

## Economuse, 24 August 2010

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### **Building for speed and pricing to withhold it!**

Canberra, we have a problem. We are building a fixed broadband network for speed which residential customers are unwilling to pay for. This is a problem for the viability of the NBN and it also undermines the broader purpose of transforming our economy. But, there is a solution.

At the ACCC Regulatory Conference in July, Dr Karl-Heinz Neumann from the WIK Institute concluded from his research that *“The supply-driven character of the roll-out also defines the greatest economic risk of a fibre project which is take-up or penetration. Any viable business plan of fibre requires a fibre penetration rate between 50% and 100% of the total potential customer base of all access lines”*.

In Tasmania, only half the homes in the first three NBN towns took a fibre connection and fewer took up (activated) broadband services. Michael Malone of iiNet says that *“A total of 70 customers have been signed up in Tasmania under the three brands – so that's not 70 each but a total of 70 between iiNet, Internode and Primus...Demand from our point of view is zero.”* (Comms Day 17 August)

The KPMG/McKinsey Implementation Study projects that 54-63% of premises in fibre areas will be activated by 2020 and 75-90% by 2035. However, it also notes that in two markets where the roll-out of fibre is complete - Japan and S. Korea with 93% and 92% of homes passed - only 32% and 39% of homes passed are activated. Of course, having no competition from other fixed broadband networks will help our NBN – but only on the supply side. On the demand side, there is a clear unwillingness to pay for speed. At December 2009, only 38.3% of broadband households subscribed to speeds in excess of 8Mbps (ABS Cat 8153) even ADSL2+ speeds of up to 24Mbps were available to around 70% of customers

There does not seem much point spending billions of dollars to make available capacity that customers will not be used with the conventional approach to pricing. Worse, the transformation of economic processes promised by the NBN is threatened. *“The services of today and the next decade are telemedicine, tele-collaboration, telecommuting, blended education, etc. All things that enable rich interactive experiences without having to be in each other's presence. This currently needs bandwidths of 100MB/sec or more.”* (Senator Stephen Conroy in Comms Day 17 August). But, to get the scale to make these worthwhile and to create new services and industries, we need not only high activation rates but also high utilisation of the speeds made possible by the NBN.

The conventional wisdom is that “*the typical consumer plans that will likely be available on the NBN in its first decade will more closely resemble ADSL2+ and HFC than anything else*” (Grahame Lynch, Comms Day, 11 August) . That would be a pity: if customers do not use the speeds available today why would they use any more in an expensive network built for speed? We know typical plans will not drive the activation and utilisation objectives. Telstra’s 100Mbps network in Melbourne is available in nearly 1 million premises but just 0.2% of those have signed-up (Dominic White in AFR, 10 March).

In the USA, telcos that have been used to providing speed based plans with unlimited downloads are now moving to down load caps as we have here. Google and others have been resisting this as an assault on net neutrality; with the recent exception of mobile broadband on the basis that its capacity constraints are greater. At least, that is what the Google-Verizon accord argues.

### **Using pricing to increase activation and utilisation.**

Australia now has the opportunity to provide world leadership where it matters. Not with a high coverage NBN that may display low activation and poor utilisation rates, but with broadband pricing that encourages both activation and utilisation while also meeting affordability objectives. Pricing is the game-changer that will realise the transformative power of the NBN investment.

As Bevan Slattery, the founder of Pipe Networks, observed “*NBN Co isn’t bringing broadband to Australia. It’s bringing faster broadband*” (Comms Day, 19 August). On current plans, it will not deliver an “*entirely new experience*” because, as argued in this column yesterday, the NBN is built for speed but looks like it will be priced to withhold it.

Although NBN Co. has not yet released its pricing, its current fibre consultation paper clearly foreshadows speed-based pricing with data throughput options starting at 12/1Mbps. Since residences are likely to require only one (or no) fibre activation, growth in revenue must come from either “*a change in demand for new or higher priced services; or a price increase on basic services (within the ongoing affordability requirement*” (p254, Implementation Study).

Suppose instead that NBN Co. has a two part tariff of, say, \$20 per month plus \$0.50/GB with unlimited speeds (ie no PIR constraints). The suggested two part tariff is inferred from a best-fit line through ADSL2+ retail broadband plans at September 2009 showing an average price of \$54 per month plus \$0.49GB. A year earlier, the same line was \$50 per month plus \$0.96/GB and the implied data price is probably much less now.

This was the approach used in TransACT’s NBN Mark 1 business model and put in several public papers including to the Senate Select Committee in March (all on my site).

This is a better approach because,

- It leads to a more attractive entry-level product beginning from a wholesale cost of \$20 which increases activation rates.
- Average usage is around 6GB now (ABS Cat 8153) so at, say, 10GB the NBN Co access cost is only \$25 compared with average retail yields over \$50 per month.
- There is built-in revenue growth tied to data growth. Under some revenue-cap arrangement, the data price would fall continuously and quickly. If data grows 60% pa, the wholesale data price can fall from 50 cents/GB to 5 cents/GB within 5 years to hold revenue constant; so the price cuts lead to more traffic and more price cuts in a virtuous circle.
- ISPs can still continue to price around monthly data caps, as they do now. Customers are more likely to migrate to higher caps with unlimited speeds.
- With high-speed broadband access as the default option, this will encourage investment in backhaul and improved consumer PCs and other devices. Unlimited speed increases innovation and investment.
- The revenue model is self-funding: as data grows so does the capacity to augment the network to meet demand (ie prices fall a little less to fund expansion)
- NBN Co has every incentive to encourage use of the network. It has no legacy retail revenues to defend.

NBN Co may object that customers will experience contention issues (although it will allow this on its satellite service). That depends on how ISPs configure the capacity they buy from NBN Co; with the exception of homes that buy services from multiple suppliers. In the past, customers have been willing to accept such trade-offs: even corporate customers who chose IP over both the ATM Constant Bit Rate Service and the cheaper Variable Bit Rate Service.

ISPs may object that this runs counter to the recent move to provide monthly terabyte quotas. As Grahaem Lynch has argued, the new *“terabyte plans would appear to be more about positioning than any-thing else”* (Comms Day, 19 August). Heavy users will not be happy with a two-part tariff but they do not pay for extra speed now and they impose costs which are reflected in a two-part tariff.

If the NBN prices access on speed, nothing much will change. However, the proposed access pricing model allows not only full-speed to be turned on for all users immediately but also enables affordable entry pricing without pre-empting the design of retail broadband plans. This approach is a game-changer which will increase both activation and utilisation rates leading to real economic and social transformation.

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