

# ECONOMUSE

## Hobson's choice with NBN Co.pricing

*The pricing options paper shows that NBN Co. is not making any major shift on CVCs and may be making its revenue situation even worse.*

NBN Co.'s July consultation paper on pricing and billing (not widely available but seen by *CommsWire*) has wilfully ignored the only serious option that has been put up against its own product and pricing construct. Unless it is changed, the NBN will not be affordable and will not increase broadband utilisation.

The five options discussed in the paper are illustrated below. Note that they skirt around Option 6, the traffic model, which is not discussed at all.

		Access Backhaul (CVC)		
		\$/Mbps	Cents/GB	None
AVC (speed)	Many	3 and 4		2
	Simple		6	1
	None		5	N/A

The consultation paper also does not discuss what prices emerge from the options. But these calculations are done below using the 2012-2015 Corporate Plan and other analyses.

Central to the discussion are the concepts of AVC (Access Virtual Circuit) and CVC (Connectivity Virtual Circuit). In simple terms, AVC is the subscriber line and CVC is the backbone bandwidth.

Option 1 has just one AVC price (i.e. with unconstrained speed) and no traffic/CVC charges. This is identical to ARPU which rises from \$31 in 2015 to \$80 in 2028 in the Corporate Plan. NBN Co. admits this is bad for low end users (the lowest current price is around \$24 for AVC + CVC) and does not meet the expressed needs of the industry. Why is it listed as an option at all - unless it is there purely to make other options look more attractive?

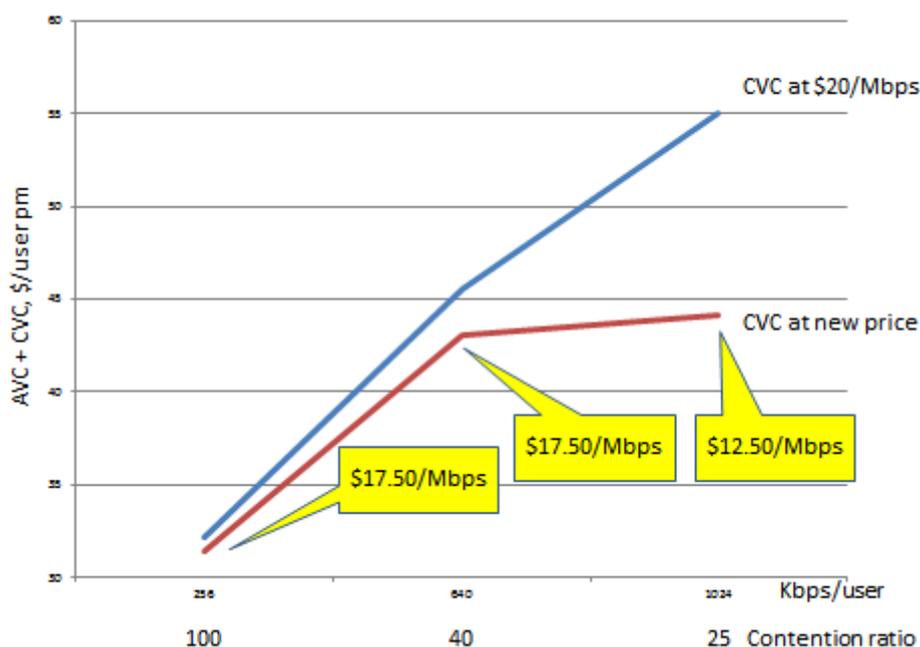
Option 2 with no traffic fees might appeal to access seekers. Flat monthly fees for wholesale access products are what they have been used to (think ULLS etc). But it would be a grave mistake. It would lead to unlimited traffic growth and limits NBN Co.'s ability to fund increased capacity in the network.

Without traffic (CVC) revenue, the weighted average AVC price in Option 2 would have to be 38% higher than the \$29.41 in the Corporate Plan for 2015 and 49% than the plan's \$53.45 (with migration to higher speeds) in 2028.

Option 3 is the status quo with an immediate reduction in the CVC price from \$20/Mbps to \$17.50/Mbps per month for 2 years; with the promise of continued reductions. The finances in the plan are already shaky. Will the cut be offset by higher AVC charges?

Option 4 replaces CVCs with “dimension based CVC pricing”. It is option 3 with discounts for buying less contended capacity (lower contention ratio).

The chart below is adapted from Table 3 in [NBN Traffic Pricing](#) which is based on NBN Co.’s December 2011 case study of 2,100 customers wanting telephony plus 25/5 Mbps broadband with a 100:1 contention rate for data. The blue line in the chart shows the monthly AVC + CVC cost per customer with no change in the current CVC price (\$20/Mbps) for different contention ratios. The possible (proposed?) CVC prices based on the chosen Kbps/user (chosen contention ratio) is shown in red.



The lines are drawn assuming CVC capacity increments move from 100 Mbps to 1 Gbps steps after the first 1 Gbps is reached. But it does not change much if the smaller increment is used.

Note that there is only \$1 pm difference between the 950Kbps/user CVC (at \$12.50/mbps) and the 650Kbps/user CVC (at \$17.50/Mbps). This removes the incentive to choose a higher contention ratio to reduce costs. Of course, having a simpler cents/GB charge instead of (any) CVC construct would be better.

Option 5 would abolish AVCs (i.e. unconstrained speed) and rely only on a traffic charge; which might be either based on the CVC or cents/GB. This idea makes as little sense as Option 1.

Without AVC revenue, the cents/GB (charged as CVCs in the corporate plan) would have to

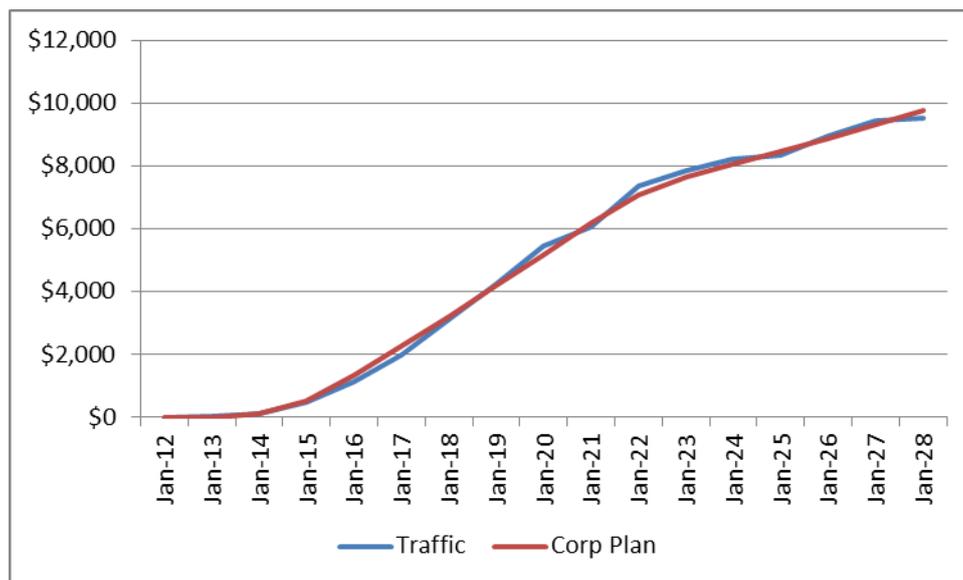
increase from 17 cents to 63 cents in 2015 and from 5 cents to 15 cents in 2028 .

At least, NBN Co. concedes the possibility of traffic charged as cents/GB (Option 5 and the original corporate plan) and unconstrained speed (Options 1 and 5). On their own, they do not make sense. But, put them together with the structure suggested by the traffic model and you get Option 6; which is not in the consultation paper.

The traffic model has just 2 AVCs (neither speed constrained) and a simple cents/GB fee.

The first AVC, the Standard Plan, is priced (consistent with retail broadband plans at September 2013) at \$38 pm plus 8 cents/GB. The second AVC, the Starter Plan, is charged \$10 pm but usage is charged at \$3/GB to set a break-even around 10 GB pm. The approach is outlined in [Entry level Pricing for Fixed Broadband](#) which was peer reviewed and published in the [AJTDE](#) journal.

The traffic model has been calibrated to track corporate plan revenues in the chart below taken from a related paper supporting [Option 6](#). The kinks in the blue line for the traffic model are due to gradual cuts in traffic fees from 8 cents/GB to just 1.2 cents/GB in 2028; with no change in AVC fees. The traffic charge for the Starter plan drops only slightly to maintain the 10 GB pm break-even point with the Standard Plan.



The continuous drop in traffic charges is the sort of good news that the industry wants to hear. It provides the certainty that it seeks for continued declines in wholesale prices while providing NBN Co. with the robust revenues it needs.

As explained previously (*CommsWire*, 3 July 2014), the traffic model has other attractive features such as much lower prices than those currently proposed by NBN Co.; which will help retain voice-only customers and make the NBN more competitive with wireless alternatives.

The traffic model was used by TransACT in its bid for NBN Mark 1 and is typical for other network utilities. It would drive adoption of the NBN. Why is it given so little consideration?