a vertically unbundled monopoly are more likely to be aligned with the public interest;
- a vertically unbundled monopoly has no interest in discriminating in ways that would reduce competition in downstream markets, such that an upstream monopoly will not necessarily discriminate in favour of larger retailers;
- an ability to discriminate would provide NBN Co with the ability and incentive to reduce the costs and risks of its rollout through coordinating its investments with the downstream investments of access seekers.

7.3 Access agreements: lodgement obligations and statements of difference

ACCC oversight of the non-discrimination obligation requires an appropriate degree of transparency on NBN Co's part regarding the Access Agreements that it has entered into. That transparency is sought to be achieved by provisions of Part XIC that require NBN Co to lodge copies of all access agreements and variations to those agreements with the ACCC.[84] The principle of transparency in this context is understood and accepted, but the practical implications of the statutory requirements have given rise to an undue administrative burden, and require amendment.

The current requirements operate as follows.

- NBN Co must lodge copies of all access agreements and variations to those agreements with the ACCC within 28 calendar days.
- In addition, where these agreements, including as varied, differ from the relevant SFAA available on the NBN Co website at the time those agreements (or variations) were entered into, NBN Co must provide a 'statement of differences' within seven calendar days.
- Statements of differences must be provided to the ACCC in a form approved in writing by the ACCC.

Currently, NBN Co maintains three SFAAs and accordingly lodges access agreements and variation agreements based on their terms, as well as statements of differences when necessary. The ACCC is required to process these lodgements and to place statements of differences on a public register.

Since April 2011, when NBN Co's lodgement obligations under Part XIC commenced, NBN Co has lodged approximately:

(a) 190 access agreements

(b) 1,730 variation agreements

(c) 590 statements of differences.

[83] Alex Sundakov, Castalia Strategic Advisors, 'Economic Effects of Non-Discrimination Provisions for NBN Co', April 2014
[84] CCA, ss 152BEA-152BEBC

NBN Co submits that the current regime does not appropriately balance the aim of transparency with the burdensome nature of the current requirements for both NBN Co and the ACCC. Lodging copies of all access agreements and variation agreements adds little to the information disclosed by NBN Co publishing the SFAAs on which those access agreements and variation agreements are based.

As a result, NBN Co welcomes the recently proposed amendments in the Omnibus Repeal Day (Autumn 2014) Bill 2014, which proposes that a quarterly report listing all relevant agreements in force at any time during the relevant quarter would replace the requirement to lodge actual access agreements and variation agreements. However, NBN Co considers that this proposal could be further improved.

1. NBN Co suggests that the proposed new s152BEA(2)(b), which requires details as to 'the service to which the agreement relates', may not work as intended in practice, as a single access agreement may make reference to multiple services. A more practical approach would be to require the carrier or carriage service provider to include with the quarterly report a reference to the relevant SFAA on which the access agreement/variation agreement is based (which NBN Co will have made available on its website).
2. While NBN Co does not consider fulfilling requests by the ACCC for copies of specific access agreements or variation agreements to be problematic, experience with the current lodgement regime has demonstrated that 10 calendar days can be insufficient time in which to fulfil those requests (for example, where there are customer confidentiality issues to be managed). NBN Co suggests that the relevant time be extended to at least 15 business days.
3. Subject to paragraph 4 below, NBN Co submits that the statement of differences regime set out in s152BEBA should be repealed in full. Given the requirement that NBN Co publish its SFAAs, it is unclear what benefit the statement of differences regime delivers. The current requirements for providing statements of differences stipulate that NBN Co must indicate when terms in an access agreement that are different from the relevant SFAA will be offered to other access seekers, or to explain why such terms will not be offered more widely. To date, NBN Co has offered all such terms to all access seekers, except where the different terms would not have been useful, for example where those terms were in response to an access seeker's financial situation. The majority of statements of differences lodged by NBN Co were required as a result of technical issues, such as the timing of updates to the relevant SFAA, or transitional arrangements between two access agreements, and not due to the unwillingness of NBN Co to offer the terms of an access agreement or a variation agreement to all access seekers. As a result, NBN Co's statements of differences have provided little information of use to access seekers.
4. NBN Co acknowledges that, were the non-discrimination obligations to be reformed in the manner proposed in section 7.2 by the inclusion of an efficiency exception, an obligation to lodge statements of differences would be appropriate. However, NBN Co suggests that in such circumstances s152BEBA be amended to accommodate a quarterly reporting approach, as is proposed for access agreements and variation agreements.

7.4 The operation of the 'notice to vary' power

As noted in section 4.2, above, NBN Co's SAU was approved after a robust process of stakeholder engagement. As part of that process, in October 2013 the ACCC exercised its power under s152CBDA to issue NBN with a Notice to Vary, which required NBN Co to lodge a varied SAU in the form that was approved in December 2013.

NBN Co is generally supportive of the Notice to Vary process, and notes that the power was used to constructive effect by the ACCC in the recent SAU assessment process. Drawing upon its experiences of that process, NBN Co has identified two main ways in which the operation of the Notice to Vary mechanism could be improved.

First, the changes proposed by the ACCC in a Notice to Vary should be limited to those changes to the SAU that are **necessary to satisfy** the ACCC that the SAU would be reasonable (and otherwise compliant with the statutory criteria for accepting an SAU) if varied as proposed in the notice. At present, s152CBDA is silent on the scope of the Notice to Vary power. Providing legislative guidance as to that scope would bring the exercise of that power into closer alignment with the statutory criteria for acceptance set out in s152CBD of the CCA.

Second, once the ACCC has issued a Notice to Vary, if the access provider lodges a varied SAU within a nominated period, this should be considered by the ACCC as if it were the original SAU lodged in circumstances where the variations either adopt the content of the ACCC's Notice to Vary, or address the substance of the ACCC concerns giving rise to the Notice to Vary. This would provide the access provider with additional flexibility in how it responds to the underlying ACCC and access seeker concerns in regard to the original SAU, without having the restart the SAU assessment process. This change would not limit the ACCC's decision-making power in any way.

7.5 The operation of the 'fixed principles' mechanism

Certain terms or conditions of an SAU may be designated fixed principles terms and conditions for a particular period: s152CBAA of the CCA. The effect of including fixed principles in an SAU is that, if the ACCC has previously accepted an SAU that contains certain fixed principles, the ACCC must not reject another SAU (or a variation to the existing SAU) relating to the same service 'for a reason that concerns' those principles (s152CBAA(5)). The object of the fixed principles mechanism is to provide carriers and carriage service providers with a degree of long-term certainty, which is particularly important in the case of major new infrastructure projects such as the NBN. NBN Co supports the use of fixed principles for the purpose of providing long-term certainty.

The application in practice of the fixed principles concept has proved challenging. Part XIC does not limit the scope of matters that may be accepted as fixed principles. However, the ACCC's willingness to accept fixed principles has been limited to those that are very narrowly and precisely defined.

NBN Co considers that, to provide certainty, all terms and conditions which apply for the term of the SAU should be fixed principles, such that these terms are not included in the ACCC's assessment of future SAU variations.[85] The ACCC has rejected this position, stating that, in such a situation, it would only be able to assess the variation to the SAU, not the existing terms and conditions accepted at the outset for the terms of the SAU.[86] The ACCC view is that it will only accept fixed principles specifically concerning long-term cost recovery.[87]

As the Panel has observed in its Consultation Paper, one issue raised by s152CBAA relates to the operation of the phrase 'for a reason that concerns' the fixed principles. NBN Co considers that the fixed principles regime does not operate to constrain the ACCC in areas beyond those matters identified specifically within the relevant fixed principles term or condition. However, the ACCC has expressed concern that the operation of the phrase 'for a reason that concerns' may significantly constrain the ACCC's discretion to reject new or varied terms or conditions that relate to the implementation of existing fixed principles. This is particularly the case where a proposed high-level fixed principle involves an element of judgement or discretion on the part of the access provider. The ACCC has stated that it may not be able to reject an SAU variation where the use of discretion may not meet the relevant statutory criteria in all circumstances, as this may be a rejection

[85] NBN Co, 'NBN Co Submission to ACCC Consultation Paper on variation of NBN Co SAU', May 2013, p 125-126; NBN Co, 'NBN Co Submission on ACCC Draft Notice to Vary NBN Co SAU', July 2013, p 42
[86] ACCC, 'Variation of NBN Co Special Access Undertaking – response to submissions', July 2013, pp 134-5
[87] ACCC, 'Variation of NBN Co Special Access Undertaking – response to submissions', July 2013, p 135

'for a reason that concerns' the fixed principles.[88] This uncertainty has contributed to the ACCC's conservative approach to accepting terms and conditions as fixed principles.

NBN Co recognises that the operation of s152CBAA has been the subject of some uncertainty. To the extent that the Panel wishes to consider the operation of the provision, NBN Co agrees that its language could be revisited – in particular, to address concerns about its potential application to fixed principles involving the exercise of discretion by an access provider. At the same time, NBN Co notes that there may be additional or alternative ways of addressing the ACCC's concerns.

7.6 Restrictions on NBN Co's supply of goods and services, investment activities and ability to participate in content markets

NBN Co is generally supportive of the restrictions set out in ss 18 and 19 of the NBN Co Act, however, the narrow drafting of these sections has been the source of practical difficulties for NBN Co. A number of examples illustrates the potential inflexibility of the provisions.

NBN Co purchases network equipment in order to construct the NBN. For operational reasons, some part of that equipment is surplus to NBN Co's requirements and can either be scrapped (at a loss to the taxpayer) or sold. NBN Co also purchases spectrum at auction or by assignment as permitted under the *Radiocommunications Act 1992*. It is an essential feature of spectrum that the whole or any part of spectrum licence can be traded. NBN Co has the corporate power and mandate to acquire spectrum in order to provide its wireless broadband solution in regional areas. NBN Co considers that ss18 or 19 should make it clear that NBN Co is entitled to engage in activities of this kind such as supplying surplus goods and rationalising its spectrum holdings.

NBN Co has also had to consider the restriction on non-communications services in the context of encouraging early migration from legacy networks to the NBN. One solution to encourage early migration which NBN Co explored (but has not progressed) involved providing selected end-users with a coupon or voucher which could be redeemed from a participating service provider which would allow the end-user a financial benefit in the form of a price discount which the provider could in turn claim from NBN Co. NBN Co understands that at least one access seeker claimed that by issuing a discount coupon or voucher directly to end-users NBN Co was offering a non-communications service and therefore in breach of its regulatory obligations. NBN Co questions whether it was the intention of the policy for NBN Co to be restricted in offering access seekers discounts that would accelerate take-up and encourage the use of the NBN.

Accordingly, NBN Co suggests that the NBN Co Act restrictions be clarified in order to ensure that NBN Co is permitted to supply goods or non-communications services to any person, provided that that supply is connected with or is necessary or incidental to the mandate of NBN Co as expressed in the statement of expectations from the Government. Alternatively, NBN Co suggests that the NBN Co Act could be amended to provide relaxation of the prohibitions by means of a regulation or a rule made under the NBN Co Act that permits a particular prescribed activity. Using a regulation or a rule would not result in mission creep for NBN Co: both legislative instruments would be subject to disallowance by Parliament and would therefore involve appropriate transparency. NBN Co suggests that similar amendments be made to s 20 of the NBN Co Act which restrict NBN Co's investment activities.

NBN Co submits that the current restrictions on content provision are acceptable for now. However, it is impossible to foresee future technological changes that might make the prohibition in s17 irrelevant, or an unnecessary hindrance to NBN Co providing a wholesale service demanded by industry. For this reason

[88] ACCC, 'Variation of NBN Co Special Access Undertaking – response to submissions', July 2013, pp 130, 135. Also, see generally: ACCC, 'ACCC Draft Decision on the Special Access Undertaking lodged by NBN Co on 18 December 2012', April 2013

NBN Co submits that, at the least, s17 should be subject to an exception prescribed in regulation or rule made under that section.

Annexure

Question in Panel's Consultation Paper	Page No.	Response of NBN Co	Section of submission
Alternative approaches to Part XIC			
Should the Panel consider a fundamentally different approach to regulating access to telecommunications services?	22	The rationale for introducing Part XIC was to provide an access regime for the telecommunications industry designed to accommodate the unique characteristics of that industry, being: • the fast pace of technological change; • the monopoly characteristics of the market; and • significant network effects. Part XIC reflects telecommunications specific policy objectives, with a focus on the long-term interests of end-users. The rationale for the regime remains applicable today. In practice, Part XIC generally works well – it is operating more effectively than it has previously and it is now well understood by industry. Maintaining Part XIC facilitates industry certainty. Further, Part XIC has been the subject of continuing review and reform. The Panel's Consultation Paper refers to a number of alternatives to Part XIC, including the general access regime in Part IIIA of the CCA.[89] In NBN Co's view, Part IIIA does not provide an appropriate access regime for a number of reasons, among them the fact that	4, 4.3, 4.4, 5

[89] *Cost-Benefit Analysis and Review of Regulatory Arrangements for the National Broadband Network – Telecommunications Regulatory Arrangements Consultation Paper for the Purposes of section 152EOA of the Competition and Consumer Act 2010*, March 2014, p 22

Question in Panel's Consultation Paper	Page No.	Response of NBN Co	Section of submission
		Part IIIA is currently in a state of flux and any transition away from Part XIC would introduce an unacceptable level of uncertainty. To the extent that the Panel is considering the issue of infrastructure based competition, it is important to note that the existing regulatory arrangements are premised on the assumption that NBN Co will operate as a monopoly wholesale provider. Any change to that assumption would require the Panel to reconsider the appropriateness of the entire regulatory framework that governs NBN Co. In particular, recent developments suggest that NBN Co may face more competition from other network providers than was originally anticipated. This will obviously have a material impact on NBN Co's business case, and will adversely impact NBN Co's ability to achieve the Government's broader policy objectives. If NBN Co is to face infrastructure based competition, including of the kind NBN Co potentially faces from TPG, it follows inevitably that: 1) NBN Co itself should not be regulated as a national monopoly wholesale-only provider; and 2) if NBN Co is subject to regulation, then other competing providers should face the same regulatory framework as NBN Co, in order to create a level playing field and ensure that the long-term interests of end-users continue to be met.	
Part 1: Part XIC			
Functional focus of Part XIC			

Question in Panel's Consultation Paper	Page No.	Response of NBN Co	Section of submission
Should Part XIC give greater emphasis to access to lower level functionality or should the status quo, in which this is left to the discretion of the regulator, remain?	6	The status quo should remain. Part XIC is currently sufficient to deal with lower level functionality. This is because: 3) the definition of 'eligible services' is sufficiently broad to cover those services (particularly the reference to 'a service that facilitates the supply of a carriage service'); and 4) the SAOs deal with facilities access to some extent (insofar as it facilitates interconnection).	6.7
Part XIC and the concept of 'significant market power'			
Should Part XIC focus on parties with a significant (or substantial degree of) market power (SMP) rather than be of general application as it is at present?	7	Part XIC should continue to be of general application, and should not focus solely on parties with significant market power. The power to determine whether particular access providers (for example, access providers without market power) should be exempt from the SAOs should rest with the ACCC.	6.5
Part XIC and the vectored VDSL 2			
Can existing provisions deal adequately with issues arising from the provision of vectored VDSL 2 FTTN services, or are new statutory arrangements required?	8	NBN Co notes the submission of the ACCC in response to the Panel's Framing Paper, which recognises that infrastructure based competition may not promote the LTIE where competitive supply is not technically feasible, for instance where the existence of multiple providers degrades technical quality. This issue was also addressed by Communications Alliance, which stated that '*effectively…there can only be one provider of VDSL2 network*	6.6

Question in Panel's Consultation Paper	Page No.	Response of NBN Co	Section of submission
		services in a node serving area or within a multiple dwelling unit or business centre development'.[90]	
Declaration			
Does the long-term interests of end-users test (***the LTIE test***) need to be revised, and if so, to what end?	9	Given the period for which the LTIE test has been in place, and the numerous ACCC and Australian Competition Tribunal decisions which have applied the LTIE test, there is broad industry acceptance of its usefulness and meaning.	4.4
Are there services that should be declared on an enduring basis? Are the existing mechanisms for reviewing declarations effective?	9-10	NBN Co believes that the mechanisms in Part XIC that limit the duration of a declaration are appropriate. They strike a balance between the need to provide long-term certainty and the need to preserve the flexibility necessary to respond to changes in the industry. Allowing an access provider to submit a long-term SAU (such as NBN Co's SAU) is consistent with maintaining this balance.	6.3
Standard access obligations			
Should Category B SAOs be applied to wholesale-only providers other than NBN Co?	11	If NBN Co is to face infrastructure based competition, including of the kind NBN Co potentially faces from TPG, other competing providers should face the same regulatory framework as NBN Co, in order to create a level playing field and ensure that the long-term interests of end-users continue to be met. For example, other providers should be subject to the same Standard Access Obligations as NBN Co and required to offer services on a	3.3

[90] Communications Alliance, 'Vertigan Review Panel: Regulatory Issues Framing Paper: Communications Alliance Submission', March 2014, p 3

Question in Panel's Consultation Paper	Page No.	Response of NBN Co	Section of submission
		wholesale basis.	
Should the non-discrimination provisions applying to NBN Co and superfast network operators be retained, relaxed or repealed?	13	Discrimination may, in many cases, be efficiency enhancing. As a wholesale-only, open access operator, NBN Co does not have the same incentive as a vertically integrated operator to discriminate in a manner which is likely to adversely affect competition in downstream markets. Therefore, to the extent Part XIC prohibits all forms of discrimination, it is not in the long-term interests of end-users. The non-discrimination obligations contained in s152AXC should be subject to an efficiency exception. In formulating the content of that exception, lawmakers could commence with the exceptions as formulated in the original draft legislation. Further, s152AXD should be repealed in full, or in the alternative, amended to include the exceptions contained in the original draft legislation regarding pilots, trials, and the provision of information about a service.	7.2 See also the attached expert report of Alex Sundakov of Castalia Strategic Advisors.
Access determinations			
Should the ACCC have the power to specify different terms and conditions for different access providers and access seekers?	15	The power to determine whether particular access providers (for example, access providers without market power) should be exempt from the SAOs should rest with the ACCC. This could be achieved by the ACCC being able to grant an exemption. The ACCC is already able, in an access determination, to provide that any or all of the SAOs are not applicable to a provider,[91] and to	6.5

[91] CCA, s152BC(3)(h)

Question in Panel's Consultation Paper	Page No.	Response of NBN Co	Section of submission
		restrict or limit the application of the SAOs to a provider.[92] The ACCC can also provide that an access determination applies differentially to certain providers or classes of providers.[93]	
Special access undertakings			
Should NBN Co be permitted to make SAUs in relation to declared services?	19	NBN Co considers that the SAU model is an appropriate methodology (used as part of the hierarchy of regulatory instruments) for regulating and setting terms and conditions of access to NBN Co's services, and accordingly it is not necessary to consider an alternative methodology or approach to determining prices at this stage.	6.2
Does the fixed principles concept serve a useful purpose? If so, should it be given a legislative form to provide greater certainty for the ACCC and infrastructure providers?	20	NBN Co supports the use of the fixed principles mechanism for the purpose of providing long-term certainty, which is particularly important in the case of major new infrastructure projects such as the NBN. However, the application of the fixed principles in practice concept has proved challenging. While Part XIC does not limit the scope of matters that may be accepted as fixed principles, the ACCC's willingness to accept fixed principles has been limited to those that are very narrowly and precisely defined, which has been motivated in part by uncertainty regarding the operation of the fixed principles concept. To the extent that the Panel wishes to consider the operation of the	7.5

[92] CCA, s152BC(3)(i)
[93] CCA, s152BC(5)

Question in Panel's Consultation Paper	Page No.	Response of NBN Co	Section of submission
		provision, NBN Co agrees that its language could be revisited – in particular, to address concerns about its potential application to fixed principles involving the exercise of discretion by an access provider. At the same time, NBN Co notes that there may be additional or alternative ways of addressing the ACCC's concerns.	
Access agreements and hierarchy of terms			
Should access agreements continue to have primacy in the regulatory framework? Is the hierarchy of terms set correctly?	20	The hierarchy of regulatory instruments that governs NBN Co's provision of services is now well understood and, broadly speaking, works well. Part XIC should continue to give primacy to commercial agreements. SFAAs should not form part of the hierarchy. The SFAA has a clear and understood function under Part XIC. It operates, upon request by an access seeker, as an access agreement, which sits atop the hierarchy of legislative instruments.	6.2
Do SFAA processes work effectively? If not, how could they be improved?	10	Part XIC requires NBN Co to lodge copies of all access agreements and variations to those agreements with the ACCC. These requirements have given rise to an undue administrative burden, and require amendment. NBN Co welcomes the proposed amendments in the Omnibus Repeal Day (Autumn 2014) Bill 2014. NBN Co identifies how this proposal could be further improved in section 7.2 of its submission. In particular, NBN Co submits that the statement of differences regime set out in s152BEBA should be repealed in full. NBN Co acknowledges that, were the non-discrimination obligations to be reformed to include an efficiency exception, an obligation to	7.3
Can the current use of SFAAs by NBN Co be improved and, if so, how? Does NBN Co's potential position in the market place mean its SFAA should formally be reflected in the hierarchy? Does NBN Co's potential market power mean that there should be scope for access seekers to have recourse to the ACCC in relation to NBN Co access agreements? Or are additional processes needed to ensure access seeker concerns can be effectively addressed before	22		

Question in Panel's Consultation Paper	Page No.	Response of NBN Co	Section of submission
they enter into access agreements with NBN Co?		lodge statements of differences would be appropriate. NBN Co suggests that in such circumstances, s152BEBA be amended to accommodate a quarterly reporting approach.	
Part 2: Rules about operation of NBN corporations			
Supply of eligible services on a wholesale-only basis			
Is the general requirement that NBN Co supply only to carriers and service providers an effective means of giving effect to its wholesale-only obligation?	23	The requirement that NBN Co supply only to carriers and carriage service providers is an appropriate means of giving effect to its wholesale-only obligation. The restriction is working well in practice to preserve NBN Co's status as a wholesale-only provider.	6.4
NBN Co's ability to supply to utilities			
Should NBN Co continue to be eligible to supply services to specified classes of utilities?	24	NBN Co is allowed to supply services directly to a number of utilities. These exceptions to NBN Co's wholesale-only obligation were designed to assist utilities to manage their networks, recognising the practical synergies that the NBN can provide utilities and the fact that several of these utilities would, but for statutory exemptions, be required to obtain carrier licences. While these provisions have not yet been used, the rationale for their inclusion in the regulatory regime still exists. The provisions remain appropriate, and do not require alteration.	6.4
Restricting NBN Co to the supply of Layer 2 services			

Question in Panel's Consultation Paper	Page No.	Response of NBN Co	Section of submission
Should NBN Co be limited by law to operating at the lowest possible layer of functionality in the OSI stack, this primarily being Layer 2 (although potentially being Layer 3 in some instances)?	24	NBN Co's restriction to operating at the lowest possible layer of functionality in the OSI stack is sufficiently dealt with by means of Government policy and ACCC oversight. The restriction is provided for in the revised Statement of Expectations issued to NBN Co on 8 April 2014, which constitutes communicated Government policy for the purposes of NBN Co's constitution. If NBN Co were to operate at a level in the OSI stack above the lowest practical level, not only would the directors of NBN Co face liability for acting beyond power, the company would be in breach of the Equity Funding Agreement with the Commonwealth that requires the company to comply with the statement of expectations. Carrier licence conditions could also be used to set the parameters of NBN Co's scope of activities if necessary.	6.8
Restrictions on NBN Co's supply of goods and services and investment activities			
Should specific restrictions on NBN Co in relation to the supply of goods and services be strengthened or relaxed and, if so, why? Are the existing restrictions on NBN Co investment activities appropriate and effective? Should they be strengthened or relaxed and, if so, how and why?	24-25	NBN Co is generally supportive of the restrictions set out in ss 18, 19 and 20 of the NBN Co Act, however, the narrow drafting of these sections has been the source of practical difficulties for NBN Co. The NBN Co Act restrictions should be clarified in order to ensure that NBN Co is permitted to supply goods or non-communications services to any person, provided that that supply is connected with or is necessary or incidental to the mandate of NBN Co as expressed in the statement of expectations from the Government. Alternatively, the NBN Co Act could be amended to provide relaxation of the prohibitions by means of a regulation or a rule made under the NBN Co Act that permits a particular prescribed activity.	7.6

Question in Panel's Consultation Paper	Page No.	Response of NBN Co	Section of submission
Remaining provisions / other concerns with the legislation governing NBN Co's operation			
Are there any other concerns with other parts of the National Broadband Network Companies Act, so far as they relate to Division 2 of Part 2 and Part XIC of the CCA, that should be addressed? Do stakeholders have any other concerns about the wider legislative arrangements governing NBN Co's operation?	26	**Every eligible service provided by NBN Co must be declared** The effect of the Part XIC regime is that, before NBN Co can supply an eligible service, for whatever purpose or however small, the service must be declared. The rationale for this requirement is well understood and, in the vast majority of cases, appropriate. However, this requirement has resulted in inefficiencies and operational difficulties for NBN Co in three key areas: conducting small-scale trials, providing services related to integrating other networks into the NBN, and providing non-bottleneck services. NBN Co submits that, to the extent it conducts or supplies services for trials and tests, or services related to the integrating of other networks into the NBN, such services should not be subject to regulation under Part XIC. NBN Co acknowledges that it would be a more complex task to identify at the outset non-bottleneck services for exemption from the declaration requirements. However, NBN Co submits that this could be appropriately addressed by granting NBN Co the ability to apply to the ACCC for an anticipatory exemption of a non-bottleneck service from the declaration requirements. In granting such an exemption, the ACCC would be promoting competition in an already competitive market.	7.1
		The operation of the 'notice to vary' power In assessing an SAU, the ACCC has the power to issue to a Notice to Vary to NBN Co under s152CBDA of the CCA. NBN Co is	7.4

Question in Panel's Consultation Paper	Page No.	Response of NBN Co	Section of submission
		generally supportive of the Notice to Vary process, and notes that the power was used to constructive effect by the ACCC in the recent SAU assessment process. However, NBN Co has identified two main ways in which the operation of the Notice to Vary mechanism could be improved: 1. The changes proposed by the ACCC in a Notice to Vary should be limited to those changes to the SAU that are necessary to satisfy the ACCC that the SAU would be reasonable (and otherwise compliant with the statutory criteria for accepting an SAU) if varied as proposed in the notice. At present, s152CBDA is silent on the scope of the Notice to Vary power. 2. Once the ACCC has issued a Notice to Vary, if the access provider lodges a varied SAU within a nominated period, this should be considered by the ACCC as if it were the original SAU lodged in circumstances where the variations either adopt the content of the ACCC's Notice to Vary, or address the substance of the ACCC concerns giving rise to the Notice to Vary. This would provide the access provider with additional flexibility in how it responds to the underlying ACCC and access seeker concerns in regard to the original SAU, without having the restart the SAU assessment process. This change would not limit the ACCC's decision-making power in any way.	

Economic Effects of Non-Discrimination Provisions for NBN Co

Expert Economics Report by
Alexander Sundakov

April
2014

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1 Introduction

I have been asked to consider whether there are potential economic benefits in NBN Co being allowed to discriminate between access seekers in relation to both price and non-price terms of access. Discrimination may include provision of information to some access seekers for specific purposes, as well as confidentiality of arrangements between NBN Co and an access seeker.

Section 152 AXC (of Part XIC) of the Competition and Consumer Act (CCA) 2010 prohibits any discrimination in the provision of declared services by NBN Co, while 152 AXD prohibits any discrimination in the provision of related activities. NBN Co can discriminate against access seekers whom it reasonably believes not to be credit worthy. It also has some ability to refuse supply if it has a capacity constraint, although the concept of a capacity constraint in a broadband context is yet to be tested and is likely to differ according to each technology platform.

For the purposes of this report, I assume that any differentiation with respect to commercial terms available to access seekers would be regarded as discrimination—and hence prohibited—regardless of whether such differentiation would promote efficiency or would be in the long-term interest of end-users. For context, I note that the Australian Competition and Consumer Commission (ACCC) in its *Part XIC Non-Discrimination Guidelines 2012* indicated that differences in the terms, conditions or manner of treatment between access seekers would be discriminatory unless they could be shown to be consistent with the statutory object of Part XIC of the CCA, and all access seekers belonging to the same class have been given an equal opportunity to receive the same treatment. While the guidelines help draw the logical distinction between differentiation and discrimination, I assume that in practice this distinction would not allow NBN Co to differentiate by discriminating between access seekers, even if it were efficient to do so.

As a background to my analysis, I note that the original Exposure Draft of the legislation explicitly allowed discrimination that aided efficiency, as long as all access seekers with like circumstances had an equal opportunity to benefit from such discrimination.

In this report, I conclude that an almost blanket restriction on the extent to which NBN Co can discriminate between access seekers is inefficient and is at odds with the normal practice in Australia in relation to vertically unbundled network infrastructure service providers. The existing legislative restriction is likely to be against the public interest.

There is a fundamental difference between the incentives of vertically integrated and vertically unbundled network service providers. It is in the public interest to maintain a presumption that discrimination by vertically integrated network monopolies is likely to have an anti-competitive purpose and effect, although even in such circumstances discrimination should be subject to the rule of reason. In this case, the onus of proof is appropriately on the network service provider to justify any discrimination. There should be no such presumption in the case of vertically unbundled networks. This is particularly true in the case of a vertically unbundled network provider that does not sell an undifferentiated commodity to all comers, where there is economic significance to the degree of interplay between upstream and downstream investments, and in an industry where rapid technological change is at its core.

While some restrictions on the extent and form of discrimination may be justified, there is a strong argument that such restrictions should be applied with caution. There are good theoretical and practical reasons to expect that a vertically unbundled network service provider's self-interested incentives would be aligned with the public interest in

promoting competition. Hence, the onus of proof should be on interventions into bilateral commercial dealings.

Finally, it is important to emphasise that the public interest with respect to new build infrastructure is different to the issues which arise from the utilisation of sunk assets. To the extent that discrimination between access seekers could lead to making NBN Co more financially viable, it could be justified even if it caused some reduction in competition among access seekers.

Overall, I conclude that there would be an economic benefit in amending Part XIC of the CCA to enable NBN Co to discriminate between access seekers in the provision of declared services, where such discrimination would aid efficiency and be in the long-term interest of end-users by promoting efficient network investment. The ACCC should, of course, continue to subject any discrimination in the provision of declared services to appropriate scrutiny. I believe restrictions on discrimination in the provision of ancillary and related services should be removed.

This paper is structured as follows:

- In Section 2, I consider what economic theory and literature tell us about price and non-price discrimination by vertically unbundled monopolies. I focus, in particular, on issues posed by vertical unbundling in the telecommunications sector
- In Section 3, I review how discrimination between access seekers is treated in other markets where vertically unbundled national broadband networks are being introduced
- In Section 4, I review how discrimination between access seekers is dealt with in other vertically unbundled infrastructure sectors, and
- In Section 5, I examine how price and non-price discrimination may be treated in the context of new-build infrastructure.

2 Discrimination by Vertically Unbundled Monopolies

Unlike vertically integrated monopolies, vertically unbundled monopolies' incentives, with regard to price and non-price discrimination, are much more likely to be aligned with the public interest. There are three reasons for this:

- First, a vertically unbundled monopoly has no interest in discriminating in ways that would reduce competition in the downstream markets. This is because an upstream network provider has an incentive to maximise the utilisation of the network and to reduce the risks associated with its dealings with the downstream access seekers[1]. An efficient and competitive market among downstream access seekers—while obviously being in the public interest—also best serves the interests of the access service provider. Hence, discrimination by a vertically unbundled monopolist—where it occurs—is likely to lead to improved efficiency

[1] See for example Nikogosian and Veith, Vertical Integration, Separation and Non-Price Discrimination: An Empirical Analysis of German Electricity Markets for Residential Customers, ZEW Discussion Paper 11-069 for evidence and theoretical proof of effects of vertical unbundling on the incentive to discriminate.

- Secondly, under many circumstances, it is likely to be efficient for a network monopoly to discriminate between end-users in line with various users' demand elasticity. To the extent a network is able to charge each user close to its reservation price, it would increase the overall welfare by both increasing its profits and producing more output. However, when a network does not deal directly with its end-users, such efficient discrimination may not be possible without some indirect discrimination between access seekers who target different end–users, and
- Thirdly, there are likely to be significant efficiencies in allowing some coordination between upstream and downstream investment through different arrangements between NBN Co and access seekers. Such efficient coordination will require a degree of discrimination, particularly in the provision of ancillary services or services incidental to the supply of access services.

Overall, vertically unbundled monopolies have an incentive to discriminate between access seekers in ways that enhance efficiency. They have no incentive to discriminate in ways that reduce efficiency: they would themselves suffer from such lower efficiency.

2.1 Risk posed by downstream market power

There are a number of risks posed to the owner of the upstream access network by any reduction in competition among the access seekers. The most obvious of these is the problem known as "double marginalisation", caused by the successive vertical layers of market power.

In the absence of price regulation, successive market power leads to lower profits for the upstream infrastructure owner. The upstream network operator would seek to charge the highest possible margin on their marginal cost consistent with its monopoly position. This reduces demand somewhat, but in a way that maximises profits for the network operator. In turn, a retailer with horizontal market power would also seek to charge the highest possible margin on their marginal cost—and their marginal cost is set by the network operator's charge. Again, this would further reduce demand but in a way that is profit maximising to the retailer. However, this additional margin charged by the retailer would lead to lower demand for the network operator's output. Hence, the upstream network operator makes lower profit when the downstream access seekers also have market power. Moreover, since both the upstream and downstream firms price at mark-up over their marginal cost, consumers suffer from the deadweight loss twice.

Regulation of the upstream network's prices may fix the double marginalisation problem from the consumer point of view: the regulated upstream network provider will be prevented from charging a monopoly margin. The downstream firm with market power will now set a single monopoly margin, and hence seek to capture all of the monopoly rent without the additional deadweight loss for consumers. However, from the perspective of the upstream infrastructure owner, downstream market power remains a problem.

In general, an upstream monopoly exposed to downstream demand risk will have every incentive to avoid becoming hostage to a small number of downstream service providers. To begin with, market power at the retail level—underpinned by the power of incumbency—would tend to lower the incentive to innovate in promoting widespread uptake of high-end broadband products. This risk is exacerbated by the dynamic and uncertain nature of the market for high-value ultra-fast broadband services. In this market, NBN Co would be especially exposed to the risks of downstream market power

leading to slower uptake in high-value services, and hence possible under-utilisation of its network assets and lower profits.

In addition, aggregation of horizontal market power by downstream retailers would concentrate NBN Co's risks. If there are many competing retailers, a misreading of the market by a few retailers or a failure of some marketing campaigns would be unlikely to have any effect on the network access provider. Errors by some retailers would quickly translate into gains by others. For example, if one retailer purchases insufficient capacity from NBN Co because it misunderstands the level of market demand for quality, it would lose share to other retailers whose services are less prone to congestion. By contrast, aggregation of market power in the hands of a small number of retailers could lead to marketing errors having a direct effect on NBN Co.

If retailers have market power, and if customers are sticky, an error in selecting the required capacity would not lead to loss of customers to other retailers, but rather would result in a lower demand for NBN Co services. This would be of particular concern to NBN Co precisely because regulation would prevent it from offsetting such risk by setting prices to take advantage of its monopoly position.

An efficient and competitive downstream market provides the best insurance to the upstream network service provider that its own performance will not be subject to the vagaries of performance by any of the downstream access seekers. In my view, this will be particularly important for NBN Co, since it is unable to deal directly with the end-users and is locked into a relatively passive role with respect to the development of services that are made available to the end-users.

I understand that there is some debate within the industry about the extent to which the particular form of structural separation applied to NBN Co represents pure vertical unbundling. There appear to be concerns about the possibility of limited competition between NBN Co and its access seekers in the provision of downstream services. Similarly, there may be the possibility of some access seekers entering into limited competition with NBN Co to substitute for the provision of network infrastructure to multi-dwelling units.

Despite general concerns being expressed, I understand there have been no cases of this happening. In my view, very limited overlap between the upstream and downstream service providers—even if it were to occur—would not fundamentally alter incentives. In any case, any such overlap would be subject to regulatory oversight.

2.2 Discrimination between end-users

Economic literature generally supports the view that price discrimination by a monopolist produces a better outcome than a single-price monopoly[2]. Under price discrimination, the capture of consumer surplus by a firm with market power leads to an increase in total output. This enhances welfare.

I generally distinguish between three types of price discrimination:

- First degree price discrimination occurs when the seller charges each individual end-user their reservation price. In this case, the seller obtains maximum possible revenue from each consumer, but must possess information on each consumer's maximum willingness to pay

[2] For textbook expositions, see J. Tirole. *The Theory of Industrial Organization*. MIT Press, Cambridge, MA, 1988 or H. Varian. *Microeconomic Analysis*. Third Edition. W.W. Norton & Company, New York, 1992.

- Second degree price discrimination involves charging different prices on the basis of the quantity of goods purchased. The seller does not need to divide the end-users into classes. The schedule of prices is designed so that each consumer reveals their type by self-selecting a quantity to purchase with corresponding marginal price, and
- Third degree price discrimination requires that the seller divide the end-users into groups according to their characteristics and offer a constant marginal price to each customer.

Price regulation of NBN Co means that it has no incentive or ability to discriminate between end-users in order to earn monopoly rent (or economic profit). However, it has the incentive to discriminate to accelerate its ability to recover costs and to reduce its financial risks.

Since broadband services are highly differentiated products, second-degree and third-degree price discrimination of end-users by retailers is common-place, even where the downstream market is relatively competitive. Significant incumbent market shares and customer stickiness enable further discrimination. The problem for NBN Co is how to implement price discrimination for its own services to maximise efficiency and the use of its network.

Part XIC of the CCA does not prohibit price and non-price discrimination with respect to end-users. In fact, NBN Co terms and conditions, to some extent, discriminate between residential and business users (for example, with respect to time to restore service). However, the current legislative provisions create the risk that price discrimination by access seekers among end-users could result in the transfer of consumer surplus to the industry, but fail to result in the provision of enhanced services if none of that additional revenue is captured by NBN Co.

Access seekers set their own charges for end-users. Without some ability to discriminate between access seekers, NBN Co will have limited ability to capture any of the benefits of price discrimination available to the access seekers. For example, NBN Co provides four traffic classes to the access seekers on its fibre network, ranging from the highest priority to the "best efforts" internet class. To the extent that the difference in pricing exceeds the difference in the marginal cost of providing different traffic classes, such differential pricing may, to a small degree, reflect end-users' willingness to pay. However, access seekers will have the ability to discriminate among end-users that by far exceeds such differential pricing.

The highest priority traffic class is designed for telephony. In general, end-users' willingness to pay for such priority will be limited by the expected price of the telephony service. However, some end-users may be willing to pay high prices for accessing the same priority for other uses. To the extent that competitive conditions in the market allow prices to be set at levels which reflect the end-users' willingness to pay, retailers would fully capture the effects of such price discrimination.

More generally, the design of the NBN Co access product[3] reflects the intention to enable access seekers to construct their own differentiated product offerings to end-users. In doing so, access seekers can choose between different levels of service in the access and connectivity components of the NBN Co's access product. However, the greater the ability of the access seekers to achieve their own differentiation through their

[3] See NBN Co Wholesale Access Service, *Product and Pricing Overview for Service Providers*, December 2011

choice of product components, the less ability for the NBN Co to use its pricing to discriminate between users.

While it is obviously important not to confuse discrimination between end-users and discrimination between access seekers, some discrimination by NBN Co between access seekers could be used to capture the effects of discrimination by the access seekers between end-users. For example, second degree discrimination **between** access seekers could directly link to second degree discrimination **by** access seekers. Similarly, given the current product set, some discrimination between access seekers with respect to their customer characteristics could be used to capture third-degree discrimination **by** access seekers.

Economic theory clearly does not suggest that price discrimination with respect to end-users is always welfare enhancing. Similarly, discrimination between access seekers would not, under all circumstances, align with price discrimination between end-users. There is little doubt that discrimination should be subject to regulatory oversight. However, efficient outcomes would require the legislative scheme to be explicit about the circumstances under which price and non-price discrimination would be permitted due to efficiency enhancement.

2.3 Effects of structural separation

In my view, a naïve view of structural separation is that NBN Co will sell an undifferentiated commodity to all comers. In this view, there is no economic significance in the interplay between upstream and downstream investments. There is no expectation that overall economic costs and risks could be minimised through a degree of coordination between upstream and downstream investments. Hence, any differentiation is seen as suspect. For example, the current legislative scheme restricts NBN Co offering special price arrangements to access seekers who are prepared to make investments that would be of financial benefit to NBN Co. Additionally, NBN Co cannot make special arrangements with a provider whose investments would provide a higher level of certainty for NBN Co's long term revenue stream through support of high value services.

By contrast, I think there may be important efficiencies from some coordination between access seekers and the network service provider in order to optimise mutual investment. This may particularly be the case during the roll-out phase, where coordination and efficient use of specialist workforces could minimise the overall cost of transitioning from copper to the fibre. In this context, the prohibition on discrimination in relation to the ancillary services and activities that are incidental to the provision of access services is particularly consequential and potentially inefficient. [redacted]

It is also highly unlikely that the roll-out of NBN Co will involve a once-off investment decision, without regard for future technologies or changes in market conditions. Over time, technological and investment choices made by NBN Co will be influenced by the technological and investment choices of its access seekers, and vice versa. Technological change is at the core of the telecommunications market. With technological change come intellectual property rights and unique solutions being developed by access seekers. Restrictions on the ability of NBN Co to treat all access seekers differently will affect its ability to improve services both for the benefit of access seekers and end-users.

The ability to discriminate between access seekers is likely to become particularly important under the proposed multi-technology solution. Under the multi-technology solution, the speed of migration from the current technologies to fibre-to-the-premises will be more aligned with market needs. However, NBN Co will never have perfect information about future needs and it will always be undesirable to delay investment until pent-up demand makes it almost risk free. Hence, NBN Co will need to make risky investment decisions under conditions of market uncertainty. Ability to manage those risks through creative contracting with access seekers, as well as coordination of investment at the upstream and downstream levels, will likely speed up investment in fibre-to-the-premises and benefit end-users through earlier availability of advanced services.

Such efficient coordination will inevitably require a degree of confidentiality and differentiation.

2.4 Summary of economic issues

In general, NBN Co's incentives with respect to discrimination between access seekers are likely to be well-aligned with the public interest. If left to its own devices:

- NBN Co would have no incentive to discriminate in ways that could reduce downstream competition. In fact, since the starting position in the downstream market may favour market incumbents, NBN Co may have an incentive to use price and non-price discrimination to offset such incumbency effects both to reduce its risks and to maximise the long term use of its network
- NBN Co will have an incentive to discriminate between access seekers in order to reduce its financial risks. For example, this may involve favouring, to some extent, those access seekers who are willing to take on more volume risk and provide more certainty of revenues. It would also involve devising arrangements that would allow NBN Co to capture the effects of discrimination by access seekers among end–users, or
- NBN Co will have an incentive to reduce the costs and risks of its roll-out through coordinating its investments with the downstream investments by access seekers.

In general, the above actions would tend to increase efficiency. However, access seekers may also have some valid concerns about discrimination:

- There are times when monopoly government enterprises may favour particular clients for reasons of administrative convenience rather than for justifiable efficiency reasons
- Risk aversion by NBN Co could lead to both more and less efficient outcomes, and
- To the extent that monopoly is conferred on a government enterprise through legislation (rather than natural market characteristics), the public typically expects an additional duty of care with respect to fairness of treatment.

These concerns suggest that an appropriate balance would be to make discrimination subject to regulatory oversight. I discuss how such oversight might work later in the paper, after reviewing lessons from other jurisdictions and other infrastructure sectors.

3 Lessons from other Jurisdictions

New Zealand and Singapore are two neighbouring jurisdictions undertaking a roll-out of national fibre-to-the-premises networks. While both countries have fibre roll-out models that differ in important respects from the NBN Co model, it is useful to consider their approaches to discrimination by the network service provider.

I briefly describe the salient features of allowed discrimination in the two jurisdictions. I conclude that in both cases discrimination that would aid efficiency would be permitted.

3.1 New Zealand

The Ultra-Fast Broadband (UFB) initiative is a government programme to expand and develop New Zealand's broadband services. Under the programme, the Government (through an entity called Crown Fibre Holdings) contracts with network service providers through competitive tenders. Fibre network service providers are only permitted to operate at the wholesale level.

Chorus, NZ's largest provider of telecommunications infrastructure and the structurally separated network business of former Telecom NZ Ltd, has won the right to install most of the UFB fibre around the country.

Chorus is bound by an open access Deed of Undertakings (Deed). The UFB Initiative undertakings represent a series of legally binding obligations focused around the provision of services on a non-discriminatory or equivalent basis.

However, the Deed explicitly allows discrimination as long as any particular difference in the treatment of access seekers is objectively justifiable and does not harm competition in any telecommunications market[4].

In addition, the Deed specifically defines the following forms of discrimination as presumed to be objectively justifiable:

- Chorus providing a service that is technically or functionally the same as a Government Initiative Service (but is not required to be provided under the Government Initiative Agreement) on terms and conditions (including price) that are different to those on which a Government Initiative Service is provided, in accordance with the terms of the Government Initiative Agreement. This means that Chorus can discriminate between access to the build out contracted and subsidised by Crown Fibre Holdings, and access to the parts of the network which were not subsidised by Crown Fibre Holdings
- Chorus not making Government Initiative Services available more widely than what is required by the terms of the Government Initiative Agreement. In other words, Chorus is free to refuse service where it is not explicitly contracted by Crown Fibre Holdings
- Chorus providing a service on terms and conditions (including price) that are different to those on which a Grandfathered Service is provided. Grandfathered Services principally include mobile services, as well as provision of access to exchanges and cabinets, and
- Chorus not making Grandfathered Services more widely available than what they are at the Commencement Date.

[4] Clause 5.2 Chorus Limited Deed of Open Access Undertakings For Fibre Services, 6 October 2011

3.2 Singapore

Singapore's approach to Next Generation Access (NGA) is the most far reaching attempt at structural reform of a telecoms sector internationally, coupled with modest levels of government funding. The Next Generation Nationwide Broadband Network (NGNBN) is Singapore's all-fibre carrier-neutral ultra-high-speed broadband network, a project under the Intelligent Nation 2015 (iN2015) masterplan by the Infocomm Development Authority of Singapore (IDA). This network does not have an exclusive franchise on the provision of fibre networks, but is deemed to be a dominant licensee.

NGNBN consists of a strictly vertically unbundled structure:

- NetCo (OpenNet) is the structurally separate, passive infrastructure company responsible for the design, build and operation of the fibre network and wholesale supply of dark fibre services to OpCo. Structural separation is defined as "no effective control". This requires NetCo and all downstream providers to be separate entities with fully autonomous decision making processes
- OpCo (Nucleus Connect) is the operationally separate entity responsible for active infrastructure and will provide Layer 2 and Layer 3 wholesale services (i.e. data link and IP layer) to retail service providers (RSPs). This requires OpCo to be a newly established and separate legal entity but may be fully owned by (or fully own) a downstream operating unit, provided it is independent and operates, in all respects, on a stand-alone basis, and
- RSPs will sell services which operate over the NGNBN to end-users.

Non-discrimination is primarily achieved through the implementation of structural and functional separation of NetCo and regulation pursuant to NetCo and OpCo's respective Interconnection Codes, which provides the basis for the implementation of non-discriminatory price and non-price terms between all access seekers through a reference access offer (RAO).

However, the regulatory framework applicable to NetCo and OpCo respectively does provide the ability for those entities to enter into a Customised Agreement with access seekers. Parties are free to agree any mutually agreeable price, term and condition, provided that they do not "unreasonably discriminate" against any other access seeker and the prices, terms and conditions of the Customised Agreement approved by IDA. IDA publishes Customised Agreements on its website.

IDA has not formally defined what terms would constitute "unreasonable discrimination" against other access seekers, but the practical implementation of that requirement has allowed Customised Agreements in circumstances where the position of a particular access seeker cannot be readily accommodated within standard RAO terms. In the case of Layer 2 and Layer 3 services supplied by OpCo, volume discounts and long term pricing discounts have been introduced without this section being invoked. In other words, by implication, IDA appears to regard such discounts as "reasonable" discrimination.

Unlike Australia and New Zealand, Singapore does not enforce structural separation across the entire sector: while NetCo is structurally separated, other network operators can be vertically integrated. Hence, its anti-discrimination provisions are based on risks of anti-competitive conduct by vertically integrated entities with market power, regardless of whether they are currently vertically integrated or not.

3.3 Lessons for the regulation of NBN Co

The emerging market structure in New Zealand provides the closest parallel to Australia. In both cases, there is likely to be a single network access service supplier which is legally prevented from vertical integration. While New Zealand authorities retain concerns about discrimination and generally encourage non-discriminatory provision of access, they apply a rule of reason to discrimination. Discrimination is allowed where it does not harm competition. Equally important, restrictions on discrimination—where such discrimination cannot be justified for efficiency reasons—are confined to the provision of access services. This is a substantive difference from the situation in Australia, where a wide range of incidental and ancillary services are subject to the non-discrimination prohibition.

In my view, the approach adopted in New Zealand is more likely to lead to efficient outcomes than the current Australian treatment of discrimination. First, restricting controls over discrimination to the specified access services (and excluding ancillary and incidental services) means that the network service provider is free to engage with the access seekers on a wide range of mutually beneficial matters in a strictly commercial and confidential manner.

4 Lessons from other Sectors

As a general principle, the National Access Regime under Part IIIA of the CCA readily permits discrimination, where such discrimination aids efficiency. Section 44ZZCA of the CCA defines pricing principles for access disputes and access undertakings or codes. The section states (the emphasis is mine):

> *"The pricing principles relating to the price of access to a service are:*
>
> *(a) that regulated access prices should:*
>
> *(i) be set so as to generate expected revenue for a regulated service or services that is at least sufficient to meet the efficient costs of providing access to the regulated service or services; and*
>
> *(ii) include a return on investment commensurate with the regulatory and commercial risks involved; and*
>
> *(b) that the access price structures should:*
>
> *(i) allow multi-part pricing and price discrimination when it aids efficiency; and*
>
> *(ii) not allow a vertically integrated access provider to set terms and conditions that discriminate in favour of its downstream operations, except to the extent that the cost of providing access to other operators is higher; and*
>
> *(c) that access pricing regimes should provide incentives to reduce costs or otherwise improve productivity."*

This general approach is entirely consistent with my economic analysis. In this section, I consider how the principles of the National Access Regime are applied in other infrastructure sectors, and the lessons for the telecommunications sector. We also consider the regulation of the electricity and gas networks. While electricity and gas are covered by sector-specific regulatory regimes, those regimes also draw their inspiration from the National Access Regime.

Outside of the telecommunications sector, it is common to find discriminatory provisions in ACCC or State access agreements. These provisions typically relate to management of the networks and the efficient allocation of demand to ensure network capacity is being appropriately utilised. Other aspects include demonstrating that an access seeker has the ability to connect to, and exit, a network without causing interference and disruption to other users. In the allocation of scarce capacity, access networks may also establish a hierarchy of users for ranking of access applicants. We see a direct parallel between the logic of allowing some discrimination by rail and telecom networks.

My analysis shows that the nature of technology and contractual arrangements make a significant difference to the extent to which discrimination could aid efficiency. For example, in the case of electricity networks, discrimination between access seekers is redundant, in the sense that all efficient discrimination can be achieved through discrimination among end-users via direct contracts with them. I find that the regulation of electricity networks does not provide for discrimination between retailers, but allows extensive opportunities for discrimination between end-users.

More generally, the examples set out below show how efficiency-enhancing discrimination occurs in those sectors. I also show the similarities between the efficiencies that discrimination can bring to those sectors and to the telecommunications sector.

4.1 Rail Networks

There are many important similarities between access to rail networks and access to NBN Co (and, of course, some obvious differences). I highlight the example of Australia Rail Track Company (ARTC), a federally regulated, vertically unbundled access network.

Predominant usage of the network is for rail services to the Hunter Valley coal markets. Subject to legislative requirements in relation to other traffic, ARTC's obligations are to improve utilisation and performance of rail services and to optimise coal export throughput in the Hunter Valley.

The "*ARTC Hunter Valley Coal Network Access Undertaking – June 2011*" is a good example of a regime with discrimination provisions. The access agreement establishes a set of principles to be followed in determining access rights. These principles cover the need for coal producers to have long term certainty of access balanced by the need for ARTC to manage its long term risks.

At the core of the undertakings is the ability for ARTC to exercise discretion and discrimination as long as it advances the statutory objective. ARTC will allocate capacity in accordance with the following rules:

- Capacity will be allocated to ensure priority is maintained to passenger services in accordance with ARTC's obligations under section 88L of the "*Transport Administration Act 1988 (NSW)*", and
- Capacity remaining after passenger services have been satisfied will be allocated to access holders at ARTC's discretion. ARTC, in exercising its discretion, may allocate capacity other than on an equitable basis, if it is consistent with the objective of ensuring efficient utilisation of the coal chain capacity.

A further key discriminatory provision is that the rights of existing access holders are superior to new applicants. The factors that ARTC can take into account when considering a new application include:

- The interests of access holders with coal access rights for export coal
- The interests of access holders with coal access rights for domestic coal
- Other users of the network, and
- Whether ARTC would be materially disadvantaged if access is provided.

The ARTC access undertakings allow it to set prices for access seekers within the range of the short-run marginal cost as a minimum and stand-alone cost as a maximum.

Overall, the ARTC access regime is explicitly designed to discriminate in any way that enhances efficiency, where efficiency is consistent with the overall utilisation of the ARTC capacity and promotion of coal exports.

Lessons for regulation of NBN Co

There are clearly some important market and technological differences between the coal rail network and the telecommunications network. In particular, capacity constraints on the coal rail network are a significant concern, with new users often having an immediate effect on the existing users. By contrast, it is more difficult to identify externalities imposed by NBN Co access seekers on each other, or to define capacity constraints.

However, there are also important similarities. In particular, like NBN Co, ARTC must invest in long-lived infrastructure with economic life well in excess of any contracts with individual access seekers. As a result, within the overall regulatory envelope, ARTC needs to be allowed to deal differentially with its customers to ensure the network capacity is being appropriately utilised. While the ARTC's overall revenue is capped by regulation, just as NBN Co's is capped, the regulatory regime enables ARTC to discriminate to manage its long-term risks.

There are also possible lessons to draw from allowing ARTC to discriminate to achieve alignment between the utilisation of its own capacity and the utilisation of capacity at the coal terminals at the Port of Newcastle. This principle recognises the broader context of the coal supply chain, suggesting that "external" components of the supply chain are important in achieving efficiency in the allocation of capacity. This recognition of the broader supply chain is relevant in the NBN Co context. The objective in telecommunications should also be to optimise and, where efficient, coordinate investment along the entire supply chain. Discrimination that assists in carefully coordinating upstream and downstream investments maximise economic efficiency.

4.2 Electricity and Gas Networks

In electricity and gas networks, the legislated contractual arrangements that govern access and the relationship between the network, retailers and customers is referred to as a "triangular" model and consists of:

- A **connection agreement** between the end-user and the network. This relates very largely to the technical terms and conditions—that is capacity, technical standards and service levels
- A **retail supply contract** between the end-user and the retailer. This sets out the commercial terms of retail supply such as price. By default these contracts appoint the retailer as an agent of the customer in dealings with the network, and
- A **commercial contract** between the retailer and the network. This sets out interface arrangements such as information sharing, invoicing and payments as

well as dispute resolution. It supplements an extensive set of legislative arrangements that define the relationship between retailers and networks.

The ability to enter into direct contractual relationships with end-users is the key distinction between the telecommunications and energy sectors. Electricity and gas networks in Australia that are regulated under the National Electricity Law or the National Gas Law are able to enter into negotiated agreements that vary the standard terms and conditions of access by customers. This ability to discriminate enables the necessary economic efficiencies, despite restrictions on discrimination between retailers.

Electricity connection agreements

Through connection agreements networks can provide different technical and service standards to end-users.

With respect to the cost of connecting to the network, provision exists for large customers to enter into a negotiated connection agreement. These don't need regulatory approval but must conform to a network's connection policy, which does require Australian Electricity Regulator (AER) approval. The technical conditions of connection must also be such that they do not affect system security or reliability levels. The technical conditions and service standards must also be no worse than would be available under a standard form connection agreement—that is, customers cannot negotiate price reductions for lesser standards.

Networks can set commercial charges for negotiated connection agreements that are not regulated. In other words, networks can charge more for better standards—but all customers have a right to connect under the standard form agreement and pay regulated charges. Of course, charging more for a better standard is not price discrimination; it is provision of a different service. However, the important fact is that networks can charge different amounts to different users for the same (upgraded) services.

Networks can also negotiate lower charges than the regulated tariff—but any discounts cannot be recovered from other customers unless they are deemed to be "prudent discounts". This usually applies when customers have the option of bypass (or closure) if charged the highly averaged regulated network tariff. If the negotiated network tariff is above the standalone cost of supply, then all customers will benefit from a discounted price—but only if bypass or closure is a certain outcome that would otherwise result in the loss of all revenue from the customer.

The provision of "prudent" discounts is the main opportunity for price discrimination available to the networks. In practice, negotiated connection agreements for customers and prudent discounts are rare in the electricity market, generally applying to only a handful of the very largest customers. However, such discriminatory arrangements often have important financial effects on the networks. For example, discrimination in favour of major users, such as smelters, can account for a significant proportion of total sales. Such discrimination enhances efficiency by preventing inefficient duplication of investment and enabling survival of customers whose departure would have imposed an even greater opportunity cost on the network than the cost of continuing to serve them at discriminatory low charges.

Commercial agreements with electricity retailers

The interface and relationships between retailers and networks is largely governed by the National Electricity Rules (Rules) and the remaining matters to be determined by commercial arrangements are quite limited.

The Rules give retailers rights to access under standardised conditions such as price and service standards. The Rules also provide that the retailer is responsible for the payment of network charges to the network for connections where it holds a retail supply contract, unless the customer expressly elects to pay those charges directly to the network or the network agrees to collect those charges from the customer.

The Rules allow the network to ask for payment support from retailers such as lodging deposits or bank guarantees. The Rules prescribe, however, that all such support must conform to an approved non-discriminatory policy.

Generally, the Rules govern most aspects of the relationship between retailers and networks and thus the remaining commercial arrangements cover such residual information as:

- Contact information for the serving of notices and invoices
- Information sharing
- Invoicing and payment details, and
- Dispute resolution.

Importantly, all of the liability, indemnity and responsibility issues are set out in the Rules. However, some differentiation is possible through information sharing.

Lessons for the regulation of NBN Co

The policy decision to prevent NBN Co from contracting directly with end-users has the effect of indirectly, and probably unintentionally, placing a firm limit on the degree of efficient discrimination that can be achieved without discriminating between the access seekers.

On the other hand, in the electricity and gas sectors, the ability to contract directly with end-users substantially removes the need for the network owner to discriminate between access seekers in order to enhance efficiency. In the electricity and gas sectors, each end-user has a contractual relationship with the network under which the individual capacity of the customer is determined. The network then charges the customer individually—through the retailer—for usage at each connection point.

In addition, the nature of the electricity networks' technology means that retailers have few mechanisms to increase network revenue in a unique and sustainable way. Hence, there is little incentive for the network to favour one retailer over another from the perspective of managing the network's financial risks.

Under a different policy, the lack of a direct contractual relationship between NBN Co and end-users could be overcome to achieve efficient discrimination between customers. However, holding the overall policy constant, and allowing some discrimination by NBN Co between access seekers, could be used to capture the effects of discrimination by the access seekers between end-users.

4.3 Airports and Ports

Ports and airports are subject to limited regulation in Australia. The provision of aeronautical services by airports is regulated in New Zealand under the price disclosure regime. In Singapore, the provision of aeronautical services is subject to price control by the Civil Aviation Authority.

In both jurisdictions, efficient discrimination between airlines is commonplace. For example, airports frequently provide airlines with price incentives to open new routes or to increase (or retain) a particular frequency of services. While as a matter of practice

airports offer incentives to all carriers, the price, terms and conditions of such incentives are typically confidential and are targeted to the circumstances of the particular service and airline.

Similarly, airports work directly with airlines to coordinate the implementation of new technologies. For example, the move towards the use of check-in kiosks required coordination between the airport and each airline on the design of the check in facilities. Since check-in technologies and practices differ among airlines, a "one solution fits all" approach would tend to reduce efficiency.

Ports in Australia are subject to different forms of price oversight at State level. The table below summarises the existing regimes.

Table 4.1: Framework for Economic Regulation of Ports

	NSW	**Victoria**	**South Australia**	**Queensland**
Type of Framework	Light handed Price Monitoring	Price Monitoring	Price Monitoring	Informal price monitoring
Involvement of independent regulator	No, price monitoring is by Minister	Yes, Essential Services Commission (ESC)	Yes, Essential Services Commission of South Australia (ESCOSA)	No
Through legislation?	Yes	Yes	Yes	No, port lease contains conditions to publish certain information
Open ended or time limited	Open ended	Periodic reviews every 5 years	Periodic review every 5 years	Open ended
Annual reporting	Port owner reports to Minister	ESC reports to Minister	ESCOSA reports to Minister	Port owner publishes information
Information disclosure	▪ Publish effective Schedule of Prices ▪ Provide Minister with rationale for change in price or basis for new charges	▪ Publish Reference Tariffs ▪ Publish Pricing Policy Statement ▪ Audited regulatory accounts and cost allocation statements to ESC	▪ Publish prices ▪ Audited regulatory accounts	▪ Publish prices ▪ High-level financial information
Discrimination between access seekers	All access contracts are confidential. Discrimination is possible, including volume incentives and non-price terms			

Lessons for regulation of NBN Co

Again, allowing for the obvious technical and market differences, the logic behind price and non-price discrimination by ports and airports is to recognise the importance of coordinating upstream and downstream investments and enabling the infrastructure service provider to manage its risks through various and variable contractual arrangements with the access seekers.

5 Financial Viability of New Build

Investment in achieving universal access to ultra-fast broadband is commercially risky. In my view, it is obvious that pricing and non-pricing measures which enhance viability would bring public benefits:

- They may enable investment to proceed, or to proceed earlier. As I have discussed, this will become particularly important under the multi-technology solution. Discrimination could underwrite the bringing forward of investment by bringing forward use of the network and demand for higher bandwidth services
- They could help reduce reliance on government subsidies. Without entering into an argument about the NBN Co's business case, any possible future reliance by NBN Co on government funding involves real economic cost associated with the deadweight cost of taxation. Contractual arrangements that reduce the risk of such support would have economic benefits, and
- They could promote greater efficiency through enabling greater private sector involvement.

In section 2 I discussed, as a general principle, that enabling NBN Co to extract a greater share of consumer surplus through some degree of discrimination between access seekers would be consistent with economic efficiency. In this section, I want to consider whether this argument actually goes further in the case of new build infrastructure: that even if such discrimination caused some inefficiency, it may still be justified if it enhanced the financial viability of a new build.

Enabling extraction of a greater share of consumer surplus is a fairly common way of making infrastructure investment more viable. For example, many social sector Public Private Partnerships (PPPs) include the grant of certain exclusive rights (such as the right to operate on-site parking or retail) to the service providers. These exclusive rights enable service providers to discriminate between customers with a different willingness to pay for on-site convenience. Such additional revenue is used to under-write the overall required infrastructure investment.

If NBN Co is prohibited from price discrimination, consumer surplus would either be captured by access seekers (if there is limited competition) or would accrue to consumers. In other contexts, this may be precisely the desired outcome. But if inability to capture some consumer surplus undermines viability, then consumers may not benefit:

- If the project is not viable, the surplus may not be created in the first place. For example, with a move to multi-technology solution, the overall shift to faster options would be delayed, or
- If the project relies on public subsidies, benefits to consumers in the form of greater consumer surplus would be offset by the deadweight cost of taxation.

Finally, NBN Co's viability is particularly dependent on consumers migrating towards more data and speed-intensive plans. This migration would depend on the types of services being offered by access seekers. Hence, for its financial viability, NBN Co is vitally interested in promoting access by the access seekers that are most likely to encourage such migration.

6 Conclusions

I conclude that, as a vertically unbundled monopoly exposed to significant investment risk and under pressure to achieve an efficient roll-out, NBN Co will not have an incentive to discriminate in an anti-competitive manner, but would have a strong incentive to discriminate in order to:

- Manage its risks with respect to downstream service providers, and to encourage service providers to act in ways that would lead to more rapid and greater optimal utilisation of the NBN Co network
- Improve its financial viability by using discrimination among access seekers as a tool to capture some of the financial effects of discrimination by the access seekers, and
- Improve the efficiency of investment by coordinating and optimising the entire value chain.

In my view, the existing non-discrimination provisions in Part XIC of the CCA prevent such efficiencies. This makes them an outlier both relative to the regulation of other network infrastructure in Australia and to regulation of telecommunications access infrastructure in similar jurisdictions. Whilst lessons from other network infrastructures obviously have to be informed by the differences in technology and market conditions, the general principle I observe is that discrimination is allowed where it can be justified on efficiency grounds.

In my view, there is significant public benefit in enabling discrimination in the provision of access to the NBN Co network, where such discrimination would promote efficiency and be in the long-term interest of end-users. The long-term interest of end-users would be particularly served by enhanced financial viability of investment in the fibre-to-the-premises infrastructure, and hence, in ensuring that end-users have more rapid and more secure access to such infrastructure.

In practice, it is difficult to identify any circumstances under which discrimination in the provision of ancillary services or services incidental to the supply of declared services could cause legitimate concerns by access seekers or could hypothetically lead to lower efficiency. Given the negative effect that this prohibition (embodied in section 152 AXD) is likely to have on the efficiency of roll-out, there is a strong argument for eliminating this prohibition altogether. On the other hand, the more narrow restrictions on discrimination in the provision of declared services embodied in section 152 AXC should be modified to enable discrimination where it aids efficiency and the long-term interests of end-users.

The current legislative scheme and ACCC guidelines appear to provide some opportunity for efficient discrimination by drawing a distinction between discrimination and differentiation. It may be possible to argue that if differentiation is efficient and is in the interests of end-users, it may not be deemed to be discrimination. If this is the intention, then there is merit in making this distinction clear in the legislation, as is the case in Part IIIA of the CCA.

Discrimination is discrimination, and should be addressed head on. With respect to discrimination by NBN Co, there are good economic reasons to expect that there will be many circumstances when discrimination would enhance efficiency by reducing risks and better coordinating upstream and downstream investments.

I conclude that there are likely to be economic benefits in treating discrimination by NBN Co in the same way as it is usually treated in similar cases: subjecting it to regulatory oversight and enabling it to happen only when it increases efficiency and is in the long-term interest of end-users.

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