NBN remote from ground control

Henry Ergas April 12, 2019



Illustration: Eric Lobbecke

It is, as Gibbons said about Corsica, easier to deplore the fate, than to describe the actual condition, of the National Broadband Network.

And with the campaign now under way, Labor's announcement that, if elected, it will launch yet another review of the NBN only makes the network's future all the more uncertain.

That the NBN remains contentious is unsurprising. After all, no project more fully encapsulates the fundamental vice of Australian infrastructure policy: the tendency to prefer vast new schemes, with their scope for grandiose promises, to the mundane task of properly maintaining, extending and replacing existing assets.

As those schemes are, by their nature, unlike any other, it is almost impossible to sensibly forecast their costs or how long they will take to complete; and since governments invariably err on the side of optimism, they always go wrong.

The resulting uproar then ensures that what might have been an intelligent debate about their merits degenerates into an unseemly brawl.

But the NBN's problem is not merely that the project was extraordinarily ambitious, its stated goals dwarfing any other country's broadband policies in scale, complexity and time frame; it is also that its execution was vested in a start-up entity which lacked the capabilities that implementing it required.

Moreover, as that entity struggled to find its feet, the then Labor government subjected it to incessant political interference, including pressures to show results in the greatest possible number of marginal constituencies.

Having accommodated those demands by dispersing its efforts from one end of the country to the other, NBN Co's mission, which would in any event have been extremely difficult, became utterly impossible.

Little wonder that by the time the Coalition came to office, the project was a shambles. Relationships with the contractors building the network had broken down; basic business systems were not in place or were scarcely functioning; costs, to the extent to which they could be properly measured, were persistently above international benchmarks; and rollout schedules bore no relation to reality.

Taxpayers, who had guaranteed NBN Co's multi-billion-dollar contracts, consequently faced enormous risks, as did consumers.

With the deployment of the NBN eliminating Telstra's incentive to maintain its own fixed lines, the immediate likelihood was that broadband service would deteriorate. But even putting that aside, advances in wireless technology had ominous implications for the project's viability.

In effect, by 2013 more than half the world's telecommunications users relied mainly on mobile service and it was in mobile-only markets that consumer demand was growing dramatically. That made mobile services the focus of the telecommunications industry's R&D efforts, so it was only a matter of time before wireless technology became the medium of choice for connecting homes to the core network.

There was, therefore, a real chance that the NBN would prove to be a 20th-century solution to a 21st-century problem, leaving taxpayers on the hook should technologies such as 5G wipe out NBN Co's massive investment in rewiring the "last mile".

But it was even worse than that. Rightly or wrongly, governments had repeatedly pledged that the network would fully recover its costs. Given how high those costs were, the revenues NBN Co obtained from each household would need to rise to levels well above those that then prevailed.

Yes, some consumers would willingly pay higher prices in exchange for faster and more reliable connections; but many others would switch to the emerging mobile solutions. That could unleash a "death spiral" in which a shrinking pool of customers faced ever higher prices as they were burdened with a rising share of NBN Co's costs, provoking waves of defections that destroyed the network's value.

All those threats were apparent to the Vertigan review, on which I served, as it prepared its final report in 2014. And it was also apparent that short of cancelling the project, there were no options for averting the risks entirely.

What could be done was to make them more manageable. That was the purpose of the "multi-technology model" that, instead of relying solely on

new fibre connections to consumers' homes, upgraded existing assets when they could deliver high-speed broadband at lower cost.

As well as reducing outlays, that allowed the network to be deployed more rapidly, benefiting consumers and permitting NBN Co to earn revenues sooner than it otherwise would. And should demand grow especially rapidly, NBN Co still had the option of replacing those connections with fibre, so that the strategy largely retained the project's upside while limiting its downside.

There were, of course, howls of protest from those who confused the means — fibre optics — with the end, which was to make broadband universally available. But while those protests were (and remain) deeply muddled, the new strategy undeniably involved risks of its own.

Large telecommunications carriers such as Telstra routinely manage many access technologies; NBN Co, however, was barely able to deal with three — fibre optics in metropolitan areas, fixed wireless in regional areas and satellite in the outback. Coping with five — those three plus fibre to the node or the kerb, and hybrid fibre coax — could swamp its capabilities.

The simplest way of dealing with that possibility would have been to separate the tasks, allowing other telco providers to take responsibility for at least the hybrid fibre coaxial network on the one hand, and the satellite and fixed wireless networks on the other, as those involved technical and commercial skills NBN Co lacked. But that option, which the review recommended, was never pursued, compounding NBN Co's difficulties.

Yet the range of technologies it uses is very far from being the greatest issue the NBN faces.

Take-up is already significantly lower than it should be, and there are

legitimate concerns that many households are being priced off the network. Were a serious attempt made to recover the \$19.4 billion (and growing) in accumulated losses, the migration of customers to mobile services would almost certainly swell into a tsunami. Having paid for the network, taxpayers would not be able to afford to use it, leaving it gleaming in the sun.

The project's enthusiasts should therefore have had illusion after illusion scraped off them by the pumice stone of experience. And that, one might have hoped, could lay the basis for a serious discussion about the network's future, rather than the puerile mud-slinging that has passed for debate in previous elections.

But as Napoleon, still reeking of Corsica, told the ageing Goethe, nowadays fate is politics. Ten years, almost to the day, from the NBN's troubled birth, that fate risks leaving consumers and taxpayers with plenty to deplore.