



# Terria Regulatory Submission

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## 1. Executive summary

This submission is Terria's response to the Government's request for submissions on regulatory issues associated with the National Broadband Network (NBN).

It focuses on the framework of the regulatory regime that Terria, as a Proponent to build and operate the NBN, considers needs to be established in order to achieve the Federal Government's expressed objectives for the NBN.<sup>1</sup> Specifically, to promote the long-term interests of end users, including:

- **(Promoting the economically efficient use of, and investment in, the NBN):** by enabling low access prices that reflect underlying costs whilst allowing the successful NBN Proponent (**Proponent**) to earn a rate of return commensurate with the risk of the project.
- **(Promoting effective competition in relevant markets):** by adopting an open access regime giving certainty to access seekers that access price and non-price terms will be reasonable and that the Proponent will have incentives to supply wholesale services/products that will enable access seekers to differentiate their product offerings.

Terria considers that the existing regulatory regime is inadequate for achieving these objectives. The reasons for this view are provided in section 3. However, with some amendment and modification, as flagged in this submission, the objectives of open access and competition can be realised, to facilitate efficient access and retail pricing of broadband services in Australia.

Terria reiterates the matters discussed in detail in section 3 of its submission to the Expert Panel of 28 March 2008 and that submission forms Schedule 1 to this further submission.

This submission identifies the key features that Terria believes will be required, as part of the ongoing regulatory regime, to achieve the Government's stated objectives and avoid the regulatory failures experienced under the existing regime, as follows:

- **(Structural separation):** structural separation should be the outcome of the NBN process and the centrepiece of an effective regulatory regime for the NBN. If the Proponent is separate from any company which uses access to the NBN to provide broadband services to retail customers and/or end-users this will facilitate the efficient construction and operation of the NBN by a party that is independent of the variety of access seekers.
- **(Minimum access requirements):** first, to facilitate the Proponent's efficient roll-out and operation of the NBN and also to facilitate and encourage effective competition in the provision of services in relevant markets.
- **(Central role for the Commission):** a regulatory regime which gives the Australian Competition and Consumer Commission (the **Commission**) an oversight role in respect of capital expenditure for the NBN, the price and non-price terms and conditions on which access to the NBN is provided and the structural separation regime (with structural separation reducing the need for constant, ad hoc, Commission involvement in specific access disputes).

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<sup>1</sup> Request for Proposals to Roll-Out and Operate a National Broadband Network for Australia, Department of Broadband, Communications and Digital Economy, 11 April 2008.

Structural separation is the only way to remove incentives for the Proponent to engage in anti-competitive discrimination or cross-subsidisation in downstream markets. Structural separation ensures that the Proponent has an appropriate incentive to make a reasonable return on its investment in the NBN as a standalone investment by maximising utilisation of the NBN rather than inhibiting, preventing or deterring competition by those who compete with its downstream interests. It also provides an appropriate incentive for the NBN owner to respond to access seeker demand for products and allow them to innovate and compete. Operational separation and/or ring fencing rules and imputation tests can assist in reducing these incentives, but experience has shown that they cannot effectively remove them (see section 3).

Providing a central role for the Commission will ensure that:

- **(Commercial return commensurate with risk):** the Proponent will receive a commercial return on investment in the NBN commensurate with the risk assumed by its owner and no more (which may lead to "gold plating") and no less (which may lead to underinvestment).
- **(Efficient prices for users/consumers):** efficient access prices reflect the underlying cost of the NBN and the regime will remove the risk (or perceived risk) that the terms and conditions will be set unreasonably, thereby discouraging efficient use of the NBN. This will need to include access by the Proponent to existing monopolistic infrastructure that forms necessary inputs to the NBN. This means that access seekers will build infrastructure where it is cheaper for them to do so (for example for interconnection into the NBN and/or investment in platforms for delivery of products and services using NBN services) and buy access/services where that makes commercial sense. Such a structure will promote competition in the provision of high speed carriage services and the provision of retail voice, data and other services (including content products such as IPTV) which will be supplied using access to the NBN by providing certainty to access seekers as to the terms on which they will be able to access the NBN and that they will be able to compete fairly and 'on the merits' (i.e. on the basis of efficiencies, superior service offerings etc) in downstream markets.

This oversight role should be conferred on one regulator and that regulator should be the Commission, in order to provide consistency in decision-making. Providing for the Commission to undertake this role is important as it is the regulator with the most appropriate expertise, having expertise both specifically in relation to telecommunications regulation, but also more generally in other relevant network industries such as gas, electricity and rail, which experience it can draw upon for the purpose of telecommunications regulation.

This submission:

- provides a brief outline of the existing regulatory regime - section 2;
- notes the inadequacies of the existing regime - section 3;
- explains the reasons structural separation is required and describes (at a high, conceptual level) what is required for effective structural separation - section 4;
- explains the role of the Commission which Terria believes is required for effective access regulation - section 5; and
- discusses the minimum access requirements, for the Proponent and for access seekers - section 6.

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## 2. Existing regulatory framework

Under the existing regulatory regime, the NBN may be regulated in one of two ways:

- relevant services may be declared pursuant to Part XIC; or
- the Proponent may provide an access undertaking pursuant to Part XIC.

Declaration of some or all of the services provided by means of the NBN would provide an access seeker with a right to have the Commission arbitrate the terms and conditions of access in the event they cannot agree those terms and conditions with the Proponent. This provides certainty that an access seeker will be able to access the NBN on some terms and conditions. It does not provide certainty to:

- access seekers about the price they will have to pay for access or the other terms and conditions of access;
- access seekers that there is no anti-competitive discrimination between entities related to the Proponent and them; or
- the Proponent about the return it will be able to make on its investment.

The acceptance of an access undertaking alone will not be sufficient to achieve the objectives outlined in section 1, unless the undertaking provides for the structural separation arrangements described in section 1.

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### **3. Inadequacies of the existing regulatory regime**

#### **3.1 Inadequate to prevent anti-competitive conduct**

Whilst the anti-competitive conduct regimes established by Parts XIB and IV of the TPA provide some scope to address anti-competitive behaviour such as anti-competitive discrimination, experience has shown that these provisions have not been entirely effective in preventing anti-competitive conduct in telecommunications markets. This concern is particularly acute in new and innovative markets where the framework adopted will have a significant impact on the competitive dynamics of markets going forward.

As was recognised by Ofcom when considering the Next Generation Network technology, the new technology should not be forced upon consumers at any cost. Appropriate regulation is necessary to ensure that investment in new technology is not made to the detriment of consumers. In this regard, Ofcom said:

Although we are keen to ensure regulation is not a barrier to companies investing in next generation access when it makes sense for them, this investment [in a next generation network] should not be achieved at any cost. In particular, it should not be detrimental to consumers, for example in having to pay higher prices for today's services, nor by sacrificing competition.<sup>2</sup>

The experiences of Terria members to date suggest that the Part XIC access regime and the anti-competitive conduct provisions in Parts XIB and IV have done little to prevent Telstra from exercising its market power with an anti-competitive effect. This has been recognised by the Commission. For example, Commissioner Ed Willett said in a speech as far back as 15th November 2004:

Both access regulation and conduct regulation (which prohibits anti-competitive conduct) have an important role in promoting competitive markets. However, given the level of market power that Telstra wields in the industry and the incentives that Telstra has to limit competition, it is arguable whether any access regime will – on its own – deliver fully competitive outcomes.

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<sup>2</sup> Ofcom, *Future of Broadband - Policy approach to Next Generation Access*, para 1.15.

Accordingly, Terria submits that relying solely on Parts XIC, XIB and IV to prevent the NBN access provider from exercising market power in an anticompetitive way will be insufficient in respect of a vertically integrated NBN Proponent, just as it has been inadequate to prevent Telstra from behaving anticompetitively in relation to the supply of services over its fixed line network.

It is therefore essential that structural separation be a central element of the regulatory environment for the NBN, requiring the separation of the network owner/operator from the array of access seekers.

### 3.2 Problems arising from vertical integration

The experience of the Terria members reveals that Telstra's existing vertical integration poses a real barrier to competition in retail services and this has endured despite the imposition of operational separation requirements on Telstra. The negative effects of such a barrier are felt more strongly in respect of emerging technologies.<sup>3</sup> The market power derived from this vertical integration is enhanced through market power exercised in related "horizontal" markets.<sup>4</sup>

The competition issues experienced in respect of Telstra's vertical integration would be the same as those likely to arise if structural separation was not required and the NBN were owned and operated by the same company or related companies. Specifically:

- **(Creating barriers to entry or expansion):** a vertically integrated operator would have strong incentives to only build the network if it were free from access regulation on the basis that it will provide access to the NBN on commercially negotiated terms and conditions. Even if a vertically integrated operator were to agree to provide access to its network, it would still have strong incentives to limit the services it supplies to entities which compete with its downstream interests or to supply them on unfavourable terms. This would make competition with a vertically integrated entity's retail business difficult (if not impossible). Control by a vertically integrated entity removes incentives for it to provide a service which competitors can use to tailor innovative services. Examples of Telstra's past behaviour include:
  - Telstra refusing to provide access to its Business Grade DSL service to competitors for more than 12 months providing an opportunity to cherry-pick the most valuable customers in the crucial roll out phase of this service;
  - Telstra refusing to provide wholesale access to its competitors to its ADSL 2+ service, and prior to this only offering three speeds of ADSL services at wholesale prices at or near Telstra retail prices;
  - Telstra imposing a retail-wholesale price squeeze when retail competitors such as Primus and Optus entered the residential DSL market in 2004; and
  - Telstra's ongoing refusal to provide replacement services when it unilaterally cancels supply or wholesale services, despite the fact that

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<sup>3</sup> Chairman Graeme Samuel said in a speech on 22 July 2004, "In addition to Telstra's horizontal and vertical integration, its full ownership of the main pay TV distribution network and copper network, as well as its 50 per cent shareholding in Foxtel, also act to stifle competition, even in new and emerging markets." The introduction of operational separation in 2005 has not proven successful in addressing these concerns - see section 3.3.

<sup>4</sup> Telstra and its related entities have a greater than 50% market share in retail markets for services including mobile telephony, directory services and pay TV.

Telstra retail is provided with replacement or substitute services. A very recent example of this is in relation to the shut down of "permitted attachment private lines" offerings to wholesale customers. Telstra retail was provided with a replacement service, whilst wholesale customers were not.<sup>5</sup>

- **(Reducing scope for innovation):** as a vertically integrated entity could also supply only limited resale services that cannot be adequately differentiated from the services of the vertically integrated entity and prevent competitors from providing innovative retail services. Being limited to resale services, or services very much akin to resale services, will mean that competitors will be only able to earn low margins on the sale of retail services, and will be forced into a financially weak position where they are unable to apply pricing pressure on the access provider. As they will have high marginal costs and low average costs, and will be unable to enjoy economic savings by increasing their scale and market share, there will be a significant and detrimental impact on the competitive pressure they can impose.
- **(Providing incentives for discrimination):** because vertical integration provides the ability and incentive for the vertically integrated entity to discriminate between downstream suppliers of retail services on price, operational processes, technical specifications and the provision of information.

Particular examples of discrimination through the operational processes and non-price conditions associated with access arise in the context of ULLS access, include:

- onerous forecasting arrangements which place the risk of forecasting entirely on access seekers by preventing access seekers from exceeding submitted forecasts, but which may penalise access seekers if actual orders fall below those forecasts;
  - the setting of arbitrary limits on daily migration rates, and preventing access seekers from pursuing aggressive migration strategies;
  - general inefficiencies in the migration process run by Telstra that increases the period of service outage faced by end-users during the migration process, providing a substantial impediment to end-user uptake;
  - failure to guarantee reasonable service levels on migration, including timeframes for completion; and
  - arbitrarily "capping" access to exchange in circumstances that prevent access seekers from effectively planning for the consequences of not being able to offer services due to the imposition of a capacity "cap".
- **(No incentive for efficient use and investment):** a vertically integrated entity may have incentives not to use, or invest in, infrastructure efficiently. For example, a vertically integrated NBN Proponent may only take into account the needs and business plans of its own retail service provider(s) in making technical decisions regarding the nature of the service to be rolled out, rather than making decisions in the interest of the collective needs and interests of all potential users of the services. That is, technical decisions may be made that do not consider the interests of access

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<sup>5</sup> Issues with ULLS access were discussed in presentations given at the National Broadband Network Regulatory Seminar held by the T4 in Canberra on 5 June 2008.

seekers or that specifically disadvantage access seekers in comparison to the Proponent's own interests.

### 3.3 Operational separation

The 'operational separation' regime which took effect in December 2006 has been heavily criticised by access seekers and the Commission as failing to achieve its objectives. In early June 2008, the Chairman of the Commission, Mr Graeme Samuel, told a Senate committee that the operational separation regime - which requires Telstra's retail and wholesale divisions to operate at arm's length - had not been effective in creating a level playing field for Telstra and its competitors. Mr Samuel said: "*We continue to receive complaints of conduct that suggest that the objective of equivalence, which was the objective of the regime, is not being achieved.*" The Committee heard that the Commission had investigated and reported three complaints of breaches of the operational separation rules yet no public action was taken against Telstra.

It is clear from industry experience that operational separation is not adequate to restrain a monopoly provider of key telecommunications infrastructure and services in the Australian context. Terria submits that it is clear that operational separation will not work in the NBN context and that the Proponent should be structurally separated in order to promote competition in the provision of services over the NBN.

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## 4. Structural separation

### 4.1 Importance of structural separation

Terria agrees with the Commission's well-documented concerns about the competition problems arising from vertical integration. Commissioner Willett said in a speech in 2004:

This is not a criticism of Telstra senior management, who are doing no more than their jobs in maximising shareholder value by protecting their markets. Rather, it is a criticism of the existing combination of Telstra's market power, ubiquity and internal structure – as well as the current regulatory arrangements that are intended to deal with competition problems only as they arise.

Terria does not agree with Telstra's criticisms of these concerns.<sup>6</sup> Whilst Terria agrees that a vertically integrated access provider which is allowed to take profits from its wholesale products may have much weaker incentives to discriminate against rival downstream operators, this needs to be balanced against the strong incentives of a vertically integrated operator to resist providing access to downstream competitors on reasonable terms.

Structural separation puts in place conditions which:

- **(Promote efficient investment in the NBN):** properly implemented, structural separation enables the Proponent access provider (and its investors) to clearly define risks and provides appropriate incentives to make an appropriate return on the investment in the NBN, as a standalone investment, by maximising the utilisation of the NBN. A vertically integrated entity could exercise its discretion to harm competition by setting inefficient access prices, which may send signals that lead to the inefficient use of, and investment in, infrastructure which would not be in the interests of access seekers nor be in the long term interest of end users.<sup>7</sup>

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<sup>6</sup> Telstra Corporation Limited - Response to ACCC Draft Decision regarding FANOC's SAU dated 4 February 2008, "*Downstream vertical integration by the network owner does not come at the cost of reduced wholesale incentives upstream... As Ofcom notes, the incentives of a vertically integrated NGN operator to discriminate against downstream competitors "may be relatively weak given that the organisation's goal may be to promote take-up of next generation access services and rapidly increase traffic on the network."*" (page 32).

<sup>7</sup> 2007 G9 Special Access Undertaking Commission Draft Decision, sections 7.4.5 and 7.8.

- **(Encourage economically efficient use of the NBN):** by providing for low access prices that reflect the underlying cost of the NBN and removing the risk (or perceived risk) that the terms and conditions will be set unreasonably, thereby discouraging efficient use of the NBN. This means that access seekers will make efficient build/buy decisions.
- **(Promote competition):** in the provision of high speed carriage services and the provision of retail voice, data and other services (including content products such as IPTV). To provide these services using access to the NBN, access seekers require certainty as to the terms on which they will be able to access the NBN and that they will be able to compete fairly and 'on the merits' (ie on the basis of efficiencies, superior service offerings etc) in downstream markets.
- **(Promote innovation):** by removing the incentive for the Proponent infrastructure provider to limit the range and scope of service it offers, allowing downstream operation to develop their own competitive service offerings.
- **(Prevent anticompetitive discrimination):** by removing an incentive for the Proponent infrastructure owner to make decisions in the interests of its downstream operators, thereby ensuring that access provider's decision-making operates independently of the objectives of the infrastructure provider's related entities.
- **(Promote regulatory certainty and reduce regulatory burden):** properly implemented, structural separation should promote regulatory certainty and reduce regulatory complexity and cost, for both the regulator and industry participants.<sup>8</sup>

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## 5. Role of the Commission

### 5.1 Central role of the Commission

This oversight role should be conferred on one regulator and that regulator should be the Commission. Providing for one regulator for access decisions is necessary to provide consistency in decision-making. Providing for the Commission to undertake this role is important as it is the regulator with the most appropriate expertise, having expertise both specifically in relation to telecommunications regulation but also more generally in other relevant network industries such as gas, electricity and rail, which experience it can draw upon for the purpose of telecommunications regulation.

### 5.2 Scope of Commission's role

Terria sees the following aspects as being crucial areas for Commission involvement in order to promote the long-term interests of end users, via oversight of an appropriate Special Access Undertaking:

- oversight of capital expenditure in the roll-out and management of the NBN (as a component of the pricing model forming part of the Special Access Undertaking);
- oversight of key terms of access - price and non-price (with structural separation having removed the incentive to discriminate against access seekers, the Commission's role in relation to non-price terms of access, in particular, should be reduced); and
- oversight of structural separation.

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<sup>8</sup> See also CEG's paper, Structural Separation for a National Broadband Network, May 2008, which forms Schedule 2 to this submission.

### 5.3 Roll-out/transition

The construction of the NBN will necessarily affect the manner in which existing carriers and carriage service providers are able to provide the services that they currently provide to end users in those areas where the NBN is rolled-out. Infrastructure presently used to provide or facilitate the provision of carriage services may, following the construction of parts of the NBN, no longer be able to be used to provide those carriage services, or may require significant modification to enable its continued use to provide services over the NBN.

Terria submits that the Commission should determine appropriate processes and procedures to be followed to ensure that the roll-out of the NBN and the provision of services over the NBN are efficient and occur in a manner that balances the interests of the access provider and its end users with the needs and interests of access seekers and their end users in minimising any disruption or inconvenience to their existing telecommunications networks and telecommunications services.

Additionally, providing the Commission with oversight in respect of capital expenditure will ensure that decisions in relation to expenditure are made in the long-term interests of end users.<sup>9</sup>

### 5.4 Key terms of access

To provide the access provider and access seeker with appropriate certainty, it would make sense to require the access provider to agree to the access arrangements up front with the Commission via a Special Access Undertaking, leaving the Commission with a defined role in reviewing key inputs periodically and resolving any disputes which may arise.

#### Price

Terria proposes that a pricing methodology be established, giving the Commission the right to review key inputs in the model used to determine the price of access (e.g. demand forecasts, expenditure forecasts and target addresses in the initial period) on a regular basis against some objective criterion appropriate to telecommunications industry (such as "reasonableness" which is used in Part XIC for the evaluation of Special Access Undertakings). Terria envisages that if the Commission were not satisfied with the key inputs, it would have the ultimate right to determine those key inputs. Terria also proposes that the Commission approve price changes to address the possibility of unreasonable price volatility. This would give the access provider additional certainty about the return it may make and give certainty to access seekers about the price they have to pay for access.

The arrangements may also include mechanisms to provide access seekers with a degree of oversight of the costs incurred by the Proponent (since any inefficient costs would be borne by access seekers in the form of higher charges) to allow access seekers to ensure that the NBN is constructed and operated in a manner that facilitates access for all access seekers and delivers services that meet the needs of end users in an efficient manner.<sup>10</sup>

Terria submits that a regime which sets out a defined methodology for calculating the price for access is sufficiently certain to permit investment, innovation and competition, while being sufficiently flexible to adapt to changing market conditions and prevent inefficient investment, innovation and competition, which is equally fundamental.

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<sup>9</sup> See, for example, the regulatory test is currently formulated by the Australian Energy Regulator against principles contained in the National Electricity Rules for the electricity industry.

<sup>10</sup> Such factors are consistent with the approaches taken in respect of access arrangements made pursuant to the Gas Code (National Third Party Access Code for Natural Gas Pipeline Systems set out in Schedule 2 to the Gas Pipelines Access (South Australia) Act 1997).

In order to facilitate such a role, an amendment to Part XIC may be required (depending on the regulatory regime selected) to make it clear that the Commission has the statutory power to perform such a function, or power. Such an amendment would be consistent with the provisions in Part IIIA of the TPA.

### **Non-price**

Terria proposes that an access provider prepare reference non-price terms, to be approved by the Commission, to provide greater certainty to access seekers about the terms and conditions on which they will be able to access services and certainty that the terms and conditions of access will be reasonable in the long term. This certainty provides access seekers with an appropriate incentive to make the investments required for them to compete in the relevant downstream markets.

Commercial negotiation between access providers and access seekers should be encouraged, with protection provided by giving the Commission oversight over the key terms, requiring the access provider to provide certain information to access seekers within a particular time frame and prohibiting the access provider from engaging in anti-competitive discrimination.

Ensuring that the price for access reflects the underlying cost of the infrastructure and removing the risk (or perceived risk) that the terms and conditions will be set unreasonably, will encourage efficient use of the NBN.

## **5.5 Ring fencing and monitoring**

If the access provider is required to separate its activities, Terria submits that it must establish and maintain systems to ensure continued compliance and report any breaches to the Commission. This is to provide certainty to access seekers that they will be able to compete fairly and 'on the merits' in downstream markets. These systems should include imputation testing and reporting requirements to provide the Commission with the information required to test whether the access provider is behaving in an anticompetitive way, in addition to the enforcement powers the Commission already has under the TPA. The regime should impose sanctions on the access provider for anticompetitive conduct.

This will assist in ensuring that the access provider's decision-making operates independently of the objectives of any individual access seekers; assist in preventing discrimination and cross-subsidisation in downstream markets; and will encourage compliance. Consideration should also be given to adding a divestiture power to the Commission's existing set of enforcement powers under Parts XIB and XIC of the TPA, to ensure there is sufficient deterrent to non-compliance.<sup>11</sup>

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## **6. Minimum access requirements**

### **6.1 NBN roll-out and operation**

Efficient roll-out, and subsequent operation, of the NBN in accordance with the Government's objectives (both in terms of time and cost) is likely to require:

- pillar migration - for efficient connection of the node elements of the NBN architecture;
- access to backhaul capacity;
- access to ducts and other "passive" facilities (owned by carriers and otherwise); and

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<sup>11</sup> Sections 4.13 and 4.14 of the National Third Party Access Code for Natural Gas Pipeline Systems set out in Schedule 2 to the Gas Pipelines Access (South Australia) Act 1997.

- continued, regulated access to the sub-loop element between premises and the nodes.

To the greatest extent possible, the existing statutory access regimes should be utilised, with facilitating adjustments to be considered by reference to the established objectives of those regimes and the Government's objectives for the NBN.

Careful consideration should also be given to ensuring that the regulatory environment for the NBN does not encourage economically irrational decisions to invest in competing infrastructure and/or technologies which could have a destabilising effect (such as occurred in relation to the HFC duplication in the 1990s).

## 6.2 Effective competition

The Proponent should be required to offer, as a minimum:

- a Broadband Access Service offering access seekers a variety of contention ratios and data symmetry to provide flexibility for their formulation of retail offerings; and
- a point to point or multipoint service providing backhaul for direct fibre connection by the access seeker for high bandwidth services.

The NBN architecture and access arrangements should also facilitate access seekers supplying:

- a standard telephony service; and
- a linear broadcast service providing a platform for services such as broadcast IPTV and other broadcasting options such as digital radio or datacasting services.

Access to backhaul capacity from a node to a point of interconnection (**POI**) on regulated terms should also be a minimum pre-requisite of the NBN service offering (whether pursuant to declaration under Part XIC, as part of a Special Access Undertaking or via specific arrangements applying to the Proponent). Access seekers should have the ability to self-supply or to buy capacity as part of an end-to-end service. However, if offered as part of an end-to-end service, the service must be capable of scaling to meet the access seeker's requirements. That is, an access seeker should not be required to purchase 12Mbps of capacity to serve every customer. Each access seeker should be capable of determining their own capacity requirements and have the ability to optimise these in respect of their own retail service offerings. This will promote customer choice and competition.

The number and location of POIs in the NBN architecture should be designed to keep access seekers' costs down, thus encouraging economically efficient use of the NBN, and to facilitate flexibility in service offerings.

Maximising competitive options for access seekers will also involve consideration of ongoing access to ducts and other "passive" facilities, whether owned or controlled by the Proponent or otherwise.

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1. **Schedule 1 - Submission to the Expert Panel - 28 March 2008**
  2. **Schedule 2 - Structural Separation for a National Broadband Network, by CEG, May 2008**