Act now - or the NBN will be a white elephant.

The Charles Todd Oration last week highlights misunderstanding about the true state of the NBN. There is no viable corporate plan yet and there are major issues to be fixed.

Graeme Samuel (reported in full in *CommsWire*, 5 November) seems to have more time for the NBN business plan than any cost-benefit analysis. Of course, both are subject to assumptions but the business case was a fantasy based on a legislated monopoly. There are issues which need to be addressed now for the next corporate plan.

The August 2012 (still current) public NBN corporate plan is fragile because the 7.1% IRR (rate of return) claimed for it was unrealistic and it also depended upon clawing back accumulated losses from low initial prices in future revenue (the initial cost recovery account, ICRA).

The December 2013 Strategic Review says that prices have to be higher and the IRR lower; even with the new technology model. But, it will be impossible to raise prices because of competition and is undesirable because it will reduce take-up.

The legislated monopoly around the NBN is generally thought to support uniform geographic pricing. But, it is actually used to support unrealistically low initial prices. The ICRA claw-back can be done only with a monopoly. This plan is now defunct because the legislated fixed monopoly is not going to hold.

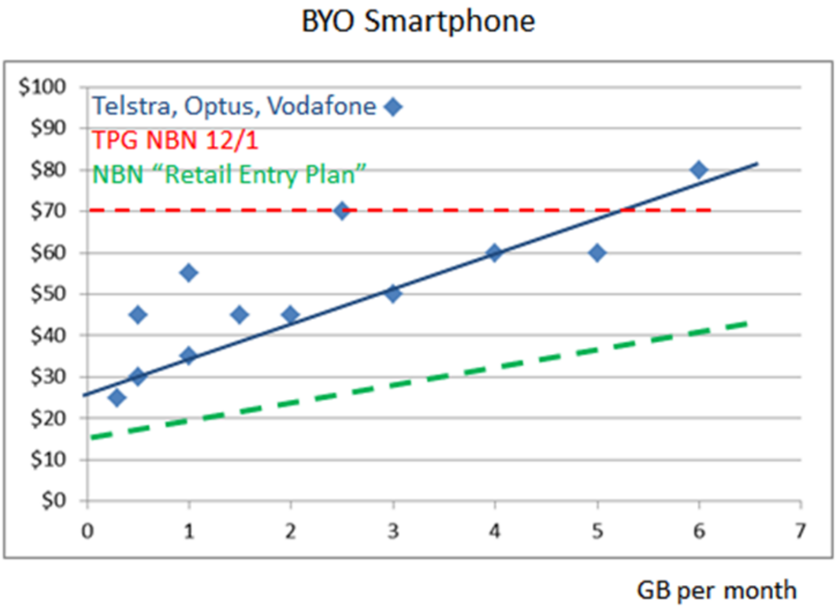
The carrier licence condition puts a finger in the dyke until a longer term solution is found. Samuel does not think TPG's exploitation of the loophole in the existing legislation matters: "*As for the FTTB infrastructure roll outs by the likes of TPG, I doubt that they will cause any more aggravation to NBN Co than the flea on the elephant's back".* Really? The Department estimates that TPG's networks are within 1Km of about 1.8 million premises of which about 1 million are multi-dwelling units or offices.

Using FTTB gives the first-in provider (such as TPG) an effective monopoly of fixed broadband services to the building as VDSL services do not work if they are not coordinated under one provider. But, it is only Plan A.

TPG has a Plan B. In May 2013, it bought 2x 10MHz pairs of spectrum in the 2.5GHz band for AU$13.5 million. It resells Optus mobile. But, "*We're not going to build a traditional mobile network because it's too expensive*" (David Teoh, September 2013). Rather, TPG announced it would roll out its own wireless broadband network in capital cities, potentially using small cell transmitters attached to buildings and lamp posts. This would compete with the NBN and cannot be stopped.

What about Telstra? In May, Telstra announced that it would not only build "*thousands* of *Wi-Fi hotspots across the country*" but also "*provide access to **two million** Wi-Fi hotspots* *across the nation. ..and 13 million international hot spots….(through an).. **exclusive** partnership with [global Wi-Fi technology provider Fon](#)*" (my emphasis). The launch will be in early 2015. With FON, 2 million WiFi (home) hot-spots could become just half a million NBN fixed lines.

This column has discussed the ogre of mobile substitution (*CommsWire*, 15 September). It is worth repeating two points.

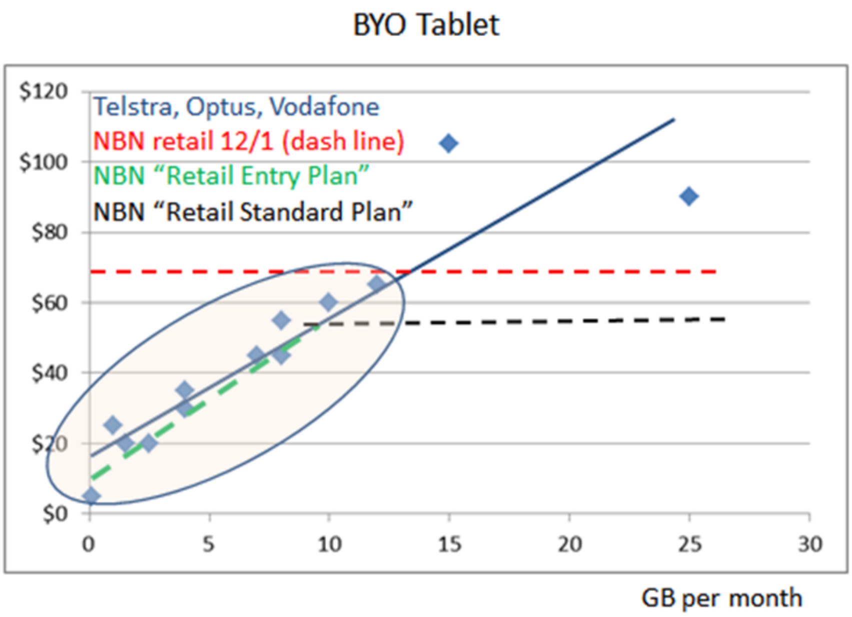


Just under 18% of NBN fixed services will use only voice or non-internet services (p66, Vertigan, Volume II).

For voice only, the chart shows the cheapest (TPG) NBN plan is more expensive than mobile plans (the dots).

An [entry level plan](#) – shown in green (assuming 30% gross margin and adding GST) could help to retain voice-only customers on the NBN; which is important to its financial viability. With FTTN, it costs little to have these customers on the NBN and reduce unit costs.

When Telstra took the original (FTTN) broadband plan to Howard Government in 2005, mobile broadband was not considered to be a threat to fixed broadband. Now it is.



The second chart shows that up to 15 GB per month, mobile broadband plans (the dots enveloped by the circle) are cheaper than TPG's NBN plan.

Mean downloads across fixed and mobile broadband are 47 GB and 2GB per month respectively. But the 47 GB must have a long tail. What is the mode (most typical download)?

The NBN Entry Plan is only just competitive in the chart above – but it is too late. Mobile broadband just gets better.

[According to NBN Co](#), only 54% of serviceable fixed lines were activated at the end of October. But, as yet, no area has been cut-over to the NBN. When that happens and the copper line is cut, we shall get a true picture of NBN take-up. It has been assumed by NBN Co. that all lines will cut over. It may be in for a nasty surprise.

Samuel said facilities competition *"should not be opposed, **unless** again the preservation of the NBN Co business case is the primary driver rather than competition"* (my emphasis). In my view, that is futile and economically inefficient.

It is futile to try and resurrect a legislated monopoly because technology and savvy entrepreneurs will always be two steps ahead of you. And, it is economically inefficient to have monopolies to prop-up policy. If a monopoly is natural, it will emerge naturally.

Of course, things like uniform geographic pricing create inefficient competition – unless you can find a way to square efficient infrastructure competition with universal pricing.

Some options were discussed at length in a submission to the NBN Regulatory Review. The ideas which seem to be most promising (and are not mutually exclusive) are:

- ✓ A re-purposed USO levy on all broadband providers. This is part of Recommendation 11 in the Market and Regulatory report (Vertigan I) to the Government. The original idea comes from Laffont and Tirole, with the surviving member of this partnership, Jean Tirole, getting the Nobel Prize for Economics this year.
- ✓ A write-down of the $3 billion capex to 2012 being spent to serve the last 7% of premises with satellite and fixed wireless. Non-NBN fixed wireless providers might complain this is not competitively neutral. But they do not serve the last 7%; only metro areas. However, they may have a point if/when NBN divests its satellite and fixed wireless divisions. As Samuel says *"there is a prospect for wireless/satellite to spread its footprint over the geographic area covered by HFC or FTTx"* so then there is conflict with existing providers.
- ✓ A lower (zero) IRR with a more modest terminal value certainly reduces the required amount of revenue. There is no mention of the ICRA in the Strategic Review. But, to replace it with Commonwealth funding under the revised assumptions just stated would cost around $10 billion.
- ✓ A revision of NBN Co. product and pricing plans to make the NBN more affordable. NBN Co. is currently undertaking a review of its pricing constructs. While we are at it, can we bestow full speed (i.e. no speed tiers in pricing)? This would be a real game-changer. If the capacity is there - and it is – why ration it?

These are not simple matters. But, in my view, it is not too late to re-set the NBN Co, corporate plan to make the NBN more affordable and more pro-competitive.

John De Ridder

John De Ridder is an independent telecommunications industry economist.