



Response to ACCC Discussion Paper -

Points of Interconnect - the National
Broadband Network

November 9th 2010

Table of Contents

1. Introduction 3

2. The POI Model - Technical 3

 2.1 Commentary 4

 2.3 Voice Interconnect..... 4

3. Commercial Model..... 5

1. Introduction

This response to the ACCC POI public discussion paper contains an overview of the commercial and technical considerations when evaluating the proposed NBN POI model.

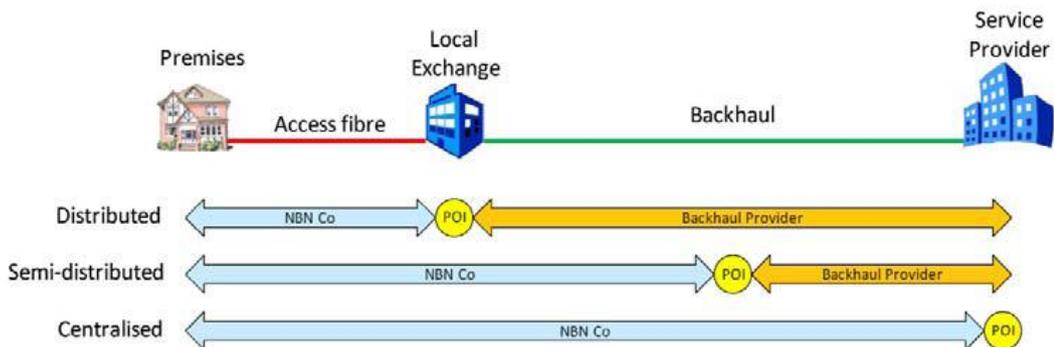
It is our position there are two components, technical and commercial, to be considered when assessing the proposed NBN models. Whilst most technical solutions will work there is a need to consider the long term commercial viability of products and services delivered over the NBN.

We believe that our response to this discussion paper should preferably be considered in conjunction with the NBN pricing principles, as recommending or indicating a preferred technical model without understanding the pricing model would not necessarily be the best commercial decision.

The preferred POI model should ideally leverage on any existing commercial agreements between RSPs and backhaul providers. The industry has reached the point where there are now significant backhaul players in the market and to go back to a single provider model would not be in the best interest of the industry or end users. Removing competition in the backhaul market, besides stranding assets, will also remove competitive backhaul pricing and could lead to increases in consumer pricing.

2. The POI Model - Technical

The technical requirements associated with any of the proposed POI solution is of little consequence to iiNet. Regardless of the location and number of POIs the interconnection requirements will be the same. The major variable technical requirement would be size of the interconnect interface – 1Gig, 10 Gig, 40 Gig. Etc.



NBN Co's depiction of POIs

There are numerous arguments for each of the above models and dependant upon the RSP's existing network footprint, any of the models above could technically work.

The distributed model works if NBN want to use existing Telstra exchanges to house their POIs. Telstra exchanges were built / located to service copper based access and, with the advent of

fibre optics at the access level, the need to have so many sites has declined. This model would be extremely costly as NBN would need to establish POI's and backhaul to all Telstra ESA's

The NBN is now designing and building a fibre network divided into FSA (Fibre Serving Area's) so the need for the distributed model, using Telstra exchanges, no longer exists. NBN now have the technology and opportunity to deploy a more flexible and future proof network to replace the existing copper infrastructure.

The semi distributed POI model would allow NBN and RSP's to utilise existing backhaul infrastructure to service end users. From a network architecture perspective, using this model and locating the POIs in geographically strategic locations, would allow flexibility and redundancy in the provisioning and operational support of NBN products and services. If a fault occurs in a local POI it would affect a smaller number of customers.

The centralised model puts all the eggs in one basket. The disadvantages of this model would mean all of the proposed POI's would need to be conditioned in such a manner that if a POI was lost, the traffic would have to be aggregated over other "local" POI sites. This would require the construction of "super POIs". The costs from an infrastructure perspective would be significantly increased, as would the costs associated with the associated electronic equipment.

As RSPs we have no visibility or control of the downstream network under this model, when transit links are contended then failure of upstream equipment would have a much greater customer impact, as all services from the centralised POI would be affected. It is possible that half a state could be without service. From a RSPs perspective this model could be seen as a very unattractive and extremely detrimental to customer service should an outage occur.

2.1 Commentary

iiNet supports a model that uses existing backhaul capacity, where present. We believe this option would provide a more viable technical solution by utilising existing backhaul infrastructure, particularly in the metropolitan and larger regional centre. It is our belief POI numbers will grow over time, from a version of the centralised model, but with significantly more numbers than initially suggested, ultimately growing to resemble the semi distributed model.

An NBN POI paper was expected some due months ago, and from our perspective earlier engagement of the RSPs in this consultation should have occurred before now, for the greatest benefit.

2.3 Voice Interconnect

A centralised POI model will remove the RSPs ability to drop voice traffic into a local CCA POI and could have a significant impact on the size of the transit links required. These CVCs are required to carry voice and data back to the centralised POI. Using the distributed model and aligning this with the existing CCA POIs would be a better use of bandwidth as voice traffic could be routed back into the PSTN closer to the customer.

3. Commercial Model

Discussion on this topic is impossible at this stage as we have not been provided with any pricing from NBN Co. Whilst we and other RSPs, have been involved in the so called deep dive product sessions organised by NBN Co, we have not seen any pricing from the NBN in relation to Fibre, Wireless or Satellite services. Without that essential information, no useful opinions can be developed.

The NBN Co model, as we understand it, is to use the existing fibre network to deliver Fibre and wireless based products to the POI and then distributes them via the appropriate medium to the end user.

The NBN Co pricing regime is an important consideration when determining an appropriate POI model from a business sense. There are metropolitan and regional locations where we already have existing backhaul arrangements in place and without having visibility of the NBN pricing model it is impossible for an RSP to make a decision based on commercial requirements.

We should not be required to abandon existing commercial relationships to transfer our backhaul traffic to ONE provider, regardless if it is NBN Co or any other provider. We do not, by default, wish to establish a backhaul monopoly player where competitive options are available and in place.

The NBN may have a role to play for smaller aggregators with bundled backhaul supply, however RSPs need to be able retain the flexibility when it comes to backhaul choice.