



14 January 2011

Public Policy and Communications

Mr Joshua Davies
Communications Group
Australian Competition and Consumer
Commission
Email: joshua.davies@accc.gov.au

Executive Director
Regulatory Affairs
Level 11
400 George Street
SYDNEY NSW 2000 Australia
Postal Address:
Locked Bag 6704
SYDNEY NSW 2001

Telephone (02) 8576 2730
Email: jane.vanbeelen@team.telstra.com

Copy to:
grahame.oleary@accc.gov.au
richard.home@accc.gov.au
rob.nicholls@accc.gov.au

Dear Mr Davies

National Broadband Network Points of Interconnection (POI)—Location of POIs, Unintended Consequences and Issues

The number and location of the points of interconnection (**POIs**) in the National Broadband Network (**NBN**) is of critical importance to the future operation, functioning and structure of the telecommunications industry in Australia. Telstra therefore welcomes the opportunity to comment on the location of the 120 POIs NBN Co has initially proposed to supply.

Telstra notes it has not been asked to comment on the number of POIs that should be adopted. Telstra remains of the view that, while the 120 POIs is a marked improvement on the 14 capital city POIs proposed in October 2010, it is an insufficient number of POIs to meet the long-term interest of end users (**LTIE**) and other obligations and will lead to some level of investment stranding.¹

In addition to this important point, after reviewing the proposed number and location of POIs, Telstra has identified three main concerns with the proposed POIs.

1. A number of the proposed POIs have more suitable (lower cost and faster make-ready build) alternative sites nearby. As a result, Telstra believes that some of the locations identified for POIs could result in an inefficient network architecture that raises the costs of the network deployment for NBN Co and access seekers, and could lead to a less than optimal network performance for end users;
2. Regional POIs are under-represented from an efficient network design perspective. Telstra believes given Australia's geography, there should be a greater number of regional POIs which would provide a more efficient network, account for larger regional population centres and potential future growth in these areas, and be in the long-term interest of end users; and
3. Telstra considers that any increase in the number of regional POIs would be more consistent with international trade commitments regarding the regulation of telecommunications services and interconnection. Further, it would expect that the ACCC would ensure that in any future NBN Co Special Access Undertaking (**SAU**), the process of the addition or relocation of POIs would comply with these binding international trade commitments.

¹ See Telstra, *Response to the ACCC Discussion Paper on Points of Interconnect to the National Broadband Network*, November 2010.

Telstra provides more detail on these concerns below.

More suitable locations in close proximity to proposed POIs

Telstra is concerned that the criteria presently applied by the ACCC and relied upon by NBN Co for developing the network planning rules will have a number of unintended and undesirable consequences.

Telstra believes these anomalies in part arise due to the ACCC assessing historical outcomes from the copper access network and then imposing them onto the design of the new NBN Co fibre access network. That is, the proposed POI locations are heavily influenced by where competitors currently have DSLAM equipment, which has been dependent on access seekers having a concentration of customers within a suitable copper loop reach. This conversely has relied upon where Telstra deployed its exchanges for a 100 year old copper network. However, the move to FTTP results in a very different access network architecture, with the fibre reach typically being much greater than the copper – generally 12km for fibre as opposed to around 4 km for copper.

Of the 120 POIs, Telstra believes that over half would require a considerable level of additional investment and an extensive period of time for either the ready works to be performed on the Telstra exchange, or for NBN Co to establish alternative accommodation.

Two examples of the proposed locations where more suitable sites exist close by are Ashmore in Queensland, and Cranebrook in New South Wales. Cranebrook has insufficient space, and a more suitable location would possibly be the larger Penrith building, which is within approximately 4 kilometres. Ashmore has insufficient space, and a better option would be to use the already proposed Southport building POI, which is 5 kilometres away and adequately equipped with the necessary floor space and building services. The fact two POIs are being located in such close proximity where only one may be necessary also serves to highlight the inefficient network architecture that can arise from the inflexible application of the current criteria.

In order to avoid any unintended and undesirable outcomes in the location of POIs such as those outlined above, the ACCC should look to adopt a more flexible approach for identifying POIs, which incorporates greater technical and commercial considerations into its criteria.

The selection of the POI location could be done on the basis of the commercial requirements of NBN Co and its future access seekers' requirements within a geographic location, which supports the targeted competitive outcome on backhaul from that POI position.

Another or additional option to prevent POIs arising in less than optimal locations is for the ACCC to establish a procedure where it identifies the urban centre, but then facilitates a consultation process where industry participants with specialist knowledge propose the optimal location of the POIs to the ACCC.

The specific POIs would also obviously need to be done with reference to key regulatory requirements of the ACCC, e.g. the existence of competitive fibre in close proximity. If there was this flexibility to locate POIs at alternative locations in the areas that have been proposed, then this would greatly assist in reducing the cost and time to deploy NBN Co's POIs.

POI Distribution and the Under-representation of Regional POIs

Of the 120 POIs, NBN Co has classed 80 as metropolitan POIs and 40 as regional POIs. Of the regional POIs, Telstra would describe 5 of these as being outer urban POIs rather than regional POIs, leaving only 35 regional POIs.

Given the geography of Australia Telstra considers there should be more regional POIs. The current criteria used by the ACCC and employed by NBN Co, has led to a distribution of POIs that is heavily skewed towards metropolitan areas, with larger regional population centres (e.g. Mackay, Maitland, Mandurah, Coffs Harbour, Orange) having no POIs. Further, it

appears that due to the planning rule proposed for a “soft cap” of 80,000 Geocoded National Address Files (**GNAFs**) for metropolitan areas, another feature of the distribution within metropolitan areas is that a large number of the 80 metropolitan POIs will be in reasonably close proximity to one another. This is highlighted by the number of POIs in each of the major capital cities:

- Sydney – 27
- Melbourne – 21
- Brisbane – 10
- Adelaide – 6
- Perth – 7

Telstra questions whether there is any advantage or network efficiency gains of having a POI distribution where there are too few regional POIs, and the metropolitan POIs are located in close proximity. The transmission links in regional areas will have to cover greater distances than they otherwise should, and this could affect the end user experience of the network.

Telstra acknowledges that while in the future a large number of POIs in close proximity in metropolitan areas may be an efficient network architecture that provides benefits to end users (e.g. for content delivery networks), in the immediate term the distribution in the metropolitan areas could create additional cost and efficiency issues for NBN Co and access seekers.

Should the ACCC and NBN Co proceed with 120 as the initial number of POIs then, given the likely benefits from having more regional POIs and the diminishing returns from having metropolitan POIs in close proximity to each other, greater benefit could be derived for the long term interest of end users from having more regional POIs and fewer metropolitan POIs.

As another option, Telstra believes that additional regional POIs could be readily identified and added to the initial 120 POIs, especially along the eastern seaboard of Australia, that make sense on the grounds of network efficiency. This would help to alleviate some of the inefficient network design problems in regional areas that have unintentionally been created by the criteria used to select the initial POIs. This addition would also provide for large regional population centres to be served, and account for future growth anticipated in these areas due to such things as the expansion of the resource industry.

One example of an existing large regional centre where there is also likely to be future growth, yet currently no proposed POI, is Mackay in Queensland. It lies between the Townsville POI and Rockhampton POI, and Telstra considers it would be a logical location for a POI and could avoid large numbers of end users in that region being served by POIs which are a long distance away, with consequent impacts on the end user experience.

Further, it is Telstra’s view that the current distribution of POIs should be examined further to determine whether that distribution may generate other anomalies in the distance between POIs and the communities which they serve. There is the potential for higher costs and decreased network performance if, communities were to be served by POIs located in distant regional centres. This could be avoided by applying more flexible criteria for the selection of POI locations.

International Trade Obligations

In accordance with its specific commitments under the WTO General Agreement on Trade in Services, the Commonwealth Government is required to comply with the WTO Reference Paper on Basic Telecommunications (**WTO Reference Paper**). NBN Co, as a carrier, is

then 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). NBN Co has no choice in this matter: these obligations are directly binding upon it under Australian domestic law. Equally, the ACCC must ensure that the POI distribution does not result in the Commonwealth breaching its international trade commitments.

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. While 2.2(b) provides that network interconnection must be sufficiently unbundled that a service supplier does not need to pay for network components it does not require, 2.2(c) provides for individual suppliers to be offered additional POIs not offered to the majority of users subject to charges that reflect the cost of constructing the additional facilities. The same or similar interconnection provisions also exist in Australia's Free Trade Agreements.

Given that NBN Co will become a "major supplier" and that interconnection at additional regional POIs will be "technically feasible",² NBN Co should supply access to a greater number of regional POIs. Further, any future NBN Co SAU submitted to the ACCC should contain a process for the addition or relocation of POIs consistent with these international trade obligations. In particular, service providers should be permitted to request interconnection at additional POIs. Under the relevant WTO and FTA provisions NBN Co is entitled to levy a charge that reflects the cost of constructing additional facilities establishing the additional requested POI, but is not entitled to use the charge for the additional requested POI to recover revenue lost by NBN Co no longer supplying transmission on a particular route.

If you have any questions regarding this letter, please do not hesitate to let me know.

Yours sincerely

pp 

Jane Van Beelen
Executive Director, Regulatory Affairs
Public Policy & Communications

² For further detail on this issue see, Telstra, *Response to NBN Co Consultation Paper: Proposed Wholesale Fibre Bitstream products*, 12 February 2010, para 18-22, pp. 8-9 and Telstra, *Response to the ACCC Discussion Paper on Points of Interconnect to the National Broadband Network*, November 2010, pp. 7-8.