

# Position Paper: The nbn™ network and the business of connecting Australia



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In 2009, the Australian Government conceived a commercial model that would build out a wholesale-only, high speed network to every home and business in the country.

The model factored in the creation of a competitive Retail Service Provider (RSP) market where the wholesale network provider (nbn co) would aggregate all their customers' data traveling in and out of the home and pass this off to the RSP's own network.

The RSPs would compete against each other by developing their own unique products with varying degrees of quality over these two interconnected digital highways. The model assumes the vast majority of households in the country will take-up this service and that the consumer would eventually pay enough for these better-than-before services to cover the costs and necessary profits to make all this a reality.

A standout feature of this model is in how it leaves no need for government subsidies to reach the high cost-to-connect areas--unlike what most other countries are having to do.

Assuming the variables in the model are correct, this wide-spread digital infrastructure promises to bring benefits that range from lifestyle improvements to increased prosperity and although less tangible, offer a level of national pride by being one of the first continents to be fully connected to a digital infrastructure. Many believe all of this still holds true, but as the nation is more than half way built, there are challenges and questions that put this model in doubt.

To better understand the consequence of these challenges, its important to understand the key variables that determine if the model is commercially viable. Simply put, the average price consumers are willing to pay (multiplied by) the

number of homes that take-up the service (minus) the cost attributed to both **nbn** and the RSP (equals) the profit or loss. If expected profits over time are acceptable to their investors, the model is commercially viable. As this relates to **nbn's** model, today we know we are already seeing the expected 75% take up by the end of the migration period. We also estimate the weighted average RSP price advertised for residential broadband-over-**nbn** is just above \$80. And finally, we know the RSPs pay **nbn** on average \$42 for a weighted average speed of 32Mbps and an average monthly download of 150 Gigabytes.

The **nbn** model assumes the digital supply of applications will grow and most consumers will elect to use these services. This increase in consumer value is coupled with the belief the end-user will be willing to pay more as they use more.

**nbn** is dependent on an additional \$8 (on average) more for these enhancements, which in turn depends on the end user's willingness to pay This is necessary to grow the current \$42 average revenue per residential home to the targeted \$50. The \$50 covers the cost of **nbn's** current network architecture which delivers on the requirement of 81% of all homes and businesses able to support at least 50Mbps peak information rate and the remainder to support at least 25Mbps. These are the minimum standards but the architecture of **nbn's** network will support the majority with 100Mbps or better speeds.

Some are arguing, however, that **nbn** needs to spend even more on a full fibre-intensive network. If **nbn** did this, it would push **nbn's** needed cost recovery to significantly higher levels. If we are to remain commercially viable, this would have a proportional impact on the expectations of what consumers would need to pay.

Compounding the problem is the RSPs are already suggesting the existing \$42 fee **nbn** charges today is too high, let alone the expected \$50 **nbn** is counting on as consumers use more data.

The same fibre proponents argue **nbn** can pull enough incremental revenue from a deep fibre network to pay the incremental cost but there is no evidence that supports this. In fact, the retail price limits expressed by the RSPs today applies equally to the million consumers now served over fibre to their home and to the million served over the less expensive fibre and copper links to the home.



We need to ask whether the near term demand for data will exceed the existing network's capability and, equally as important, will consumers be willing to pay substantially more than what is expected for this further increase in data consumption and speed? If the answer is no to either of these questions, then spending more on a deeper fibre network will render the commercial model unviable leaving tax payers or other sources to pay the incremental cost.

Even with no change to the network architecture, the RSPs are challenging the price **nbn** is currently charging them and the belief that consumers will be willing to pay more as they use more data-- something the commercial model relies on.

In today's environment, **nbn** is rolling out faster than ever before with peaks reaching 140,000 homes being made ready within a single week. Add to this, up to a hundred different retail companies trying to persuade these consumers to sign up with them. A land-grab phenomenon like this drives a price war and may not reflect the price consumers are willing to pay but naturally leaves consumers paying no more than what's on offer by the competition.

We need to ask whether this is a faulty commercial model where cost recovery isn't possible or an overheated retail market with a price-centric marketing strategy that needs to change?

And finally, the elephant in the room. There are many opinions being expressed as to what **nbn**, the Government, or the RSPs need to do in light of the two challenges above. Some have suggested the Government remove the need for **nbn** to make a modest profit. Others have suggested we write down the assets so we can lower the price and maintain the accounting definition of a positive IRR.

Each of these suggestions, however, will result in a form of government tax-payer subsidy to make the model whole. On the other side of the debate, some RSPs have come out arguing that a consumer value proposition that focuses on speed and service experience will produce higher retail prices than the averages today and this will be enough for them to cover their cost and make a fair profit.

The fundamental question here comes down to how we pay for a faster-than-before broadband network that is universally available? Do we rely on tax-payer monies in the form of subsidies or rely on those who are going to use the service?

The answers to these questions will be flushed out in due course. **nbn** is working with the RSPs, the Government, and consumer advocacy groups to be sure we achieve the objective at hand and that is to have universal access by 2020 with more than 8 million happy broadband consumers.