



TELSTRA CORPORATION LIMITED
RESPONSE TO THE ACCC DISCUSSION PAPER ON POINTS OF
INTERCONNECT TO THE NATIONAL BROADBAND NETWORK

November 2010

PUBLIC

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1. OVERVIEW

Telstra is concerned about the competition implications of NBN Co's proposed approach to establishing points of interconnection (**POIs**) and suggests the following alternative approach:

- NBN Co should be required to publish an initial table of potential POIs at locations currently served by two or more existing backhaul operators. NBN Co should additionally be required to provide interconnection at any other technically and operationally feasible location requested by an access seeker. This approach is consistent with access principles applied in telecommunications markets internationally over the last twenty years and Australia's international trade obligations; and
- geographic price parity issues should be addressed by a separate subsidy (as required) of privately funded backhaul infrastructure or a backhaul blackspots scheme.

Telstra's approach has the benefit of:

- avoiding stranding of existing private investment in backhaul;
- preserving current competition and promoting future competition in backhaul; and
- achieving the Government's urban/rural pricing parity objective in a more commercially realistic manner.

By contrast, NBN Co's proposed approach to establishing POI locations would, by bundling access services with backhaul services, push out the boundaries of NBN Co's monopoly access network and marginalise existing and future competitive fibre backhaul networks. Like the suggestion that NBN Co might provide point-to-point fibre services to the enterprise market or retail services to Government departments, NBN Co's POI proposal would represent a significant and unacceptable expansion of the NBN Co's scope into an already highly competitive market sector and an expansion beyond the bottleneck residential broadband access network it is being set up to serve.

NBN Co's proposal would see:

- The crowding out of existing competition in transmission markets
- The stalling of backhaul infrastructure investment pending finalisation of NBN Co build
- An adverse effect on competition in downstream retail markets because highly centralised POIs will impair current and future retail services and threaten the viability of regional retail service providers (**RSPs**)
- Drive NBN Co towards a large scale, national network which will provide the capability and incentive for future expansion of scope into layer 3 services

In this submission, Telstra:

- reviews why NBN Co's preferred composite option is unlikely to result in more than 14 POIs and estimates how much existing investment could be marginalised by the NBN Co POI proposal (section 2);
- explains that Telstra believes NBN Co has overstated its role in the Government's urban/rural pricing parity objective and as a result incorrectly defined the problem it is trying to solve for (section 3);
- describes our alternative POI approach and discusses why it is consistent with the current regulatory approach to POIs in Australia, international best practice and Australia's international trade obligations (section 4);

- discusses why Telstra’s alternative approach will better promote the long term interests of end-users than NBN Co’s preferred approach (section 5); and
- concludes by highlighting the importance of ensuring that NBN Co’s scope of activities remain tightly focussed on the Government’s policy objectives (section 6).

2. WHAT NBN CO’S PROPOSAL MEANS FOR THE INDUSTRY

2.1. NBN CO’S COMPOSITE OFFER IS REALLY A 14 POI PROPOSAL

Whilst NBN Co’s proposal on its face provides for more than 200 POIs, there is a very strong likelihood that there will be not many more than 14 POIs. NBN Co’s composite option should be assessed on this basis.

The composite option and the high consolidation option are likely to produce much the same practical outcome for access seekers for the following reasons:

- NBN Co justifies the composite option on the basis that it is *“the most effective option as it provides uniform national wholesale pricing”* ...which NBN Co defines as being distance independent and requiring *“that [a]ccess Seekers should face the same total wholesale cost from any premises to a designated state capital city point of presence”*. This implies that the same price will apply nationwide to reach either a CSA POI or the capital city POI from any location in the POI serving area. The inevitable consequence of this pricing approach is that, even if POIs beyond the 14 capital city POIs in theory are available, access seekers will take up the bundled service to avoid incurring additional backhaul costs on their own networks or third party networks. No network operator will have the incentive to duplicate the NBN backhaul between the capital city POIs and the CSA POIs;
- NBN Co makes no commitment beyond the initial 14 POIs: the 195 CSA POIs constitute only the maximum theoretical number of POIs which might be deployed. NBN Co states that the number of actual CSA’s to be *“made available for interconnection will depend on the business rules and subject to the further consultation”*, the CSAs are *“potential”* POI locations and the current proposal represents merely an *“initial plan, which may change as detailed network planning progresses”*. The Commission adds that the CSA POIs are limited by *“timing constraints”*;¹ and
- Further, NBN Co provides no guidance on the content of its POI business rules, the objectives of the business rules or the way in which those business rules will be created, identified, challenged and/or amended. For example, will an access seeker be able to seek a review or challenge to a decision by NBN Co as to whether to activate a POI? Will the business rules require access seekers to contribute to construction and migration costs associated with moving from the capital city to the CSA POIs?

As an industry, we are being asked to agree to NBN Co’s proposal for a limited number of initial POIs in return for a heavily caveated assurance that there may be some uncertain number of additional POIs at some unspecified future time under conditions yet to be defined but which, if they get built, will make no difference to NBN Co’s process.

2.2. THE EXTENT OF POTENTIAL ASSET STRANDING

The Government has asked the ACCC to consider how much infrastructure might be stranded by NBN Co’s POI proposal.

The telecommunications industry has invested several billions of dollars in backhaul infrastructure covering many thousands of kilometres. This infrastructure will potentially be impaired as a result of NBN Co’s proposal to deliver backhaul functionality to the 14 capital city POIs, in a manner that excludes competitive supply any deeper in its network. This existing backhaul infrastructure network may still serve some other purpose, for instance in backhauling mobile services, or resupply to NBN Co for it to use in building its network. Even so, a large portion of the current

¹ ACCC’s Discussion Paper at page 13.

capacity is likely to become surplus to requirements. Even if the network operator supplies to NBN Co, it will be forced to take the bundle of backhaul and access from NBN Co rather than directly use its own backhaul infrastructure for the purpose of transporting traffic between aggregation points closer to customers' premises and inter-capital networks.

Further, as the table annexed to NBN Co's own paper shows, most of the 195 CSA routes, including to regional cities and towns, have competing operators, often more than 3 and in some cases 5 or more. Telstra has limited information on the location of alternative infrastructure, although information provided by operators under the ACCC's Infrastructure RKR should give the ACCC a picture of the scope of stranding of competitive networks.

It would be a clear reversal of over 10 years of public policy if a new public monopoly was allowed to substitute for current competitive infrastructure.

3. WHAT PROBLEM IS NBN CO SEEKING TO SOLVE?

In evaluating NBN Co's proposal, it is important to test the problem NBN Co thinks its POI proposal is seeking to solve.

NBN Co identifies uniform national wholesale pricing (UNWP) as the key policy objective which the Government requires it to meet and that achievement of "the benefits [of UNWP] are very much dependent on NBN Co's POI location policy." To support this interpretation, NBN Co relies on statements made by the Prime Minister and Minister for Broadband, Communications and the Digital Economy about uniform national wholesale prices.

NBN Co has overstated its own role in supporting the Government objective of delivering pricing parity:

- First, the Government is promoting uniform wholesale prices not for their own sake but for what they can achieve – parity between retail prices in urban and rural/regional areas. Therefore, it is relevant to consider the relatively small contribution that wholesale pricing plays in the prices offered to end-users;
- Second, the Government's high level statements in favour of uniform wholesale pricing cannot be read as a categorical requirement that distance-sensitive pricing has to be excluded from every NBN Co input and every NBN Co price. For example, the current requirement for retail urban/rural pricing parity for telephony services still recognizes scope for distance-based pricing such as long distance calls, and does not require that exactly the same price has to be paid no matter where the end user is located; and
- Third, the Government has articulated other policy objectives for the NBN, including the promotion of competition, which need to be weighed with the urban/regional pricing parity objective and statutory objectives of efficient use of resources when deciding the appropriate boundaries of the monopoly NBN.

When viewed in this frame, the Government's national wholesale pricing statements do not require mandatory backhaul bundling:

- The cost of backhaul from a fibre access node to a capital city point of presence is likely to represent a relatively small share of the overall cost of service and variability in this component is unlikely to significantly affect the structure of end-user charges. Telstra estimates that on average, backhaul costs represent approximately [c-i-c] [c-i-c] of average subscriber costs across urban and rural areas. Therefore, as the ACCC notes, nationally averaged access charges are much more important to achieving urban/rural retail pricing parity than nationally averaged backhaul charges;
- Retail price structures are influenced by a wide range of factors, including consumers' willingness to pay, marketing and billing considerations and the cost of other service components. Many of these factors are likely to match - or outweigh - the influence of backhaul prices in driving urban/rural retail pricing parity. Significant levels of retail

pricing parity are already achieved where wholesale prices are not mandated to be uniform;² and

- Promoting more backhaul competition should result in prices converging across routes at lower price points.

Telstra considers a more reasonable interpretation of UNWP is that, as the ACCC itself identifies in its discussion paper, NBN Co supply access services and backhaul services separately and access services must be supplied at uniform national prices while backhaul service can be priced on a different basis, including distance-sensitive charges.

4. TELSTRA'S PREFERRED POSITION

Telstra considers that a more appropriate approach to the location of NBN POIs would be to:

- adopt the general principle that NBN Co should provide interconnection at any technically and operationally feasible points within its network requested by an access seeker, including the option of POIs within FSAs;
- apply this principle initially by requiring NBN Co to:
 - publish an initial list of available POI sites which corresponds with routes on which there are currently competing backhaul providers (i.e. Telstra plus 1); and
 - publish the principles to be applied in determining technical and operational feasibility of further potential interconnection points, to provide clarity to industry as to where it may make sense to build or buy backhaul.
- address any residual issues of backhaul affordability through mechanisms that preserve private investment in infrastructure and competition, such as the blackspots scheme or approaches suggested by the ACCC in its discussion paper.

4.1. CONSISTENT WITH INTERNATIONAL BEST PRACTICE

The long standing approach in access regulation has been that, as a general principle, an access provider should make available points of interconnection where it is technically and operationally feasible.

In the United States, incumbent carriers are required under the Telecommunications Act of 1996 to interconnect "at any technically feasible point within the carrier's network".³ The FCC requires carriers to demonstrate that interconnection is infeasible wherever they refuse interconnection.⁴

Ofcom recently considered how these principles of interconnection should apply to next generation access networks (NGAN) in the United Kingdom:⁵

"Interconnection, by the access seeker, should occur locally; that is at the first technically feasible aggregation point. In practice this is likely to be in the local serving exchange where the first Ethernet switch is located. This characteristic is necessary to ensure that the VULA [Virtual Unbundled Local Access, which is a layer 2 bitstream service] is a remedy that is appropriate to the defined WLA market.

Interconnection at the local serving exchange means that CPs only purchase the access connection. It therefore allows competing CPs to arrange (or build) their own backhaul and

² For example, many broadband providers are able to offer uniform pricing across metropolitan and regional areas, despite disparities in the cost of transmission inputs. In some cases this is facilitated by subsidy schemes such as the Australian Broadband Guarantee.

³ 47 USC 251(c)(2)(B)

⁴ FCC, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, August 1996, paragraph 205

⁵ Ofcom, *Review of the wholesale local access market: Consultation on market definition, market power determinations and remedies*, March 2010, p129

core networks, maintaining their control over as many of the network elements used in providing the service as possible.

This provides competing CPs with complete flexibility over the architecture and dimensioning of the backhaul and core network elements."

The ACCC, as it notes in its discussion paper, took a similar approach to POI location at the local serving exchange when considering the FANOC SAU.

The access provider's reasonable costs of establishing and operating a new point of interconnection, of course, need to be recovered if it is technically and operationally feasible to meet the access seeker's request. While the guiding principle should be technical and operational feasibility, Telstra acknowledges that there may come a point where the costs of a new POI are so large that, standing back from the access seeker's request, objectively it is not economically efficient to establish a new POI.

4.2. INTERNATIONAL TRADE OBLIGATIONS

The requirement that network operators must provide interconnection at any technically feasible points is also a binding international obligation on the Commonwealth Government.

The Commonwealth Government is required to comply with the WTO Reference Paper on Basic Telecommunications ("WTO Reference Paper") in accordance with its specific commitments under the WTO General Agreement on Trade in Services⁶. NBN Co, as a carrier, is then directly required to act in a way consistent with the Government's obligations under the WTO Reference Paper through section 366(3) of the *Telecommunications Act 1997* (Cth).⁷

Article 2.2 of the WTO Reference Paper provides that interconnection with a major supplier must be ensured at any technically feasible point in that major supplier's network. NBN Co will be a major supplier so will be subject to that obligation. Interconnection at more than NBN Co's specified number of POIs would appear to be 'technically feasible' within the meaning of the WTO Reference Paper.

Article 2.2(b) similarly provides that network interconnection must also be sufficiently unbundled that a service supplier does not need to pay for network components that it does not require for a service to be provided.

The US-Australia Free Trade Agreement (**AUSTFTA**) includes these same interconnection obligations, as does the Singapore-Australia Free Trade Agreement. The ASEAN-Australia-New Zealand Free Trade Agreement and the Chile-Australia Free Trade Agreement contain similar provisions with the same intent. Article 12.11 of AUSTFTA provides, for example, that (emphasis added):

Each Party shall ensure that major suppliers in its territory provide interconnection for the facilities and equipment of suppliers of public telecommunications services of the other Party:

⁶ The WTO Reference Paper is incorporated into Australia's Schedule of Specific Commitments forming part of the Fourth Protocol to the General Agreement on Trade in Services ("GATS"), as subsequently updated by the World Trade Organisation Group on Basic Telecommunications Agreement, signed in Geneva on 15 February 1997 ("WTO Basic Telecoms Agreement"). The GATS forms part of the Agreement Establishing the World Trade Organisation, signed in Geneva on 15 April 1994 ("WTO Treaty").

⁷ Under section 366(2) of the *Telecommunications Act 1997*, the Minister may, by notice published in the *Gazette*, declare that, for the purposes of that section, a specified convention is binding in relation to the members of a specified class of persons. The *Telecommunications (Compliance with International Conventions) Declaration No. 1 of 1997* was issued by Hon Richard Alston on 18 June 1997 for the purposes of section 366 and provides that the conventions specified in its Schedule ("Conventions") are binding in relation to persons that are carriers or carriage service providers within the meaning of the Act ("Class"). The WTO Treaty and the WTO Basic Telecoms Agreement are respectively specified in Items 36 and 39 of that Schedule as Conventions, thereby including the WTO Reference Paper.

(a) **at any technically feasible point in the major supplier's network;**

(b) *under non-discriminatory terms, conditions (including technical standards and specifications), and rates;*

(c) *of a quality no less favourable than that provided by such major suppliers for their own like services, for like services of non-affiliated service suppliers, or for their subsidiaries or other affiliates;*

(d) **in a timely fashion, on terms, conditions (including technical standards and specifications), and cost-oriented rates, that are transparent, reasonable, having regard to economic feasibility, and sufficiently unbundled so that suppliers seeking interconnection need not pay for network components or facilities that they do not require for the service to be provided; and**

(e) *on request, at points in addition to the network termination points offered to the majority of users, subject to charges that reflect the cost of construction of necessary additional facilities.*

These issues around compliance by both the Government and NBN Co with Australia's international trade obligations have been previously raised by Telstra in its response to the earlier NBN Co consultation paper.⁸

4.3. CURRENT COMPETITIVE ROUTES AS A MINIMUM REQUIREMENT

NBN Co should be required to initially offer interconnection at points which currently are or can be served by two or more competing backhaul providers. Interconnection at these points should necessarily be regarded as operationally and technically feasible.

Telstra has argued in the context of the deregulation of transmission routes that the ACCC's "Telstra plus 2" rule is too strict. Telstra considers that the existence of an alternative provider on any route competing with Telstra would create an effective competitive market dynamic.

Even if the "Telstra plus 2" test is applied to NBN POI locations, it would be met at locations served by Telstra and one other third party backhaul provider (e.g. Pipe Networks) because both will have to compete against NBN Co. To serve end users in a regional town, the RSP would have a choice between 3 providers for backhaul – NBN Co at the capital city POI or at the more localised POI and Pipe and Telstra at the more localised POI.

The list of POIs based on current competitive routes should not be a 'once and for all' statement of NBN Co's obligations to provide interconnection. Otherwise, the effect would be to 'freeze' competition as it is today. Backhaul competition has the potential to develop on other routes in the future. While the ACCC discussion paper expresses the view that future expansion is likely to be slow, the ACCC also acknowledges that the greater data usage stimulated by the NBN (and also by wireless services) may improve the economics of deploying competing backhaul infrastructure. Government funding of 6000km under the backhaul blackspots programme is also promoting more backhaul competition.

The location of future POIs could be based on the number of backhaul operators requesting interconnection at a location: i.e. NBN Co does not have to provide a new POI until it has received requests from at least two backhaul providers. However, such an approach would not be appropriate because:

- competition usually develops incrementally, with one operator prepared to take on more risk and deploy ahead of others. If an operator has to wait around until another operator expresses interest to NBN Co in building on a route, it is likely to invest elsewhere and competition is unlikely to develop in the first place; and
- an 'at least two requests' policy is likely to encourage co-ordination or collusion between backhaul providers, possibly signaled or brokered by NBN Co.

This is not a new issue. It is exactly why the general principle of "interconnection at any technically feasible point" discussed above has applied in the copper world to determine the

⁸ Telstra, *Response to NBN Co Consultation Paper: Proposed Wholesale Fibre Bitstream products*, 12 February 2010, para 18-22 at pages 8-9.

location of POIs. The principle means that regulators – and importantly the owner of the monopoly local access network – are not second guessing how and where competition will develop. The decisions about whether it is economically feasible to deploy competing infrastructure is, at least as a starting proposition, left to the market.

Concern has been expressed that if there is only one backhaul provider on a route, usually Telstra, and there are limited prospects of further entry, requiring NBN Co to provide a POI on that route will force other access seekers to rely on Telstra's backhaul. However, access seekers would have more choice than currently and more choice than under the NBN Co approach:

- Under NBN Co's preferred approach, access seekers, in effect, swap Telstra as the sole supplier of backhaul for NBN Co as the sole supplier of backhaul. As limited as the prospects might seem today, access seekers also forfeit future competition because NBN Co's bundling of its monopoly access product with the backhaul will foreclose any future competition; and
- Under Telstra's alternative approach, access seekers would have a choice: they could either buy access from NBN Co and backhaul from Telstra to connect with NBN Co at the regional POI or they could connect at the NBN capital city POI and buy separately priced backhaul and access services from NBN Co. The incentives for future entry and prospects of future entry by another backhaul provider would also remain open.

4.4. BACKHAUL AFFORDABILITY

If backhaul prices remain a concern on particular routes, Telstra agrees with the ACCC's comments in its Discussion Paper that there are other ways in which backhaul prices in regional areas may be reduced to be in line with those faced by metropolitan users. These alternatives provide a more proportionate response because, unlike NBN Co's proposal, they do not eliminate competition on routes which are currently or prospectively competitive.

Where there are prospects of competition, public funds are better invested in assisting the private sector to deploy competing infrastructure than in funding a publicly owned monopoly.

Telstra also considers there is merit in the ACCC's proposal for an affordability cap on backhaul charges on monopoly routes. To the extent that the affordability cap would result in the supply of those backhaul services becoming uneconomic, some form of funding (subsidy) could be provided to the backhaul operator. The combination of a cap and a subsidy would avoid the investment disincentive effects which a cap alone might have. The ACCC notes that there are a range of ways in which funding could be sourced including a levy on end-users of telecommunications services, a transparent up-lift on the prices of NBN Co's FTTP access service or a levy placed on all access seekers in proportion to their share of eligible revenues. Telstra considers that the least distortionary approach would be for the subsidy to be funded directly by the Government rather than from industry or end-users. The Government already does this through the backhaul blackspots program.

5. NBN CO AND TELSTRA POSITION COMPARED

Telstra's alternative POI approach will better promote the long term interests of end-users than the NBN Co's POI proposal because Telstra's approach:

- more closely aligns NBN Co's interconnection obligation to its bottleneck local access network; and
- allows that boundary between monopoly and competition to be adjusted in the future in response to market forces rather than at NBN Co's discretion.

5.1. EFFICIENT USE OF AND INVESTMENT INFRASTRUCTURE

Use of existing infrastructure

NBN Co's proposal would mean that its network would overbuild substantial existing private sector investment in backhaul.

Competitive infrastructure impaired by NBN Co's proposal

The telecommunications industry has invested several billions of dollars in backhaul infrastructure covering many thousands of kilometres. Much of this infrastructure will potentially be impaired as a result of the NBN Co proposal to deliver backhaul functionality to the 14 capital city POIs, in a manner that excludes competitive supply.

A couple of examples of recent investments in transmission services by Telstra in regional areas include:

- A \$20 million investment to upgrade its regional Western Australian network, which was announced in October 2008; and

- The \$34 million *Broadbanding the Top End* project to connect Arnhem Land, which was completed in December 2009. This saw 800km of fibre laid between Jabiru and Nhulunbuy and required 190km of fibre and five radio systems to each of the islands.

By contrast, Telstra's proposal for interconnection at the lowest technically and operationally feasible point will allow for the use of existing transmission infrastructure. This infrastructure will be available to supply backhaul services to RSPs from local points of interconnection.

NBN Co promotes its POI proposal on the basis of the lower barriers to entry at the RSP level. However, NBN Co's proposal is not good news for all RSPs. Regionally based RSPs will need to haul their traffic to the capital city POIs for that traffic then to be backhauled to their regional service area. This tromboning is inefficient and costly, and as a result the NBN Co proposal is likely to see the elimination of regional ISPs. This also places a large strain on network capacity compared to having more POIs more locally distributed that can deal with local traffic more efficiently. This is not an efficient use of backhaul resources.

Incentives for investment in infrastructure

If NBN backhaul is mandatorily bundled with NBN monopoly access, there will be no opportunity for third party network builders to recover the cost of their backhaul investments and thus there will be no further backhaul investment, even in areas where it would be economically efficient. Third parties will also face the uncertainty of which CSA POIs NBN Co will eventually make available and when they will be made available. NBN's proposal will send signals to the market to defer efficient investment in telecommunications infrastructure. There may also be steep costs associated with transitioning from 14 POIs to 195 POIs which could be avoided if the initial investment is made in the larger number of POIs.

By contrast, implementation of Telstra's proposal would allow for investment wherever this is economically efficient, rather than investment being artificially restricted to routes serving the 14 POIs. Investment in backhaul infrastructure will be economically efficient wherever the long-term benefits of such investment outweigh the costs, including NBN Co's POI establishment costs (which will be approved or overseen by the ACCC). If interconnection is offered wherever it is technically and operationally feasible, there will be incentives for efficient investment since backhaul builders will be able to recover the benefits of their investment from end-users (and thus cover the cost of their investment).

5.2. PROMOTION OF COMPETITION

Transmission markets

NBN Co's proposal will eliminate current competition and foreclose future competition in wholesale transmission markets.

NBN Co has chosen to bundle the access service, which bears natural monopoly characteristics, with the transmission service, for which costs are scalable and there is the potential for competitive entry. The mandatory bundling by NBN Co can therefore be seen as an attempt by it to leverage its market power in the supply of network access services into the potentially competitive wholesale transmission market to foreclose competition in that market. It would result in the extension of NBN Co's monopoly further out into the network and represents anti-competitive bundling that will impair or marginalise existing investments and foreclose competition in the wholesale market for transmission services. Given the large increases anticipated in data traffic over transmission networks in the future from IPTV services and LTE or 4G mobile services, and the ability to scale costs over transmission networks, mandatory bundling is also likely to preclude what would otherwise be future efficient entry and competition in the supply of transmission services in the future.

Competition in wholesale transmission is currently intense in metropolitan areas and on many regional routes. The ACCC has exempted a large number of routes served by at least three fibre-based operators, including:⁹

- inter-exchange routes connecting all but one of the 16 CBD ESAs;
- inter-exchange routes connecting any two of the 72 metropolitan ESAs deemed competitive by the ACCC; and
- inter-exchange routes on 23 capital city to regional towns.

The set of exemption routes deemed competitive by the ACCC in its 2008 decision is currently only a sub-set of those that would now be treated as competitive under the same test. Due to limited data availability, Telstra only applied for exemption on a limited number of routes, predominantly those in metropolitan Sydney. There is likely to be many more competitive routes in locations where Telstra does not have data for competitive network build and in locations where further competitive entry is likely to have occurred over the past three to four years since the data used for the exemption application was last updated. The ACCC will have more up to date data as a result of its infrastructure record-keeping rule.

As the table in the annex to NBN Co's own paper shows, every one of the metropolitan and non-metropolitan CSA POIs is served by multiple backhaul providers. Yet NBN Co makes no definite commitment to provide POIs at these locations. As we have discussed, even if NBN Co did provide a POI, these backhaul providers will find it difficult to compete effectively against a bundled backhaul and access product from Government-owned NBN Co.

The rollout of the NBN could potentially lead to further growth in this already dynamic market. As access network capabilities are substantially upgraded, demand for backhaul is likely to grow. Growth in demand may potentially lead to further entry and stronger competition. However, if a route is not on NBN Co's list of 195 CSA POIs, that route will be permanently foreclosed to competition and remain on the monopoly side of the fence.

Product innovation

Telstra agrees in principle with the ACCC that NBN Co overlooks the trade-off its proposal necessarily involves between retail and wholesale competition: that the potential benefits from a consolidated POI approach where backhaul services are bundled with access services could be outweighed by a reduction in competition on price and in the scope for service innovation.

Highly centralized POIs drive NBN Co towards a large scale layer 2 network, escalating the dependence of downstream wholesale and RSPs on the NBN. All services, from the simplest to the

most complex, become much more dependent on NBN Co's network design, service performance characteristics and pricing. The monopoly inputs are required for a much larger chunk of the downstream retail services.

There are currently a number of suppliers of wholesale Layer 3 services. As service aggregation is typically a feature of Layer 3 services, the high level of aggregation proposed by NBN Co service may have an adverse impact on competitors in the wholesale Layer 3 services market. To the extent this occurs, it will deter differentiation and inhibit innovation in the supply of Layer 3 wholesale services, which will be to the overall detriment of end users.

Examples of retail products which could be adversely affected by highly centralised POIs include the following:

- Ethernet and wideband internet products, such as those supplied to schools in regional areas, often utilise local switching at regional Ethernet Aggregation Points to improve service quality, such as reduced latency. Under a capital city POI approach, traffic would need to be tromboned over much longer distances to more centralised switching equipment, which would increase costs and reduce service quality;
- IP-WAN services currently utilise IP-VPN edge devices in capital cities. However, centralization of POIs limits the ability of suppliers to respond to regional customer demand for low latency services; and
- Streaming media services, such as high definition video are increasingly being demanded by customers. The importance of video quality to end users has led a number of companies investing in content delivery networks (CDNs). To meet the escalating demand for these video services (e.g due to TV panels that can directly stream content), an efficient network architecture that limits network congestion, will increasingly require CDNs to be deployed closer to the home. The proposal for a highly consolidated POI approach would be inefficient, undermine the benefits to customers from further investment in CDNs, and may make existing investments in CDNs redundant.

The NBN Co proposal for 14 POIs will limit choices available to RSPs in how and where they deliver services to end customers, reducing ability to compete using differentiated business models. There may also be concerns about the technical feasibility of aggregating all national IP traffic to as few as 14 POIs in respect of the difficulty of tagging data to such a high degree of aggregation.

By contrast, Telstra's proposal for POI locations allows for further investment and vigorous competition in wholesale transmission markets, with associated benefits for product innovation in downstream markets.

Impact on other markets

Aside from these direct impacts on wholesale transmission markets and end-users of downstream services, there may also be indirect impacts on other telecommunications markets. To the extent that transmission infrastructure is shared among a number of different services, those services that continue to use this infrastructure are likely to bear a greater proportion of the costs of this infrastructure if backhaul for fixed line services is mandatorily bundled with access. For example, mobile users may be forced to bear a greater proportion of transmission infrastructure costs, if these costs can no longer be recovered from fixed-line services.

There are already signs that NBN Co may also seek to move into the mobile space and to that end VHA has already suggested it may seek to acquire backhaul from NBN Co to supply its mobile services.¹⁰ Developments of this nature would intensify the adverse impact of NBN Co's fixed network services monopoly on those other markets.

As the ACCC notes, centralised POIs will be a constraint on the efficiency and performance quality of content-based services. NBN Co does note in its discussion paper that one of the reasons why it may establish CSA POIs is to address the technical requirements of particular services. However, it is unclear how this will square with NBN Co's rigid UNWP policy and its discrimination obligations.

¹⁰ The Australian, NBN could compete with backhaul providers, 26 October 2010.

On the one hand, if NBN Co establishes a CSA POI to technically support content services but still charges a UNWP for the access service, content service providers potentially will pay for backhaul twice. On the other hand, if NBN Co charges content service providers separately for access and backhaul services when the content service provider utilizes a CSA POI, NBN Co will have to provide the same arrangement to other downstream providers, unless it can meet the economically efficiency test overseen by the ACCC.

It is also unclear how operators deploying regional access networks, such as business parks and Greenfield estates, will be able to acquire backhaul from NBN Co if NBN Co only offers a bundled backhaul and access product. As NBN Co is subject to non-discrimination obligations, it would have to unbundle access and backhaul across the board for all providers if it is to offer backhaul for third party access networks or not connect those networks at all.

By contrast, Telstra's POI approach will preserve the current choice which RSPs have between competing backhaul providers. Telstra's proposal also will expand competitive choices available to downstream service providers because they will be able to choose between backhaul provided by NBN Co at the capital city POI, backhaul provided by competing backhaul providers at more localised POIs or by Telstra on routes where Telstra is currently the sole provider of backhaul infrastructure.

5.3. NETWORK RELIABILITY CONSIDERATIONS

Another relevant consideration for the ACCC is the safe and reliable operation of telecommunications networks¹¹. The ACCC has previously noted that reliability is particularly important in the context of transmission networks:¹²

"Transmission networks underlie virtually every telecommunications service. Consequently their reliability is very important. Should there be a failure it is strongly desirable that service is not lost, that an alternative pathway is available and that the fault is repaired quickly."

Currently, transmission networks are configured in a way that provides for a high degree of network resilience and reliability. Telstra's transmission network (currently the largest in Australia) is made up of a series of interlocking rings which ensures continuity and quality of service. If one link in a ring fails, then continued service can be provided using the other links. Alternative networks owned by competing carriers provide a further 'safety net' in the event of network failure. In Telstra's experience acquirers of transmissions services on occasions do employ resiliency measures such as acquiring transmission services from different network operators for the purposes of having a redundant link available.

NBN Co's proposal for highly consolidated POI locations and mandatory backhaul bundling would significantly alter this structure and potentially risk future network reliability. Transmission below NBN Co's 14 POIs would no longer be provided through multiple competing networks, including the tested, resilient and reliable Telstra network. Rather, transmission below these 14 POIs would rely solely on the NBN Co network. NBN Co has not offered assurances that it will operate a similarly resilient network structure and therefore there is a risk that network reliability may be compromised. In any event, the extinguishment of competition below the 14 POIs brought about by mandatory backhaul bundling will in itself reduce the level of reliability, since the 'safety net' of alternative networks will no longer exist.







By contrast, Telstra's approach would allow diversity across NBN backhaul and backhaul provided by one or more alternative providers.

¹¹ TPA, s152AH









¹² ACCC, *Domestic Transmission Capacity Service: An ACCC Discussion Paper reviewing pricing of the domestic transmission capacity service*, April 2010, p9









5.4. SUMMARY





The table below summarises the key advantages and disadvantages of the NBN Co proposal, compared to the Telstra proposal.

Metric	NBN Co Mandatory backhaul bundling	Telstra "technically / operationally feasible POIs" approach	Explanation
Maintains current level of competition in markets for wholesale transmission			<p>Under NBN Co proposal, current competitive infrastructure beyond the initial 14 POIs could be stranded because NBN Co makes no commitment that it will actually deploy any of the 195 CSAs POIs on its list.</p> <p>Under Telstra proposal, no competing infrastructure is stranded because the initial list of mandatory POIs is to include all locations served by Telstra plus one alternative provider.</p>
Expands choice on current sole provider backhaul routes			<p>Under NBN Co proposal, access seekers swap Telstra as sole supplier for NBN Co as sole supplier.</p> <p>Under Telstra proposal, access seeker has choice between Telstra backhaul at CSA POI or NBN Co backhaul plus access at capital city POI.</p>
Provides opportunities for future competition in transmission			<p>NBN Co's proposal 'freezes' its maximum POIs commitment (and therefore guarantees its monopoly footprint) to a subset of current competitive routes. Further, NBN Co's possible POIs make up only 13.8%¹³ of regional FSAs, reducing scope for competitive backhaul even if NBN Co deployed all CSA POIs.</p> <p>Telstra's proposal allows future expansion of competition (and shrinkage of NBN Co monopoly) because NBN Co is required to provide POI at any technically and operationally feasible point requested by an access seeker.</p>

¹³ 81 potential regional CSAs identified in Appendix A to NBN Co's paper as a percentage of 586 Regional FSAs.

Metric	NBN Co Mandatory backhaul bundling	Telstra “technically / operationally feasible POIs” approach	Explanation
Avoids stranding of significant existing infrastructure investment			NBN Co’s proposal potentially strands or impairs private sector investment in backhaul infrastructure beyond the 14 POIs. Not all of the backhaul infrastructure owned by Telstra and other carriers will be completely stranded because some capacity may be used for mobile backhaul or supplied to NBN Co. However, Telstra anticipates that significant capacity may be surplus to requirements, and if the backhaul provider has to access its own network through the bundled NBN access and backhaul service, its capacity to innovate may be impaired.
Encourages efficient future investment in backhaul infrastructure			<p>The uncertainty about whether and when NBN Co under its proposal will deploy POIs beyond the 14 POIs will overhang investment decisions in competing backhaul.</p> <p>Under Telstra’s proposal, there will be an initial list of committed 200 or so NBN POIs plus investors will know if there is a business case for future investment as there will be clear guidance as to the future availability of new POIs.</p>
Avoids damaging competition in other telecommunications markets?			<p>NBN Co’s proposal for highly centralised POIs is unsuitable for content delivery services and will damage regionally based RSPs and local access network providers because they have to trombone traffic through a capital city POI.</p> <p>Telstra’s proposal will allow content to be hosted closer to customers and regional RSPs/networks to be connected locally.</p>
Promotes dynamic efficiency			NBN Co’s proposal for highly centralised POIs will reduce scope for product innovation (e.g. decentralised access seeker equipment to manage latency). All services will be more heavily

Metric	NBN Co Mandatory backhaul bundling	Telstra “technically / operationally feasible POIs” approach	Explanation
			<p>dependent on and shaped by NBN Co monopoly inputs.</p> <p>Telstra’s proposal ensures choice in upstream inputs.</p>
Consistent with international best practice?			<p>NBN Co’s POI approach ignores fundamental tenet of interconnection over last 20 years that incumbent/major supplier must provide POIs at any technically and operationally feasible points requested by access seekers.</p> <p>Telstra’s proposal applies this principle to the fibre world, as Ofcom in the UK has recommended and as the ACCC also endorsed in its FANOC SAU review.</p>
Consistent with international treaty obligations?			<p>NBN Co’s proposal breaches WTO and FTA commitments (and carrier licence requirements) which reflect the principle of interconnection at any technically feasible point and prevent discriminatory self supply (in which NBN Co engages by bundling access and backhaul).</p> <p>Telstra’s proposal is consistent with the WTO and FTA commitments.</p>
Provides for network resilience?			<p>Under NBN Co’s proposal, access seekers are dependent on single network provider for diversity.</p> <p>Under Telstra proposal, access seekers can use alternative networks for backhaul diversity (as is possible on many routes currently but will not be possible on those routes in the future if NBN Co does not build a CSA POI).</p>
Consistent with the ACCC’s approach taken to interconnection			<p>NBN Co’s proposal is inconsistent with current ACCC approach to service descriptions which require access provider to supply interconnection at</p>

Metric	NBN Co Mandatory backhaul bundling	Telstra “technically / operationally feasible POIs” approach	Explanation
with Telstra’s fixed line network?			<p>technically feasible locations requested by access seeker.</p> <p>Telstra’s approach of an initial list of POIs and a requirement to provide future POIs at technically and operationally feasible points mirrors the ACCC approach.</p>
Allows for nationwide uniform retail prices?			<p>NBN Co’s rigid UNWP will support uniform nationwide retail prices, but at the cost of truncated competition and an expanded NBN monopoly.</p> <p>Telstra’s proposal recognises that urban/rural retail pricing parity is mainly driven by a uniform access price – in aggregate, nationwide, backhaul is only [c-i-c] ██████████ [c-i-c] of final retail service costs. Other market factors are also likely to drive to urban/rural retail pricing parity even if backhaul is distance sensitive. Telstra’s approach preserves the other benefits of competitive backhaul for end users.</p>
Safeguard against NBN Co leveraging its monopoly access into competitive markets			<p>NBN Co’s proposal for highly centralised POIs will drive NBN Co towards a large scale layer 2 network which functions as a standalone national network, only minus the capital city links. NBN Co will have the technical capacity and incentive to move into higher value services on such a network.</p> <p>Telstra’s proposal aligns NBN Co’s POIs more closely with the local access bottleneck and reduces its ability to ‘go it alone’ in competing against access seekers in the future.</p>

6. THE SCOPE OF NBN CO’S OPERATIONS

It is important that NBN Co’s scope of activities remain tightly focussed on the Government’s policy objectives.

The NBN Implementation Study elucidated the powerful incentives of NBN Co as a monopoly to expand its activities into current or future competitive areas:¹⁴

"Other safeguards are also required once NBN Co has private investors seeking to maximize returns. Through a strong regulatory regime, Government needs to safeguard against monopoly incentives to minimize reinvestment and to keep prices higher and volume lower than in a competitive market. A more aggressive NBN Co in private hands could seek to increase the scope of its operation by trying to move into Layer 3 services or serve end users directly by exploiting exceptions in the customer restrictions. Explicit restrictions will be essential, removing the flexibility that is appropriate under Government ownership. "

The Implementation Study further notes:

"It is possible that NBN Co would pursue opportunities in markets for other network elements, or even devices and content. For example, the company could potentially seek to offer a national backhaul transit product. Such a product would likely meet customers' needs, and represent a value creation opportunity – but would likely exceed the reasonable mandate of NBN Co."

Specifically in relation to backhaul, the Implementation Study cautioned:¹⁵

"NBN Co's operations should be confined to those areas where the market has not delivered a competitive outcome on its own – this principle should also apply to NBN Co's participation in backhaul. Commercial operators like Optus, Nextgen Networks, Pipe Networks and Telstra have created competitive backhaul markets on high-traffic routes. NBN Co should not overbuild these links for the purpose of creating a contiguous national network."

This is exactly what the NBN Co POI proposal involves, a national network minus the inter-capital city links.

Another important boundary line which NBN Co should not be permitted to cross is that between layer 2 and layer 3. As the NBN Implementation study notes:

"NBN Co would have incentives to leverage the natural monopoly portion of its business – access and backhaul – to expand the scope of its activities... As an operator of active electronics at Layer 2, there is scope for NBN Co to offer increasing functionality. Indeed, the demarcation between Layers 2 and 3 is already becoming blurred... This scope creep could result in the company effectively competing against its own customers in the provision of Layer 3 services, exercising undue influence over the availability and pricing of various retail services, engaging in harmful price discrimination and stifling competition from independent Layer 3 platforms...."

NBN Co's POI proposal shifts NBN Co's incentives to move into layer 3 products. Highly centralised POIs will drive NBN Co towards a large scale, fully functioning independent network – in effect, an entire national network minus the point to point links between the 14 capital city POIs. NBN Co will have strong commercial and technical incentives to introduce higher value wholesale services, such as wholesale Ethernet and IP services. If NBN Co was more firmly confined to the access layer as Telstra is proposing, its network is more in the nature of an input to other networks.

NBN Co's POI proposal highlights the issue of ensuring that NBN Co's scope of activities remain tightly focussed on the Government's policy objectives.

As the Implementation Study has cautioned, powerful incentives to scope creep exist. The industry needs confidence that NBN Co will not be permitted to expand in the future into new infrastructure and services, such as point-to-point enterprise services, which otherwise could be provided competitively.

¹⁴ Page 53

¹⁵ Page 27

SCHEDULE 1: ANSWERS TO SPECIFIC QUESTIONS

ACCC Question	Telstra response
Effect on relevant markets	
<p>1. To what extent will the number and location of POIs impact competition in the backhaul market in the short term and in the long term?</p>	<p>As NBN Co makes no commitment beyond the 14 capital POIs, all existing backhaul infrastructure beyond and between those 14 POIs is at risk of stranding or impairment. NBN Co's own table demonstrates there are multiple backhaul providers on routes to each of the 195 CSAs. Current competition therefore could be replaced by a monopoly if NBN Co does not build POIs at those locations.</p> <p>As NBN Co is not proposing to commit to provide future POIs at technically feasible locations requested by access seekers, the 209 POIs on its list represent the permanent boundary between competition and monopoly, foreclosing future competition in transmission markets. Only 13.8% of rural FSAs are possible POIs, which means NBN Co will be the monopoly network across much of regional and rural Australia.¹⁶</p> <p>See discussion in sections 1 and 3 of Telstra's submission.</p>
<p>2. To what extent (if any) do you anticipate that any of your transmission assets (or other relevant assets) will become stranded under any of the proposed approaches to POIs on the NBN? What is the value of and location of those assets?</p>	<p>The telecommunications industry has invested several billions of dollars in backhaul infrastructure covering many thousands of kilometres. This infrastructure will potentially be impaired as a result of the NBN Co proposal to deliver backhaul functionality to the 14 capital city POIs, in a manner that excludes competitive supply. This existing infrastructure network may still serve some purpose, for instance in backhauling mobile services, or resupply to NBN Co. However a large portion of the current capacity would become surplus to requirements and even if the network operator supplies to NBN Co, it will be forced to take the bundle of backhaul and access from NBN Co rather than directly use its own backhaul infrastructure for the purpose of transporting traffic between aggregation points closer to customers' premises and inter-capital networks.</p> <p>See section 2.2 of Telstra's submission.</p>

¹⁶ 81 potential regional CSAs identified in Appendix A to NBN Co's paper as a percentage of 586 Regional FSAs.

ACCC Question	Telstra response
3. What is the current state of competition in the relevant backhaul markets? To what extent are backhaul services priced competitively in CBD, metro, regional and remote areas?	<p>In summary, competition in wholesale transmission is intense in metropolitan areas and also on many regional routes, much of which may be at risk given that NBN Co is not committing to the 195 CSAs.</p> <p>See section 5.2 of Telstra’s submission.</p>
4. How would investment in backhaul infrastructure used for other networks, such as mobile and non-NBN fixed networks, be affected by the number and location of NBN POIs?	<p>Transmission costs are strongly affected by scale. Diversion of traffic from Telstra transmission capacity onto NBN transmission capacity (even if using Telstra fibre) will substantially reduce scale available to other services, such as mobile, using backhaul. In addition, press reports of discussions between Vodafone and NBN Co suggest that NBN Co may be aggressively pursuing mobile backhaul services in competition with existing backhaul providers. If NBN Co is a monopoly provider of network for fixed services, it will be able to leverage that scale in competing for mobile backhaul against private providers of backhaul.</p>
5. To what extent will the number and location of NBN POIs impact competition at the retail level in the short term and in the long term?	<p>Telstra concurs with the position expressed by the ACCC that it will reduce competition in the retail market in terms of both price and innovation in service offerings. Regional ISPs and regional providers of local networks (e.g. greenfields) will be adversely affected by the need to trombone traffic through capital city POIs back to their service areas.</p> <p>See section 5.2 of Telstra’s submission.</p>
6. Is the emergence of a Layer 3 wholesale sector likely under the NBN? If so, how will the location of NBN Co’s POIs affect this market in the short and long term?	<p>Typically, high levels of aggregation are provided as part of a managed Layer 3 service. NBN Co’s proposal of mandatory bundling will mean that Layer 3 providers will no longer be able to differentiate based on aggregation or backhaul technology choice or on coverage and there will also be minimal differentiation based on resiliency, scalability and cost. Highly centralized POIs also will drive NBN Co towards a large scale, standalone national network which will provide the means and the incentive to expand into value-added wholesale services in the future.</p> <p>See discussion in section 6 of Telstra’s submission.</p>

ACCC Question	Telstra response
Location of POIs on the NBN and provision of related services	
7. What is the preferred number and location of initial NBN POIs and why? How would this be different in the short term and the long term?	<p>Telstra’s proposal is that NBN Co publishes an initial list of available POI sites which corresponds with routes on which currently there are competing backhaul providers (i.e. Telstra plus 1). These routes would be identified by the ACCC using its RKR data.</p> <p>See section 4 of Telstra’s submission.</p>
8. What are the strengths and weaknesses of NBN Co’s preferred ‘composite model’ outlined in its Public Position Paper?	<p>Telstra addresses these matters throughout its submissions and in particular in section 5. The key strengths and weaknesses are summarized in a table in section 5.4. Our view is that the NBN Co’s proposal is a disproportionate response to the Government’s objective of urban/rural pricing parity and that the downsides of reduced wholesale competition, constrained retail competition and enlarged monopoly overwhelm any benefits the proposal has. As the ACCC has suggested in its cover paper, there are more targeted ways of achieving urban/rural pricing parity which are less distortionary of current and future competition.</p>
9. Where a composite or low-medium consolidation approach is adopted for NBN Co’s POI location, what factors should be taken into account in determining the location of the distributed POIs? For example, is the number of available backhaul routes relevant? If so, what should be the threshold?	<p>Consistent with the basic tenets of interconnection which have guided the industry for the last 20 years, NBN Co should provide interconnection at any technically and operationally feasible points within its network requested by an access seeker.</p> <p>See section 4 of Telstra’s submission.</p>
10. On what terms should NBN Co supply backhaul from the small number of centralised aggregation POIs to the decentralised disaggregated POIs if its ‘composite model’ is adopted?	<p>The commercial terms for the transmission between the CSA and the 14 POIs should take into account the relevant characteristics of the service and the way it is provisioned. Pricing should be allowed to differentiate on a costs basis including by the adoption of distance-based charging. Access and backhaul should not be bundled – otherwise this pricing structure will provide no economic incentive to connect beyond the 14 POIs and achieve substantially the same outcome as the high concentration option. The 195 POIs will be “window dressing” to a much larger monopoly footprint.</p> <p>See section 4 of Telstra’s submission.</p>

ACCC Question	Telstra response
11. If NBN Co supplies backhaul, should this be on a Layer 2 Ethernet basis or in the form of dark fibre (or both)?	Telstra supports a Layer 2 focus for NBN Co's proposed product offerings and believes competition will be best promoted, and innovation and product differentiation more likely, if NBN Co does not offer services beyond Layer 2. Telstra adoption of Layer 2 offerings will promote end-user choice and promote vigorous competition for end-user customers.
Timing and Business Rules for interconnection under NBN Co's composite approach	
12. Under NBN Co's 'composite model', what "business rules" should govern when NBN Co will allow interconnection at the distributed POIs?	Telstra submits that POIs should be initially located where there is competitive backhaul, where the threshold is that there are two or more backhaul providers on that route (including Telstra plus 1). Further, NBN Co should provide interconnection at any technically and operationally feasible points within its network requested by an individual access seeker. Requiring NBN Co to provide a new POI only where two or more access seekers have requested it would 'hold up' competition, if not discourage investment in the first place. Even if another backhaul provider does not enter, access seekers will have expanded choice between backhaul at the CSA POI from the alternative provider or backhaul from NBN Co at the capital city POI, rather than NBN Co as a monopoly supplier. See section 4 of Telstra's submission.
13. What should be the process to coordinate the addition of interconnection at the disaggregated POIs?	Telstra submits that the addition of interconnection at the disaggregated POIs beyond the initial POI list should be on request by an access seeker if interconnection at that location is determined to be technically and operationally feasible. This would require a process that allowed for mass migration and any incremental ports being requested over time. Telstra has experience with transfers involving mass migration and demand for additional ports, and this could be used as an initial reference point for NBN Co or the industry in defining its process. It should be ensured that any process to coordinate the addition of interconnection is done in a timely manner.
Changes to the initial POIs	
14. What factors should trigger a review of the location of NBN Co's initial POIs?	See section 4 of Telstra's submission.
15. What mechanisms should be used to effect a change to the location of NBN Co's POIs? (i.e. consultation requirements and notification periods)	As above.

ACCC Question	Telstra response
Layer 1 Unbundling	
16. What are the implications of the number and location of POIs for potential Layer 1 unbundling and home-run network topology for the NBN?	Telstra agrees with the ACCC position that Layer 1 unbundling does not appear to be feasible under the NBN Co proposal. This could hinder any future uptake of unbundled layer 1 services. Telstra's more decentralized POI proposal would be consistent with the future use of layer 1 NBN Co access.
Uniform National Wholesale Pricing (UNWP)	
17. To what extent can UNWP be achieved independently of decisions about the number and location of POIs?	<p>Telstra addresses these matters in section 3 of its submissions. In summary, aggregation of POIs is not needed to achieve UNWP because:</p> <ul style="list-style-type: none"> • in aggregate, nationwide, backhaul is a limited proportion of the costs of supplying services to end-users [c-i-c] [REDACTED] [c-i-c]; • creating more competition in backhaul markets would lead to reduced backhaul prices thereby bridging the gap between rural and metro wholesale prices; and • UNWP can also be achieved by a more targeted subsidy approach without eliminating or foreclosing competition. <p>In any event, the objective of UNWP is achieving geographically uniform retail prices. Retail prices are influenced by marketing and operational factors not just wholesale costs.</p>
18. Is NBN Co's definition of UNWP "...that Access Seekers should face the same total wholesale cost from any premises to a designated state capital city point of presence" an appropriate one? If not, what alternative definition would you propose?	<p>In summary, NBN Co's position is not appropriate because it has significant effect on competition in backhaul markets, is not needed to support UNWP's objective of achieving retail pricing parity and further wrongfully assumes that UNWP dictates the removal of distance-based charges.</p> <p>Rather, UNWP should require that Access Seekers face the same wholesale costs for the key access component.</p> <p>See section 3 of Telstra's submission.</p>

ACCC Question	Telstra response
<p>19. To what extent can it be ensured that Access Seekers face the same total wholesale cost in supplying services to end-users across regions independently of decisions about the number and location of POIs? That is, are there alternative ways to the approach proposed by NBN Co of ensuring that Access Seekers face the same total wholesale cost in supplying services to end-users across regions?</p>	<p>Telstra believes uniform wholesale pricing requires that prices be equivalent for equivalent services. This means that access services could be priced equally and backhaul providers should be able to price backhaul services having regard to distance. If further measures are required to promote pricing parity at the retail level this can be achieved using a subsidy.</p> <p>See sections 3 and 4 of Telstra’s submission.</p>
<p>20. If NBN Co’s preferred composite model were to have no price differentiation between interconnecting at designated capital cities or at CSA locations, what impact would this proposal have, particularly on regional retail markets and regional backhaul transmission markets?</p>	<p>Competition in regional backhaul transmission markets would be foreclosed as backhaul providers would not be able to compete with NBN Co’s bundled offering.</p> <p>See sections 2 and 5 of Telstra’s submission.</p>
<p>Wireless Services</p>	
<p>21. Should the same approach for the number and location of POIs for NBN Co’s fibre services be adopted for wireless and satellite services? Why and/or why not?</p>	<p>To the extent that wireless and satellite services have the same underlying characteristics and service specifications as the NBN Co’s fibre services, then the same approach should apply.</p>
<p>Other</p>	
<p>22. In relation to the data provided in Appendix A of NBN Co’s Public Position Paper, do you believe that NBN Co’s input information is accurate, and has NBN Co correctly assessed the current state of the backhaul and competitive DSLAM markets?</p>	<p>It is not clear to Telstra how NBN Co has selected its POIs and CSAs and therefore Telstra cannot analyse or comment.</p> <p>The ACCC has the best available data being that produced pursuant to the Infrastructure Record Keeping Rule. Telstra would encourage the ACCC to use that information as a starting point for assessing the accuracy of NBN Co’s data.</p>

ACCC Question	Telstra response
23. Are there any other considerations or information that you think are relevant to the selection of NBN Co's POI locations?	In summary, Telstra is of the view that technical and operational feasibility is most relevant to the selection of NBN Co's POI locations. See section 4 of Telstra's submissions.