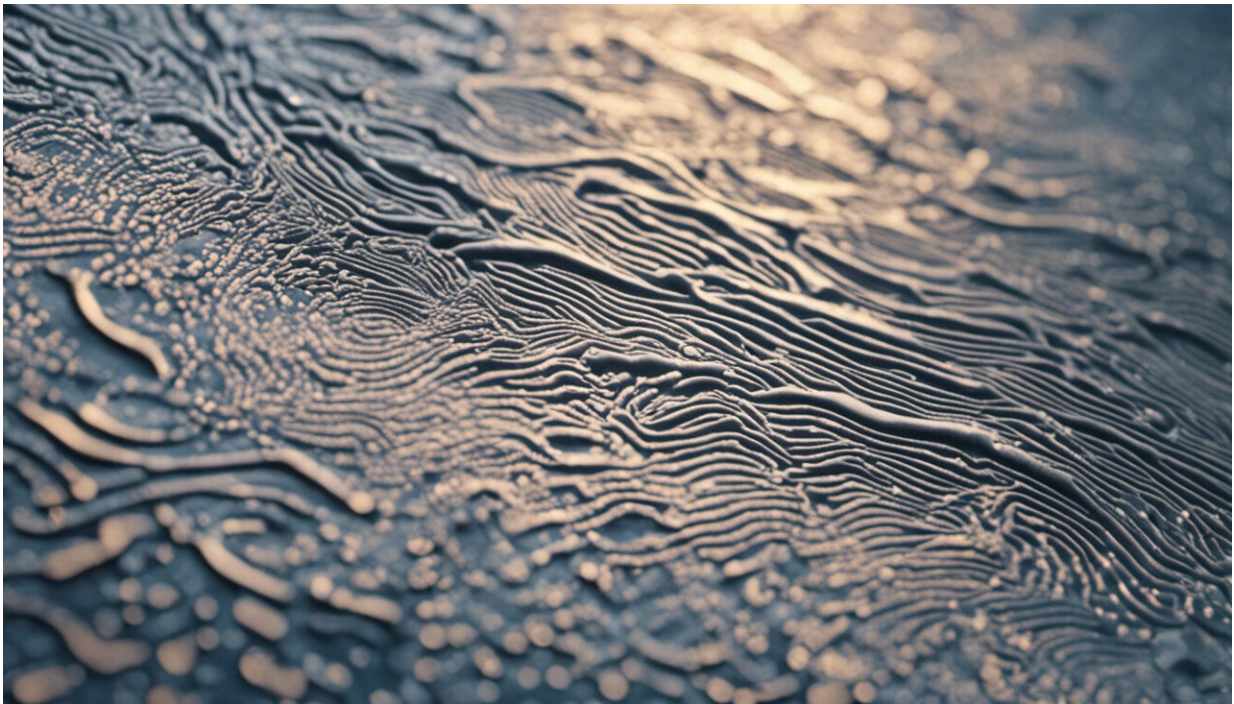


The need for speed—there's still time to fix Australia's NBN

June 22 2016, by Mike Quigley



Credit: AI-generated image ([disclaimer](#))

A National Broadband Network (NBN) based on Fibre to the Premises (FTTP) was, and still is, the right answer for Australia's broadband needs.

Compared to the original FTTP-based NBN, we are currently on the way

to a much poorer performing [broadband network with a mix](#) of FTTP, fibre to the node (FTTN) and other technologies. It will entail increased long-term costs and be completed at about the same time as the original project would have been completed.

Around the world, the direction in which new builds of fixed broadband networks are headed has become clear. The world is increasingly moving towards FTTP. As a consequence, advances are being made in FTTP technology that make it cheaper and easier to deploy.

These developments, which have taken place in the last few years, have only reinforced the rationale for basing Australia's NBN on FTTP.

Not too late to change

It is not too late to change the current direction of the NBN, but that change would need to be made in a controlled and managed way to ensure the project is not subject to another major disruption.

Why has it been so hard to get at the facts regarding the costs and timing of the FTTP-based NBN? The answer, as we all know, is that the NBN project has been from its inception a contentious political issue.

Initiated by the Labor party back in 2009, it was a good example of a government being courageous enough to initiate a large and complex project for the public good.

The original NBN was a visionary project and would have created a valuable asset for the Australian public. It didn't take long, though, for the attacks on the project to start.

But the fact – [confirmed this week](#) - remains that over the past three years, Australia's world ranking for average peak connection speeds

dropped from 30th to 60th. We shouldn't have been happy with being ranked 30th in the first place.

Yet the drivers of faster speeds and capacities for fixed broadband have not abated. Quite the contrary.

The latest Australian Bureau of Statistics data shows internet usage has been [increasing over the years](#), from [191,839 terabytes](#) downloaded in the month of December 2010 to [1,714,922 terabytes](#) in December 2015. That's nearly a ninefold increase in five years.

What's more, Cisco is forecasting that global broadband speeds will [nearly double between 2015 and 2020](#).

From megabits to gigabits

That's why the debate in the United States and Asia is about gigabit per second speeds, not about whether 25Mbps or 50Mbps is sufficient.

It is a bit surprising that we continue to hear the argument that [nobody is buying a 1Gbps service today](#), so why build a network that can deliver that much speed? 25Mbps to 50Mbps is more than enough.

This has been a mantra for the Coalition, and it was supported in the view by the [Vertigan committee](#), which was set up to review the NBN. In its [final report](#), the committee assumed that the [median household would require only 15Mb/s by 2023](#).

It seems especially curious that a government that styles itself as the innovation and infrastructure government should argue this. Because this argument betrays a complete lack of understanding of what the original FTTP NBN was all about.

It was about providing the vital infrastructure that Australia needs in order to remain competitive internationally in the 21st century.

It is arguable that, today, most homes and businesses can get by with speeds of up to 50Mbps. But already there are many home-based businesses that can't and are demanding 100Mbps or more.

[Gigabit services](#) are just starting to emerge elsewhere in the world, so the applications that can take advantage of this type of speed are in their infancy. But we all know they are coming.

To spend billions of dollars on building a major piece of national infrastructure that just about meets demand today, but doesn't allow for any significant growth over the next ten or 20 years is incredibly short-sighted.

It is such a pity that so much time and effort has been spent on trying to discredit and destroy the original FTTP-based NBN plan. Equally, it's a pity the Coalition has put its faith in what has turned out to be a short-sighted, expensive and backward looking multi-technology mix ([MTM](#)) plan based on copper.

The nation is going to be bearing the consequences of those decisions for years to come – in higher costs and poorer performance in an area that is critical to its long-term future. Betting tens of billions of taxpayers dollars at this time on copper access technologies, as the Coalition has done, is a huge miscalculation.

The number of telcos still focussed on squeezing out the last bit of value from their old copper networks continues to decrease every year. Even the UK's BT, which has been the poster child for FTTN, is now [planning to increase its FTTP deployment](#), in part as a response to pressure from the UK regulator, Ofcom.

Come the election

No matter what the outcome of the upcoming election, the original vision of a [broadband network](#) built largely on a future-proof FTTP solution is now going to happen over a longer period and at a greater cost to taxpayers.

The Coalition is likely to continue with the FTTN and Hybrid fiber-coaxial (HFC) deployments and the peak funding is likely to be in the range of A\$49 billion to A\$56 billion. It will take a "[heroic](#)" effort, as NBN Co's chairman Ziggy Switkowski has said, to have the network completed by the end of 2020.

Just when the FTTN equipment will need to be upgraded to provide higher speeds is an unknown but given what is happening overseas, it is unlikely to be very long. No one has yet made public the estimated costs of this upgrade.

Should the Labor party win the election, we can expect a managed transition from FTTN to FTTP, increasing the number of premises served by FTTP by about two million.

Given what we now know about the deployment costs of FTTP versus FTTN, I would not expect this transition to FTTP to make a big difference to deployment costs or timing of completing the NBN. It will result, however, in a network that is a step closer to the desired end state.

While it is impossible to turn back the clock on the MTM, it is still possible to make changes to the current direction, without introducing another major disruption. Changes that will get us closer to building the right network for the long term.

It is becoming increasingly obvious, especially to customers, that an

NBN based on FTTP is a much better network than an MTM-based NBN from every angle – speed and capacity delivery, maintenance costs, reliability, longevity and upgrade costs.

An FTTP network would be a much more valuable public asset and could generate greater cash flows for the government due to lower maintenance, higher revenues and almost no upgrade costs. And it would be vastly superior in driving growth through the wider economy.

So it is a great pity that before making the shift to the MTM, the Coalition did not [heed the words re-quoted](#) by the then independent MP for New England, Tony Windsor: "Do it right, do it once, do it with fibre."

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