

The National Broadband Network

Research Brief

April 2013



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Background

On 7 April 2009, the Australian Government announced that it would establish a company that would invest up to \$36 billion¹ over the next eight years to build and operate a wholesale-only, open access National Broadband Network (NBN).

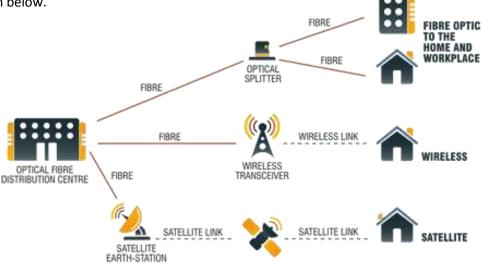
The NBN will essentially upgrade Australia's fibre optic network, so that the fibre optic cables run directly up to the home or business, instead of being terminated at the 'node' (typically to a box in the neighbourhood), with the final connection to the premises being copper wire. Fibre to the premises (FTTP) is considered better than fibre to the node (FTTN) because it allows faster speeds and greater capacity for future upgrades.

The NBN will provide faster broadband services to a greater number of premises.

• The NBN aims to deliver FTTP broadband services to 93 per cent of all Australian homes, schools and workplaces with speeds up to 100 megabits per second (as a reference, this is about 100 times faster than those currently used by many households and businesses).

 The remaining 7 per cent of premises (primarily in remote areas) will be connected with nextgeneration wireless and satellite technologies that will deliver

broadband speeds of 12 megabits per second. This is represented in the diagram below.



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¹ Total capital investment in the NBN was revised down from \$43 billion to \$36 billion primarily due to the agreement reached with Telstra.



On announcing the NBN, the Government said it would:

- 1. establish a company to build and operate the network and make an initial investment in the network;
- 2. commence an implementation study to determine the company's operating arrangements, detailed network design and ways to attract private sector investment;
- fast-track negotiations with the Tasmanian Government, as suggested by the Panel of Experts, to build upon its National Broadband Network proposal to begin the rollout of a FTTP network and next generation wireless services in Tasmania as early as July 2009;
- implement measures to address regional backhaul 'blackspots' through the timely rollout of fibre optic transmission links connecting cities, major regional centres and rural towns – delivering improvements to telecommunication services in the short term;
- 5. progress legislative changes that will govern the national broadband network company and facilitate the rollout of FTTP networks, including requiring use of fibre optic technology in future new developments³; and
- 6. commence a consultative process on necessary changes to the existing telecommunications regulatory regime⁴.

This paper explores how the Government has progressed each of these steps, as well as other developments and implementation milestones that have been reached.

The NBN represents an historic investment in Australia's infrastructure which will have significant implications for a wide-range of industries including through:

- the regulatory and financing of the network;
- the design, construction, maintenance and operation of the network; and
- the provision of an expanded range of information and entertainment services using the network.

Industries that will benefit include:

- Telecommunications and broadcasting
- Information technology and government service delivery
- Construction and engineering
- Finance and financial services
- Advertising and marketing
- Legal
- Retail services
- Education

http://www.dbcde.gov.au/communications/national broadband network/national broadband network Regiona Backbone_Blackspots_Program.

http://www.dbcde.gov.au/all_funding_programs_and_support/national_broadband_network/fibre_in_new_developments.

http://www.dbcde.gov.au/communications/national_broadband_network/regulatory_reform_for_21st_century_b_roadband_and_http://www.minister.dbcde.gov.au/media/media_releases/2009/021_

² See

³ See

⁴ See



- e-Health
- Climate change and environmental management
- Energy and water efficiency
- Local government and planning
- The creative industries

There are countless ways that businesses can engage with the Government and the new Government-owned NBN Co to take advantage of the many opportunities this new initiative will present.

Hawker Britton is able to assist clients in developing these important relationships and providing strategic advice.



Timeline of Significant Developments

- On 6 May 2013 Minister Conroy announced plans to connect another 1.3 million home and businesses to the NBN, bringing the total number of premises where NBN construction will commence or be complete by 30 June 2016 in excess of 4.8 million.
- On 9 April 2013, Opposition Leader the Hon. Tony Abbott MP and Shadow Minister for Communications and Broadband the Hon. Malcolm Turnbull MP released the Coalition's National Broadband Network Policy, the "Plan for Fast Broadband and an Affordable NBN."
- On 4 March 2013 NBN Co announced that Arianespace, the European satellite launch company, has been awarded the \$300 million contract to propel Australia's National Broadband Network satellites into space. The satellites will allow access to fast internet to up to 200,000 homes, farms and businesses in rural and remote parts of the country.
- On **29 January 2013** NBN Co announced that at the end of 2012, the number of homes and business already using the NBN was 34,500, with construction commenced or completed in areas covering 784,600 homes, which is ahead of targets outlined in the Corporate Plan. The Press Release is available here.
- On **10 October 2012** NBN Co announced that it would begin shutting down the old copper network in 15 locations across the country. NBN Co's press release is available here.
- On 1 October 2012 Minister Conroy, and Western Australian Senators Louise Pratt and Glenn Sterle, announced that Western Australia will be home to three NBN satellite ground stations that will provide fast, reliable and affordable broadband to rural and remote Australia. The ground stations will be built and operated in Moonyoonooka near Geraldton, Binduli near Kalgoorlie, and Carnarvon. They are three of ten satellite ground stations that are being constructed to operate the NBN's long-term satellite service that will start in 2015.
- On 29 March 2012, NBN Co chief executive Mike Quigley together with Prime Minister Gillard
 and Minister Conroy announced its first national three year interactive <u>rollout plan</u>. The plan will
 see construction of fibre network either commenced or completed for more than 3.5 million
 premises across Australia between 1 April 2012 and 30 June 2015. Minister Conroy's press
 release together with a summary of the roll out schedule is available <u>here</u>.
- On 26 March 2012, Minister Conroy welcomed the announcement by NBN Co that it had
 finalised its agreement for the construction of the remainder NBN in Tasmania, and that
 telecommunication firm Visionsteam Australia had been appointed to undertake the remainder
 of the construction of the fibre network in that state.
- On 7 March 2012, the Definitive Agreements between Telstra and NBN came into force. The
 Agreements confirms Telstra's participation in the rollout of the NBN, allowing for more efficient
 building and rollout, including the reuse of existing infrastructure. The coming into force of the
 Agreements removes one of the last impediments for the full-scale rollout of the NBN.
- On 28 February 2012, the Australian Competition and Consumer Commission (ACCC) announced
 that it would accept Telstra's structural separation undertaking (SSU), and approve its draft
 migration plan. The SSU implements structural separation through migration to the NBN, and
 comes in response to longstanding competition concerns arising from Telstra's involvement in
 both wholesale and retail markets. This approval allows for the finalisation of the Definitive
 Agreements between NBN Co and Telstra.
 - In making the announcement, the ACCC noted that Telstra had made substantial improvements to its interim equivalence and transparency commitments, which are intended to ensure that wholesale customers gain access to key input services on an equivalent basis to Telstra's retail business units during the transition to the NBN.



- On 8 February 2012, Prime Minister Julia Gillard, Minister Conroy and Minister for Regional Australia Simon Crean announced a \$620 million agreement between NBN Co and the US company Space Systems/Loral to design and build two satellites to deliver high speed broadband to rural and remote areas. The satellites, together with the fixed wireless and fibre networks of the NBN, will for the first time deliver universal broadband coverage across the entire Australian continent and its external territories.
- In a press release on 19 December 2011, Minister Conroy congratulated Vodafone for connecting its first trial customers to the NBN, and welcomed the telco's entry into the fixed line market in Australia. Minister Conroy said Vodafone's decision to enter the fixed line services market demonstrates that structural reform is increasing retail service competition. Minister Conroy's media release is available here.
- On **13 December 2011**, Minister Conroy addressed the National Press Club in Canberra. In his speech, the Minister spoke about the principal arguments for the NBN, and compared it to the alternate policy suggestions. The text of the speech is available here, with the slide presentation available here.
- On **5 December 2011**, NBN Co committed to keep its wholesale prices fixed for five years, with subsequent increases limited to being less than the rate of inflation. NBN Co's media release is available here.
- On **30 November 2011**, NBN Co released its 12-month Wholesale Broadband Agreement, which sets out the commercial arrangements and obligations between NBN Co and its customers. NBN Co's media release is available here.
- On 23 June 2011, Telstra signed Definitive Agreements with NBN Co and the Commonwealth for
 its participation in the rollout of the NBN. The agreement is subject to the satisfaction of a
 number of conditions, including ACCC acceptance of Telstra's structural separation undertaking
 and approval of its migration plan. Approval was obtained from Telstra shareholders at the
 company's AGM on 18 October 2011. Telstra's Media Release is available here.
- Optus signed an agreement with NBN Co on **23 June 2011.** The key to the deal is Optus' agreement to progressively migrate HFC customers to the NBN as it is rolled out. Optus estimates the agreement is worth around \$800million post tax. Optus' Media Release is available here. NBN Co's Media Release is available here.
- The Government released a policy statement on 23 June 2011that outlines the overall policy framework and sets out the key terms of the agreement with Telstra <u>Universal Service Policy in</u> <u>the National Broadband Network environment</u>.
- On 1 June 2011, NBN Co reached an agreement with Silcar Pty Ltd for construction worth \$380 million over two years to roll out the network in Queensland, New South Wales and the ACT.
- On 18 May 2011, the Prime Minister and Minister for Broadband, Communications and the
 Digital Economy launched the first mainland NBN services in the regional city of Armidale in
 northern New South Wales. Press release is available here: <u>Historic Launch of NBN in Armidale</u>
- On 6 May 2011, NBN Co announced the interim satellite solution, bringing forward the
 introduction of enhanced satellite broadband services to remote rural areas. Press release is
 available here: <u>Better broadband for Rural and Regional Australians</u>, NBN Co announcement:
 Remote Australians the priority for new NBN Interim Satellite Service
- On **12 April 2011**, legislation to provide the regulatory framework for the National Broadband Network (NBN) came into force. Press release available here: NBN legislative framework
- On 1 March 2011, the House of Representatives passed the legislative framework for the NBN.



- Also on 1 March 2011, the House of Representatives established a <u>Joint Committee on the NBN</u> to inquire into and report on its rollout every six months. The Independent MP Rob Oakeshott has been appointed as the Chair of the Committee, and the remainder of its membership is comprised of equal numbers of Government and Opposition members, along with representatives from the minor parties.
- On 14 February 2011, the Government released the executive summary of an <u>independent</u> assessment of NBN Co <u>Limited's Corporate Plan</u>. Greenhill Caliburn provided a commercial assessment of the plan, identifying and analysing its key assumptions and potential risks.
- On 10 February 2011, Telstra and NBN Co announced that they had finalised key commercial terms to allow for the more efficient rollout of the NBN. These pave the way for NBN Co to make use of Telstra's assets to roll out the NBN and for Telstra to decommission its copper network.
- The Government released NBN Co Limited's <u>Corporate Plan</u> on **20 December 2010**, providing further detail for industry and the public on the rollout of the NBN. The Government also released the Statement of Expectations that sets out the government's expectations of the company as it rolls out the NBN. The Statement comprises the Government's response to the Implementation Study.
- On 29 November 2010, the House of Representatives sat for an extra day and passed the
 Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2010
 to separate the wholesale and retail arms of Telstra, paving the way for the implementation of
 the NBN.
- On 24 November 2010, the Prime Minister released the <u>NBN Business Case Summary</u>, an analysis based on detailed engineering, financial and business analysis undertaken by NBN Co. over the last twelve months. The Business Case Summary sets out the key objectives and priorities for NBN Co for the three years from 1 July 2010 to 30 June 2013.
- On 22 October 2010, the Government released a discussion paper, 'Implementation of Universal Service Policy for the transition to the National Broadband Network environment', that raised a number of matters for public comment, including the delivery of the Universal Service Obligation and public interest services, and possible funding and institutional arrangements for delivering outcomes. Media release: Consultation on Universal Service Policy More information about the Universal Service Policy is available here: Universal service policy in the National Broadband Network environment
- On 20 June 2010, NBN Co announced it had reached a <u>Financial Heads of Agreement</u> with Telstra that would provide access to Telstra facilities and the progressive migration of Telstra traffic onto the National Broadband Network, subject to regulatory approval. Further details on pages 10-11.
- On **6 May 2010**, the Government released the NBN Implementation Study. The Implementation Study examined all aspects of the Network and its implementation and was conducted independently by McKinsey & Company and KPMG and is available here.



Rollout

The construction and rollout of the NBN is currently underway, and planned to be finished by 2021.

On 29 March 2012, NBN Co chief executive Mike Quigley together with Prime Minister Gillard and Minister Conroy announced its first national three year interactive rollout plan. The plan will see construction of fibre network either commenced or completed for more than 3.5 million premises across Australia between 1 April 2012 and 30 June 2015. On 6 May 2013 Minister Conroy announced plans to connect another 1.3 million home and businesses to the NBN, bringing the total number of premises where NBN construction will commence or be complete by 30 June 2016 in excess of 4.8 million.

- 1,416,800 in New South Wales
- 994,600 in Victoria
- 934,300 in Queensland
- 610,700 in Western Australia.
- 445,000 in South Australia
- 180,300 in the ACT
- 65,400 in the Northern Territory (by the end of 2015)
- 208,400 in Tasmania (by the end of 2015)
- And more than 7,303 schools, 663 hospitals, 120 university campuses and 1,415 aged care facilities across the country.

NBN Co is working with construction partners Syntheo (WA, SA); Transfield (Vic); Silcar (NSW, QLD, ACT); and Visionstream (Tas) to rollout the Network. NBN Co has developed an interactive roll-out map with a search function that allows look-up via address, postcode, or suburb to find out when NBN construction will begin in that area. The map will be update with the progress of construction regularly. The interactive map is available on NBN Co's website www.nbnco.com.au

In announcing the three year rollout plan, Mike Quigley said that decisions on where to rollout the fibre network and in what order, were made based on a series of design principles that aim to deliver a high-speed broadband network in an efficient and cost-effective manner.

These include extending the network in areas where work has already begun; balancing construction across states and territories and between metropolitan and regional locations; and making use of available exchange and transit infrastructure as it becomes available.

Minister Conroy's press release together with a summary of the roll out schedule is available here. Nextgen Networks has completed construction of 3,000km of new fibre optic backbone transmission links with a further 3,000 to follow, as part of the Government's program to address Regional Backbone Black spots.

Rural and Regional Rollout

On 8 February 2012, Prime Minister Julia Gillard, Minister Conroy and Minister for Regional Australia Simon Crean announced a \$620 million agreement between NBN Co and the US company Space Systems/Loral to design and build two satellites to deliver high speed broadband to rural and remote



areas. The satellites, together with the fixed wireless and fibre networks of the NBN, will for the first time deliver universal broadband coverage across the entire Australian continent and its external territories. More information is available on the NBN Co's website, here.

On 26 March 2012, Minister Conroy welcomed the announcement by NBN Co that it had finalised its agreement for the construction of the remainder NBN in Tasmania, and that telecommunication firm Visionsteam Australia had been appointed to undertake the remainder of the construction of the fibre network in that state.



About the NBN Company

On 28 April 2009, the Minister for Broadband, Communications and the Digital Economy, Senator the Hon. Stephen Conroy, announced that NBN Co had been established.

NBN Co is a wholly-owned Commonwealth company that has been prescribed as a Government Business Enterprise (GBE) and is represented by "Shareholder Ministers" - the Minister for Broadband, Communications and the Digital Economy and the Minister of Finance and Deregulation.

NBN Co must remain in full Commonwealth ownership until the Communications Minister declares that the National Broadband Network is built and fully operational. A sale of NBN Co can only occur after a Productivity Commission inquiry into the NBN regulatory framework has been considered by a Parliamentary Joint Committee.

The NBN Co website is www.nbnco.com.au

Key features of the Company are:

- Unlike other companies in the telecommunications sector, NBN Co will only be allowed to offer wholesale services. This means it will not offer retail services to consumers and businesses. It will be required to treat all its customers equally, not favouring one over another.
- The Government will be the majority shareholder of the company and will make an initial investment of \$4.7 billion in the company. Significant private sector investment in the company is anticipated but will be capped at 49per cent. Ownership restrictions will be established to ensure the network remains a wholesale open access network.
- The Government's investment in the company will be funded through the Building Australia Fund and the issuance of Aussie Infrastructure Bonds, which will provide households and institutions the opportunity to invest in the New NBN.
- The Government intends to sell down its interest in the company within 5 years after the network is built and fully operational, consistent with market conditions, and national security considerations.

The NBN Company Ltd is registered with the Australian Securities and Investment Commission as A.C.N. 136 533 741 LIMITED and is a public company limited by shares, incorporated in the Australian Capital Territory.

NBN Co Board

Name	Position				
Ms Siobhan McKenna	Chair (Non Executive Director, Chair of the				
	Communications Committee)				
Ms Diane Smith-Gander	Deputy Chair (Non Executive Director, Chair of the				
	People and Performance Committee)				
Mr Terrence (Terry) Francis	(Non Executive Director, Chair of the Audit				
	Committee)				
Ms Alison Lansley	(Non Executive Director)				
Mr Brad Orgill	(Non Executive Director)				
Mr Michael (Mike) Quigley	Chief Executive Officer (Executive Director)				



Dr Kerry Schott	(Non Executive Director)					
Mr Richard (Rick) Turchini	(Non	Executive	Director,	Chair	of	the
	Implementation Committee)					

NBN Co Corporate Plan

In December 2010 NBN Co released its first Corporate Plan which outlined its long-term business case and set rollout targets for the period from June 2011 to June 2013.

Over the 20 months since the first Corporate Plan was released there have been a number of changes to the scope of the project including the nature of NBN Co's responsibilities in new developments and the increase in the number of Points of Interconnect. There is also the impact of other commercial opportunities such as the HFC agreement with Optus.

On 8 August 2012, NBN Co released an update to its Corporate Plan for the years 2012-2015. The 2012-2015 Corporate Plan shows:

- The underlying business case has remained fundamentally unchanged
- The commitment to connect all Australians to high-speed broadband over the remaining nine years of this 10 year project
- Construction will be commenced or completed for approximately 758,000 premises by December 2012 and for approximately 3.5 million by mid 2015, in line with the 12 month and three-year rollout plans
- The expected return on investment for shareholder equity remains slightly above 7%
- NBN Co has confirmed its wholesale prices are projected to fall over time in both real and nominal terms.

The Corporate Plan 2012-2015 is available here.



The role of Telstra

Telstra owns and operates the largest telecommunications network in Australia. The establishment of the NBN involves the physical construction of the fibre optic cables, enhanced mobile and satellite data services, as well as reforms to the telecommunications legislative framework. The NBN will mean a significant change to the current arrangement whereby retail companies such as Telstra, Optus and TransACT own significant portions of Australia's broadband infrastructure.

Telstra-NBN Co Agreement

On 10 February 2011, Telstra and the NBN Co announced that they had finalised key commercial terms for the rollout of the NBN. The Minister for Broadband, Communications and the Digital Economy, Senator the Hon Stephen Conroy, welcomed the announcement, which he said will "pave the way for NBN Co to make use of Telstra's assets to rollout the NBN and for Telstra to decommission its copper network."

Minister Conroy's media release is available at http://www.minister.dbcde.gov.au/media/media-releases/2011/131

Financial Heads of Agreement

On 20 June 2010, the Government announced that it had concluded negotiations with Telstra, and that they had entered into a Financial Heads of Agreement. Combined with Australian Government public policy reforms, Telstra estimates that the agreement announced will deliver Telstra a post-tax net present value of approximately \$11 billion.

The media release is available at http://www.minister.dbcde.gov.au/media/media releases/2010/060.

This Agreement between NBN Co and Telstra provides for:

- The reuse of suitable Telstra infrastructure, including pits, ducts and backhaul fibre, by NBN Co as it starts to rollout its new network – avoiding unnecessary infrastructure duplication; and
- The progressive migration of customers from Telstra's copper and pay-TV cable networks to the new wholesale-only fibre network to be built and operated by NBN Co."

Definitive Agreements

On 23 June 2011, The Government, Telstra and NBN Co signed Definitive Agreements for the rollout of the NBN. The Agreements confirms Telstra's participation in the rollout of the NBN, allowing for more efficient building and rollout, including the reuse of existing infrastructure.

The agreement with Telstra will be managed by a new entity, the Telecommunications Universal Service Management Agency, or TUSMA (previously referred to as USO Co). The legislation to establish TUSMA was introduced to the House of Representatives on 2 November 2011 and is available here. The legislation has been referred to both the House of Representatives Standing Committee on Infrastructure and Communications, and the Senate Environment and Communications Legislation Committee, which is due to report on 27 February 2012.



The agreements were subject to the satisfaction of a number of conditions, including ACCC acceptance of Telstra's structural separation undertaking and approval of its migration plan; and approval from Telstra's shareholders. Approval from Telstra's shareholders was given at the company's AGM on 18 October 2011. On 28 February 2012 the ACCC announced that it would approve Telstra's structural separation and migration plan, effectively bringing the Definitive Agreements into force.

Key Components of the agreements are as follows:

- Telstra agrees to progressively disconnect all copper-based Customer Access Network services and broadband services on its HFC cable network and will migrate services onto NBN-based services
- Telstra will provide NBN Co with large-scale access to certain infrastructure
- The Government has agreed to a package which includes increased funding for the delivery of the Universal Service Obligation (USO)
- Telstra and NBN Co have agreed to key product feature and price commitments relating to NBN Co's basic voice and data offering.

Telstra's Media Release is available here.

A joint Media Release from the Prime Minister, Senator the Hon. Penny Wong; Minister for Finance and Deregulation and Senator the Hon. Stephen Conroy; Minister for Broadband, Communications and the Digital Economy is available here.

Definitive Agreements between Telstra and NBN came into force on 7 March 2012. The coming into force of the Agreements removes one of the last impediments for the full-scale rollout of the NBN.

ACCC Approval

On 28 February 2012, the Australian Competition and Consumer Commission (ACCC) announced that it would accept Telstra's structural separation undertaking (SSU), and approve its draft migration plan. The SSU implements structural separation through migration to the NBN, and comes in response to longstanding competition concerns arising from Telstra's involvement in both wholesale and retail markets. This approval allows for the finalisation of the Definitive Agreements between NBN Co and Telstra.

In making the announcement, the ACCC noted that Telstra had made substantial improvements to its interim equivalence and transparency commitments, which are intended to ensure that wholesale customers gain access to key input services on an equivalent basis to Telstra's retail business units during the transition to the NBN. The ACCC's media release is available here.



NBN Legislative Framework

The regulatory framework for the NBN is established initially through two pieces of legislation introduced into Parliament on 25 November 2010, the *National Broadband Network Companies Act 2011* and the *Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Act 2011* (NBN Access Act).

- National Broadband Network Companies Act 2011

The *National Broadband Network Companies Act 2011* sets out ownership, governance and sale arrangements for NBN Co. The Act's main features include:

- defining NBN corporations to include NBN Co Limited, NBN Tasmania and any company NBN Co Limited controls;
- limiting NBN Co Limited to operating as a wholesale-only telecommunications company in terms of the services and goods is supplies, as well as the investments it makes;
- establishing powers to require functional separation, and transfer or divestment of assets;
- clarifying that the Minister may make licence conditions, including to require NBN Co Limited to provide or not provide specified services;
- establishing the framework for the eventual sale of NBN Co Ltd;
- enabling the making of regulations to set limits on private control of NBN Co Limited postprivatisation;
- establishing reporting obligations on NBN Co Limited once no longer wholly Commonwealthowned; and
- exempting NBN Co Limited from the *Public Works Committee Act 1969*.

The Act also provides that the Government must retain full ownership of NBN Co Limited until the NBN rollout is complete. This will give the Australian Government greater flexibility to pursue its objectives in the rollout of the network. The eventual sale of NBN Co Limited will depend on:

- the Communications Minister making a declaration that the NBN is built and fully operational;
- the Productivity Commission conducting an inquiry into and reporting on regulatory, budgetary, consumer and competition matters relating to the NBN;
- a Parliamentary Joint Committee considering the findings of that report;
- the Finance Minister making a disallowable declaration that conditions are suitable to sell NBN Co Limited; and
- Parliament not disallowing that declaration.
- <u>Telecommunications Legislation Amendment (National Broadband Network Measures Access Arrangements) Act 2011</u>

The Access Act sets out access arrangements and rules for the supply of services by NBN Co. It introduces open access, transparency and non-discrimination measures for NBN corporations, under clear oversight by the Australian Competition and Consumer Commission (ACCC).

This Act amends the *Telecommunications Act 1997* and the *Trade Practices Act 1974* (TPA) to establish access and equivalence obligations for NBN Co, additional to those in the TPA. Amongst other things, the Act:



- makes all services provided by NBN Co Limited 'declared' and thereby subject to supply and equivalence requirements and ACCC oversight;
- establishes the mechanisms to ensure that the terms and conditions relating to the supply of services by NBN Co Limited are transparent;
- requires NBN Co Limited to offer services on an equivalent basis, with discrimination only allowed where it aids efficiency and in other limited circumstances, subject to ACCC oversight; and
- requires the ACCC to publish details from access agreements with different terms from the standard ones already published, to provide a high level of transparency.

Provision is also made to simplify the making of industry codes and standards for fibre infrastructure and services. Once in place, these provisions will ensure new fibre-to-the-premises networks that are built are consistent with NBN technical specifications.

In addition to these two pieces of legislation, a number of pieces of legislation have been introduced into Parliament to assist in the roll out of the NBN. They include:

- Telecommunications Legislation Amendment (Fibre Deployment) Bill 2011

On 27 September 2011 the *Telecommunications Legislation Amendment (Fibre Deployment) Act 2011* amended the *Telecommunications Act 1997* by inserting a new Part 20A to:

- enable the minister to specify new developments in which fixed lines which are installed need to be optical fibre
- require passive infrastructure such as pit and pipe that is installed to be fibre-ready
- impose penalties on constitutional corporations such as developers that sell or lease specified new developments without fibre-ready passive infrastructure
- enable carriers to seek access to passive infrastructure that is owned by a non-carrier
- enable the Australian Communications and Media Authority to make standards for customer equipment and cabling for use with the NBN and other superfast networks.

The legislation supports the rollout of fibre generally and the government's decision that NBN Co should be the fibre provider of last resort in new developments.

- Telecommunications Universal Service Management Agency Act 2012
- <u>Telecommunications Legislation Amendment (Universal Service Reform) Act 2012</u>
- Telecommunications (Industry Levy) Act 2012

On 21 March 2012, parliament passed universal service reform legislation, a three-act package aimed at ensuring the ongoing delivery of key telecommunication consumer safeguards during and after the rollout of the National Broadband Network (NBN). This legislation represents a significant move from a regulatory model for delivery of universal service, with obligations imposed directly on Telstra and other service providers, to a more accountable and flexible contractual model.

A key aspect of the package of legislation was the establishment of the Telecommunications Universal Service Management Agency (TUSMA). TUSMA is responsible for entering into, and managing contracts or grants, to ensure:



- all Australians have reasonable access to a standard telephone service (the USO for voice telephony services)
- payphones are reasonably accessible to all Australians (the USO for payphones)
- the ongoing delivery of the Emergency Call Service by Telstra (calls to Triple Zero '000' and '112')
- the ongoing delivery of the National Relay Service
- continued availability of untimed local calls for customers outside standard zones, and
- that appropriate safety net arrangements are in place to support the continuity of supply of carriage services during the transition to the NBN.



The Coalition's NBN Policy

On Tuesday 9 April 2013, Opposition Leader the Hon. Tony Abbott MP and Shadow Minister for Communications and Broadband the Hon. Malcolm Turnbull MP released the Coalition's National Broadband Network Policy, the "Plan for Fast Broadband and an Affordable NBN" (the Plan).

The Plan is available in full, <u>here</u>. Mr Abbott's press release is available <u>here</u>.

The Plan abandons the current Government's commitment to delivering universal 'Fibre To The Premises' (FTTP) broadband, and instead pursues a policy of 'Fibre To The Node' (FTTN). FTTN involves rolling out fibre to cabinets in the street and using existing copper infrastructure for the 'last mile' connection from the cabinet to premises.

The Plan claims that the switch in emphasis to FTTN will result in significant cost reductions. Specifically, the Plan states that the Coalition's NBN will cost 33% less than the Government's cost estimation for its FTTP based NBN.

The Plan states that the Coalition's NBN will:

- be complete by the end of 2019;
- cost \$29.5 billion;
- deliver download speeds of between 25 and 100 megabits per second by the end of 2016 and 50 to 100 megabits per second by 2019; and
- preference regions with substandard internet services for priority rollout.

The Coalition also proposes to conduct:

- a strategic review into NBN Co.'s current commercial progress and options to meet the Coalition's policy objectives, to be completed within 60 days;
- an independent audit into broadband policy and NBN Co.'s governance; and
- an independent cost benefit analysis and review of regulation.

Policy Details

The new Coalition policy has two primary aspects around which it is based:

- 1. leveraging existing infrastructure; and
- 2. making the future adoption of widespread FTTP possible.

Leveraging Existing Infrastructure

The proposed Coalition NBN makes substantial use of existing infrastructure. In particular, it makes use of existing copper networks to deliver broadband services through a FTTN model.



FTTN provides higher bandwidth at lower cost by pushing fibre deeper into the network and closer to end users. Therefore, under Coalition policy, fibre optic will be extended to distribution points near premises and then connected to the premises using existing copper lines.

The Plan states that this consequently ensures a FTTN upgrade is significantly cheaper than the Government's FTTP upgrade as there is less 'digging up of streets' and disturbance to user premises. Where FTTP fits into the Coalition's Plan

Although the Coalition Plan specifies that the majority of its NBN will use FTTN (71%), there are some instances where the Plan states that FTTP must be used. The Plan proposes that "FTTP should be employed in new housing estates", and also wherever copper has to be replaced due to its poor condition.

The Plan also highlights the possibility for demand to change favourably in the future toward FTTP. It states that the Coalition's policy is designed to accommodate this, and change its FTTN model to a FTTP model if FTTP became more logistically and financially viable.

New Statement of Expectations

The Plan states that the Coalition will release a revised statement of expectations instructing NBN Co. to provide services with a minimum download data rate of 25 megabits per second to all areas of Australia by the end of 2016. This will increase to 50 megabits per second by 2019.

The new statement of expectations will directly specify a limit on the public capital available to NBN Co. This limit will be \$29.5 billion.

NBN Co. will also be required to achieve these objectives while providing a positive after-inflation return on all post-election equity invested by taxpayers.

Competition

Under its proposed Plan, the Coalition will remove or waive impediments introduced to provide a monopoly to the Government's NBN. The Coalition will also investigate opportunities to invigorate and enhance competition amongst retail service providers.

To ensure additional competition, the Coalition Plan will;

- Prohibit NBN Co. from supplying services to end users (similar restrictions will be imposed on any future owners of the network).
- Remove regulatory obstructions to the construction and operation of non NBN access networks.