

Australia's NBN as a precedent for UK broadband policy November 2019

Proposals for a change in UK broadband policy have sparked interest in government interventions in broadband elsewhere, and in particular in Australia's National Broadband Network.

This note sets out Australia's history with the NBN, and its consequences.

Creation of the NBN

Prior to the creation of the NBN, Australia's broadband development was stalled. Telstra, the incumbent, was not willing to upgrade from ADSL to fibre-to-the-cabinet (FTTC).¹

In 2008 Australia's then Labour government tendered to develop a National Broadband Network in partnership with industry, but found the responses unacceptable.

Thus in April 2009 it announced a new NBN to be owned by government.² Prime Minister Kevin Rudd promised "high speed broadband will create jobs, high speed broadband will spur innovation and enhance our economy's growth and productivity in the long-term".

The NBN was to be a wholesale access network (as is Openreach in the UK), providing connections to premises, but not the onward connectivity to the wider internet. For 93% of households, it was to be based on fibre-to-the-premise (FTTP), with the remainder served by satellite or wireless broadband.

The NBN was expected to cost £23bn, and take eight years to deliver (i.e. by 2017). Once it had been 'up and running for a period of five years', it was thought the NBN could be sold in part to the private sector.

The NBN plan did not include any nationalisation of Telstra (the incumbent telco), but NBN did acquire duct access and other services from Telstra. Further, NBN was strictly wholesale only, with no provision of service to end-users.

NBN under Labour, 2009 - 2013

NBN spent much of its first two years on establishment, consultation, planning and contracting. Even once construction was under way, it was considerably slower than expected. The first corporate plan anticipated 1.27m premises would be passed by fibre by mid-2013. The actual figure was 207,000.³ While spend to 2013 was lower

¹ "[Telstra broadband plan an 'illusion': ACCC](#)", The Age, 15 June 2011

² Kevin Rudd, "[Transcript of joint press conference: Parliament House, Canberra: 7 April 2009: earthquake in Italy; National Broadband Network](#)", Parliament of Australia, Canberra ACT, 7 April 7 2009

³ NBN, [Corporate Plan 2011-2013](#), 17 December 2010; NBN, [2012 2013 Annual Report](#), 30 June 2013

than expected (due to delayed deployment), forecast peak funding increased from £23bn to £38bn.⁴

NBN under the Coalition, 2013 onwards

In 2013 the Labour government was replaced by a Coalition government. The Coalition's NBN policy was based on a multi-technology approach – that is, NBN should make use of FTTC, cable, FTTP and other technologies according to local circumstances. This was expected to be cheaper, quicker to deploy and sufficient for user requirements. Since 2013, NBN has been using this approach, though the change in strategy did lead to further delays and costs for this revised strategy also exceeded expectations.

At conception (2009) the network was to be expected to be complete by 2017. By 2013 this had slipped to the mid 2020s for FTTP. The current target (for the multi-technology approach) is 2020. Expected peak funding is £27bn, less than the revised 2013 forecast for the FTTP network, but above the initial 2009 optimistic figure of £23bn.⁵

NBN has also not met expectations for uptake of faster broadband. For instance, while there are 1.8m premises passed with FTTP⁶, just sixty-four (64) in total have taken a gigabit service.⁷

Thus its revenue per user has been well below expectations. This, combined with cost overruns, mean that NBN's financials are far worse than expected. (For instance, it was expected to achieve EBTIDA breakeven in 2018. Instead it made a loss of £1.1bn.⁸ This has led to speculation that the value of NBN's assets may need to be written down by as much as £13bn.⁹

Results of government ownership

Displacing a substantial part of the Australian telecoms industry with a government entity had a number of consequences, many stemming from the fact that this made telecoms inherently more political. As NBN itself has noted, its "history is fraught with political/ideological differences".¹⁰ According to the Internet Society: "Absent a bipartisan consensus ... building and managing [NBN] has been contentious, politically charged, and inevitably disappointing to some and a scandal to others."¹¹

Consequences have included:

Significant worsening of Australian broadband for a number of years. NBN was effectively granted a monopoly at its foundation (though even without this it would have been uneconomic for commercial players to compete with it outside certain dense areas). This paralysed commercial broadband deployment, but NBN itself took a long time to get up to speed. In the interim, broadband was much worse than it might otherwise have been. For illustration, in the two years 2009-11 when NBN was getting

⁴ NBN, [Strategic review](#), December 2013

⁵ ABC, "[NBN will be complete by mid-2020 within revised budget, says CEO Stephen Rue](#)" 14 August 2019

⁶ NBN, [Corporate Plan 2020-23](#), August 2019

⁷ ACCC, [September 2019 Market Indicators Report](#)

⁸ NBN, [Corporate Plan 2011-2013](#), 17 December 2010; NBN, [Annual Report 2019](#), 8 August 2019

⁹ Frontier Economics, [Writing down the NBN](#), 20 February 2019

¹⁰ NBN, [Connecting to the NBN](#), May 2019

¹¹ Internet Society, [Study of Broadband Competition in Selected Countries: Lessons for Canada](#), 26 March 2019

established (and Telstra was not investing in broadband access), BT passed 20% of UK households with FTTC.¹²

Politicisation of broadband as an issue. As political parties battled over broadband, it became important issue for voters. In the 2013 federal election, it was the #6 issue overall (well ahead of taxes and defence), and the #2 issue for men.¹³

Politicisation of the technology plan. Whether the NBN should be based on FTTP (higher capacity) or FTTN and cable (cheaper, quicker to deploy) became a highly contentious topic, strongly debated by politicians. As discussed above, when a Coalition government replaced Labour, NBN's FTTP approach was reversed leading to further delay.

Politicisation of management. Since NBN and its operations became political, it was perhaps inevitable that the organisation's management would also become politicised. The NBN CEO appointed by Labour was replaced when the Coalition came to power. Certain executives have declined to attend parliamentary hearings, and have been threatened with subpoenas as a result.¹⁴

Politicisation of all network problems. While broadband is a postbag issue for parliamentarians in many countries, this is particularly acute in Australia, where government has effectively taken on responsibility for broadband performance. This is problematic since consumers' experience of broadband is affected by many factors besides the quality of the last mile connection. Consequently, Australian politicians are addressing issues far beyond those in other countries – for example, the Labour party recently proposed to upgrade in-home wiring for 750,000 premises.¹⁵

Politicisation of the deployment plan, with accusations that the network was rolled out first in favoured constituencies.¹⁶

NBN in global context

The NBN approach – creating a national-government-owned entity to deploy faster broadband access – is virtually unique globally. (Qatar's Qbn is on a similar model).

Very many countries (including the UK) have used public funds to support the deployment of improved broadband, but (barring some municipal networks)¹⁷ this has been done via commercial entities.

For instance South Korea and Japan (early leaders in FTTP) provided soft loans and tax incentives to commercial players such as Korea Telecom, SK Telecom and NTT. However these players provided the majority of the funding (and retained full ownership of the networks). Further, competition between commercial networks was seen as a key driver of success in Korea, for example.¹⁸

¹² Ofcom, [Communications Market Report 2011](#), 4 August 2011

¹³ ABC, [Vote Compass: The most important issues to voters](#), 9 August 2013

¹⁴ ["Stephen Conroy threatens NBN Co with subpoena over Senate no-show"](#), The Guardian, 28 May 2015

¹⁵ ["NBN Co may fix in-home cabling free for 750,000 homes"](#), IT News, 9 April 2019

¹⁶ ["NBN rollout a political pork barrel of the left: Fletcher"](#), IT Wire, 18 October 2011

¹⁷ There are municipally owned broadband operators in a small number of countries, notably Sweden, Norway and Denmark

¹⁸ World Bank, [Broadband Policy in Korea](#), 30 June 2010

Australian and UK contexts

The Australian situation at the time of the creation of NBN was very different from that in the UK today. As of 2009, Australian broadband development was largely stalled, with limited prospect of widespread movement beyond basic ADSL. Today, the UK already has near-ubiquitous superfast (30 Mbps+) and a majority have access to 300 Mbps or more. Further, UK deployment of FTTP is proceeding at pace, with announced deployments totalling over 30m homes passed. Thus the NBN was intended to address a challenge that has no parallel in the UK.

Conclusion

According to Australia's national broadcaster, ABC:

"As a cautionary tale of the potentially caustic brew that can result from the intersection of government and investment, politicians and infrastructure, the National Broadband Network has it all."

It is for good reason that the NBN approach has not inspired imitation.

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About Broadband Stakeholder Group

The Broadband Stakeholder Group (BSG) is the UK government's leading advisory group on broadband.

It provides a neutral forum for organisations across the converging broadband value-chain to discuss and resolve key policy, regulatory and commercial issues, with the ultimate aim of helping to create a strong and competitive UK knowledge economy. It was established in 2001, and since 2006 has focused on next generation broadband issues.

The BSG's diverse network includes telecoms operators, manufacturers, investors, ISPs, mobile network operators, broadcasters, new media companies, content producers and rights holders, as well as central and local government, devolved administrations, Ofcom and others.

Communications Chambers

We are a consultancy specialising in telecoms, media and technology. We advise on issues of strategy, policy and regulation. Our members have substantial international experience, having worked across Europe, the US and Asia.

¹⁹ Partner at Communications Chambers (rob@commcham.com). This paper represents the view of the author only and does not represent a corporate view of BSG or Communications Chambers.