Independent Audit

NBN Public Policy Processes

April 2008 – May 2010

Letter of Transmittal

The Hon Malcolm Turnbull MP
Minister for Communications
Parliament House
CANBERRA ACT 2600

Dear Minister

I have pleasure in submitting my independent audit of the public policy process that resulted in the establishment of NBN Co Limited, covering the period from April 2008 to May 2010.

I commend this report to you.

Yours sincerely

Bill Scales AO
Independent Auditor
Independent Audit of the NBN Public Policy Process
25 July 2014

Acknowledgements

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I would like to thank all those individuals who met with me and the members of the Audit team during the process of this Audit, and those companies and agencies which gave access to documentation, to assist our understanding of the details of the NBN public policy process.

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I would also like to thank Stephen Hunter for his assistance in developing a framework for good public policy process which was an important and timely contribution during the development of this report.

Finally, I would like to thank the Audit team, under the expert leadership of Dr James Horne - Christine Hoysted, Loretta Power and Ayndri de Soysa for their dedication and commitment and for their outstanding, thoughtful and thorough contribution to this Public Policy Audit.

Bill Scales AO

Audit Report

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Abbreviations/Glossary

ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
ADSL	Asymmetrical Digital Subscriber Line
AGS	Australian Government Solicitor
ANAO	Australian National Audit Office
ASX	Australian Securities Exchange
Backhaul	generally refers to the mid-to-long-distance transport of data from a series of disparate locations such as local exchanges, to and from a more centralised location (usually a point connecting to the backbone of the network from which data can be sent to and from anywhere in the world). The backhaul and backbone portions of a network sometimes overlap and the terms are often used interchangeably.
bn	billion
Broadband	an 'always on' internet connection with an access speed (bandwidth capacity) equal to or greater than 256kbps
CBA	Cost Benefit Analysis
CEO	Chief Executive Officer
CPGs	Commonwealth Procurement Guidelines
Cut-over	the exclusive or near-exclusive access to, and use of, Telstra's customer access network by a non-Telstra provider
DBCDE	Department of Broadband, Communications and the Digital Economy
DSL / xDSL	Digital Subscriber Line/ x Digital Subscriber Line
DSLAM	Digital Subscriber Line Access Multiplexer
EU	European Union
FANOC	Fibre Access Network Operating Company
FTTN / FTTC	Fibre To The Node/ Fibre To The Cabinet
FTTP / FTTH	Fibre To The Premises/ Fibre To The Home
FSA	Fibre Serving Area
GB	gigabyte
GBE	Government Business Enterprise
GFC	Global Financial Crisis
GPON	Gigabit Passive Optical Network
HFC	Hybrid Fibre Coaxial
HiBIS	Higher Bandwidth Incentive Scheme
kbps	kilobits per second
km	kilometre
Labor	Australian Labor Party
LSS	Line Sharing Service
Mbps	megabits per second
Minister	Minister for Broadband, Communications and the Digital Economy
mn	million
NBN	National Broadband Network
OECD	Organisation for Economic Co-operation and Development
PC	Productivity Commission
PM&C	Department of the Prime Minister and Cabinet
PNFC	Public Non-Financial Corporation
RFP	Request for Proposals
RIS	Regulatory Impact Statement

SAU	Special Access Undertaking
SME	Small and Medium Enterprise
SPBC	Strategic Priorities and Budget Committee
Treasury	The Treasury
UK	United Kingdom
ULL / ULLS	Unconditioned Local Loop / Unconditioned Local Loop Service

Key Points, Findings and Recommendations

Key Points

There were two NBN Policies developed by the Rudd Labor Government.

- NBN Mark I was based on the policy taken to the 2007 General Election, and subsequently implemented through an April 2008 Request For Proposals process.
- NBN Mark II was the policy developed after the Government decided not to pursue any proposal submitted under NBN Mark I. It was announced in April 2009.

NBN Mark I

NBN Mark I was in general conducted appropriately from a public policy perspective. It was a relatively traditional 'tender' process, where proposals were sought and evaluated by a Panel of Experts against prescribed 'value for money' criteria. However, even a well conducted process could not disguise or overcome lack of information about, for example, the proposed regulatory framework, the relative importance of the Government's objectives and evaluation criteria, and how best to define and measure the requirement that the NBN should cover 98 per cent of Australian homes and businesses.

While election commitments are an important part of the democratic process and it is appropriate that governments are held to account for their implementation, that also places a burden on political parties to ensure their proposals are clear and well thought out, and have been sufficiently tested to allow their direct implementation.

From a public policy process perspective, two additional matters stand out in relation to NBN Mark I. They are:

- The ACCC overstepped its authority by advising the Panel of Experts that Fibre To The Node was not a stepping stone to Fibre To The Premises. This ACCC advice became influential in relation to the decision by the Government to proceed with NBN Mark II.
- The Panel of Experts that conducted the RFP process appears not to have fully tested the ACCC's unsolicited advice about the unsuitability of Fibre To The Node as a stepping stone to Fibre To The Premises, advice that supported a number of the Panel's observations, which were submitted to the Government in January 2009.

NBN Mark II

By contrast with NBN Mark I, the public policy process for developing NBN Mark II was rushed, chaotic and inadequate, with only perfunctory consideration by the Cabinet.

After just 11 weeks of consideration, the Government had decided to establish a completely new 'start-up' company (now called NBN Co) to roll out one of Australia's largest ever, single public infrastructure projects. The NBN was to be rolled out in eight years at a preliminary estimated cost of around $43bn. There is no evidence that a full range of options was seriously considered. There was no business case or any cost benefit analysis, or independent studies of the policy undertaken, with no clear operating instructions provided to this completely new Government Business Enterprise, within a legislative and regulatory framework still undefined, and without any consultation with the wider community.

Most of the important issues in relation to the NBN policy and the operating arrangements for NBN Co remained unstated or unresolved well beyond the end of the period of this Audit, with the Government's first detailed Statement of Expectations not provided to NBN Co until December 2010.

NBN Co was not fit for purpose. It was a start-up company given a job that only a well-functioning, large, and established telecommunications company would have been able to undertake in the allotted timeframe. The governance arrangements that operated in the very early stages of NBN Co's life had a long lasting and detrimental effect on its operations, and a profound effect on the roll out of Australia's NBN.

Findings and Recommendations

Recommendation 1: When political parties include in their election commitments a promise to implement large infrastructure projects or infrastructure related funding, they should also commit to having the project (or projects) fully and independently costed by the Productivity Commission or Infrastructure Australia before the project proceeds, and to disclose fully the costs of the project to the public. They should also commit to preparing a full project plan and to releasing it for public comment before the project commences.

Finding 1: Departments must be resourced with highly knowledgeable 'subject matter experts' if they are to assist Governments with the implementation of large infrastructure projects.

Recommendation 2: Departments should urgently review their strategic objectives so as to ensure that they have highly knowledgeable 'subject matter experts' who are capable of assisting the Department to achieve its overall strategic objectives.

Finding 2: Better practice public policy development relies on learning from 'failed' public policy processes. 'Taking stock' should be seen for what it is: a necessary part of good government and good public policy processes.

Recommendation 3: Governments should use a 'taking stock' approach to public policy development when it is clear that the initially chosen approach to major infrastructure projects or reforms is unlikely to deliver expected outcomes. The well-established Productivity Commission public inquiry process provides a well-tested starting point for 'taking stock' when required.

Finding 3: Effective use of Cabinet processes is critical to better practice public policy process. The rigours of a well-argued Cabinet submission contribute to scrutiny, informed debate and decision-making within government. The full Cabinet should play an important role in assessing larger, complex infrastructure proposals.

Finding 4: Better practice public policy development for large infrastructure projects and major economic reforms requires very clear definition of the problem being addressed, the case for government intervention if that is being proposed, full development of cost benefit analyses, business cases and regulatory impact statements. The Cabinet Handbook provides the overarching framework for what constitutes good policy development, while up to date guides exist within government for undertaking cost benefit analysis, preparation of a business case and regulatory impact statements.

Recommendation 4: Large public sector infrastructure projects with costs above $1bn should be subject to a cost benefit analysis study and the results made public prior to the commencement of the project.

Recommendation 5: The Government should give consideration to preparation of a single whole of government guide (or website) for evaluating infrastructure proposals and reforms that might involve some form of government intervention. This could draw together the essence of key guidebooks already available, developed with the specific purpose of assisting Ministers, Ministers' Offices, Opposition equivalents, public servants and others wanting to promote a public policy proposal, to better understand their role in preparing cases for large infrastructure projects and reforms.

Recommendation 6: Government should take special care in determining and deciding appropriate, realistic timeframes are put in place for the design and implementation of large and complex infrastructure projects and reforms.

Recommendation 7: The leaders of the Australian Public Service should examine whether its inability to have its views seriously considered on the important matters related to the Rudd Labor Government's NBN Policy was circumstantial or whether it signals a more serious malaise within the Australian Public Service that needs addressing.

Bill Scales
25 July 2014

Overview

Introduction

I have been asked to conduct a Public Policy Process Audit of the National Broadband Network (NBN). The period of this Audit is from April 2008 to May 2010. Appendix 1 details the full Terms of Reference for this Audit.

In public policy terms, there were two NBN policies.

- NBN Mark I relates to the NBN policy that the Rudd Labor Government brought to the 2007 general election. NBN Mark I was expected to require a public contribution of $4.7bn.
- NBN Mark II was the NBN policy that was developed after it became clear that NBN Mark I would not proceed. In April 2009 NBN Mark II was initially estimated to cost $43bn and take eight years to complete. NBN Mark II is now estimated to cost around $73bn and take up to 20 years to fully complete, making it one of the largest single public infrastructure projects in Australian history.

In conducting this Public Policy Process Audit, I have considered development of NBN Mark I and Mark II in the context of what would have been accepted at the time as 'better practice' in public policy development for major government initiatives, including major infrastructure projects such as the NBN. The key elements of better practice in public policy formulation and implementation were well described at the time, in the Australian Government Cabinet Handbook and other government guides, and in OECD and academic literature.

I have been careful not to use '20-20 hindsight' to judge the matters which are the subject of this Audit. I have also been conscious of the fact that during this period, Australia was in the grip of the global financial crisis, a period like few others in modern economic history.

Setting The Context

The policy issues related to Australia's current and future demand for high-speed internet capability, or 'broadband', and how it should be provided, had been a matter of interest to the Australian community and to Australian and other national governments for most of the 21st century. In practical terms, the central issues concerned the means

of the delivery of broadband, and the extent of the capability and its coverage. Debate about these issues was complicated by the structure of the telecommunications sector in Australia, where the reforms to facilitate Australia-wide and efficient delivery of telecommunications services were still in progress.

During 2007 the Howard Coalition Government was actively attempting to speed up the roll out of broadband in Australia. It announced that OPEL, a joint venture between Optus and rural group Elders, had won a tender to roll out by June 2009 a new national $1.86bn high speed wholesale network to deliver a mix of fibre optic, ADSL2+ and wireless broadband platforms to rural and regional areas. The consortium was to contribute over $900mn to the project, buttressed by a government contribution of $958mn. The roll out was designed to ensure broadband coverage for 99 per cent of the population and offer speeds of 12Mbps at prices comparable to metropolitan areas. The Government also announced a range of measures as a part of its 'Australia Connected' election package which, when combined with the OPEL contract, amounted to a large-scale public intervention to upgrade Australia's broadband infrastructure.

After the swearing in of the new Rudd Labor Government on 3 December 2007, the incoming Minister for Broadband, Communications and the Digital Economy (the Minister) moved quickly to put in place Labor's election commitment to build a national high-speed broadband Fibre To The Node network, announcing his ambition was to complete the process to determine who would build the network by the end of June 2008. The policy approach was, put simply, to support more rapid private sector expansion of Australia's broadband capability by providing a public contribution (debt or equity) to telecommunication providers of up to $4.7bn.

The period between December 2007 and 11 April 2008, the date when the Government announced its Request for Proposals (RFP) tender, was a period of intense activity within the Government. This period is outlined in some detail in the Australian National Audit Office 2009-10 performance audit *The National Broadband Network Request for Proposal Process*. Key points covering the public policy process were:

- Department of Broadband, Communications and the Digital Economy (DBCDE) officials provided initial lengthy strategic briefings to the Minister on the Incoming Government Brief in late November and early December 2007, and then began to develop a RFP.

- In December 2007, DBCDE advised the Government that Telstra had estimated the cost of rolling out a NBN based on Fibre To The node (FTTN) and other technologies had risen to $12bn, would take eight years to build, and require a mix of technologies to cover 98 per cent of premises. DBCDE's own work on the cost of the NBN stopped in late 2007 when the Minister stated it should be discontinued.
- In January 2008 the Government established a Panel of Experts, chaired by the Secretary of DBCDE and including the Secretary to the Treasury, to recommend a proponent to roll out the NBN.
- The Government took the decision to conduct the RFP process in one stage, rather than as a multi-stage process. A conventional two-stage process would have involved first seeking expressions of interest before a second tender stage. While a two-stage process would have been more conventional for a project of this size, nature and risk, it also would have lengthened the process.
- In March 2008, the Government sought formal submissions from industry and the public over a two-week period to assist in the development of the RFP. Specialist advisors to the RFP process were appointed.
- The short timeframe in which the policy approach was settled and the RFP developed limited the opportunity for consultation.
- Shortly before the announcement of the RFP tender process, the new Government terminated the contract entered into between the former Government and OPEL for the provision of a broadband network covering underserved areas and premises across Australia.

NBN Mark I - 11 April 2008 To 20 January 2009

Tender Process With Compressed Timetable:
The Government released its RFP documentation to solicit applications to roll out and operate the NBN Mark I on 11 April 2008.

The policy set out in the RFP was different from the election commitment in two important areas: it was less prescriptive on the technology and the network structure, now seeking FTTN and/or Fibre to the Premises (FTTP) based proposals, rather than FTTN alone; and it suggested the Government contribution 'could take forms other than an equity investment'.

The RFP tender document detailed 18 Commonwealth objectives and six evaluation criteria against which proposals would be evaluated, within the framework of a value for money assessment. The evaluation framework did not prioritise either the objectives or the evaluation criteria.

The original closing date for NBN Mark I proposals was 25 July 2008, just 15 weeks after the release of the RFP documentation, with a government decision expected during October 2008. This was a very truncated process for developing proposals for a very large infrastructure project, of significant complexity and with funding requirements likely to be multiples of $4.7bn.

The primary means for addressing the significant risk in the process (from the Government's perspective) for a project of this size and complexity was to design an RFP that maximised flexibility, minimised mandatory technical and structural requirements and allowed proponents to offer innovative solutions. To attempt to address any concerns as the RFP proceeded there were a number of processes put in place to allow communication between proponents and DBCDE.

Work Of Panel Of Experts And Its Advisors

The Panel of Experts provided advice to the Minister and oversaw the governance framework for the RFP tender process. DBCDE and its specialist advisors, including the ACCC, supported the Panel of Experts. There was an interdepartmental committee established to monitor and facilitate whole-of-government coordination, and working groups set up to manage the RFP tender process. DBCDE was responsible for day-to-day management of the RFP including interactions with proponents. The Secretary of DBCDE played an active role in the oversight and the implementation of the RFP tender process within DBCDE, as well as chairing the Panel of Experts. DBCDE also put considerable effort into considering risks to the tender process, and undertaking associated scenario planning. DBCDE and the ACCC provided substantive advice to the Panel of Experts on issues likely to impact the tender on an ongoing basis. The ACCC's role was to provide advice to the Panel on pricing and competition issues, and provide it with a written report.

From the outset of the RFP tender process, a Probity Plan was put in place to ensure probity within the process.

DBCDE regularly briefed the Minister during the RFP process. In July 2008, the Minister was advised that the RFP process was unlikely to attract binding offers capable of acceptance. At the end of July 2008, the Panel of Experts considered a range of issues that had emerged through the RFP process including overbuild and coexistence, compensation issues, international obligations and the capacity of proponents to deliver the network.

Bilateral Meetings, External Environment And Market Soundings

Several rounds of bilateral meetings were held with proponents during the tender process to enable DBCDE to learn more about the types of proposals and plans for the NBN that were being developed by proponents. These bilateral meetings also enabled proponents to clarify process requirements and explore the Government's policy and objectives under the RFP. As DBCDE was unable to provide much elaboration of tender documentation, proponents found the bilateral meetings with the department and its specialist advisors of limited value.

In August 2008 DBCDE advised the Minister that a recurring theme arising from bilateral meetings with proponents was the difficulty for proponents in developing and financing their proposals given the 'flexibility' in the Government's process.

The second round of market soundings was undertaken in September/October 2008. This provided the Government with a clearer sense of what proponents were intending. At this time, Telstra was actively seeking guidance both within the RFP process and from the Minister about whether structural separation of their network would be required. They received no reply to this question. In early October 2008 the Panel of Experts was aware that given the global financial crisis it appeared likely that all proponents (except perhaps Telstra) would not be able to submit fully financed bids.

Evaluating The RFP

On 26 November 2008, DBCDE received proposals from six pre-qualified proponents: Acacia Australia Pty Ltd; Axia Netmedia Corporation; Optus Network Investments Pty Ltd; Telstra Corporation Ltd; the Crown in the Right of Tasmania; and TransACT Capital Communications Pty Ltd. These proposals were then assessed by the Panel of Experts, supported by the NBN Taskforce in DBCDE, specialist advisors, and other Commonwealth Government departments and agencies, including the ACCC.

The Panel of Experts only had eight weeks in which to evaluate the proposals and identify a preferred bidder.

Telstra submitted a 12-page proposal. A much more detailed proposal was prepared, but that proposal was never submitted. On 8 December 2008, on the basis of substantial legal and probity advice, the Panel of Experts came to the preliminary conclusion that Telstra had not met the conditions of participation set out in the RFP by failing to include a Small and Medium Enterprise Participation Plan. After receiving comments from Telstra, and obtaining further legal advice, on 15 December 2008 the Government announced that Telstra had been excluded from further consideration in the RFP process. There is no question there were valid grounds for excluding the Telstra proposal, and the Panel had no choice other than to exclude Telstra from consideration. However, it is also clear that the exclusion of Telstra effectively and practically derailed the RFP process.

Following the exclusion of Telstra, the remaining five proposals were assessed in accordance with the evaluation criteria set out in the RFP and the evaluation plan. Of the three Australia-wide proposals, Optus and Acacia offered FTTN-based solutions to around 90 per cent of premises, and proposed significant regulatory change. Axia offered a more limited proposal. None of these proposals involved FTTP on a broad scale.

During this time, the ACCC gave a presentation to the Panel of Experts outlining its draft views on the proposals, and noting that around 70 per cent of the costs of FTTN proposals would be 'stranded costs' in any subsequent upgrade to FTTP.

The Evaluation Report

On 20 January 2009, following detailed consideration and discussions, including consideration of the advice of the ACCC, advice on the strength of each of the eligible proposals and AGS advice on, *inter alia,* the issue of possible compensation payable to Telstra from the roll out of the eligible proposals, the Panel of Experts provided its Evaluation Report to the Minister.

Only very limited sections of the Report have been made public, but the key point was that none of the three remaining national proposals was considered to provide value for money.

The Panel of Experts also observed that 'the Proposals confirm there are multiple approaches to delivering high-speed broadband and that, with the right technology mix and incentives to create sound business cases being developed, the goal of providing high-speed broadband services to 98 per cent of homes and businesses can be reached.'

Further, based heavily on ACCC advice, the Panel of Experts raised concerns that a FTTN network was unlikely to provide an efficient upgrade path to FTTP. They also indicated that the eligible proposals had not addressed the potential cost to the Commonwealth of providing network access to a party other than Telstra.

The Evaluation Report noted that the Panel of Experts could see a way forward to achieving the outcomes sought and had provided that advice separately and in confidence to the Government. I have not had access to this advice.

According to the ANAO, the Panel of Experts' 'primary proposition was that FTTP was a preferable, albeit more costly, technology to FTTN and that the Government should explore incentive schemes to encourage the roll-out of FTTP'.

NBN Mark II - Advice And Processes That Led To Establishing NBN Co:
21 January 2009 to 10 May 2010

Developing A New Government-Owned NBN

The NBN policy development and discussions were taking place in an environment of frenetic and chaotic activity within the Government caused mainly by the effect or anticipated effect of the Global Financial Crisis (GFC) on the Australian economy. The Government announced its second stimulus package responding to the GFC, a $42bn Nation Building and Jobs Plan, on 3 February 2009, with key initiatives commencing before the end of the financial year. Activity at the national level was frenetic, as the Government and the public service worked to rapidly develop and implement a wide range of policies.

The NBN Mark II was also being developed against a backdrop of an almost complete breakdown in the relationship between the Government and Telstra, and ongoing disputation between Telstra and the regulator.

On 21 January, the day on which he received the report of the Panel of Experts, the Minister briefed the Prime Minister on its outcome. This briefing continued the following day. It appears these discussions were critical in shaping how the Government would proceed with NBN Mark II. It is also clear that at this point neither the Government nor the public service had a detailed understanding of the cost of developing a FTTP NBN.

Once the general direction was determined for NBN Mark II, and against the background of the RFP process for NBN Mark I still being 'live' (in as far as the Government was yet to announce that none of the proposals was satisfactory), work commenced almost immediately in DBCDE on fleshing out a 'go it alone proposal'. This revised proposal centred around a NBN based on FTTP architecture, to around 90 per cent of houses and businesses, via a government-controlled delivery mechanism and necessary but unspecified changes to the regulatory environment.

The responsibility for the detailed development of NBN Mark II fell to the Strategic Priorities and Budget Committee of Cabinet (SPBC) rather than the full Cabinet. The members of SPBC were the Prime Minister, the Deputy Prime Minister, the Treasurer and the Minister for Finance and Deregulation. The Minister participated in the SPBC discussions that focused on developing the NBN Mark II.

Once the high level decision had been taken to develop and implement NBN Mark II, a small group of senior DBCDE officers, supplemented by senior officers of the Department of Finance and Deregulation and the Treasury worked to develop the proposal. Advisors outside of government were not used in the development of NBN Mark II, reflecting concerns within government around commercial sensitivities and the possibility of leaks. Work pressure was intense as the group of officials sought to develop a radically new NBN approach for the Government.

On 4 February 2009 DBCDE sought advice on broadband technologies from key Commonwealth 'technology' agencies and two of its advisors (ACCC and GQ-AAS). ACMA made the point that 'given the pace of technological change evident in communications, it is extremely difficult to provide an accurate assessment of future proofing characteristics of particular technologies.'

On 25 February, the first meeting took place of the NBN Working Group, a small interdepartmental committee chaired by the Secretary of the Department of the Prime Minister and Cabinet involving only the three central agencies, DBCDE and a representative from the Prime Minister's Office. It operated as a 'clearing house' for these agencies to discuss and consider aspects of the proposed new NBN policy before briefing the SPBC. It met on nine occasions over the six weeks from 25 February to 3 April 2009.

During the proposal development phase of NBN Mark II from late January 2009 to early April 2009 the Department of Finance and Deregulation examined and assessed DBCDE cost estimates of the proposed new policy, provided advice on forming a 'start-up' GBE and (along with the Treasury) provided advice on budget classification issues related to the proposed public non-financial corporation (PNFC). This classification was essential for the Government to keep the cost of the new NBN project at arm's length from the budget, and budget accounting and monitoring arrangements. Treasury's role also focused on its core responsibilities – in this case, budgetary and regulatory matters. From this process, a preliminary cost estimate of $43bn for the implementation of NBN Mark II emerged.

But the public policy process for the development of NBN Mark II did not involve any cost benefit analysis or business case. When the broad parameters of NBN Mark II were announced, the operating arrangements, detailed network design, ways to attract private sector investment, detailed costings and the appropriate regulatory regime all remained as works in progress, to be determined following the Implementation Study that would be undertaken by specialist external advisors over the coming months.

Details of the policy were closely guarded not only in the public service, but also in the Government. As a result, the full Cabinet's role was perfunctory. The full Cabinet did not consider the policy until very early on the morning of 7 April 2009, which was immediately prior to the announcement. By that stage, with everything already in place for the announcement; the Cabinet's role was to rubber-stamp SPBC's decision.

Announcing A New Government-Owned NBN Mark II

The Government's announcement of its NBN Mark II came in a three page press release. The NBN Mark II was to connect 90 per cent of all premises in Australia with speeds of up to 100Mbps and connect the remaining premises with next generation wireless and

satellite technologies. It specified that optical fibre would extend to towns with a population of around 1,000 or more people. A new company specifically established by the Government to carry out this work would invest $43bn over eight years to build the network, and significant private sector interest in the company was anticipated. Importantly, the costings were done on the basis that the network would be a stand-alone wholesale network, with equal access for all retail operators. The regulatory approach to give this new network meaning had not been fully thought through but the hope was that it would deliver separation between the infrastructure provider and retail service providers. To put the plan of action into effect the Government indicated it would:

- commence an implementation study to determine operating arrangements, detailed network design, ways to attract private sector investment for roll out in early 2010 and ways to provide procurement opportunities for local businesses
- fast track negotiations with the Tasmanian Government to build upon its NBN proposal to begin roll out of a FTTP network and next generation wireless services in Tasmania as early as July 2009
- implement measures to address 'black spots' through the timely roll out of fibre optic transmission links connecting cities, major regional centres and rural towns to deliver improvements in services in the short term
- progress legislative change that would govern the NBN company and facilitate the roll out of fibre networks, including requiring greenfield developments to use FTTP from 1 July 2010
- make an initial investment of $4.7bn, and
- commence a consultative process on necessary changes to the existing telecommunications regulatory regime.

A company, initially known only as ACN 136 533 741 Limited, was registered on 9 April 2009, Interim Directors were appointed from within the public sector and the first Board meeting held on 20 April 2009. DBCDE put in place a number of actions and administrative arrangements to further develop and implement the Government's NBN proposal including putting in place contract advisors to undertake an Implementation Study and a National Broadband Network Implementation Study Steering Committee, to facilitate coordination between involved parties.

The Shareholder Ministers of ACN 136 533 741 Limited did not provide a formal Statement of Expectations to the Interim Board. Expectations, largely of an

administrative nature, were set out in a letter from the Shareholder Ministers to the Interim Board.

The Government announced the appointment of the Executive Chairman of what became known as NBN Co on 25 July 2009. The initial expectation was that the company would establish, roll out and operate the NBN consistent with the April 2009 announcement. It was not until December 2010 that the Board of Directors received its first comprehensive Statement of Expectations from the Government.

Implementation Study

The NBN Mark II announcement indicated the Government would immediately commence an Implementation Study to determine operating arrangements, detailed network design and ways to attract private sector investment and provide procurement opportunities for local businesses. The announcement was silent on many important issues, including likely product offerings and cost to end users, the extent of subsidies required, and the timetable and strategy for rolling out the new network. The proposal to seek detailed expert advice on these issues before implementation was recognition of the amount of work yet to be undertaken before the NBN Mark II could become a reality. The time allowed for the Implementation Study was around three times that taken to develop the initiative.

On 6 August 2009, the Government announced the appointment of McKinsey & Company-KPMG as lead advisor for the Implementation Study. Notably missing from the requirements set out for the Implementation Study was any evaluation of the Government's policy objectives, its decision to implement the NBN through establishing NBN Co and a cost benefit analysis. The study was to focus solely on detailed implementation issues with the merits of the policy remaining untested.

The final Implementation Study report was received by the Government on 5 March 2010, but not released until 6 May 2010. It made 84 recommendations in its 534 pages, and concluded, *inter alia*, that:

- the Government's objectives could be implemented within the $43bn estimate
- fibre coverage should be increased from 90 to 93 per cent, and
- a strong regulatory regime would be required once private investors were in place and privatisation safeguards should be set out in NBN legislation.

NBN Co Seeks Access To Telstra Network

The Government's decision to 'go it alone' and build a stand-alone network in its NBN Mark II announcement appeared to have been at least in part designed to offer the Government and the sector the prospect of avoiding the continuation of difficult and protracted regulatory and access negotiations with Telstra. NBN Co began to meet with Telstra soon after the appointment of the Executive Chairman at NBN Co. Fortuitously for NBN Co, this period coincided with a change in the leadership at Telstra, with Telstra taking a more constructive approach to its relationships with key players. The meetings quickly turned into negotiations about NBN Co's access to Telstra's network.

In March 2010, Telstra provided a 'National Broadband Network (NBN) Negotiations Update' to the ASX, noting that negotiations with the Government and NBN Co on the future of Telstra's fixed local access networks and associated matters were continuing, but there was 'a significant gap between Telstra and NBN Co on what each party considers to be an acceptable financial outcome'.

In June 2010, Telstra announced it had signed a non-binding Financial Heads of Agreement with NBN Co covering the use of Telstra's fixed line network that, if completed, would deliver a post-tax net present value to Telstra of approximately $11bn.

GBE 'Start-Up' Commences The Hard Work

NBN Co was prescribed as a GBE in early August 2009. In October 2009, the NBN Co Executive Chairman outlined the wide range of activities NBN Co would undertake to build the organisation in the following six months. This work would include, among other things: designing a reference offer; selecting technology; defining high-level network architecture; negotiating with potential partners; and establishing an operational program management office. The Chairman indicated it was possible that NBN Co would have begun to purchase assets prior to completion of the Implementation Study. In October 2009 NBN Co had 13 full time employees and 25 contract staff.

In early March 2010 NBN Co completed preparation of its first preliminary business case. On 23 March, the NBN Co CEO wrote a lengthy letter to the Minister about the Implementation Study that the Government had just received. While he endorsed the general thrust of the Implementation Study, he drew attention to a number of areas of difference between NBN Co and the Implementation Study. For a start-up, indeed even

for a substantial established construction company, the task of rolling out the NBN was huge. The CEO's Monthly Update at that time underscored the fledgling nature of the company.

Fibre Roll Out To 90-93 Per Cent Of Australian Premises

The terms of reference for this Audit ask specifically that it describe the origin and basis for NBN Co's mandate to run FTTP to 90-93 per cent of Australian premises.

The NBN Mark I proposal was structured in terms of FTTN or FTTP architecture to 98 per cent of Australia. The two national proposals involving local access submitted through the RFP process provided for around 90 per cent coverage of all Australian homes and businesses by FTTN.

The Government's NBN Mark II announcement indicated an objective of 90 per cent coverage of the FTTP network, and remaining coverage to be delivered through wireless and satellite technologies. However, during the Implementation Study consideration was given to extending coverage from 90 per cent to 93 per cent of Australian premises. At its April 2010 meeting the NBN Co Board considered a comparison between the Implementation Study approach to coverage and its own base case. In discussions with the Minister in May 2010, NBN Co recommended FTTP coverage of at least 93 per cent, and the Minister approved this recommendation.

Approach Taken To Cost Benefit Analysis Or Independent Reviews

In relation to NBN Mark I, the incoming Minister stated in late 2007 that no further work should be undertaken within DBCDE on costing the Government's $4.7bn election commitment. 'The Minister's position was that the department's estimates would be heavily caveated, costly to undertake and a poor second best to what proponents provided.'

Following the collapse of the RFP process, the Government quickly turned its attention to considering alternative approaches to delivering its NBN policy. NBN Mark II emerged without the benefit of any cost benefit analysis or business case. The Implementation Study is also explicit that it did not undertake a cost benefit analysis as part of that work. No Government sponsored independent reviews of the project were undertaken before the Government's April 2009 announcement.

Evaluating The NBN Mark I Public Policy Process

Better practice in public policy development would normally demand the conduct of a broad ranging Cost Benefit Analysis (CBA) as part of the development of any piece of public policy. No CBA was conducted in relation to the NBN RFP process. In the context of the open and transparent conduct of the RFP process it was not necessary for Government to have requested, nor the Panel to have conducted, a CBA in relation to NBN Mark I. The policy intent was clear, the public contribution on offer transparent, and in effect, the Panel was charged with conducting a tender process and then making an assessment of whether the proposals submitted constituted value for money against a set of published criteria.

In essence, the CBA was being conducted through the RFP process, by asking proponents to provide their assessment of how they would best be able to utilise the public contribution on offer.

However, while a CBA may not have been necessary once the RFP process had begun, it would have been prudent for the Government to have conducted a CBA on coming to office in relation to NBN Mark I, to assure itself that the policy, which it brought before the electorate during the election campaign in late 2007, was capable of successful implementation within the cost framework outlined during the election campaign.

During the NBN Mark I tender process, there were a number of important matters that I have found were not consistent with 'better practice' public policy processes.

Unsolicited Advice From The ACCC

The ANAO report states, and it has been confirmed by this Audit that during the RFP process the Panel received unsolicited advice from the ACCC that FTTN was not a stepping stone to FTTP.

In my examination of this unsolicited advice and intervention by the ACCC in the RFP process, despite the ACCC's view to the contrary, I cannot find any compelling reason why the ACCC decided it was in a position to make comments on this matter. I have not been able to find any evidence that the ACCC had been asked by the Panel or the Government to make this intervention, or that the ACCC had any particular expertise that would make it competent to make these comments. The ACCC has some technical

telecommunications expertise on staff to advise on regulatory matters. This is appropriate and consistent with good policy and regulatory practice both in Australia and overseas. In this case, however, the ACCC was providing definitive advice to the Panel about the technical, financial and economic suitability of one particular form of telecommunications technology over all others, during a time of significant worldwide debate on this complex issue, a matter it was not qualified to provide. In fact, ACCC staff papers at the time on this very subject were very cautious about being seen to promote any one particular technology as a means of extending competition in the telecommunications sector in general, and in the supply of broadband services in particular.

This intervention was particularly important in the subsequent development of the Government's NBN policy. A number of people interviewed during the conduct of this Audit have advised me that this ACCC view on the inappropriateness of FTTN as a stepping stone to FTTP was one of the influential matters in their thinking in relation to advice subsequently provided to Government on this matter, and in relation to the Government's decision to adopt a FTTP approach in NBN Mark II.

It is my view that the ACCC over-reached its authority in providing this advice. In public policy terms it would have been appropriate for the ACCC to have drawn attention to how it would regulate a FTTP or FFTN network and any impediments in them doing so. In public policy terms, providing advice beyond this was inappropriate and beyond what it was in a position to provide.

In addition, it is my view that the Panel did not provide sufficient scrutiny of the ACCC view once it was provided. Not only did the Panel not seem to question the competence of the ACCC to provide this advice, this Audit has also found many references from overseas which at the time had come to a very different conclusion to that provided by the ACCC on this particular matter. I have not been able to find any evidence that these alternative views were sufficiently examined by the Panel.

I have therefore found that the Panel unsoundly relied on this ACCC view in relation to whether FTTN was an appropriate stepping stone to the establishment of FTTP, at least in part, when providing subsequent advice to Government on this matter.

A Departure From The ANAO View

In early January 2009, having decided that there were no 'value for money' proposals that met the Government's policy intent, the Panel provided what it described as 'observations' to the Government on what it might now do in light of the failure of the RFP process. The Panel also indicated it could see a way forward to achieve the outcome sought, and provided that advice to the Government in confidence.

While it was appropriate for the Panel to advise the Government on the outcome of the RFP process, in my view, on the documents available to me, it was not appropriate in public policy terms for the Panel to provide the Government with advice on the 'next steps' in the way in which it did. There are two reasons why I have come to this view.

First, it is not clear that the make up of the Panel provided it with the expertise to provide this advice. The Government selected the Panel because of its view that the structure and make up of the Panel was appropriate for the conduct of the RFP. The RFP process was in reality a tender process. There is no *a priori* reason to assume that this same Panel would be an appropriate source of advice on what might now replace this tender process, or to provide advice about whether the Government should adopt a very different NBN policy approach than was intended by the RFP process.

Second, the Panel among other matters, observed in its Evaluation Report, submitted to the Government on 20 January 2009, that FTTN was unlikely to provide an efficient upgrade path to FTTP. The Panel was not in a position to make this observation. Other than the unsolicited advice provided to it by the ACCC, it had not been provided through the RFP process with sufficient information that could have allowed it to make this observation. Two of the three national proposals under the RFP were predicated on providing a FTTN solution, as per the initial election commitment of the Rudd Labor Government, and the third was a multi-technology solution. In addition, on this particular matter I can find no documentary evidence that the Panel had been provided with any significant research, a detailed business case or a cost benefit analysis that would have allowed it to come to this particular observation as outlined in its Evaluation Report to the Government.

The only observations that the Panel would have been in a position to provide, consistent with its responsibilities, the make up of the Panel, the detailed documentary evidence provided to the Panel during the RFP process and good public policy practice,

would have been to provide a possible pathway that would have allowed the Government to thoroughly reconsider its NBN policy position in the light of the lack of success of the RFP process.

On this matter I disagree with the ANAO report, in that I did not find in relation to this particular issue that the conclusions and observations in the Panel's Evaluation Report were supported by appropriate evidence.

In addition, I disagree with the ANAO's response to the concerns raised by the former Secretary of DBCDE, and Chair of the Expert Panel, in relation to whether the Panel should have informed the Government earlier in the RFP process that FTTN does not provide a cost-effective migration strategy to a future FTTP network. The Panel did not have the necessary information available for them to make this assessment and it would have been inappropriate for them to do so.

Evaluating The NBN Mark II Public Policy Process

A Potential For Reflection And Reconsideration: 20 January Until 7 April 2009

The period from 20 January until 7 April 2009 was intense from a public policy development perspective not only in relation to NBN, but also on many other fronts. The GFC was still taking its toll on the world and Australian economy. The Australian Government was in the midst of rolling out an extensive economic stimulus package.

In addition to these pressures the Government unexpectedly found itself in the situation of now having to completely reconsider its NBN policy. In light of the lack of success of the NBN RFP process, the Government quickly decided that it would completely review its NBN policy. The public policy process for developing a revised NBN vision, preliminary estimates of the costs, an appropriate funding structure, the feasibility of using a government owned company to deliver the Government's vision and a practical pathway for it to do so was all done in 11 chaotic weeks in early 2009.

The decisions made by the Rudd Labor Government during this 11 week period and the means by which they were made had, and will continue to have, a profound effect for many years on the roll out of Australia's NBN, its cost and its effectiveness.

The effectiveness of this period in terms of public policy development is best illustrated, not by what was done during those 11 weeks, but by what was left to be done after the Government's announcement on 7 April 2009.

The media release gave some indication of the extent of the work still required before the policy could become reality. For example:

- The final cost of the policy was yet to be determined.
- An Implementation Plan to guide the operations of NBN Co would need to be completed.
- Legislative changes would need to be developed and progressed.
- The regulatory regime governing the NBN would need to be decided and implemented.
- Governance arrangements for the NBN Co would need to be determined and established.

In addition, the media release was completely silent on how the Government, and this newly established 'start-up', would deal with the many issues associated with its inevitable conflict and relationship with Telstra. This issue alone had already been problematic for governments, regulators and competitors in the past and it must have been known at the time that it was going to be similarly problematic for NBN Co in the future. I have not seen any evidence that guidance was provided, either publicly or privately, by the Government as to how this highly complex and politically charged matter was going to be appropriately addressed by the Government or by NBN Co. Moreover, a core feature of this revised policy was that the NBN would be a new, separate network that would operate in parallel with all other telecommunications networks operating across Australia, and yet the media release was silent on how this important, but highly complex feature of this new policy was going to be implemented in practice.

In summary, the Government had decided to establish a completely new start-up public company, something that was extremely rare at the Commonwealth level, to roll out one of Australia's largest ever public infrastructure projects, in 8 years, at a cost still to be determined, but estimated at around $43bn, without a business case or a cost benefit analysis, without clear operating instructions, within a legislative and regulatory framework still undefined, with the key strategic and business relationship with Telstra

ignored or unresolved and without any prior consultation with the Australian community, and perfunctory involvement by the Cabinet.

Given the size, scope and complexity of the revised NBN policy, 11 weeks was clearly insufficient time to allow the Government and its officials to do all the work necessary to meet the requirements of better practice public policy development for one of Australia's largest ever public infrastructure projects.

For example, the public policy process did not provide for significant Cabinet involvement. There was no Cabinet involvement in NBN Mark II prior to its rubber stamping of the policy on 7 April 2009. It is true that SPBC was heavily involved, but in that forum, the work load was already heavy because of its central role in GFC related matters and initiatives. The Cabinet did not consider the reasons for the collapse of NBN Mark I, nor was it presented with a careful analysis of where that left the Government's broadband policy, and the options for the future. And importantly, there was no broader discussion in the community about this radical turnaround in the Government's NBN policy. This was a long way from better public policy practice.

NBN Mark II: 7 April 2009 Until May 2010

The way by which NBN Co was established, its initial governance arrangements, the lack of clear and precise objectives and the lack of instructions from the Government as its sole shareholder about its operating and public reporting requirements were not consistent with good public policy process and practice.

The extent of the challenges caused by the absence of a thorough public policy process is best illustrated by the lack of progress of NBN Co in the first 12 months of its operation.

- The Executive Chairman was not appointed until late July 2009.
- By October 2009, NBN Co had only 13 fulltime staff and 25 contract staff.
- The Implementation Study, the study that was intended to be the blueprint for the roll out of the NBN was not provided to NBN Co and the Government until early March 2010, nearly a year into the actual policy implementation process.

Taken on their own, each of the particular achievements of NBN Co and its advisors within the first 12 months of its existence seems reasonable for a 'start-up'. However, given the 8-year timeframe set for NBN Co to complete the full roll out of the NBN, these achievements were manifestly inadequate.

Meeting the Government's very tight timeframes for the roll out of its NBN program would have been a significant challenge, even for a well-functioning, large and well established telecommunications provider. For a 'start-up', it was an impossible assignment.

Tight timeframes and inadequate operating instructions took their toll immediately on NBN Co. During the first 12 months of the existence of NBN Co, some of those involved describe the process as 'making it up as they went'. The appointment by the Government of an Executive Chairman of NBN Co as the first employee of the company, before an independent Chair and Board was appointed, set the scene right at the beginning for a period of poor governance practice within NBN Co. The practical effect of this decision was that the Executive Chair, in conjunction with the Minister, made most of NBN Co's decisions in the first 12 months of its existence. This had a number of adverse consequences in public policy terms. For example, the decision to extend the footprint of NBN Co from 90 per cent to 93 per cent of all premises was made by the Minister and the Executive Chair of NBN Co, without Cabinet scrutiny or approval, without sufficient consultation with the NBN Board and without a cost benefit analysis.

The Implementation Study

As discussed briefly above, when announcing its revised NBN policy in April 2009, the Government also announced its intention to conduct an Implementation Study to determine operating arrangements, detailed network design, ways to attract private sector investment for roll out in 2010 and ways to provide procurement opportunities for local businesses.

However, the development of all these matters was proceeding in parallel with the decision making and implementation processes already underway within NBN Co, supported by the encouragement of the Minister, for NBN Co to get on with the job of implementing the Government's announced policy as quickly as possible. In addition, in the absence of clear instructions from the Government to NBN Co on a range of matters, the Secretary of DBCDE met regularly with the NBN Co Board to help provide the Board with greater clarity about the Government's policy intent.

These examples highlight the problems created for NBN Co from poor public policy processes.

Having the NBN Co implementing the Government's policy in parallel with a process which was determining the precise future operating parameters for NBN Co, demanded a process that could resolve differences and contradictions as they occurred. In practice, this was at best only a partly workable public policy proposition given the conditions operating at the time.

It was not until March 2010, 11 months after the Government's NBN Mark II announcement, that NBN Co completed its first preliminary business case. The intention of this preliminary business case seems to have been to make up for the lack of consideration of important public policy matters that should have been determined before any Government announcement, or at the very least, been provided to NBN Co soon after. These matters were to:

- provide an understanding of the logic used to construct the financial model
- highlight the critical assumptions underlying the business case
- invite feedback on the assumptions underlying the Base Case in order to further refine as required
- assist management and the Board in evaluating different business options by providing a baseline against which different scenarios can be modelled.

These were clearly very sensible matters that NBN Co needed to have resolved before it could proceed to meet the Government's policy intent. However, they were considered far too late into the process. Better practice public policy process development would require these important and fundamental matters to have been resolved prior to the establishment of the company. In addition, it was not until December 2010, some 20 months after the Government's announcement of NBN Mark II that NBN Co received a comprehensive Statement of Expectations from the Government, outlining matters which in public policy terms should have been resolved as the policy was being developed and made public when the policy was announced in April 2009.

A Final Related Matter

There is one other matter, not directly related to the terms of reference for this Audit, but which has constantly arisen in the course of this Audit and has profound

implications for public policy development and implementation. It is clear to me that during the whole of the period of this Audit, public officials involved in the NBN policy development process, in both its manifestations, worked with remarkable dedication and commitment to attempt to make this policy work. However, it is also clear that during the development of NBN Mark I and Mark II, the public service, even at its most senior levels, had difficulty in having its 'voice' heard on many important NBN policy matters.

It is tempting to assume that this was simply circumstantial and related to the very special circumstances and operating culture of the Rudd Labor Government at the time and were specific to the NBN public policy development process. However, this may be too convenient an explanation. There have been many other times in Australia's history when similarly difficult and complex policy issues have emerged and have created tensions between the Executive and the most senior levels of the public service, and yet, robust advice has still been provided to Ministers and the Executive, and it has been seriously considered by the Government of the day. The most senior levels of the Australian Public Service should consider whether the inability of the public service to have its views seriously considered during the NBN public policy development process was circumstantial, or whether it signals a more serious malaise within the Australian Public Service that needs to be addressed.

CHAPTER 1: APPROACH TO THIS AUDIT

I have been asked to 'conduct an independent audit into the public policy process that resulted in the establishment of NBN Co Limited ('NBN Co')'. The terms of reference of the Audit are set out in Appendix 1.

This Audit is different from a performance audit, such as the ANAO's audit of the National Broadband Network Request for Proposal Process.[1] Performance audits involve 'the evaluation of the implementation of specific government programs, policies, projects and activities… Each performance audit has specified objectives.'[2] The ANAO process begins with the government's policy approach as given, and seeks then to evaluate implementation with specific objectives in mind.

By contrast, this Audit examines the public policy processes undertaken to support decisions by the Australian Government relevant to its NBN policy. It focuses on the policy making process per se, outlining the public policy processes over a two year period from April 2008 to May 2010. It also outlines in brief some of the history leading up to the audit period, on the basis that this history is important to understanding the audit period itself.

I have sought information from a wide range of sources available to me to respond to the terms of reference.

However, unlike in the case of an ANAO performance audit, I have had no statutory or other legal power to compel the production of information in any form. Nor have I sought additional powers to do so.

A restriction properly applies to non-disclosure of information by government agencies that would be contrary to long standing conventions which involve maintaining confidentiality of Cabinet material and that current Ministers do not seek access to Cabinet and other deliberative material of previous governments. Unless the documents were already public, these restrictions covered:

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[1] ANAO, 2010, *National Broadband Network Request for Proposal Process*, Performance Audit Report No. 20, 2009-10.
[2] ANAO, 2008, *Performance Auditing in the Australian National Auditing* Office, p. 3.

- Minutes and other records of meetings of the Cabinet and subcommittees of the Cabinet evidencing decisions relating to NBN policy.
- Advice (written and oral) provided to the Cabinet, subcommittees of the Cabinet and relevant Ministers by departments.
- Advice (written and oral) provided by staff of Ministers to those Ministers.

However, within the confines of these restrictions, during the conduct of this Audit I have been provided with very significant information and support from most people with whom I have held discussions. They have been prepared to recount their involvement in what was and remains a very large and important Australian infrastructure project. While I have not relied on these discussions in forming my views, they have on occasions led me to reexamine information or seek out further information in relation to specific issues.

In general, relevant individuals, agencies and organisations have been most helpful in reviewing documents related to NBN processes and providing material to the Audit Secretariat and me. I am unable to judge how they have applied the access restrictions applying to this audit, which are set out in Appendix 2.

I have also been provided with some contextual material that I have felt some might construe as being subject to the information restrictions applying to this Audit. Where I have felt this is the case, I have excluded this material. Of course much of this involves fine judgments about the coverage of the restrictions. As might be expected, my sense is that government departments, agencies and some individuals apply the conventions differently and conveniently.

In this report I have sought to clearly identify sources of information wherever that has been possible. A number of departments and agencies were provided with copies of the draft report (that is, Chapters 1 to 6 and the Appendices), which provided them with an opportunity to indicate any areas where they thought the draft report relied on sources subject to restrictions.

The documents used in this Audit include:

- information held by government departments to which the Audit Secretariat and I have been given access, by way of direct access to documentation
- Senate reports

- ANAO reports
- documents owned and made available by corporations, generally under certain confidentiality conditions
- material released under FOI
- Productivity Commission reports
- government publications
- newspaper and journal articles.

These documents are catalogued in the Bibliography.

Some of the material in this report was previously classified commercial in confidence. We have sought and received permission for this material to be made public.

As noted above I have had discussions with entities and individuals both within and outside government, with a view to gathering and testing evidence. There have also been a number of letter and email exchanges. Members of my Secretariat have also had some additional discussions and email exchanges. In both cases, these discussions have involved current and past departmental officers involved directly in NBN public policy processes, members of the Panel of Experts, former politicians, agency office holders, special advisors, business people, and consultants. These individuals all contributed to the understanding of the period covered by this Audit.

For a variety of reasons, a number of individuals have chosen not to be involved in discussions with me.

Appendix 3 outlines the key sources of information.

In forming an assessment of the NBN public policy process, I have been conscious of the issue of benefiting from '20/20 hindsight'. I have sought to avoid it by assessing the public policy process in terms of the prevailing orthodoxy, and the information available at the time. I have drawn on the analysis and documentation available at the time covering:

- public policy literature
- the 2002 and 2009 Cabinet Handbooks, probity and required regulatory impact statement guidelines

- procedures for large infrastructure projects set out in the work of COAG, Infrastructure Australia, and the Productivity Commission
- technical literature available at the time, including work by the OECD and private consultants
- 1997 Government Business Enterprise Guidelines.

These sources have been used by me to come to an understanding of best practice on which to assess the public policy process that applied to the development of the Labor Government's NBN policy.

During the conduct of this Audit I have not made judgments about a preferred technical or network structure for the NBN. That would be beyond the scope of this review. In addition, I have deliberately taken the view that in conducting this Audit the key task was to examine and make judgments about the public policy process that was followed and whether the information, evidence and research used to arrive at a particular policy outcome supported the policy decisions that were eventually made and implemented, not the outcome itself.

For the record, I met with the Minister for Communications before undertaking this Audit, and on one further occasion towards the end of the Audit to outline the progress of the Audit to that date.

CHAPTER 2: SETTING THE CONTEXT

As infrastructure with a critical role in the Australian economy and in society more generally, the telecommunications sector has long held a place of ongoing and significant interest to Australian governments and the Australian public. Political sensitivity around the role of government and commercial disputes flowing from the regulatory framework has been a feature of the telecommunications sector in Australia for more than two decades. Many of the issues that arose during the national broadband network (NBN) public policy processes between April 2008 and May 2010, the focus of this public policy process audit, had their genesis in debates, regulations and actions within the telecommunications sector in an earlier period in Australia's history. Australian Governments have played a central role in the development and delivery of telephony services since they first became available in Australia in the mid-1800s. Indeed, Section 51(v) of the Constitution recognises the need for all Australians to have access to adequate communication services by giving the Federal Government power over all postal, telegraphic, telephonic and other like services. This role was evidenced by the creation of the Postmaster-General, the Overseas Telecommunications Commission, the Australian Telecommunications Commission (Telecom) and then Telstra.

Over the past 25 years, there has been a rapid shift in the focus of Australian consumers and businesses, away from postal and telephony services to information technology services, together with a move towards less direct government service involvement in the sector. In the late 1980s, Telecom, the predecessor to Telstra, was corporatised as part of the Hawke Government's package of microeconomic reforms. Since that time, there has been considerable debate about the need for structural separation of Telecom and then Telstra, which then and now provided monopoly telephony services.[3] The issue arose again in the mid-1990s when the first tranche of Telstra was privatised under the Howard Government, but the public policy focus at that time was predominantly on promoting network competition and structural separation was not pursued.[4]

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[3] The Davidson Inquiry into *Telecommunications Services in Australia* in 1982 had concluded that separation of system operation and service provision was 'essential' (para. 4.41) and the May 1988 Ministerial Statement on *Australian telecommunications services: a new framework* acknowledged issues around structural separation, paras 3.95-3.99.

[4] Minister for Communications and the Arts, 1996, 'Partial Sale of Telstra', Opening Address to ATUG 96, Melbourne, 30 April 1996 and Richardson, D., 1996, *Telstra: Privatisation Issues*, Parliamentary Research Service Current Issues Brief No. 8 1996-97, 8 October 1996, p. 9.

2.1 Regulatory Reform To Encourage Competition

The objective of the 1997 telecommunications regulatory reforms was to effectively deregulate the telecommunications industry, to allow new players to enter the market to increase competition in the sector and to create a regulatory environment that promoted the greatest practicable use of industry self-regulation.[5]

There were four main aspects of the regime: declaration of a service; model terms and/or indicative prices; arbitration of access disputes; and undertakings. The main focus of these regulatory reforms was to ensure that telecommunications carriers that were competing, or intended to compete with Telstra, had access to Telstra's network at appropriate prices and conditions.

If a telecommunications service was declared, a provider carrier against which the declaration was made (mainly Telstra) was required to comply with standard access obligations and provide the same service to other competing carriers when requested, as it was providing to itself. Services that were not declared were still open for commercial negotiation between parties, but there was no obligation on a carrier to provide access to the service to other industry parties or on an 'equivalence' basis. Services deemed declared through the initial legislation included the Domestic Public Switched Telephone Network Originating and Terminating Service (PSTN), the Domestic Transmission Capacity Service and the Digital Data Access Service (DDAS).[6]

Additional services declared between 1997 and 2007 included the Integrated Services Digital Network (ISDN) Originating and Terminating Service, Local Carriage Services (LCS) and Wholesale Line Rental Service. The Unconditioned Local Loop Service (ULLS) and Line Sharing Service (LSS) were also declared. Most of the services declared since 1997 were critical in enabling Telstra's competitors to begin providing a broader range of services to Australian telecommunications customers and ultimately to begin investing in infrastructure themselves.[7]

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[5] ACCC, 2000, *Annual Report 1999-2000*, p. 63; Telecommunications Bill 1996, Explanatory Memorandum Volume 1, Objects and Regulatory Policy, refers to s. 3 and s. 4 of the Act.
[6] ACCC, 2007, *Fixed Services Review: A second position paper*, April 2007, p. 18.
[7] ACCC, 2007, *Fixed Services Review: A second position paper*, April 2007, p. 19.

Once a service was declared, an access provider was subject to standard access obligations such as supplying the declared service to other telecommunications carriers at the same level of quality and fault handling it was providing to itself and allowing interconnection on an 'equivalence' basis. The ACCC was required to provide pricing principles and was able to provide model terms and conditions and indicative prices at its discretion. While the objective of the regulatory regime was that commercial parties would negotiate terms of access, it provided for arbitration by the ACCC in the event the access seeker and access provider could not agree, but there was no right of appeal of an ACCC determination in an access dispute.

The final part of the regulatory regime related to undertakings by access providers. An undertaking allowed the access provider to present proposed terms and conditions for access seekers for supply of the declared service. The ACCC could either accept the entire undertaking or reject it, but it could not accept parts of the undertaking or accept the undertaking conditionally. The ACCC's decisions with respect to undertakings could be appealed.

While the 1997 regulatory regime sought to promote self-regulation in the telecommunications industry, the reality turned out to be very different. Even after only a couple of years in operation, the ACCC conceded that the regime had 'significant drawbacks'. It was slow and resource intensive. [8] For example, Telstra lodged several undertakings relating to the ULLS - in 2003, 2004 and 2005 - all of which it either withdrew or were rejected by the ACCC.[9] In 2006 alone, the ACCC made 15 determinations in relation to access to Telstra's ULLS by seven different access seekers.[10]

Around this time, as a result of a number of regulatory decisions against Telstra, the ACCC drove down ULL prices by more than 30 per cent. Copper access pricing not only fell below the average price of any alternative fixed network, but below the marginal price of connecting Hybrid Fibre Coaxial (HFC) networks in many places, creating an incentive for other providers to buy access from Telstra rather than invest in new

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[8] ACCC, 2000, *Annual Report 1999-2000*, p. 73.
[9] ACCC, 2009, *Assessment of Telstra's Unconditioned Local Loop Service Band 2 monthly charge undertaking Final Decision Public Version* April 2009, pp. 25-26.
[10] ACCC register of Unconditioned local loop service (ULLS) determinations. Retrieved from: http://registers.accc.gov.au/content/index.phtml/itemId/768629 on 20 May 2014.

networks. Telstra was also arguing that ULL prices were below cost forcing it to subsidise its competitors.[11]

In its review of fixed services in 2007 the ACCC noted that the approach it adopts to pricing could have a significant effect on the incentives for efficient investment in infrastructure.[12]

Despite these ongoing disputes, the Australian Communications and Media Authority noted that 88 per cent of Australia's population was connected to an ADSL enabled exchange in 2006 and this increased to 91 per cent by January 2007.[13] This included increased penetration of ADSL enabled exchanges into regional areas.[14]

2.2 Expanding Broadband Use Internationally

Australian experience in relation to demand for information technology and services was a reflection of world trends. As the 1980s progressed, personal computers moved from the realm of technicians and hobbyists, becoming smaller, more reliable and cheaper. The world wide web was becoming well established by the early 1990s, and Australia's first commercial internet provider was established in 1992. Household computer usage quickly morphed from a focus on computer games to the internet, electronic mail and a range of online services and databases.

On the back of the rapid expansion of the internet, many governments around the world considered how best to promote the roll out of high-speed internet or broadband.[15]
A range of factors has influenced deployment of broadband. First, the financial viability of broadband deployment was strongly influenced by geography and demographics, in particular population densities (apartment versus suburban dwellings) and distances on local copper loops.[16] Population densities and the high proportion of people living in

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[11] Will Irving, 2010, The Telecoms' Rubik's Cube, UniSA Trade Practices Workshop 2010, mimeo, pp. 5 & 6.
[12] ACCC, 2007, *Fixed Services Review: A second position paper*, April 2007, p. 67.
[13] ACMA, 2008, *ACMA Communications Report 2006-07*, 14 February 2008, p. 25.
[14] ACMA, 2006, *ACMA Communications Report 2005-06*, 30 October 2006, p. 16 and ACMA, 2008, *ACMA Communications Report 2006-07*, 14 February 2008, p. 180.
[15] Crandall, R, Lehr W. and Litan R, 2007, 'The Effects of Broadband Deployment on Output and Employment: A Cross-sectional Analysis of U.S. Data', *Issues in Economic Policy*, the Brookings Institute, Number 6, July 2007, p. 33.
[16] Webb, D, 2007, 'Investment in Telecommunications Networks: a Perfect Storm?', Speech to the IET Wellington Branch, 20 June 2007 and OECD, 2008, *Developments in Fibre Technologies and*

apartments favoured the business case for constructing fibre networks in countries like Japan and Korea, while shorter copper loops in places like the UK reduced the advantage of deploying fibre against using ADSL technology. Second, the existing state of competition in telecommunications markets (such as the level of cable deployment by cable television operators where the cables could also provide broadband access) provided a significant competitive spur to deployment of fibre networks in countries like the Netherlands.[17] And finally, regulatory clarity and certainty was key to either promoting or hindering investment with uncertainty in relation to the extent of future regulatory intervention and its impact on expected returns providing a strong disincentive to invest.[18] In Europe, trade-offs between promoting competition versus pressure to deploy fibre to keep economies growing and retaining competitiveness with the rest of the world were acknowledged.[19]

In the regulatory arena in overseas countries, there were also major questions around providing fair access to bottlenecks in telecommunications while at the same time providing the correct incentives for efficient investment.[20] More specifically, the deepest level in the network where competition is effective and sustainable is directly impacted by the technology chosen.[21] That is, the economics for competitors to invest in their own facilities is affected by where in the network unbundling occurs.[22] Investment in next generation infrastructure is also impacted by regulatory uncertainty.

In early 2008 the OECD noted 'In countries which have chosen to allow network sharing and unbundling as part of their policy framework to foster competition and reduce significant market power, the topologies of the networks have implications from the

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Investment, Working Party on Communication Infrastructures and Services Policy, 3 April 2008, pp. 16 & 21.

[17] Wieland, K, 2007, *The FTTx Mini-Guide*, Nexans, February 2007, pp. 26 and 29. http://www.nexans.com/eservice/SouthEastAsia-en/navigatepub_167371_-7831/Launch_of_the_1st_FTTx_Mini_Guide_a_collaboration_.html and Onwurah, C, Head of Telecoms Technology, Ofcom 2007, 'A regulatory perspective on FTTx deployments', presentation to FTTx Summit, 19th June 2007. www.steptoe.com/assets/attachments/3060.ppt.

[18] Wieland, K, 2007, op. cit., pp. 27-8;

[19] Hutcheson, L, 2008, 'FTTx: Current Status and the Future', *IEEE Communications Magazine*, July 2008, p. 92.

[20] Onwurah, C, Ofcom 2007, 'A regulatory perspective on FTTx deployments', presentation to FTTx Summit, 19 June 2007. www.steptoe.com/assets/attachments/3060.ppt.

[21] Ibid.

[22] Analsys Mason, 'Introducing Analysys Mason, Expertise and Experience in FTTx',. Retrieved from: www.analysysmason.com/pagefiles/2398/fttx_web.ppt. and OECD 2008, *Developments in Fibre Technologies and Investment*, Working Party on Communication Infrastructure and Services Policy, p. 17.

competition and policy perspective'.[23] At that time 28 out of 30 OECD countries including Australia were using local loop unbundling as part of their regulatory policy.[24] The OECD concluded that technological choices relating to deploying fibre networks would determine both the business models and the regulatory options available.[25] In the EU, the prevailing view was that the public sector's role should be limited to ensuring the market functions efficiently.[26]

2.3 Australians Embracing The Internet And Broadband

In Australia, the number of households with access to a computer rose from 3.1mn in 1998 to 5.0mn in 2003. Over that same period the number of households with access to the Internet rose from 1.1mn to 4.0mn. That is, computer access rose from 44 per cent to 66 per cent of households and internet access rose from 16 per cent to 53 per cent of households over the five years.[27] By 2006-07 computer access was 73 per cent of households and internet access 64 per cent of households.[28]

Over this period consumers were also moving up the technology ladder, including to increased levels of broadband internet access.[29] At end March 2001 there were 27,000 DSL (broadband) subscribers in Australia.[30] By end March 2007 DSL subscribers had risen to 3.4mn. Broadband accounted for 67 per cent of the 6.4mn internet subscribers. In addition to DSL, broadband subscribers include those accessing services via ISDN, satellite, wireless, cable and other non dial-up technology.[31] Thus by 2006-07 43 per cent of households in Australia had broadband access, with 64 per cent of households having internet access.[32] Mirroring the move from dial-up to broadband was the brisk uptake of increased bandwidth capacity among broadband users. In the two and a half

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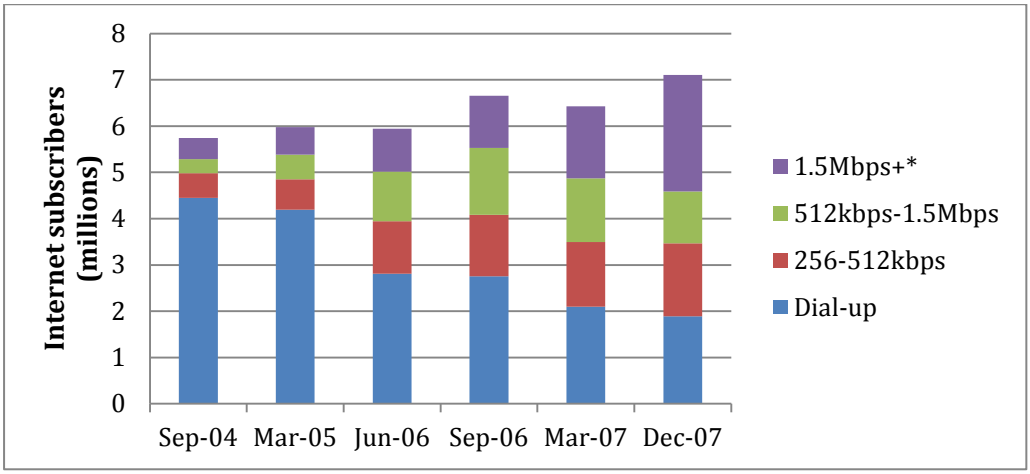
[23] OECD, 2008, *Developments in Fibre Technologies and Investment*, Working Party on Communication Infrastructure and Services Policy, p. 27.
[24] Ibid., p. 51.
[25] Ibid., p. 28.
[26] Ovum, 2007, *A comparison of broadband policy in Europe and Asia*, 27 July 2007, p. 5.
[27] Australian Bureau of Statistics (ABS), 2004, *Household Use of Information Technology 2002 and 2003*, cat. no. 8146.0, p. 6.
[28] ABS, 2007, *Household Use of Information Technology 2006-07*, cat. no. 8146.0, pp. 11 and 13.
[29] While the definition of 'broadband' is changing over time, in these figures a broadband connection refers to an 'always on' internet connection with an access speed equal to or greater than 256kbps. This contrasts with dial-up access where users can use their telephone line for either voice services such as phone calls or for internet connection but not both at the same time.
[30] ABS, 2001, *Internet Activity*, March Quarter 2001, cat. no. 8153.0, p. 14.
[31] ABS, 2007, *Internet Activity, Australia, Mar 2007*, cat. no. 8153.0, viewed 8 April 2014, http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/B5E9C6B29994B110CA25743400186DA5?opendocument.
[32] ABS, 2007, *Household Use of Information Technology 2006-07*, cat. no. 8146.0, pp. 8-9.

years from September 2004 to March 2007 broadband subscribers with a download rate of more than 1.5Mbps more than tripled from 454,000 to 1.6mn.[33]

CHART 1 INTERNET ACCESS AND DOWNLOAD SPEEDS 2004-2007



*In Dec 2007 this figure included 1.3mn subscribers on an 8-24Mbps plan and 180,000 on a 24Mbps+ plan.

Source: ABS, cat. no. 8153.0, various.

Alongside these developments was the even more impressive uptake of mobile technologies. At the turn of the century, Australia had around 0.4 mobile services in operation for every person in the country.[34] By June 2007, this had grown to more than one mobile service in operation for every person in the country.[35] Convergence in the telecommunications sector also resulted in consumers beginning to use mobile devices for a range of activities including internet connectivity, with 56 per cent of mobile phones having advanced features by 2006-07.[36] Between the end of December 2007 and the end of June 2008, the number of wireless broadband subscribers increased by nearly 90 per cent.[37]

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[33] ABS, 2005, *Internet Activity,* March 2005, cat. no. 8153.0, p. 13 and ABS, 2007, *Internet Activity, Australia, Mar 2007*, cat. No. 8153.0, viewed 8 April 2014, http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/B5E9C6B29994B110CA25743400186DA5?opendocument.

[34] ACMA, 2006, *ACMA Communications Report 2005-06*, p. 51 and ABS, 2001, *Year Book Australia 2001*, cat. no. 1301.0, p. 170.

[35] ACMA, 2008, *ACMA Communications Report 2006-07*, p. 12.

[36] ACMA, 2008, *ACMA Communications Report 2006-07*, p. 22.

[37] ABS, 2008, *Internet Activity, Australia, Jun 2008*, cat. no. 8153.0, viewed 24 June 2014, http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/41BFD19AD2AA50EACA25758D0023D847?opendocument.

By end December 2007 there were 5.2mn broadband subscribers in Australia, of which 1.3mn had a subscription for 8-24Mbps and 180,000 a subscription for 24Mbps or higher. That is, 28 per cent of all broadband users had access to a service of 8Mbps or higher.[38]

At end October 2008, the Department of Broadband, Communications and the Digital Economy estimated that no more than 6.4 per cent or 722,500 premises in Australia were 'underserved'. Underserved premises were defined as residential or small business premises that were without access to a terrestrial broadband service that: provided at least 512kbps download speed and 128kbps upload speed; provided a monthly data allowance of 3GB; and cost the customer no more than $2,500 over three years.[39]

2.4 New Industry Players Still Struggling

While the open access regime had been in place nearly a decade by 2005-06, the telecommunications market was still highly concentrated. Telstra accounted for 65 per cent of total market revenue, Optus 21 per cent and the remaining 14 per cent was generated by more than nine other players.[40] This dominance by Telstra extended into the wholesale market where Telstra held more than 70 per cent of the $4.2bn wholesale market in 2007.[41]

One of the ways that carriers other than Telstra could provide broadband more directly to customers was for them to deploy DSLAM (Digital Subscriber Line Access Multiplexer) units in Telstra exchanges. This allowed them to use the wires from Telstra's exchange to individual premises (the ULLS) to provide broadband (and voice) services. Carriers could then use either their own or Telstra's infrastructure at the Telstra exchange to send or receive signals to and from elsewhere in the telecommunications network. Uncertainty around the price of access to Telstra's

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[38] ABS, 2008, *Internet Activity, Australia, Dec 2007*, cat. no. 8153.0, viewed 14 May 2014, http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/021AF2525B2376A4CA2574C90017BA24?opendocument.
[39] Department of Broadband, Communications and the Digital Economy, 2008, Answers to Estimates Questions on Notice , Senate Standing Committee on the Environment, Communications and the Arts, Supplementary Estimates Hearing October 2008, Question 44.
[40] ACCC, 2007, *Fixed Services Review: A second position paper*, April 2007, p. 4.
[41] Budde, P and Harpur, P, 2007, *2007 Australia Telecoms Industry Statistics and Forecasts*, 20th edition, October 2007, p. 1.

infrastructure was a particularly contentious and difficult issue for non-Telstra carriers when seeking access to the ULLS, and in some cases took years to determine.[42]
Non-Telstra organisations began to deploy DSLAMs in 2000. For example, XYZed (a subsidiary of Optus) announced the deployment of DSLAM equipment in 50 Telstra exchanges in September 2000, with the intention of ultimately targeting more than 100 Telstra exchanges in areas where corporate and large enterprise businesses were located.[43] A number of other carriers followed suit, investing actively between 2004 and 2006 in placing DSLAMs in Telstra exchanges. Factors influencing deployment were regulatory decisions by the ACCC and significant reductions in the carrier licence application charge and annual licence charge (falling from $10,000 to $2,200 and from $10,000 to less than $1,000, respectively).[44] Uptake of the Government's Higher Bandwidth Incentive Scheme (HiBIS) was probably also influencing deployment by that time.[45]

In 2006 the ACCC and the Minister for Communications, Information Technology and the Arts expressed concerns regarding Telstra's failure to enable some exchanges for use of ADSL2+, a faster internet service, unless Telstra was facing competition at that particular exchange.[46] By that time the third tranche of Telstra shares had been sold.[47] Telstra was effectively a private company, making decisions (as required by law) in the best interests of its shareholders.

By January 2007 there were 2,432 exchanges providing ADSL coverage out of a total of 5,092. ADSL2+ was available at 17 per cent of these exchanges. In metropolitan areas 57 per cent of exchanges had ADSL2+ services in January 2007.[48] There were 18 other carriers besides Telstra which had deployed 1,354 DSLAMs in exchanges around Australia (although in commercially attractive areas such as the larger cities there could

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[42] Ovum, 2011, *Unfinished Business – 20 Years of competition in Australia's telecommunications sector: A report for Optus by Ovum*, November 2011, p. 23.
[43] XYZed, 2000, Media Release, 'First competitive DSL network opens for business', 4 September 2000, www.xyzed.com.au.
[44] ACMA, 2006, *ACMA Communications Report 2005-06*, p. 53.
[45] ACMA, 2006, *ACMA Communications Report 2005-06*, p. 53.
[46] Minister for Communications, Information Technology and the Arts, 2006, 'Minister joins call for Telstra to 'flick the switch' on fast broadband, Media Release, 30 November 2006 and ACCC, 2006, 'ACCC Challenges Telstra', Media Release MR288/06, 30 November 2006.
[47] http://www.telstra.com.au/abouttelstra/company-overview/history/telstra-story/.
[48] ACCC, 2007, *Fixed Services Review: A second position paper*, April 2007, p. 37 and ACMA. 2008, *ACMA Communications Report 2006-07*, 14 February 2008, p. 25.

be several DSLAMs deployed in a single exchange).[49] Telstra continued to make ADSL broadband available in additional exchanges and upgraded many exchanges to ADSL2+ through 2007 and early 2008.[50]

As competition in the broadband market began to grow, there were five separate attempts by various companies to obtain government and regulatory approval so as to deliver a Fibre To The Node (FTTN) network. Telstra put forward three proposals to government and regulators to upgrade its network - in 2005, 2006 and 2007. None came to fruition. A fourth attempt was made by a consortium of nine carriers (calling itself G9) comprising Telstra's major rival carriers, which proposed building a FTTN network in metropolitan areas, with the network to be owned by a separate company, Fibre Access Network Operating Company (FANOC). G9 lodged a Special Access Undertaking (SAU) with the ACCC in May 2007 and the ACCC issued a draft determination in December 2007 rejecting the undertaking. G9 withdrew its SAU in March 2008 noting that it intended to lodge another one once it had addressed the issues raised in the ACCC's draft determination.[51]

The fifth attempt was the process begun in 2007 by the Howard Government, which set up an Expert Taskforce to seek proposals for the commercial roll out of new high-speed broadband infrastructure in capital cities and major regional centres. The Taskforce called for proposals by February 2008, but the incoming Rudd Government cancelled the process in December 2007.[52]

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[49] WIK-Consult, 2008, *The Economics of Next General Access – Final Report*, 10 September 2008, pp. 45-46.
[50] Minister for Communications, Information Technology and the Arts, 2007, 'Telstra signs agreement with Government to switch on ADSL broadband in more than 200 communities', Media Release, 10 October 2007 and Prime Minister and Minister for Broadband, Communications and the Digital Economy, 2008, '900 Exchanges serving 2.4 million households receive ADSL2+ broadband', Media Release, 6 February 2008.
[51] Telstra, 2005, Letter to the ASX Company Announcements Office, *The Digital Compact & National Broadband Plan*, 10 August 2005; ACCC, 2006, 'ACCC 'perplexed' by Telstra decision on fibre-to-the-node investment', Media Release, 7 August 2006 and ABC, 2007, 'Telstra 'ready to roll out' broadband plan', news article 7 June 2007, http://www.abc.net.au/news/2007-06-07/telstra-ready-to-roll-out-broadband-plan/61190; ACCC, 2007, *Assessment of FANOC's Special Access Undertaking in relation to the Broadband Access Service Draft Decision*, December 2007; FANOC, 2008, Letter from Company Secretary of FANOC Pty Ltd to the ACCC regarding 'FANOC Pty Limited (FANOC) Special Access Undertaking' dated 7 March 2008.
[52] For further details see DBCDE, 2008, 'Scoping Paper – Key legislative and regulatory issues and possible proposals for change', Second Meeting, National Broadband Network Panel of Experts, 28 May 2008.

Government Broadband Funding Focuses On The Regions, Health And Education

Since the mid-1990s, the Australian Government has produced a number of reports regarding broadband. Many of these reports have emphasised the opportunities for broadband to deliver substantial economic and social benefits to Australia.[53] Successive governments also established a number of funding programs to encourage increased and improved broadband services. For example, in 1997, the Networking the Nation Fund was established, with the objective of enhancing telecommunications infrastructure and services, and access to such services, in rural Australia.[54] In 2003 the Government introduced HiBIS, a funding program designed specifically to promote broadband uptake as part of the 2003 National Broadband Strategy.[55] HiBIS provided registered internet service providers with incentive payments for supplying broadband services in regional, rural and remote areas at prices comparable to those available in metropolitan areas. HiBIS was extended and evolved into the first part of the 2005 Broadband Connect program and then the Australian Broadband Guarantee.[56]

Alongside these funding programs, between 2000 and 2005 the Australian Government initiated a number of smaller infrastructure programs targeted at the use of newer technologies and broadband. These programs were aimed at enhancing outcomes in health, education and the delivery of government services in rural, regional and remote Australia including to Indigenous communities.[57] In general these programs were aimed at addressing perceived gaps in the provision and coverage of broadband services.

The 2007 Federal Election – Broadband Moves To Centre Stage

As noted earlier, many governments internationally were considering their role in fostering fibre based telecommunications networks at the time the policy

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[53] National Office for the Information Economy, 2003, *Australia's Broadband Connectivity* – The Broadband Advisory Group's Report to Government, p. 1.
[54] Australian National Audit Office (ANAO), 1999, *Networking the Nation – the Regional Telecommunications Infrastructure Fund*, Audit Report No. 43 1998-1999, p. 23.
[55] National Office for the Information Economy, 2003, *The National Broadband Strategy Explained*, brochure, September 2003.
[56] ANAO, 2007, *Management of the Higher Bandwidth Incentive Scheme and Broadband Connect Stage 1*, Audit Report No. 36 2006-07, pp. 13-14.
[57] The National Communications Fund, Coordinated Communications Infrastructure Fund, Clever Networks and Backing Indigenous Ability referenced in National Office of the Information Economy (undated), *Coordinated Communications Infrastructure Fund Discussion Paper*, pp. 1-2 and Minister for Communications, Information Technology and the Arts, 2005, 'Connect Australia: A Plan to Future Proof Telecommunications', Media Release, 17 August 2005.

announcements were made by the two major Australian political parties in the lead up to the 2007 election. At around the same time, the OECD concluded that:

> 'In general governments should remove barriers to entry and to investment, should facilitate a cost effective roll out, ensure that new services can develop, leave it to the market to the greatest extent possible to develop networks and markets, provide regulatory certainty and be vigilant in achieving a competitive marketplace for networks and services.'[58]

In September 2006 the Howard Government announced it would provide funding to encourage private sector roll out of large scale, sustainable and scalable broadband infrastructure in rural, regional and remote Australia.[59] This was the first time an Australian Government had announced an intention to provide funding for large-scale broadband infrastructure. The Government announced a successful bidder in June 2007 as part of its 'Australia Connected' election package. The package included:

- a new national high speed wholesale network to deliver a mix of fibre optic, ADSL2+ and wireless broadband platforms to rural and regional areas. The Government was to contribute $958mn in funding towards the project that was to be rolled out by OPEL, a joint venture between Optus and rural group Elders by June 2009. The consortium was to contribute over $900mn to the project. The roll out was designed to ensure broadband coverage for 99 per cent of the population and offer speeds of 12Mbps at prices comparable to metropolitan areas. As part of the project 15,000km of fibre optic cable was to be laid linking rural areas to major cities in order to provide increased backhaul capacity
- a plan to facilitate a new commercial fibre optic network build in cities and larger regional centres via a competitive bids process and subsequent enabling legislation. This process was to leverage the previously announced proposals to roll out a commercial fibre broadband network by Telstra and the G9 consortium (neither organisation was seeking funding). The aim of the competitive bids process was to evaluate the regulatory arrangements for the investment in an open and transparent manner
- continuation of the Australian Broadband Guarantee
- creation of BroadbandNow – a consumer help centre about getting connected and

[58] OECD, 2008, *Developments in Fibre Technologies and Investment*, p. 36.
[59] Minister for Communications, Information Technology and the Arts, 2006, '$600 million Broadband Connect program launched', Media Release, 21 September 2006.

- preservation of the $2bn Communications Fund to provide future income for upgrades to regional and rural telecommunications infrastructure. [60]

In March 2007, the Australian Labor Party (Labor) announced that, if elected, a Labor Government would roll out a new FTTN network, which would:

- connect 98 per cent of Australians to broadband internet services with minimum speeds of 12Mbps
- improve broadband services for the remaining two per cent of Australians in regional and rural Australia, and
- involve a public equity injection up to $4.7bn.[61]

The Department of Broadband, Communications and the Digital Economy (DBCDE) did considerable work on the Labor policy commitment in the lead-up to the 2007 federal election, including on costing the commitment and considering strategy, risks, industry capacity and the likely actions of Telstra and the ACCC.[62] In its Incoming Government Brief, DBCDE identified implementing Labor's broadband election commitment as the top priority for the Department and outlined key issues that would need to be addressed, including the risk of compensation being payable to Telstra.[63] The Brief indicated that the cost of a FTTN NBN was 'likely to be very significant', would require using Telstra's network, that non-Telstra proposals were likely to seek regulatory change, and advised that it would continue to develop cost estimates based on expert advice.[64]

After the swearing in of the new Government on 3 December 2007, the incoming Minister for Broadband, Communications and the Digital Economy, Senator the Hon Stephen Conroy (the Minister), moved quickly to reiterate the policy commitment to build a national high-speed broadband Fibre To The Node network, and noted the ambition of completing the process to determine who would build the network by the

[60] Minister for Communications, Information Technology and the Arts, 2007, 'Australia Connected: Fast affordable broadband for all Australians', Media Release, 18 June 2007.
[61] ALP, *New Directions for Communications: A Broadband Future for Australia – Building a National Broadband Network*, March 2007.
[62] Audit discussions.
[63] ANAO. 2010, *The National Broadband Network Request for Proposal Process*, Performance Audit, Audit Report No. 20 2009-10, pp. 41 and 54.
[64] ANAO, 2010, op. cit., pp. 52 and 54.

end of June 2008.[65] The announcement set in place tight timing constraints for the finalisation of policy details and conduct of a tender process that would give effect to the incoming Government's NBN policy.

In early December 2007, the Minister asked that no further work be undertaken on costing the Government's $4.7bn election commitment. According to the Minister, the Election Commitment $4.7bn was based on a proposal from Telstra given to the former Government.[66] The Government's rationale for why it didn't need this work undertaken for the original RFP appears to have been based around three propositions:

- the market would supply the solution
- the maximum at risk for taxpayers was $4.7bn, and
- market forces would ensure value for money.[67]

This was a period of intense activity within the Government and it is outlined in some detail in the Australian National Audit Office (ANAO) 2009-10 performance audit *The National Broadband Network Request for Proposal Process*.[68] Key points in the public policy process are outlined below.

- DBCDE officials provided initial lengthy strategic briefings to the Minister on the Incoming Government Brief in late November and early December 2007.[69] Against this background, DBCDE began to develop a draft Request for Proposals (RFP).[70]
- In December 2007, DBCDE advised the Government that Telstra had estimated the cost of rolling out a NBN based on FTTN and other technologies had risen to $12bn, would take eight years to build, and require a mix of technologies to cover 98 per cent of homes and businesses.[71]
- DBCDE's own work in late 2007 on the cost of the NBN stopped when the Minister stated it should be discontinued. According to the ANAO, the Minister considered DBCDE's estimates would be heavily caveated, costly to undertake and a poor second best to what proponents provided.[72]

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[65] Minister for Broadband, Communications and the Digital Economy, 2007, 'Government committed to FTTN national network', Media Release, 7 December 2007.
[66] Senate Standing Committee on Environment, Communications, and the Arts, 2008, Official Committee Hansard, Additional Budget Estimates, ECA 201-202, 18 Feb 2008.
[67] ANAO, 2010, op. cit., p. 24 and section 2.48.
[68] Ibid.
[69] Audit discussions.
[70] ANAO, 2010, op. cit., pp. 47-48.
[71] Ibid., pp. 52-53.
[72] Ibid., p. 24 and p. 53.

- The Government's approach to rolling out its election commitment on broadband appears to have been settled early in 2008, following a Cabinet discussion. In January, DBCDE engaged the Australian Government Solicitor (AGS) as the probity adviser for the RFP process and on 21 January the Government agreed to establish a Panel of Experts, chaired by the Secretary of DBCDE and including the Secretary to the Treasury, to conduct a competitive assessment process and recommend a proponent to roll out the NBN.[73]
- The Government took the decision at this time to conduct the RFP process in one stage, rather than as a multi-stage process. A conventional two-stage process would have involved first seeking expressions of interest before a second tender stage. This would have helped better determine the scope of proposals and any necessary regulatory improvements, and would have facilitated a competitive dialogue with potential proponents.[74] While a two-stage process would have been more conventional for a project of this size, nature and risk, it also would have extended the process. The Government concluded that a one-stage process was appropriate, and the risks could be managed.[75]
- In March 2008, the Government sought formal submissions from industry and the public over a two-week period to assist in the development of the RFP.[76] Specialist advisors to the RFP process were appointed from mid-March.[77]
- The short timeframe in which the policy was settled and the RFP developed limited the opportunity for consultation and for the incorporation of additional details before the RFP process was announced on 11 April 2008.

Shortly before the announcement of the RFP process, the new Government also terminated the contract entered into between the former Government and OPEL for the provision of a broadband network covering underserved areas and premises across Australia. The Minister indicated that the contract was terminated because analysis by DBCDE demonstrated the OPEL network would cover only 72 per cent of identified underserved premises, rather than the 90 per cent stipulated in the contract.[78]

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[73] Ibid., pp. 30, 44 and 46. The five further members of the Panel were appointed on 11 March 2008.
[74] Ibid., p. 43.
[75] Ibid., p. 43.
[76] Ibid., p. 49.
[77] Ibid., p. 48.
[78] Minister for Broadband, Communications and the Digital Economy, 2008, 'OPEL Networks Funding Agreement not to proceed', Media Release, 2 April 2008.

AN OUTLINE OF THE NBN PUBLIC POLICY PROCESS

Chapters 3 and 4 outline the public policy process to support decisions of the Australian Government relevant to NBN policy during the Audit period, April 2008 to May 2010. It covers two major processes that I will refer to as:

- NBN Mark I – the Request for Proposals (RFP) tender
- NBN Mark II – the advice and processes that led to the establishment of NBN Co.

Chapter 5 covers, as requested in the Terms of Reference, a description of:

- the origin and basis for NBN Co's mandate to run Fibre To The Premises (FTTP) to 90-93 per cent of Australian premises
- the approach taken in regard to obtaining cost benefit or independent reviews of the project.

A detailed chronology of events covering the period of the Audit is at Appendix 4.

CHAPTER 3: NBN MARK I - 'ONE STAGE' RFP TENDER

Some elements of NBN Mark I have been covered in ANAO and Senate Select Committee reports. Much of the detailed material presented here is contained in those reports, and this Audit has drawn on those reports where possible. My task here is to outline the public policy process that was followed.

3.1 Tender Process With A Compressed Timetable

For a project the size, complexity and scope of NBN Mark I, the Government had options for conducting the RFP tender process as a single, or multistage process. The Government was determined to implement its NBN policy as soon as practical and so the RFP process selected by the Government was a 'one stage' process, supported by mechanisms to provide clarification to the proponents as the tender proceeded. Proponents were aware of the tender process and its likely tight timeframe in early December 2007 when the Minister confirmed the Government would proceed quickly with its election commitment.[79] In the event, the Government released its RFP documentation to solicit applications to roll out and operate NBN Mark I on 11 April 2008. The RFP documentation set out the scope of the intended NBN Mark I, which was to:

- deliver minimum download speeds of 12 megabits per second to 98 per cent of Australian homes and businesses
- have the network rolled out and made operational progressively over five years using Fibre To The Node (FTTN) or Fibre To The Premises (FTTP) technology
- support high quality voice, data and video services including symmetric applications such as high-definition video-conferencing
- earn the Government a return on its investment
- facilitate competition in the telecommunications sector through open access arrangements that allow all service providers access to the network on equivalent terms
- enable uniform and affordable retail prices to consumers, no matter where they live. [80]

[79] Minister for Broadband, Communications and the Digital Economy, 2007, 'Government committed to FTTN national network', Media Release, 7 December 2007.
[80] Minister for Broadband, Communications and the Digital Economy, 2008, 'Government invites National Broadband Network proposals', Media Release, 11 April 2008.

While largely reflecting the Government's 2007 election commitment, the policy set out in the RFP had been altered in two important areas:

- it was less prescriptive in relation to the technology and the network structure, now seeking FTTN and/or FTTP based proposals, rather than FTTN alone
- it suggested the Government contribution 'could take forms other than an equity investment'.[81]

The March 2007 broadband election commitment had stated that a Labor government would put in place regulatory reforms to provide certainty for investment including that regulated access prices would be set at a level that ensured a commercial return could be made on the NBN.[82] Despite this assurance, and a number of calls for regulatory certainty in the pre-RFP submissions stage of the tender, the RFP only set out the likely regulatory regime in the broadest of terms.[83]

The RFP tender document detailed 18 Commonwealth objectives and six evaluation criteria against which proposals would be evaluated, within the framework of a value for money assessment. The value for money assessment was to take comprehensive account of the costs, benefits and risks of proposals. The evaluation framework did not prioritise either the objectives or the evaluation criteria.[84]

The RFP tender document also set out the timetable for the tender as well as more detailed requirements of what was to be provided in proposals.[85] The original closing date for proposals was 25 July 2008, just 105 calendar days after the release of the RFP documentation with a government decision expected during October 2008. This was a very truncated process for developing proposals for a very large infrastructure project, of significant complexity and with funding requirements likely to be multiples of $4.7bn (the government funding and the associated private sector capital expenditure).

The primary means for addressing the significant risk in the process (from the Government's perspective) for a project of this size and complexity was to design an RFP that maximised flexibility, minimised mandatory technical and structural requirements

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[81] ANAO, 2010, *The National Broadband Network Request for Proposal Process,* Audit Report No. 20 2009-10, Performance Audit, pp. 41-42.
[82] ALP, 2007, *New Directions for Communications: A Broadband Future for Australia – Building a National Broadband Network*, March 2007.
[83] DBCDE, 2008, *Request For Proposals To Roll-Out And Operate A National Broadband Network For Australia*, Request For Proposals Number: DCON/08/18, 11 April 2008, pp. 2, 5, 9-10.
[84] Ibid., pp. 5-6, 33-34.
[85] Ibid., pp. 4, 7-15.

and allowed proponents to offer innovative solutions. However this approach did not fully address specialist advisor concerns prior to release of the RFP that a lack of detail in the RFP documentation put at risk attracting binding offers.[86]

To attempt to address these concerns there were a number of processes put in place to allow communication between proponents and DBCDE from the time the RFP was released to the closing date for bids. These included mechanisms for tenderers to request further information (clarification questions), for the Government to amend the RFP, bilateral meetings for mutual information exchange and the ability for the Government to seek information from a proponent on its proposal.[87] The first formal RFP clarification was released on 9 May 2008, less than a month after the tender began.[88] The first market soundings were undertaken in early to mid-May 2008.[89] This early market sounding, aimed as a listening exercise by DBCDE, raised a number of critical issues. These included proponent concerns about insufficient time to respond to the RFP, inadequacy of network information provided by that time, lack of definitive tender evaluation criteria (and related matters, for example, there was no weighting of criteria or information on potential trade-offs), inability of proponents to lodge binding proposals, lack of certainty surrounding regulatory issues and the importance of bilateral meetings.[90]

The RFP tender document also set out the role for the ACCC.[91] In summary, its role was to 'provide ongoing advice to the Panel on pricing and competition issues, and … provide a written report to the Panel'.[92]

In separate but parallel processes, submissions were invited by 25 and 30 June 2008 respectively on:

- regulatory issues associated with the NBN[93]

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[86] ANAO, 2010, op. cit., p. 51.
[87] DBCDE, 2008, op. cit., clauses 5.1, 5.2, 1.2 and 11.2.
[88] ANAO, 2010, op. cit., p. 106.
[89] Ibid., pp. 73, 106.
[90] Ibid., p. 74.
[91] DBCDE, 2008, op. cit., pp. 2, 36-37.
[92] Ibid., p2.
[93] Minister for Broadband, Communications and the Digital Economy, 2008,'National Broadband Network Request for submissions on regulatory issues', Media Release, 11 April 2008.

- policy and funding initiatives to provide enhanced broadband to rural and remote areas not covered by the NBN with submissions to be considered by the Regional Telecommunications Independent Review led by Dr Bill Glasson AO.[94]

3.2 Pre-qualification

The first tender deadline was pre-qualification within six weeks (by 23 May 2008). In order to pre-qualify, proponents were required to lodge a bond of at least $5mn and sign a Confidentiality Deed.[95] No assessment of capacity to undertake the project was required.

Meeting pre-qualification requirements meant that a proponent would be invited to bilateral meetings with the Government, be eligible to receive network information, receive addenda to the RFP document and the Government's commercial terms and be eligible to submit a proposal.[96]

Potential proponents noted that at the time of pre-qualification it was 'likely that the final corporate structure, consortium membership and financial participants for a Proponent will not be known'.[97] Proponents also asked questions about the timing of provision of network information.

On the day before the pre-qualification deadline, the Minister announced that bidders would have 12 weeks to examine network information from the date all material was made available, effectively pushing out the due date for proposals.[98] This was confirmed in clarification number nine of the RFP released on the day of pre-qualification.[99]

Eight parties met pre-qualification requirements with one later withdrawing.[100]

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[94] Minister for Broadband, Communications and the Digital Economy, 2008, 'Call for submissions on broadband solutions for remote areas', Media Release, 11 April 2008.
[95] DBCDE, 2008, op. cit., section 8.1.
[96] Ibid.
[97] http://www.archive.dbcde.gov.au/2009/april/national_broadband_network/request_for_proposals.
[98] Minister for Broadband, Communications and the Digital Economy, 2008, 'NBN bidders will have 12 weeks to examine network information', Media Release, 22 May 2008.
[99] http://www.archive.dbcde.gov.au/2009/april/national_broadband_network/request_for_proposals
[100] ANAO, 2010, op. cit., p. 33.

3.3 Work Of The Panel Of Experts And Its Advisors

As noted in Chapter 2, a Panel of Experts provided advice to the Minister and, through him, to the Cabinet and its various Committees, and oversaw the governance framework for the RFP tender process. DBCDE and its specialist advisors, including the ACCC, supported the Panel of Experts. There was an interdepartmental committee established to monitor and facilitate whole-of-government coordination, and working groups set up to manage the RFP tender process.[101] DBCDE was responsible for day-to-day management of the RFP including interactions with proponents. The Secretary of DBCDE played an active role in oversighting the implementation of the RFP tender process within DBCDE, as well as chairing the Panel of Experts. Throughout the RFP process DBCDE briefed the Minister regularly.[102] It also put considerable effort into considering risks to the tender process, and undertaking associated scenario planning.[103]

DBCDE and the ACCC provided substantive advice to the Panel of Experts on issues likely to impact the tender on an ongoing basis.

For example, in briefing to the Panel of Experts for its meeting on 28 May 2008, DBCDE advised that all proponents would be seeking regulatory certainty, that the level of wholesale access prices was fundamental to investment, competition and consumer outcomes and that in its submission to the ACCC on an earlier private sector broadband proposal, Telstra had indicated that it would seek considerable compensation if cut-over was legislated to facilitate the use of its customer access network, such as the requirement outlined in the FANOC consortium's proposal.[104]

As Australia's competition policy regulator, the ACCC has particular responsibilities with respect to national infrastructure (including telecommunications). As part of the RFP process the ACCC was tasked with providing the Panel of Experts with ongoing advice on proposals covering issues such as wholesale access services and prices, access arrangements, proposed legislative or regulatory changes and the likely impact of

[101] Ibid., pp. 30-32.
[102] Ibid., pp. 18, 75.
[103] Ibid., pp. 18, 52.
[104] DBCDE, 2008, Scoping paper – Key legislative and regulatory issues and possible proposals for change, 24 May 2008, pp. 1, 13.

proposals on pricing, competition and the long-term interests of end users in the communications sector.[105]

At the same 28 May 2008 meeting, the ACCC made a presentation to the Panel of Experts raising a number of issues for consideration by the Panel. The presentation noted that as there was minimal prospect of NBN duplication (from wireless, HFC or ULL), effective access was critical for the maintenance and continuation of effective competition in the sector, and structural measures might be necessary to ensure equivalent access for telecommunications service providers who were not successful in the RFP process. It raised a series of questions including: how prices should be set once the new arrangements were put in place; what structural arrangements would be required to ensure equivalence as part of the RFP process; options for structural separation as part of the RFP considerations, noting that structural remedies should not be considered in isolation from other features of NBN proposals; how to ensure a smooth transition from a copper to a fibre network; whether the existing copper network should continue to run alongside a fibre network and in what circumstances should existing assets be retired; the prospects for sub-loop unbundling under FTTN; and social policy objectives. In raising the issue of upgrading from FTTN to FTTH, the ACCC questioned to what extent FTTN provided a stepping stone to FTTH and noted the significant cost to upgrade from FTTN to FTTH.[106]

From the outset of the RFP tender process, a Probity Plan was put in place to ensure probity within the process.[107] The probity arrangements were designed both to ensure that tender processes were fair to all tenderers and to guard against and if necessary prevent tenderers from inappropriately influencing those involved in evaluation and decision making in relation to proposals.

DBCDE regularly briefed the Minister during the RFP process.[108] In July 2008, the Minister was advised that the RFP process was unlikely to attract binding offers capable of acceptance.[109]

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[105] DBCDE, 2008, *Request For Proposals To Roll-Out And Operate A National Broadband Network For Australia*, Request For Proposals Number: DCON/08/18, 11 April 2008, clause 10.4.
[106] ACCC, 2008, Presentation to Panel of Experts 28 May 2008, ACCC FOI Request 66-2013.
[107] ANAO, 2010, op. cit., pp. 44-45.
[108] Ibid., pp. 18, 31.
[109] Ibid., p. 82.

At the end of July 2008, the Panel of Experts considered a range of issues that had emerged through the RFP process including overbuild and coexistence (coexistence of ULL and LSS with new NBN network, needed for full node cut-over and potential transitional arrangements, from both technical and competition policy perspectives); compensation issues; international obligations and the capacity of proponents to deliver the network.[110]

In August 2008 DBCDE contracted an existing member of the Panel of Experts as a Strategic Advisor to DBCDE on matters related to the RFP process. This person would provide advice to DBCDE in addition, and separate to his role as a member of the Panel of Experts. His specific role as Strategic Advisor was to provide separate advice to DBCDE on strategic issues, including commercial matters and their interrelationship with other issues that may arise during the RFP process.[111] In his role as Strategic Advisor to DBCDE, this person took part in the second round of market soundings in September and October 2008. According to the ANAO, the probity adviser did not raise issue with this dual role.[112]

3.4 Bilateral Meetings, External Environment And Market Soundings

The first two rounds of bilateral meetings were held between 10 and 12 June 2008 and 31 July and 4 August 2008. The purpose of these meetings was mutual information exchange – to enable DBCDE to learn more about the types of proposals and plans for the NBN that were being developed by proponents and to enable proponents to clarify process requirements and explore the Government's policy and objectives under the RFP.[113]

During these bilateral meetings proponents requested guidance on the relative importance of the Government's objectives, evaluation criteria and regulatory changes that would (or would not) be accepted. DBCDE was unable to elaborate or provide additional insight into the RFP, the Government's objectives or the desired outcome. As

[110] DBCDE, 2008, Agenda Item 9: Issues to assist the Expert Panel's consideration of proposals, NBN Panel of Experts meeting, 30 July 2008.
[111] Letter from Secretary, DBCDE regarding 'Appointment as Strategic Advisor to the Department of Broadband, Communications and the Digital Economy on the National Broadband Network Process', 14 August 2008.
[112] ANAO, 2010, op. cit., para 2.27.
[113] ANAO, 2010, op. cit., pp. 106, 72.

a consequence, proponents found the bilateral meetings with the department and its specialist advisors of limited value.[114]

Responses to detailed questions about the RFP process were sometimes less than timely. For example in mid-June clarification was sought on the process for revising national proposals to take into account a State/Territory based proposal. On 18 July DBCDE referred the proponents back to the RFP document but subsequently sought specialist advice on the matter. A clarification was released on 19 September 2008, three months after the issue was first raised.[115]

It was not clear how the Government would measure the requirement that the national broadband network should cover 98 per cent of Australian homes and businesses, a key objective in the Government's policy and the first listed of the 18 objectives for the NBN.[116] This lack of clarity extended even to basic definitions such as the meaning of 'open access' (objective number 10 in the RFP).[117] Speedy clarification of aspects of the RFP process or the Government's NBN policy may have changed some proponents' decisions to participate in the process.[118]

To enable proponents to prepare credible proposals, information about Telstra's customer access network was required. That information was provided via the first addendum to the RFP on 25 August 2008, four and a half months after the RFP was released, and one month after the original deadline for submissions. Just over a week later on 3 September 2008 the second addendum to the RFP was released, confirming the closing date for bids as 26 November 2008.[119] Bidders had just under three months to finalise their tenders.

Simultaneously with the conduct of the RFP process, there was deterioration in world financial markets. In late 2007, Optus had announced it had obtained advice from an

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[114] ANAO, 2010, op. cit., pp. 19, 73.
[115] ANAO, 2010, op. cit., pp. 71-72.
[116] Senate Select Committee on the National Broadband Network, 2008, Interim Report, December 2008, pp. 14-17 and DBCDE, 2008, *Request for Proposals to Roll-Out and operate a National Broadband Network for Australia*, Request for Proposals Number: DCON/08/18, 11 April 2008, clause 1.3.1.
[117] Senate Select Committee on the National Broadband Network, 2008, op. cit., pp. 20-26.
[118] ANAO 2010, op. cit., p. 72; Telstra letters dated 29 August 2008 and 26 September 2008 from Telstra's Chairman to the Minister regarding further separation of Telstra.
[119] Minister for Broadband, Communications and the Digital Economy, 2008, 'Date set for National Broadband Network proposals', Media Release, 3 September 2008; ANAO, 2010, op. cit., p. 106.

investment bank that 'with specified regulatory changes, the required capital could be easily raised from the financial markets'.[120] However, just prior to release of the RFP, Telstra drew attention to the 'current turbulence in credit markets'.[121] The financial situation worsened further through the RFP process. At the time the RFP tender commenced in April 2008 the S&P/ASX 200 index was down 18 per cent from its high in November 2007. By June 2008 the index was down 23 per cent and by the time the RFP closed in November 2008 the Australian market had slumped by 45 per cent.
On 20 August 2008 DBCDE advised the Minister that a recurring theme arising from bilateral meetings with proponents was the difficulty for proponents in developing and financing their proposals given the flexibility in the Government's process and the uncertainty this was creating. This particularly related to the relative importance of evaluation criteria and the need for more regulatory certainty such as access to third-party infrastructure and wholesale pricing arrangements.[122]

The second round of market soundings was undertaken in September/October 2008.[123] This provided an improved understanding of what proponents were intending to propose. The Minister was informed of the results of these market soundings.[124]

At this time, proponents were still seeking additional information from DBCDE. From May 2008 to the close of the RFP in November, DBCDE provided 33 clarifications to proponents.[125] Telstra was actively seeking guidance both within the RFP process and from the Minister about whether structural separation of their network would be required.[126] They received no reply to this question.[127] Proponents noted that the RFP did not allow them to submit more than one proposal (unless any additional submission was part of a consortium submitting a proposal). This limited the ability of proponents to propose a range of options.

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[120] Optus, 2007, 'Optus: We're ready to build a FTTN network' attachment 'Some facts about the FTTN network', Media Release, 7 December 2007.
[121] Telstra, 2008, *Telstra Submission: Criteria for RFP* to the National Broadband Network Panel of Experts, 30 March 2008.
[122] ANAO, 2010, op. cit., p. 73.
[123] ANAO, 2010, op. cit., pp. 74, 106.
[124] Ibid., p. 74.
[125] Ibid., p. 106.
[126] Telstra letters dated 29 August 2008 and 26 September 2008 from Telstra's Chairman to the Minister regarding further separation of Telstra.
[127] Discussion with Telstra, confirmed by DBCDE.

In early October 2008 the Panel of Experts was aware that given the global financial crisis (GFC) it appeared likely that all proponents (except perhaps Telstra) would not be able to submit fully financed bids.[128]

3.5 Parallel Regulatory Processes

Throughout the RFP process the existing telecommunications regulatory regime continued to operate. Regulatory mechanisms applying to the sector were being used to achieve competitive outcomes. For example, during the period of the RFP there were 14 determinations by the ACCC in relation to the ULLS (although in some cases there was more than one determination per access seeker).[129] In 2008-09 the ACCC was notified of a further 12 access disputes and there were 38 disputes awaiting determination at the end of 2008-09.[130] The ACCC also increased ULLS prices for metropolitan areas from 1 July 2008 from $14.30 to $16 after reducing them continually from $35 in 2002.[131]

The parallel call for submissions on telecommunications regulatory reform and policy elicited over 80 submissions. They were made public by DBCDE on 2 July 2008 in order to inform proponents when formulating their proposals to build and operate the NBN. The Minister noted that the Panel of Experts would be able to take the submissions into account in evaluating proposals and that the submissions would provide a general resource for the Government in relation to the development of future communications policy and regulation.[132]

Many of the submissions raised the issue of structural separation between wholesale and retail provision for the new NBN as well as making suggestions to improve the existing telecommunications regulatory regime. The Government did not respond to the submissions during the RFP process, nor did it provide any further guidance to proponents on what regulatory changes it would or would not accept.[133]

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[128] Extract from meeting minutes from Panel of Experts Meeting 6, Friday 3 October 2008.
[129] ACCC Unconditioned local loop service (ULLS) determinations, retrieved from http://registers.accc.gov.au/content/index.phtml/itemId/768629.
[130] ACCC, 2010, ACCC telecommunications reports 2008-2009, p. iv.
[131] ACCC, 2008, 'ACCC sets ULLS indicative prices for 2008-09, issues discussion paper on Telstra's ULLS undertaking', Media Release, 4 June 2008, and Irving, W., 'The Telecoms' Rubik's Cube', UniSA Trade Practices Workshop 2010, p. 7.
[132] Minister for Broadband, Communications and the Digital Economy, 2008, 'National Broadband Network regulatory submissions now available', Media Release, 2 July 2008.
[133] ANAO, 2010, *The National Broadband Network Request for Proposal Process,* Audit Report No. 20 2009-10, Performance Audit, p. 19.

The Senate Select Committee on the National Broadband Network noted that provision of a regulatory framework, as part of or during the RFP, would have provided proponents with greater certainty in building their business cases as well as a legal framework for assessing proposals.[134] In addition, it concluded that failing to specify the structure of the new network caused confusion and uncertainty among potential bidders.[135]

3.6 Evaluating The RFP

By late October 2008 DBCDE advised the Minister that all non-Telstra bids except one were likely to propose the cut-over of Telstra's customer access network. It was also known by this time that the size of potential compensation to Telstra was likely to be significant in the event that a party other than Telstra was selected, and required access to Telstra's customer access network.[136] And it was also evident that the GFC could adversely affect some proponents' ability to attract funding. For example, some members of one pre-qualified consortia withdrew.[137]

An evaluation checklist was released to proponents in early November 2008.[138] The last clarification was issued on 14 November and the final inquiry on the communications register was recorded one week before bids were due.[139] On 24 November 2008 Telstra noted in a letter to DBCDE that its questions about confidentiality had not been satisfactorily addressed.[140]

On 26 November 2008, DBCDE received proposals from six pre-qualified proponents: Acacia Australia Pty Ltd; Axia Netmedia Corporation; Optus Network Investments Pty Ltd; Telstra Corporation Ltd; the Crown in the Right of Tasmania; and TransACT Capital Communications Pty Ltd.[141] These proposals were then assessed by the Panel of Experts,

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[134] Senate Select Committee on the National Broadband Network, 2008, Interim Report, December 2008, p. 49.
[135] Ibid, p. 51.
[136] ANAO, 2010, op. cit., pp. 57, 56.
[137] Ibid., p. 20.
[138] Ibid., p. 106.
[139] Ibid., p. 106.
[140] Letter from Telstra to DBCDE, 24 November 2008.
[141] DBCDE, 2009, Evaluation Report for the Request for Proposals to Roll-Out and Operate a National Broadband Network for Australia, 20 January 2009.

supported by the NBN Taskforce in DBCDE, specialist advisors, and other Australian Government departments and agencies, including the ACCC.

The Panel of Experts only had eight weeks in which to evaluate all six proposals and identify a preferred bidder.[142] This was shorter even than the original timeline set out in the RFP (which specified a closing date of 25 July and a Government decision in October) and was further truncated as the period included the traditional Christmas/New Year shutdown period.

During this time, the ACCC was required to provide the Panel of Experts with a written assessment of proposals for consideration in the assessment process.[143] This report was provided to the Panel on 12 January 2009. ACCC officials noted the demands on the ACCC in providing advice over this period were 'certainly difficult and demanding', but that staff had indicated they were happy that they had enough time to provide sound advice.[144] Nevertheless, the ACCC's presentation to the Panel of Experts noted that not all issues could be explored in the time available, and further work in some areas could be necessary.[145]

Telstra submitted its proposal on time along with the other proponents and also provided a copy to the Australian Securities Exchange (ASX). [146] Its proposal was a short 12 pages. A more detailed proposal was prepared, but it was never submitted.

In its 12 page proposal Telstra indicated it would commit to self-fund up to $5bn on an NBN capable of speeds of at least 25Mbps and up to 50Mbps in around 65 to 75 per cent of the NBN footprint, and between 12 and 20Mbps elsewhere in that footprint. With a $4.7bn government loan at concessional rates, the full NBN footprint would cover 80 to 90 per cent of the population. Telstra further indicated that an average of 4,000 skilled staff would be employed for the life of the construction phase and that building could be well underway in 2009. However, the company argued it was not in a position to lodge a

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[142] Official Committee Hansard, Senate, 2008, Select Committee on the National Broadband Network, Reference: Implications of the Proposed National Broadband Network, 8 October 2008.
[143] DBCDE, *Request for Proposals to Roll-Out and Operate a National Broadband Network for Australia*, Request for Proposals Number: DCON/08/18, 11 April 2008, clause 10.4.
[144] Official Committee Hansard, Senate, 2008, Select Committee on the National Broadband Network, Reference: Implications of the Proposed National Broadband Network, 3 March 2009.
[145] ACCC, 2009, National Broadband Network: ACCC draft views on Proposals, Presentation to National Broadband Network Panel of Experts, 9 January 2009.
[146] Letter dated 26 November 2008 from the Telstra Company Secretary to the Australian Stock Exchange.

highly detailed proposal as it had been unable to resolve its concerns relating to: the further separation of Telstra; the confidentiality of its bid information; the 12 month period over which bids would remain open; and the Government's proposed contractual terms.[147]

On 8 December 2008, on the basis of substantial legal and probity advice, the Panel of Experts came to the preliminary conclusion that Telstra had not met the conditions of participation set out in the RFP by failing to include a Small and Medium Enterprise (SME) Participation Plan.

This omission by Telstra of a SME Participation Plan was curious. The RFP documentation made it very clear this was a non-negotiable condition for participation and that proposals that did not include an SME Plan would be excluded.[148] In addition, over the course of the RFP process, DBCDE had stressed to potential proponents on numerous occasions that an SME Plan was a mandatory requirement. Further, had Telstra been so inclined, this condition probably could have been satisfied in one page. For whatever reason, Telstra did not meet this key condition.

Accordingly, on 10 December 2008 Telstra was advised of the Panel's preliminary view and invited to make a submission by 12 December before a final view was reached.[149] Following consideration of Telstra's response and further legal advice, on 15 December 2008 the Government announced that Telstra had been excluded from further consideration in the RFP process.[150]

There is no question there were valid grounds for the Panel of Experts excluding the Telstra proposal; it was the only decision that could be taken. However, it is also clear that the exclusion of Telstra effectively and practically derailed the RFP process. A winning Telstra bid would have created significant challenges for the Government but it would not have involved any compensatory risk. Moreover, Telstra was in a position to fund the proposal without going to the market, it had a workforce and technical capacity to roll out the new network and the ability to commence the work immediately. No

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147 Ibid.
148 DBCDE, 2008, op. cit., clauses 1.5.32, 10.9 and section 6.1 of Schedule 2.
149 DBCDE, 2009, Evaluation Report for the Request for Proposals to Roll-Out and Operate a National Broadband Network for Australia, 20 January 2009.
150 Minister for Broadband, Communications and the Digital Economy, 2008, 'Telstra proposal excluded from further consideration under Government's NBN process', Media Release, 15 December 2008.

other proponent was in a similar position. It is not clear, even to those closely involved with the Telstra bid, whether providing the proposal that it did was a deliberate attempt by Telstra to disrupt the RFP process, or a simple administrative error.

Following the exclusion of Telstra, the remaining five proposals were assessed in accordance with the evaluation criteria set out in the RFP and the evaluation plan. In the eight weeks from the receipt of proposals to finalisation of the report, the Panel of Experts held four teleconferences, five face-to-face meetings, attended two days of proponent presentations, one technical demonstration and three site visits.[151]

Optus and Acacia offered FTTN-based solutions to around 90 per cent of premises, and proposed significant regulatory change. Axia offered a more limited proposal, involving a new fibre backbone and FTTP to greenfield premises. None of these three proposals involved FTTP on a broad scale. The Optus and Acacia proposals are summarised in Appendix 5.

3.7 Concerns About A Successful Outcome

The possibility of an unsuccessful tender process was understood well before its closing date. Indeed, DBCDE's strategic advisor raised this issue in late June 2008 and the issue was first recorded on the project's risk register in August 2008.[152] As international economic conditions deteriorated over 2008, the assumption was that access to debt and equity finance had deteriorated to such an extent that proponents other than Telstra would find it difficult to obtain the necessary financing.

As noted earlier, DBCDE held two rounds of market soundings (in May and September/October) and four rounds of bilateral meetings (from June to November) with potential proponents to discuss the types of proposals likely to be received and any issues of concern. Key issues that recurred included the uncertainty over the relative importance of the evaluation criteria, the need for more regulatory certainty and difficulties in developing and financing proposals.[153]

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[151] Senate Standing Committee on Environment, Communications and the Arts, 2009, Additional Estimates Hearings February 2009, Broadband, Communications and the Digital Economy Portfolio, Answers to Senate Estimates Questions on Notice, Question No 70.
[152] ANAO, 2010, op. cit. p. 78.
[153] Ibid., p. 73.

While DBCDE kept the Minister informed, the Minister was not inclined to cancel or amend the RFP process. Indeed, as early as July, in response to DBCDE advice about the possible need for a second stage in the process, the Minister indicated that he wanted the RFP to progress without change to see what the market could produce within the specified parameters.[154]

DBCDE first noted other options for progressing the policy in mid-August, and by late October alternative methods of delivering the policy were being examined more formally.[155]

Two further pieces of advice were requested and/or prepared:

- a paper setting out options for the Government to build an alternative network - prepared for the Prime Minister by his department, in conjunction with DBCDE
- a paper outlining contingency options in the event the RFP process was not successful – requested by the Acting Prime Minister on 19 December 2008.[156]

Over the course of the tender period, DBCDE also provided specific advice to the Minister and his office on nine occasions about the risk of compensation being payable to Telstra in the event that another organisation was the successful tenderer.[157] DBCDE obtained key constitutional law advice on this issue from the AGS Office of General Counsel and the Solicitor-General in September and December 2008 as the successful tenderer would have required access to Telstra's customer access network.[158]

At its 6 January teleconference the Panel of Experts discussed this constitutional advice from the AGS, which covered, inter alia, matters arising from proposals that included the need to use Telstra's network to roll out a new FTTN network. Prominent among these matters was the issue of the possibility of compensation payable to Telstra.[159] This was one of a small number of issues that was critical to the Panel of Experts' overall finding that none of the three remaining national proposals was sufficiently developed to provide value for money.

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[154] Ibid., p. 82.
[155] Documentation from DBCDE, August 2008, mimeo; ANAO, 2010, op. cit., pp. 82 - 83.
[156] ANAO, 2010, op. cit. p. 83.
[157] Letter from DBCDE to Joint Committee of Public Accounts and Audit, 11 June 2010.
[158] DBCDE advice to the Audit.
[159] DBCDE advice to the Audit.

3.8 ACCC Advice

A second critical issue for consideration of the Panel of Experts was the impact of ACCC advice. On 9 January 2009, before finalising its report to the Panel of Experts on the proposals submitted under the tender, the ACCC gave an oral presentation to the Panel setting out its draft views on proposals. The Panel of Experts set aside two and a half hours of its four hour meeting for the presentation and discussion with the ACCC. [160] This was the largest amount of scheduled time set aside on any single issue in a meeting in the evaluation period. (The presentation built on a more equivocal presentation made by the ACCC to the Panel of Experts on 28 May 2008, which discussed a range of issues including whether FTTN provided a stepping stone to FTTP.)[161]

The purpose of the ACCC presentation was to highlight the strengths and weaknesses of proposals against principles the ACCC had set out in its written report. It made the point that what it had not done was analyse and assess the feasibility of technical solutions, analyse funding structures, analyse compensation issues or provide options for government on the way forward. It assessed the proposals against key principles in its areas of expertise (promoting competition and regulating national infrastructure services) but, unusually, it also made some key comments on technology and commercial considerations.[162]

The ACCC argued that the NBN could and should have a greater degree of separation between wholesale and retail than existed in the telecommunications sector at the time, and that proponents were seeking overbuild protections. It made the point that if a non-Telstra proponent rolled out a FTTN network there would still be a difficult local loop issue to resolve. This core issue had been around for some years (certainly from the days of the Howard Government).

Against this background, the ACCC then indicated its view that around 70 per cent of the costs of a FTTN network were for node electronics and node related expenditure that

[160] National Broadband Network Panel of Experts, 2009, Meeting Agenda, 9 January2009.
[161] ACCC, 2008, Presentation to Panel of Experts 28 May 2008, ACCC FOI Request 66-2013.
[162] ACCC, 2009, National Broadband Network: ACCC draft views on Proposals, Presentation to National Broadband Network Panel of Experts, 9 January2009.

would not be used in any subsequent upgrades to FTTP or FTTH and would therefore become 'stranded costs'.[163]

This advice seems to have been very influential in the thinking of some members of the Panel of Experts, some Ministers involved with the Strategic Priorities and Budget Committee of Cabinet (SPBC), subsequent discussions within government, and in shaping the direction of future NBN policy.

3.9 The Evaluation Report

During the period from 12 to 19 January 2009 DBCDE undertook some scenario planning relating to a possible alternative approach to the $4.7bn election commitment. 'These scenarios were developed in conjunction with a number of the RFP advisors and to some extent arose from an interest by some members of the Panel of Experts in understanding what could be achieved with $4.7bn if FTTP was rolled out, and also in understanding an order of magnitude of the subsidy that would be required if a private sector provider was to roll out fast broadband using a range of technologies, apart from FTTN. Information on FTTN was available from the RFP responses.'[164] Without access to Ministerial or SPBC considerations, I am unable to determine how this information was used by the Panel of Experts or the Government.

On 20 January 2009, following detailed consideration and discussions, including of the ACCC and AGS advice, and considerable work by public servants through the traditional holiday period, the Panel of Experts provided its Evaluation Report to the Minister.

Only very limited sections of the Report have been made public, but within that material a number of the ten observations of the Panel of Experts are worth repeating. Key to these was that none of the three remaining national proposals was sufficiently well developed to provide value for money. In accordance with the RFP documentation, the State/Territory proposals were then not considered further in the evaluation process.[165]

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[163] ACCC, 2009, National Broadband Network: ACCC draft views on Proposals, Presentation to National Broadband Network Panel of Experts, 9 January 2009.
[164] Communication from DBCDE to the Audit Secretariat, 13 June 2014.
[165] ANAO, 2010, op. cit., p. 85.

The Panel of Experts also observed that:

> 'The Proposals confirm there are multiple approaches to delivering high-speed broadband and that, with the right technology mix and incentives to create sound business cases being developed, the goal of providing high-speed broadband services to 98 per cent of homes and businesses can be reached.'[166]

Further, it raised concerns that 'rolling out a single fibre-to-the-node (FTTN) network is:

- unlikely to provide an efficient upgrade path to fibre-to-the-premises (FTTP), because of the high costs of equipment associated with rolling out a FTTN network that would not be required for a FTTP network (i.e. FTTN is not a pre-requisite for the provision of FTTP); and
- likely to require exclusive or near-exclusive access to Telstra's existing copper sub-loop customer access network (CAN), the so called 'last mile', thereby confirming that strong equivalence of access arrangements would be essential. As well, providing such access to a party other than Telstra runs a risk of liability to pay compensation to Telstra. The Proposals have this risk remaining with the Commonwealth but they have not addressed the potential cost to the Commonwealth of any such compensation. In any event, the Panel considers that no Proponent could accept the cost risk and continue to have a viable business case.'[167]

The Evaluation Report noted that the Panel of Experts could see a way forward to achieving the outcomes sought and had provided that advice separately and in confidence to the Government.[168] I have not had access to this advice. However, it is reasonable to assume that the advice to the Government would logically mirror the observations in the Panel's Evaluation Report.

According to the ANAO, the Panel of Experts' 'primary proposition was that FTTP was a preferable, albeit more costly, technology to FTTN and that the Government should explore incentive schemes to encourage the roll-out of FTTP'.[169]

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[166] DBCDE, 2009, Evaluation Report for the Request for Proposals to Roll-Out and Operate a National Broadband Network for Australia, 20 January 2009.
[167] Ibid.
[168] Ibid.
[169] ANAO, 2010, op. cit., p. 34.

CHAPTER 4: NBN MARK II - ADVICE AND PROCESSES THAT LED TO THE ESTABLISHMENT OF NBN CO

4.1 Developing A New Government-Owned NBN

The NBN policy development and discussions were taking place in an environment of frenetic and chaotic activity within the Government caused mainly by the effect or anticipated effect of the GFC on the Australian economy. The Government was already working feverishly on a number of fronts. In his book, *Politics with Purpose*, Lindsay Tanner (then Minister for Finance and Deregulation) commented that:

> 'In January 2009 we met almost continuously for two weeks, in almost every capital city, to craft the second stimulus package. We later moved on to conduct extensive deliberations on the National Broadband Network proposal, and on complex health-reform and tax-reform proposals.'[170]

The Government announced its second stimulus package responding to the GFC, a $42bn Nation Building and Jobs Plan, on 3 February 2009, with key initiatives commencing before the end of the financial year.[171] Then on 7 February, the Black Saturday bushfires in Victoria claimed the lives of 173 people in one of Australia's worst natural disasters. Activity at the national level was frenetic, as the Government and the public service worked to rapidly develop and implement policies in both known and unanticipated areas.

The NBN policy development was also being conducted against a backdrop of an almost complete breakdown in the relationship between the Government and Telstra, and ongoing disputation between Telstra and the regulator.

By the completion of the Panel of Experts meeting on 9 January 2009, if not before, the Government would have been aware that the RFP tender process would not result in a proposal that could be used to deliver its $4.7bn NBN election commitment.

The Minister is on the record that on 21 January, the day on which he received the report of the Panel of Experts, he briefed the Prime Minister on its outcome. This

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[170] Lindsay Tanner, 2012, *Politics with Purpose: Occasional Observations on Public and Private Life,* ebook, Loc 4245 of 4410, Scribe Publications.
[171] Prime Minister and Deputy Prime Minister, 2009, Joint Media Release, '$42 Billion Nation Building and Jobs Plan', 3 February 2009.

briefing continued the following day .[172] It appears these discussions were critical in shaping how the Government would proceed. At the very least the Minister and the Prime Minister appear to have agreed to press on as quickly as possible to develop a new NBN strategy before the results of the RFP were announced. It is also clear that at this point neither the Government nor the public service had a detailed understanding of the public policy framework or the cost of developing a FTTP NBN.

Once the general direction was determined for NBN Mark II, and against the background of the RFP process for NBN Mark I still being 'live' (in as far as the Government was yet to announce that none of the proposals was satisfactory), it would appear that, almost immediately, work commenced in DBCDE on fleshing out a 'go it alone proposal' sought by the Minister and endorsed by the Prime Minister. This revised proposal centred around a NBN based on FTTP architecture, to around 90 per cent of houses and businesses, via a government-controlled delivery mechanism and necessary but unspecified changes to the regulatory environment. This approach seems to have been constructed on three grounds: the ACCC's view on stranded costs in a FTTN network in the event that a transition to FTTP was required; legal advice that compensation would be required in relation to any non-Telstra proposal; and the view that given the ongoing and problematic relationship between Telstra and the Government, the ACCC and Telstra's competitors, the need for structural separation of Telstra was more pressing than ever. [173] No detailed documentation was made available to me covering the reasons for the decision to develop a FTTP based NBN proposal, however I am very reliably informed that all these matters were foremost in the mind of some senior members of the Government at the time and central in the reasons for the development of NBN Mark II.

The responsibility for the detailed development of NBN Mark II fell to the Strategic Priorities and Budget Committee of Cabinet (SPBC). The SPBC was also considering at the time a range of other critical matters facing the Government and the nation. It appears that the first Cabinet committee consideration (by SPBC) of the proposal to develop a new NBN approach was on 29 January 2009. SPBC rather than the Cabinet played a key role oversighting the development of the new NBN model over the following two months.[174] The members of SPBC were the Prime Minister, the Deputy

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[172] Official Committee Hansard, Senate, 2009, Environment, Communications and the Arts Legislation Committee, Estimates, 26 May 2009, p. ECA 93.
[173] Email correspondence to Audit Secretariat.
[174] Senate Standing Committee on Environment, Communications and the Arts, Answers to Senate Estimates Questions on Notice, Budget Estimates Hearings May 2009, Broadband,

Prime Minister, the Treasurer and the Minister for Finance and Deregulation. The Minister for Broadband, Communications and the Digital Economy also participated during the SPBC discussions that focused on developing the NBN Mark II.

Once the high level decision had been taken by the Government to develop a proposal for a FTTP based NBN Mark II, delivered by a government business enterprise, DBCDE commenced in earnest to develop the means of implementing this new policy. It was centred on a small, but very senior group of officers (mainly Senior Executive Service officers), supplemented almost immediately by senior officers of the Department of Finance and Deregulation and the Treasury. DBCDE effectively drove the policy development and implementation process at the officials' level. Advisors outside of government were not used for the development of NBN Mark II, reflecting concerns within Government around commercial sensitivities and the possibility of leaks. Work pressure was intense as the group of officials sought to develop a radically new NBN approach for the Government.[175]

On 4 February 2009 DBCDE sought advice on broadband access technologies from key Commonwealth 'technology' agencies (Australian Communications and Media Authority, Commonwealth Scientific and Industrial Research Organisation, Defence Science and Technology Organisation, Defence Signals Directorate and NICTA) and two of its advisors (ACCC and GQ-AAS).[176] These agencies were asked to provide relative rankings of technologies against specific performance characteristics (speed, reliability, proven track record and upgradeability) to address the issue of the sustainability of the technology into the future. Replies were received during the following week, and are summarised in Appendix 6.

ACMA made the point that 'given the pace of technological change evident in communications, it is extremely difficult to provide an accurate assessment of the future proofing characteristics of particular technologies…' [177]

The Government also established the NBN Working Group, an interdepartmental committee chaired by the Secretary of the Department of the Prime Minister and Cabinet. This interdepartmental committee first met on 25 February 2009. Unlike a more traditional interdepartmental committee, it involved only the three central

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Communications and the Digital Economy Portfolio, Department of Broadband, Communications and the Digital Economy, Question No. 10 and 11.

[175] Discussions with officers of DBCDE, and the Departments of Finance and the Treasury.

[176] Information provided by DBCDE.

[177] Letter from ACMA to DBCDE, Questionnaire on Broadband Technologies, 9 February 2009.

agencies and DBCDE. And, unusually, a representative from the Prime Minister's Office also attended the meetings. It operated as a 'clearing house' for these agencies to discuss and consider aspects of the proposed new NBN policy before briefing Ministers and the SPBC, ensuring in a narrow sense that only those who needed to know were kept informed.[178] Papers were prepared by relevant departments (DBCDE and Finance) on specific aspects of the initiative (including timeframe, costs, risks, scope for private sector involvement, corporate structure for delivery, regulation, negotiating strategy and announcement) and refined to reflect the views of the Working Group. It met on nine occasions over the six weeks from 25 February to 3 April 2009. [179]

During the proposal development phase of NBN Mark II, that is, from late January 2009 to early April 2009, the Department of Finance and Deregulation undertook three main tasks:

- it examined and assessed DBCDE cost estimates of the proposed new policy, ensuring substantial contingencies and the full scope of the risk of the policy was built into the preliminary estimates for the project
- it provided advice on forming a 'start-up' GBE, an extremely rare event for the Department. Hitherto, the Department of Finance and Deregulation had focused on either closing or privatising existing government business enterprises. As an indication of the rarity of this activity, the 1997 GBE guidelines made no mention of establishing 'start-up' GBEs[180]
- it (along with the Treasury) provided advice on budget classification issues related to the proposed public non-financial corporation (PNFC). This classification was essential for the Government to keep the cost of the new NBN project at arms' length from the budget, and budget accounting and monitoring arrangements. Ultimately, the task of classifying the body as a PNFC was an ABS responsibility, but there were key conditions that needed to be met before this new PNFC could meet ABS guidelines.[181]

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[178] PM&C, 2014, 'National Broadband Network Working Group', April 2014, mimeo.
[179] Information provided by the Department of the Prime Minister and Cabinet, May 2014, mimeo.
[180] The Department of Finance noted it might have been the first time that a start-up of this type had been established. Communication from Department of Finance to Audit Secretariat, 13 June 2014; Commonwealth Government, 1997, Governance Arrangements for Commonwealth Government Business Enterprises Guidelines, June.
[181] Discussions with officers of the Department of Finance.

Treasury's role also focused on its core responsibilities – in this case, budgetary and regulatory matters.

The public policy process from 21 January to the announcement of the NBN Mark II on 7 April 2009 involved considerable iteration of the basic proposition as assumptions around costs of delivery and assumed revenue were estimated, challenged and settled.[182] From this process, a preliminary cost estimate of $43bn for the implementation of NBN Mark II emerged.

But the public policy process for the development of NBN Mark II did not involve any cost benefit analysis, nor the business case proposed by the Panel of Experts. Indeed, the Minister disputed the need for such economic, cost, or business analysis arguing that:

- the revised NBN approach was transformational and is 'going to use the best available technologies for the circumstance'
- 'access to high speed broadband is a good and necessary thing for Australia'
- the election commitment to deliver a NBN had been voted on by the Australian public
- other studies had demonstrated the benefits to the economy. [183]

When the broad parameters of NBN Mark II were announced, the operating arrangements, detailed network design, ways to attract private sector investment, detailed costings and the appropriate regulatory regime all remained as works in progress to be determined following the Implementation Study that would be undertaken by specialist external advisors over the coming months. It appears, for example, that no external soundings on the likely interest of private investors was undertaken prior to the announcement, as the RFP process was still incomplete, even though the Government's announcement of 7 April 2009 stated that private investors would be sought.

Details of the policy were closely guarded not only in the public service, but also in the Government. As a result, the full Cabinet's role was perfunctory. The policy was not considered by the full Cabinet until very early on the morning of 7 April 2009, which

[182] Discussions with officers of DBCDE and the Department of Finance.
[183] Official Committee Hansard, Senate, Environment, Communications and the Arts Legislation Committee, Estimates, 26 May 2009, Canberra, pp. ECA 70-71, 102-104.

was immediately prior to the announcement. By that stage, with everything already in place for the announcement, the Cabinet's role was to rubber-stamp SPBC's decision.

4.2 Announcing A New Government-Owned NBN Mark II

The Government's announcement of its NBN Mark II came in a three page press release.[184] The Government media announcement on the enhanced NBN is set out in full in Appendix 7.

The NBN Mark II was to connect 90 per cent of all premises in Australia (subject to an implementation study) with speeds of up to 100Mbps and connect the remaining premises with next generation wireless and satellite technologies. It specified that optical fibre would extend to towns with a population of around 1,000 or more people. The fibre network would include links connecting cities, major regional centres and rural towns and was expected to be rolled out simultaneously in metropolitan, regional and rural areas. The Media Release indicated that a new company specifically established by the Government to carry out this work would invest $43bn over eight years to build the network, and that significant private sector interest in the company was anticipated. Importantly, the costings were done on the basis that the network would be a stand-alone wholesale network, with equal access for all retail operators. The regulatory approach to give this new network meaning had not been fully thought through, but the hope was that it would deliver separation between the infrastructure provider and retail service providers.[185]

To put the plan of action into effect the Government announced that it would:

- commence an implementation study to determine operating arrangements, detailed network design, ways to attract private sector investment for roll out in early 2010 and ways to provide procurement opportunities for local businesses
- fast track negotiations with the Tasmanian Government to build upon that Government's (unsuccessful) NBN proposal to begin roll out of a FTTP network and next generation wireless services in Tasmania as early as July 2009 as an immediate start on the national network

[184] Prime Minister, Treasurer, Minister for Finance, Minister for Broadband, 2009, 'New National Broadband Network', Joint Media Release, 7 April 2009.
[185] Ibid.

- implement measures to address 'black spots' through the timely roll out of fibre optic transmission links connecting cities, major regional centres and rural towns to deliver improvements in services in the short term
- progress legislative change that would govern the NBN company and facilitate the roll out of fibre networks, including requiring greenfield developments to use FTTP from 1 July 2010
- make an initial investment of $4.7bn, and
- commence a consultative process on necessary changes to the existing telecommunications regulatory regime.[186]

The Media Release stated that the Government's decision was informed by expert advice:

> 'The Panel of Experts has encouraged the Government to invest in optical fibre technology, supplemented by next-generation wireless and satellite technologies. The Australian Competition and Consumer Commission has also endorsed the use of FTTP as a superior technology to Fibre to the Node.'[187]

A company, initially known only as ACN 136 533 741 Limited, was registered on 9 April 2009, Interim Directors were appointed from within the public sector and the first Board meeting held on 20 April 2009.

DBCDE put in place a number of actions and administrative arrangements to further develop and implement the Government's NBN proposal. These actions included:

- Arrangements to contract advisors to undertake an Implementation Study.[188]
- DBCDE and the Department of Finance and Deregulation were represented at all meetings of the interim company until end July 2009.[189]
- A National Broadband Network Implementation Study Steering Committee, chaired by the Secretary of DBCDE, with senior representation from the departments of the Prime Minister and Cabinet, the Treasury and Finance and

[186] Ibid.
[187] Ibid.
[188] DBCDE, 2009, Request For Expression of Interest number DCON/09/23 for Provision of Lead Advisory Services relating to the Implementation Study for the National Broadband Network', 24 April 2009.
[189] NBN Co, 2009, Board Minutes (access provided by NBN Co).

Deregulation, CEO level representation from NBN Co and representation from the study's lead advisors, KPMG and McKinsey & Company was established and appears to have played a major role facilitating coordination between involved parties. It met 16 times between 20 August 2009 and 23 April 2010 discussing the key issues of the Implementation Study, the Interim Report, the first iteration of the NBN Co business case, the output of the study and later issues around the Telstra 'deal' and preparation for further SPBC consideration in March 2010. [190]

- The Secretary of DBCDE attended nine of 14 NBN Co Board meetings for specific agenda items (basically operating as a conduit between the Board and the Government) during the period August 2009 and May 2010, once the full board was in place.[191]

PM&C's Secretary-level NBN Working Group continued to meet, albeit with reduced frequency.[192]

The Minutes of the first Board meeting record that the terms of reference for the Implementation Study were being developed, and it was envisaged the Study would commence in July 2009.[193] (In the event, a contract with an advising team comprising KPMG and McKinsey & Company was put in place on 6 August 2009 to undertake the Implementation Study.)

The company's Interim Directors, all public servants, were initially supported by the public service. To quote from the Minutes of the inaugural Board Meeting:

'DBCDE will provide Directors with the following information:

- the stakeholder consultation paper on the backhaul blackspots initiative
- DBCDE weekly reports to the Minister for Broadband, Communications and the Digital Economy on NBN implementation
- media monitoring clips relating to the NBN project

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[190] National Broadband Network Implementation Study – Steering Committee, Agendas and Working Papers, mimeo, provided by DBCDE.
[191] NBN Co, Board Minutes, August 2009 to May 2010 (access provided by NBN Co).
[192] Department of the Prime Minister and Cabinet, 2014, National Broadband Network Working Group, April 2014, mimeo.
[193] NBN Co, Board Meeting No. 1, 20 April 2009 (access provided by NBN Co).

- proposed arrangements for the provision of financial resources to the Company possibly via an equity injection.' [194]

Initially, Interim Directors were to report fortnightly via letter to Shareholder Ministers on the activities of the company, and any inquiries that Directors received from the media about the company were to be referred to the office of the Minister for Broadband, Communications and the Digital Economy. [195]

The guiding principles for governance of Commonwealth government business enterprises (GBEs) at that time noted that Shareholder Ministers should set clear objectives for GBEs and also required that in providing each GBE with a clear mandate and set of objectives the Shareholder Ministers will ensure that the objectives include any requirements to meet explicitly stated Government social and economic objectives.[196]

The Shareholder Ministers did not provide a formal Statement of Expectations to the Interim Board. Expectations, largely of an administrative nature, were set out in a letter from the Shareholder Ministers to the Interim Board.[197]

On 25 July 2009 the Government announced the appointment of an Executive Chairman of NBN Co.[198] The Executive Chairman's letter of appointment briefly set out the Government's initial expectations for the company in very similar terms to those of the Interim Directors. The principal initial expectation was that the company would establish, roll out and operate the NBN consistent with the 7 April 2009 announcement. It was not until December 2010 that the Board of Directors received its first comprehensive Statement of Expectations from the Government.

4.3 Implementation Study

As noted earlier, the NBN Mark II announcement stated that the Government would immediately commence an Implementation Study to determine operating arrangements, detailed network design and ways to attract private sector investment and provide procurement opportunities for local businesses. However, the

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[194] Ibid.
[195] Ibid.
[196] Commonwealth Government, 1997, Governance Arrangements for Commonwealth Government Business Enterprises, Sections 1.3(b), 1.8(b), June.
[197] A.C.N. 136 533 741 Limited, Directors Meeting, 'Agenda Item 14', 4 May 2009 (access provided by NBN Co).
[198] Prime Minister, Minister for Broadband, 2009, Joint Media Release, 'Mike Quigley appointed Executive Chairman of NBN Co', 25 July 2009.

announcement was silent on many important issues. These included likely product offerings and cost to end users, the extent of public subsidies required, and the timetable and strategy for rolling out the new network.

On 24 April 2009 DBCDE issued a 'Request for Expression of Interest' for provision of services to undertake the study designed to answer many of the key questions that were not included in the 7 April announcement.[199]

Ideally, these issues would have been worked out prior to the policy announcement, but the very tight timetable chosen by the Government for the development of the new NBN policy, and perceived constraints on consultation flowing from the incomplete RFP process precluded this from happening. Against this background, the proposal to seek detailed expert advice on these issues before implementation was recognition of the amount of work yet to be undertaken before the NBN Mark II could become a reality. The time allowed for the Implementation Study was around three times that taken to develop the policy. The substance of the advice sought as part of the Implementation Study covered:

1 advice as required in support of proposed legislation relating to the operation and governance of the network company, the regulatory regime, and ownership restrictions for retail telecommunications providers and other investors as required
2 advice on the overall funding requirements for the network roll out beyond the $4.7bn initial funding injection
3 development of strategies to maximise the scope for private sector investment in the network company
4 advice on the optimal capital structure for the network company over time
5 development of detailed commercial/financial and engineering analysis of the network roll out and the implications for the network company
6 advice on how best to structure NBN Co's arrangements from the outset so that the Government's long term objective of privatisation can be accommodated
7 development of plans for the integration of the Tasmanian NBN trial operations and the backhaul network into the overall national broadband network
8 network design consistent with the Government's objectives
9 development of strategies to provide procurement opportunities for local businesses

[199] Ibid.

10 development of a detailed implementation plan for the roll out of the National Broadband Network
11 development of recommendations as to the appropriateness of any foreign ownership restrictions for the network company
12 development of a risk management strategy for the national broadband roll out, and
13 stakeholder consultation. [200]

Notably missing from the requirements set out for the Implementation Study was any evaluation of the Government's policy objectives, its decision to implement the NBN through establishing NBN Co and a cost benefit analysis. The study was to focus solely on detailed implementation issues with the merits of the policy remaining untested.

On 6 August 2009, the Government announced the appointment of KPMG and McKinsey & Company as lead advisor for the Implementation Study and that the Study would be completed in February 2010.[201] On 20 August 2009 a Working Draft of the NBN Implementation Study Interim Report was discussed by the NBN Implementation Study Steering Committee.[202]

The final Implementation Study report was received by the Government on 5 March 2010, but not released by the Government until 6 May 2010. It made 84 recommendations in its 534 pages, and concluded, *inter alia*, that:

- the Government's objectives could be implemented within the $43bn estimate
- fibre coverage should be increased from 90 to 93 per cent, noting its view that the cost was not prohibitive, that most premises out to 93 per cent could already receive DSL broadband (likely to be superior to wireless or satellite), and the cost per premises activated for fixed wireless was potentially higher than for fibre in the 90th to 93rd percentile range
- fixed wireless and satellite should be available from 94 to 97 per cent of premises, with satellite only beyond the 97th percentile
- up to $26bn would be required as a temporary peak investment, and

[200] DBCDE, 2009, Request For Expression of Interest number DCON/09/23 for the Provision of Lead Advisory Services relating to the Implementation Study for the National Broadband Network', 24 April 2009.
[201] Minister for Broadband, Communications and the Digital Economy, 2009, Media Release, 'McKinsey-KPMG appointed Lead Advisor for National Broadband Network', 6 August 2009.
[202] NBN Implementation Study Steering Committee, 2009, Agenda Item 20 August 2009, mimeo.

- an appropriate market structure and regulatory framework should be in place prior to privatisation and privatisation safeguards should be set out in NBN legislation.[203]

4.4 NBN Co Seeks Access To Telstra Network

The Government's decision to 'go it alone' and build a stand-alone network in its NBN Mark II announcement appeared to have been at least in part designed to offer the Government and the sector, the prospect of avoiding the continuation of difficult and protracted regulatory and access negotiations with Telstra, which had characterised the sector for many years but which had become even more protracted in recent times.

However, if this was at least in part the motivation for establishing and building a stand-alone fibre network this seems naïve at best. Telstra still owned the copper network, it owned the largest cable and mobile network, and it owned a 50 per cent share of Foxtel, the largest subscription television provider. A market dominant, financially sound incumbent with a ubiquitous network and extensive customer base, even structurally separated, had the potential to seriously undermine the short, medium and long term viability of the new NBN network. Indeed, despite assurances from the Government that the NBN would be viable even without Telstra's cooperation, the Implementation Study later noted there was considerable uncertainty in predicting the long-term economics of copper and Telstra's decisions about its future, and that no country had yet closed down its copper infrastructure as a consequence of a roll out of a fibre network.[204]

NBN Co began to meet with Telstra soon after the appointment of the Executive Chairman at NBN Co. Fortuitously for NBN Co, this period coincided with a change in the leadership at Telstra at both the Board and the management level. This change of leadership within Telstra led to Telstra taking a more constructive approach to its relationship with the Government, the regulator and eventually, with NBN Co. These meetings quickly turned into negotiations about NBN Co's access to Telstra's network. Both parties agreed that the negotiations were to be kept strictly confidential, including the fact that negotiations were even occurring.

NBN Co's objectives from these negotiations included the decommissioning of the Telstra copper network to coincide with the roll out of the NBN, and the eventual

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[203] *Implementation Study for the National Broadband Network*, Prepared for the Department of Broadband, Communications and the Digital Economy, 5 March 2010.
[204] *Implementation Study for the National Broadband Network*, Prepared for the Department of Broadband, Communications and the Digital Economy, 5 March, 2010, p. 250.

migration of Telstra's customers to NBN Co (to secure a solid customer base and guaranteed access to significant cash flows), as well as immediate access to Telstra's infrastructure (to reduce build costs and network duplication). Telstra's objectives were to provide fair value to its shareholders from any negotiated arrangement with NBN Co, to ensure that any negotiated settlement led to a reduced regulatory burden on the company, and to ensure that any settlement helped facilitate a clear pathway for a new direction for the company.

On 18 December 2009 the Government announced that formal Terms of Engagement had been agreed between NBN Co and Telstra. These terms of engagement included a preferred model for any agreement about a progressive transition from Telstra's copper access network to a FTTP NBN operated by NBN Co.[205]

On 19 March 2010, Telstra provided a 'National Broadband Network ('NBN') Negotiations Update' to the ASX, noting that negotiations with the Government and NBN Co on the future of Telstra's fixed local access network and associated matters were continuing, but there was 'a significant gap between Telstra and NBN Co on what each party considers to be an acceptable financial outcome'. Telstra also noted that agreement was needed on a range of commercial matters, legislative changes and regulatory approvals.[206] On 24 March 2010, NBN Co sent a 12 page document to its Shareholder Ministers, outlining the state of negotiations with Telstra, also noting a significant gap between the parties.[207]

Intense negotiations between NBN Co and Telstra continued for some months, beyond the end of the period of this Audit. On 20 June 2010, Telstra announced it had signed a non-binding Financial Heads of Agreement with NBN Co covering the use of Telstra's fixed line network that, if completed, would deliver a post-tax net present value to Telstra of approximately $11bn. This figure included payment for the decommissioning of the copper network and cable broadband service, use of Telstra's infrastructure and the value to Telstra of avoiding certain ongoing costs, including Universal Service Obligation costs. Under the Agreement, Telstra would progressively migrate its voice

[205] Minister for Broadband, Communications and the Digital Economy, 2009, Media Release, 'Terms of Engagement agreed between Telstra and NBN Co', 18 December 2009.
[206] Telstra, Letter to the ASX, 'National Broadband Network ('NBN') Negotiations Update' 19 March 2010.
[207] Letter to Shareholder Ministers from NBN Co , 'Negotiation Update and Path Forward', 24 March 2010.

and broadband traffic to the NBN Co network as it was rolled out, but would continue to use its cable network to meet its pay TV contract obligations with Foxtel.[208]

Telstra noted there was still significant work to be done on a range of issues including migration processes, taxation, and the future of legacy regulations applying to Telstra and that the Agreement was contingent on a number of conditions, including the passage of necessary enabling legislation by the Commonwealth Parliament and ACCC approval.

Binding Definitive Agreements between NBN Co and Telstra were not signed for another 12 months.[209]

4.5 GBE 'Start-Up' Commences The Hard Work

NBN Co was prescribed as a GBE in early August 2009.[210]

On the same day as NBN Co's first meeting of the Board comprising only independent directors, NBN Tasmania Limited (ABN 49 138 338 271) was registered and its first four Directors announced by the Premier of Tasmania and the Minister.[211] The Tasmanian roll out was seen as a pilot for the larger nationwide NBN project. But the impact of truncated planning and the start-up character of the delivery mechanism was already being felt. In September the NBN Co Board resolved to write to the Shareholder Ministers regarding their concerns that projects like the early Tasmanian roll out and the blackspots program were running ahead of proper planning.[212]

When the NBN Co Chairman appeared in front of the Senate Select Committee on the National Broadband Network in October 2009 he outlined the wide range of activities NBN Co would undertake to build the organisation in the following six months. This work would range over, among other things: designing a reference offer; selecting technology; defining high-level network architecture; negotiating with potential partners; and establishing an operational program management office. NBN Co would

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[208] Telstra, 2010, Letter to the ASX, 'Telstra signs Financial Heads of Agreement on NBN' and attached media statement, 20 June 2010.
[209] NBN Co, 2011, Media Release, 'NBN Co and Telstra Sign Binding Definitive Agreements', 23 June 2011.
[210] Official Committee Hansard, Senate, 2009, Select Committee on the National Broadband Network, Reference: Implications of the proposed National Broadband Network, 1 October 2009, p. NBN 58.
[211] ABN lookup record, retrieved from http://abr.business.gov.au/SearchByAbnHistory.aspx?SearchText=138338271; Premier of Tasmania, Minister for Broadband, Communications and the Digital Economy, 2009, 'TasmaniaNBN Co Limited established', Joint Media Release, 13 August 2009.
[212] NBN Co, 2009, Board Minutes, 11 September 2009.

expect to be underway with tender processes, obtaining a carrier licence and perhaps negotiating the necessary spectrum and satellite slots. He expected they would have commenced planning roll out schedules and potentially have started executing acquisitions, designing business and operational support systems to run the network and be designing the internal processes of the company.[213] The Chairman advised the Committee that it was possible that NBN Co would have begun to purchase assets prior to completion of the Implementation Study.[214] In October 2009 NBN Co had 13 full time employees and 25 contract staff.[215]

The third report of the Senate Committee on the National Broadband Network released in November 2009 raised many concerns regarding the processes around the NBN. These included that Tasmanian NBN Co seemed to be flying blind with no structured business plan.[216]

Nevertheless, by early 2010 NBN Co was starting to position itself.

In early March 2010 it completed preparation of its first preliminary business case. The purpose of the preliminary business case was to:

'1. provide an understanding of the logic used to construct the financial model;

2. highlight the critical assumptions underlying the Base Case;

3. invite feedback on the assumptions underlying the Base Case in order to further refine as required; and

4. assist management and the Board in evaluating different business options by providing a baseline against which different scenarios can be modelled.' [217]

The business case drew on 'information provided from a number of sources, notably:

- *Proposed Wholesale Fibre Bitstream Products*, NBN Co consultation paper dated December, 2009

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[213] Official Committee Hansard, Senate, 2009, Select Committee on the National Broadband Network, Reference: Implications of the proposed National Broadband Network, 1 October 2009, pp. NBN 59-60.
[214] Ibid. p. NBN 73.
[215] Official Committee Hansard, Senate, 2009, Environment, Communications and the Arts Legislation Committee, Estimates (Supplementary Budget Estimates), 19 October 2009, p. ECA 91.
[216] Senate Select Committee on the National Broadband Network, 2009, Third Report, November 2009, p. 60.
[217] NBN Co, 2010, Business Model – Base Case, Structure, Assumptions and Results, 12 March 2010 (access provided by NBN Co).

- *Revenue Demand Analysis*, Information Paper dated December 2009
- *Impact Assessment of the Greenfield Deployment Bill for the NBN*, Options Paper dated 12 January, 2010
- *Points of Interconnect for NBN Co's Wholesale Fibre Products*, Information Paper dated <>(sic)
- *Fibre Access (FTTP) Products,* Product Business Requirements Document dated 29 January, 2010;
- *Improving Broadband in Rural & Remote Australia: A Plan to 2014*, Paper dated December, 2009
- *Network Cost Model Structure*, Information Paper dated 3 December, 2009
- *Model – Geographic Divisions/Sections*, Information Paper dated 3 December, 2009
- *Model – Passive Infrastructure*, Information Paper dated 3 December, 2009 and
- Business model prepared by Evans & Peck on behalf of NBN Co, presented on 21 December, 2009.'[218]

On 23 March 2010, the NBN Co CEO wrote a lengthy letter to the Minister on the Implementation Study that the Government had just received, but at this point was not public. He commented:

> 'As is acknowledged in the Implementation Study itself, the Study complements rather than duplicates NBN Co's work. In particular the Implementation Study acknowledges that:
>
> > "Details of implementation planning, engineering analysis, technology evaluation and roll-out planning remain the responsibility of NBN Co."
>
> NBN Co agrees with and endorses the general thrust of the Implementation Study and the vast majority of its findings and recommendations. However there are a number of areas where NBN Co holds a different view to that expressed in the Implementation Study. These differences and NBN Co's position on each are set out in this correspondence….'[219]

These documents illustrate that the task of the newly formed GBE was just commencing, and that there were many issues still to be resolved before a clear understanding of the role of NBN Co would emerge.

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[218] Ibid.
[219] Letter to the Minister for Broadband, Communications and the Digital Economy from NBN Co CEO, 23 March 2010 (access provided by NBN Co).

For a start-up, indeed even for a substantial established construction company, the task of rolling out the NBN was huge. The CEO's Monthly Update at that time underscored the fledgling nature of the company. At end March 2010, 11 months after the Government's announcement of NBN Mark II, it had 110 staff and 48 contractors on its books, and had spent $8mn in the previous month. Its construction group had just doubled its staff during March, to eight.[220] NBN Co was engaged in a tender process for Gigabit-capable Passive Optical Networks (GPON), active equipment and services, aggregation and transmission equipment and services and had commenced a process to acquire operation and business support systems. A tender for passive network hardware and services had just closed and the first stage of the tender for design and construction of a fibre access network was open. NBN Co was planning construction activities and in Tasmania its subsidiary was on track for the connection of the first operational services in July 2010. NBN Co was also in the process of preparing a three-year business plan that would be submitted to its Shareholder Ministers by the end of May 2010.[221]

4.6 2009-10 Parallel Regulatory Processes

Concurrent with the announcement that a GBE would be created to roll out the NBN, the Government released a consultation document *National Broadband Network: Regulatory Reform for 21st Century Broadband.*[222] While the title of the paper suggests that its aim was to address overall regulatory reform relating to broadband, the paper appears to have been specifically aimed at issues that needed to be addressed in the existing regulatory regime, and was about regulation of all facets of the telecommunications industry, not just broadband. The Discussion Paper specifically asked for input on:

- streamlining current regulatory processes
- strengthening the powers of the ACCC to tackle anti-competitive conduct
- promoting greater competition in the telecommunications industry including measures to address Telstra's vertical integration
- addressing competition and investment issues arising from horizontal integration
- improving universal access arrangements for telephony and payphones

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[220] NBN Co, Board Meeting No 22, , 'Item 5: CEO Update', 16 April 2010 (access provided by NBN Co).
[221] Official Committee Hansard, Senate, 2010, Select Committee on the National Broadband Network, Reference: Implications of the proposed National Broadband Network, 2009, 15 April 2010, pp. NBN44, 48.
[222] Prime Minister, Treasurer, Minister for Finance, Minister for Broadband, 2009, 'Regulatory Reform for 21st Century Broadband', Joint Media Release 7 April 2009.

- introducing greater consumer protections regarding connection and repair times by telephone companies.[223]

Submissions responding to the Discussion Paper were due in early June 2009, and more than 120 submissions were received.[224] Most of the submissions to the Discussion Paper called for structural or stronger functional separation of Telstra, and reform of the access regime to include up-front determination of price and non-price terms plus the elimination of the negotiate-arbitrate model and the curtailment of appeals processes. Some submissions suggested adjustment to the arrangements around the ACCC issuing competition notices. There was general support for some kind of Universal Service Obligation continuing but acknowledgement that changes would be necessary after the NBN roll out.[225]

As discussed above, the day after the NBN announcement in April 2009, the Australian and Tasmanian Governments announced Tasmania as the launch state for the NBN. The roll out was to begin as early as July 2009.[226] At this stage, however, there was no understanding of the regulatory rules that would apply to this or any other NBN roll out. Two weeks later the Minister announced steps to fast track the roll out of NBN in regional Australia. Again, it was also not clear how this announcement would mesh with the operation of the new GBE or with the existing policy and regulatory settings for the telecommunications sector. Further details on this announcement are set out in Appendix 8. A further announcement in late May 2009 seeking feedback on the Government's proposed approach to the installation of fibre into greenfield premises[227] raised many additional issues, with responses drawing attention to the uncertainty in the regulatory environment going forward.

On 3 July 2009 the Minister called for further submissions (by end July 2009) on the legislation to cover the access regime for the NBN Mark II and governing the operations, ownership and control of the fledgling GBE. The Government was seeking to 'radically improve competition in the Australian telecoms sector by providing access to retailers

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[223] Australian Government 2009, *National Broadband Network: Regulatory Reform for 21st Century Broadband*, Discussion Paper, April 2009, p. iii.
[224] Minister for Broadband, Communications and the Digital Economy, 2009, Media Release, 'Regulatory reform submissions published', 12 June 2009.
[225] The Parliament of the Commonwealth of Australia, House of Representatives, 2010, Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2010 Explanatory Memorandum, pp. 18, 53, 63 and 79.
[226] Prime Minister, Premier of Tasmania, Minister for Broadband, 2009, Joint Media Release, 'Tasmania first to receive superfast broadband', 8 April 2009.
[227] Minister for Broadband, Communications and the Digital Economy, 2009, Media Release, 'New property estates to lead fibre broadband revolution', 29 May 2009.

on an open and equivalent basis'. Issues included: the optimal access regime for the NBN including legislative obligations to ensure the NBN company operates on a wholesale-only, open access basis, the process for identifying services to be offered, how the price and non-price terms and conditions of those services should be set and for how long, and the role of the ACCC; the appropriate equivalence obligations for the company and the services it offers; the nature of ownership restrictions applied to private sector investors; arrangements for the Government to sell its stake; and any other rights and obligations to be conferred on the company. [228]

The announcement noted that the Regulatory Reform Discussion Paper included a policy framework for the regulation of the GBE and its access regime. The Discussion Paper, however, had only dedicated just over four pages out of a total of 63 pages to the regulatory environment for the NBN Mark II and the roll out of fibre.[229] The existing telecommunications competition framework was discussed and questions raised over 16 pages while the telecommunications consumer safeguard framework was discussed with questions raised over 20 pages.[230] The July announcement and the April Discussion Paper were silent on the place of infrastructure-based competition under the new regime, cut-over of Telstra's network and overbuild.

The April Regulatory Reform Discussion Paper consultation process covered a transitional period that was at that time anticipated as 8 years. This second process, outlined in the 3 July 2009 Media Release was to cover the post roll out period during the lifetime of the NBN, which could be up to 40 years. Submissions received in this second process strongly supported clear obligations on NBN Co to offer equivalent access to all customers and that this should be reinforced by ACCC oversight with up-front certainty on prices and terms and conditions of access.[231]

The Government introduced legislation into the Parliament for reforms to existing telecommunications legislation in September 2009, released exposure drafts of the legislative package for NBN Co and access arrangements for the NBN on

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[228] Minister for Broadband, Communications and the Digital Economy, 2009, Media Release, 'Views sought on legislative framework for National Broadband Network', 3 July 2009.
[229] Australian Government, 2009, *National Broadband Network: Regulatory Reform for 21st Century Broadband Discussion Paper*, April 2009, pp. 7-11.
[230] Ibid.
[231] The Parliament of the Commonwealth of Australia, House of Representatives, 2010, National Broadband Network Companies Bill 2010 and Telecommunications Legislation Amendment (National Broadband Network Measures – Access Arrangements) Bill 2010, Explanatory Memorandum, pp. 33 and 37.

24 February 2010 and introduced legislation for fibre in greenfield estates a month later.

In the end no significant NBN related regulatory change occurred during the period of this Audit with the two pieces of legislation introduced lapsing during the August 2010 Federal Election. Bills relating to NBN Co were first introduced to the Parliament in October 2010, which is also outside the timeframe of this Audit.

CHAPTER 5: OTHER SPECIFIC MATTERS

The terms of reference for this Audit also asks specifically that it describe:

- the origin and basis for NBN Co's mandate to run fibre-to-the-premises (FTTP) to 90-93 per cent of Australian premises
- the approach taken in regard to obtaining cost benefit or independent reviews of the project.

5.1 Fibre Roll Out To 90-93 Per Cent Of Australian Premises

This Audit is required to outline the origins and basis of NBN Co's mandate to run FTTP to 90-93 per cent of Australian premises.

The substance of the Government's broadband proposal evolved considerably through 2008 and 2009, and into 2010. When the RFP was issued in April 2008, the proposition was structured in terms of FTTN or FTTP architecture to 98 per cent of Australian homes and businesses:

> " … the Government will build a National Broadband Network (NBN), in partnership with the private sector, which will deliver a dedicated downlink transmission speed of at least 12 Megabits per second (Mbps) over each connection provided to a premises, using FTTN or FTTP architecture, and that will be available to 98 per cent of Australian homes and businesses." [232]

Under NBN Mark I, two national proposals submitted through the RFP process provided for around 90 per cent coverage of all Australian premises by FTTN. [233]

As it became clear that the RFP process would not yield a preferred tenderer, discussions within government turned to alternatives. The argument seemed to be that if the market-based proponents had indicated they could cover around 90 per cent of the population with FTTN, and given ACCC comments on the technology and economics of the FTTN outlined earlier it must be possible to roll out FTTP in a similar way, and

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[232] DBCDE, 2008, *Request for Proposals to Roll-Out and Operate a National Broadband Network for Australia*, Request for Proposals Number: DCON/08/18, 11 April 2008, p. 1.
[233] Optus Network Investments (ONI), 2008, Proposal to roll out and operate a National Broadband Network for Australia RFP DCON/08/18, Executive Summary (access provided by Optus); Acacia Australia, 2008, Executive Summary.

achieve similar coverage. Using Census data for population (rather than premises) the 90 per cent figure would cover all towns with populations down to 1,000.

The Government's 7 April 2009 NBN Mark II announcement indicated:

> 'The Government's objective is to achieve 90 per cent coverage of the FTTP network, and remaining coverage to be delivered through wireless and satellite technologies, within this funding envelope. Initial advice to the Government is that this objective is achievable, but this estimate will be subject to an implementation study.'[234]

A speech made by the Minister in May 2009 further discusses the choice of 90 per cent FTTP coverage:

> "At the same time as critisising (sic) Government for its fibre ambitions, our opponents also question why we are not deploying fibre to 100% of homes and businesses. In fact, evidence suggests that 100% coverage of the population with FTTP is the exception rather than the rule. South Korea is one of the very few countries planning to get that far. Recognising the underlying economic realities, other countries such as Japan and Finland are planning fibre coverage of around 90% of population. In Australia, our low density of population and large physical distances would result in extremely high deployment costs for FTTP beyond 90% of homes and businesses. Our opponents remain in a position of denial as the world passes them by. As the statistics the FTTH Council presented today demonstrate, the world is moving further towards fibre platforms and Australia should not be left behind."[235]

The goal of providing NBN services to 90 per cent of Australian premises remained for some time. When the Executive Chairman of NBN Co was appointed in July 2009, the expectation was that NBN Co would 'establish, roll out, operate and maintain the NBN in a manner consistent with the Government's policy announcement on 7 April 2009.'[236]

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[234] Prime Minister, Treasurer, Minister for Finance, Minister for Broadband, 2009, Joint Media Release, 'New National Broadband Network', 7 April 2009.
[235] Minister for Broadband, Communications and the Digital Economy, 2009, Speech to the FTTH Council Asia-Pacific Conference, 19 May 2009.
[236] NBN Co, 2009, Papers to Board Meeting 8, 20 July 2009, Letter from Shareholder Ministers to M Quigley re appointment as interim Executive Chairman (access provided by NBN Co).

However, the issue of coverage was also being investigated in the Implementation Study. It was during the Implementation Study that consideration emerged of extending coverage from 90 per cent to 93 per cent of Australian premises.

Analysis conducted for the Study suggested 'the cost of deploying fibre to 93 per cent is not prohibitive' and that 'by the 93rd percentile it costs 2.8 times the 50th percentile'.[237]

However there were clearly serious differences of opinion between those preparing the Implementation Study and NBN Co on this issue.

The issue came under consideration within NBN Co from late 2009 into early 2010.[238]

In a letter to the NBN Co Shareholder Ministers in late March 2010, the CEO of NBN Co was alert to the public policy and cost implications of the Implementation Study's recommendation to move from 90 to 93 per cent. Among other things he invited Ministers to:

> 'Rigorously evaluate the public policy requirements placed on NBN Co
>
> ■ Carefully evaluate the full impact of adopting Implementation Study requirements which place significant additional burdens on NBN Co, in particular:
>
> 1. Preparation for Layer 1 unbundling and the deployment of 'home run' topology;
>
> 2. The extension of fibre beyond 90 per cent to 93 per cent;
>
> 3. Subsidisation of transit (backhaul between the FSA and the NBN Co Point of Interconnect), coupled with its sale at these subsidised prices to other fixed and wireless access seekers and the extension of NBN Co's backhaul obligations beyond the fibre footprint (even if it has no part to play in wireless);
>
> 4. Requirements to serve mobile base stations; and
>
> 5. Preparation for separation.
>
> These recommendations are likely to substantially undermine NBN Co's business case and create significant challenges with respect to cost recovery

[237] *Implementation Study for the National Broadband Network*, Prepared for the Department of Broadband, Communications and the Digital Economy, 5 March 2010, pp. 13, 281.
[238] NBN Co, 2009, Papers to Directors Meeting No. 16, 20 November 2009, Agenda Item 4, Network Design.

given the ACCC has already raised concerns that the first three of these recommendations may violate the principle of efficient network build. There are a number of other recommendations that also warrant further review, in particular the commercial tender process for fixed wireless.'[239]

The NBN Co CEO emphasised this point in detail in a separate letter to the Minister:

'NBN Co believes 93 per cent should be viewed as an indicative figure that may be refined as additional analysis is undertaken and assumptions are tested during the roll out. We have concerns about both the accuracy of the cost assumptions and the basis for selecting the 93 per cent.

In arriving at this recommendation the Implementation Study makes a number of significant assumptions which may or may not prove to be correct in practice. For example:

1. The fibre penetration rate is assumed to be constant at 80 per cent across the footprint despite differences in ability to pay, broadband uptake, and extent of retail competition.

2. The fibre build cost estimates rely on a number of significant assumptions around access to and cost of passive infrastructure which could vary significant (sic) both on average and across the footprint.

3. The methodology for smoothing of the fibre curve has not been clearly explained. Presumably the premises in the 90-93 per cent sit on the edge of a FSA and as such should be viewed on an incremental cost basis, it is unclear whether the smoothing is consistent with this approach.

4. To the extent that the movement from 90 to 93 per cent results in the inclusion of additional FSAs, this has the potential to add significant transit (which would need to be subsidised). The incremental cost of transit is not included in the current modelling.

Secondly, the basis for selecting the 93 per cent relies on:

1. The fact that the slope of the curve significantly increases at this point which is not in our view a compelling reason to select this point. Rather the

[239] Letter to Shareholder Ministers from NBN Co CEO, 'Negotiation Update and Path Forward', 24 March 2010.

decision should be made based on actual cost relative to alternatives.

2. While the trade-off between fibre and wireless is considered, assumptions around differential take up of the wireless and fibre products which may or may not be accurate.

3. The argument that DSL goes beyond 90 per cent has some merit. However, it is not clear at this point in time that the 93 per cent of premises that are covered by DSL are the same as those that would be covered by the extension of the fibre footprint to 93 per cent.

There would seem to be very little to be lost at this stage in taking the approach of requiring NBN Co to provide fibre to not less than 90 per cent, in line with Government's original requirements. The fibre footprint could be extended if it can be economically justified once we have a better understanding of actual build costs, the implications for transit, consumer uptake and the overlap between the DSL and fibre footprint.' [240]

At its April 2010 meeting the NBN Co Board considered a comparison between the Implementation Study approach to coverage and its own base case.[241] In discussions between the CEO and the Minister and his office on 7 May 2010, a set of five scenarios was presented, each of which included coverage and CAPEX.[242]

The scenarios used geospatial data and covered both access costs and transit backhaul costs (not included in the Implementation Study). To quote NBN Co documentation:

'The "algorithm" that was used in producing these 5 scenarios was:

1. Start with a resilient but minimum cost design that provides at least 90% FTTP coverage by the end of the roll out. This would mean starting at about [C-in-C] coverage but would get to at least 90% when future Greenfield sites are included.

2. Add the Satellite Earth stations and the transit backhaul needed to reach them. Then add FSAs to cover any towns on these routes that have greater than [C-in-C] premises. This takes the FTTP coverage to 90.8% at deployment start.

[240] Letter to Minister for Broadband, Communications and the Digital Economy from NBN Co CEO, 23 March 2010.
[241] NBN Co, 2010, Board Meeting No. 22, 16 April 2010, Item 11 Implementation Study Update.
[242] NBN Co, 2010, Meeting No. 23, 20 May 2010, Item 9, CEO Update and Monthly Report.

3. Include FSAs to cover any remaining towns of greater than 1000 premises. This adds transit backhaul up the coast of WA and also in central NSW and parts of Qld and Victoria. This results in [C-in-C] premises being added to the FTTP footprint for an additional [C-in-C], which is about [C-in-C] per premise.

4. Include FSAs to cover any towns of [C-in-C] premises or greater that lie on the existing transit backhaul routes. This adds a further [C-in-C] premises for an additional [C-in-C], which is about [C-in-C] per premise. The FTTP coverage with this fourth step provides a starting coverage of 92.5%, which would be in excess of 93% by the end of the deployment due to increasing percentage of Greenfield installations.

5. The final step is to add all towns of 500 or more premises and the transit backhaul needed to connect them. This adds another [C-in-C] premises for [C-in-C] or approximately [C-in-C] per premise.'[243]

NBN Co recommended Scenario 4 to the Government as a basis for planning purposes and the NBN Co record of this discussion shows that the Minister agreed to this. The summary notes indicate this decision was incorporated into V0.05 of the Corporate Plan. It was noted 'this scenario provided for FTTP coverage of at least 93% after taking account of the increased Greenfield numbers by the end of the build'. One agreed action from the meeting was to 'produce a paper describing the options and our recommendations to Gov for our 10% solution.'[244]

5.2 Approach Taken To Cost Benefit Analysis Or Independent Reviews

In late 2007, the incoming Minister stated that no further work should be undertaken within DBCDE on costing the Government's $4.7bn election commitment. 'The Minister's position was that the department's estimates would be heavily caveated, costly to undertake and a poor second best to what proponents provided.'[245]

With the collapse of the RFP process, the Government quickly turned its attention to considering alternative approaches to delivering its 2007 Election Commitment. The

[243] Ibid.
[244] Ibid. (This corporate plan is no longer current.)
[245] ANAO, 2010, *The National Broadband Network Request for Proposal Process,* Audit Report No. 20 2009-10, Performance Audit, pp. 24, 53.

2007 Election Commitment went through a dramatic transformation, without the benefit of any cost benefit analysis.

The public policy process from 21 January to the announcement of the new NBN policy (NBN Mark II) on 7 April 2009 involved considerable iteration of the basic proposition that first emerged in early 2009 as assumptions around costs of delivery and assumed revenues were estimated, challenged and settled.[246] From this process, a preliminary cost estimate of $43bn emerged. But this estimate did not involve any cost benefit analysis, nor the business case proposed by the Panel of Experts. Indeed the Minister had disputed the need for such analysis at length, arguing that:

- the approach was transformational and is 'going to use the best available technologies for the circumstance'
- 'access to high speed broadband is a good and necessary thing for Australia'
- the election commitment to deliver a NBN had been voted on by the Australian public
- other studies had demonstrated the benefits to the economy.[247]

The Implementation Study is also explicit that it did not undertake a cost benefit analysis as part of that work.

No independent reviews of the project were undertaken before the Government's April 2009 announcement. Moreover, as the policy development process was undertaken over compressed timeframes, and in a highly commercially sensitive environment, independent advisors who were used through the much more straightforward NBN Mark I process were not included in the new NBN Mark II process.

The Implementation Study to further flesh out the proposal cannot be construed as an independent review. Its introduction states:

'The purpose of the Implementation Study is to advise Government on how best to implement its stated policy objectives, not to evaluate those objectives, given that the policies have already been agreed by Government'. [248]

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[246] Audit discussions.
[247] Official Committee Hansard, Senate, Environment, Communications and the Arts Legislation Committee, Estimates, 26 May 2009, pp. ECA 70-71, 102-104.
[248] *Implementation Study for the National Broadband Network*, Prepared for the Department of Broadband, Communications and the Digital Economy, 5 March 2010.

The Implementation Study suggests approaches that the Government could direct the NBN Co to follow. It was being undertaken in parallel with NBN Co starting to put in place its own infrastructure and contracts in what was a very compressed timeframe.

CHAPTER 6: ASSESSMENT OF NBN PUBLIC POLICY PROCESSES DURING THE AUDIT PERIOD

This Chapter assesses the NBN public policy processes from April 2008 to May 2010, and makes a number of recommendations concerning future actions that could be considered by the Australian Government when it is contemplating major infrastructure projects and reforms. The assessment focuses on the issues that I consider to be central in regard to these processes.

6.1 Better Practice Public Policy Processes

In developing these recommendations I have sought to go back to the period in question and consider the information available to aid the development of better practice public policy processes at that time and the expectations on participants in the policy process, particularly as set out in documents, guides and accepted practice available to, or put in place by, the government of the day. These documents include:

- Australian Government Cabinet Handbooks (5th and 6th editions, 2002 and 2009)
- Australian Government Best Practice Regulation Handbook (2007)
- Australian Government, Budget 2008-09, Budget Paper No. 1 – Statement 4: Boosting Australia's Productive Capacity: The Role of Infrastructure and Skills (2008)
- ANAO Developing Policy Advice - Better Practice Principles (2001)
- Guidance on Ethics and Probity in Government Procurement (2005)
- Building Australia Fund Evaluation Criteria (December 2008)
- Department of Finance Handbook of Cost Benefit Analysis (2006)
- Governance Arrangements for Commonwealth Government Business Enterprises (1997)
- Uhrig Review Of The Corporate Governance Of Statutory Authorities And Office Holders (2003)
- *Infrastructure Australia Act 2008*
- Infrastructure Australia Assessment Framework (2009)
- OECD Principles for Private Sector Participation in Infrastructure (2007)
- OECD Developments in Fibre Technologies and Investment (2008).

I have then considered these practices in the context of their contemporary equivalents and currently accepted better practice.

Policy making in the real world rarely starts from a clean sheet of paper and rarely follows neat prescriptions set out in academic literature. Good practice checklists sit side by side with the practice of active, day by day, contemporary politics. Both clearly have a legitimate place. Cabinet government is about ensuring sensible and workable practices are put in place to ensure good and 'value for money' outcomes are achieved through the policy development and implementation process. Reflecting the political world in which it is made, policy is often messy, fast paced, incomplete and subject to compromise. Both Ministers and public servants deal with these tensions within the context of framework documents that have been developed over the years as contributing to better outcomes, and that are workable in the real world of practical political engagement.

In addition, the mere existence of the documents detailed above does not provide an assurance of their use in public policy development: better practice approaches in this regard need constant attention through the culture developed by each government, as social norms and the world in which government operates and makes decisions change. This has been particularly relevant over the past decade with the increasing contestability of public service advice to governments, the role of social media in influencing government decisions, and new ways of accessing and using information becoming more mainstream.

6.2 Issues With NBN Mark I Public Policy Process

As discussed in Chapter 3, the further development of broadband in Australia through government funding figured prominently in election commitments of both major political parties in the lead up to the November 2007 election. Once sworn in, the new Government quickly started the process of implementing its election commitment.

The ANAO and the Senate Select Committee on the National Broadband Network have examined this process for NBN Mark I in considerable detail and my comments on it will therefore be limited to the more direct public policy aspects.

I have concluded that, from a public policy process perspective, the NBN Mark I RFP tender process was in general well conducted.

DBCDE went to great lengths to ensure a robust and fair process. It brought on board numerous technical advisors to fill the gaps in in-house capability, it put in place a high quality Panel of Experts to oversee what was a major election commitment, it put in place a detailed probity process, it sought proactively to understand the risks that might confront the tender process during the initial part of what was an overly ambitious timetable, it was prepared to adjust the timetable as it was shown to be unworkable and it kept the Minister continually informed on progress and development in what was a turbulent year in both the Australian and the international economy and financial system.

However, even a well conducted process could not disguise or overcome lack of information about, for example, the proposed regulatory framework, the relative importance of the Government's objectives and evaluation criteria, and how best to define and measure the requirement that the NBN should cover 98 per cent of Australian homes and businesses. For Telstra, it never received an answer to its query as to whether structural separation would be a requirement of any proposal.

There are three comments I wish to make on the NBN Mark I process.

6.2.1 The Standing Of Election Commitments

The first issue from a public policy process is how the incoming Government's election commitment was managed.

DBCDE sought at an early stage to establish a firm cost basis for the Government's NBN election commitment, but was directed by the Minister not to continue this work. That was the Minister's prerogative, although it sits a little awkwardly with the incoming Government's emphasis on evidence-based decision making.[249]

A little later the then Prime Minister made the following comment:

> 'Policy design and policy evaluation should be driven by analysis of all the available options, and not by ideology. When preparing policy advice for the Government, I expect departments to review relevant developments among State and Territory governments and comparable nations overseas. The

[249] ABC Lateline, 2007, Tony Jones talks to Opposition Leader Kevin Rudd, 8 November 2007, Retrieved from http://www.abc.net.au/lateline/content/2007/s2085991.htm.

> Government will not adopt overseas models uncritically. We're interested in facts, not fads. But whether it's aged care, vocational education or disability services, Australian policy development should be informed by the best of overseas experience and analysis. In fostering a culture of policy innovation, we should trial new approaches and policy options through small-scale pilot studies…Policy innovation and evidence-based policy making is at the heart of being a reformist government.'[250]

The Minister's decision not to develop a firmer cost base for the Government's NBN policy can be justified in public policy terms because of the decision to conduct a tender process in relation to NBN Mark I. The tender process sought to elicit innovative 'bids' for public funding. These bids were to be assessed by a Panel of Experts, which would undertake the assessment of benefits and costs (through a value for money assessment) at the conclusion of the process, on the basis of proposals received.

The RFP required proponents to address 18 separate, albeit in some cases contradictory objectives. The Government added complexity to this process by eschewing clarity on its election commitment and not weighting the 18 objectives of the RFP. It is not clear that at any stage the Panel of Experts sought, nor was required to assess, information on demand (or willingness to pay) and hence the benefit likely to accrue directly from the government funding on offer.

As is well recognised, election commitments are an important part of the democratic process and it is appropriate that governments are held to account for their implementation. However, that also places a burden on political parties to ensure their proposals are clear and well thought out, and have been sufficiently tested to allow (from a public policy process perspective) their direct implementation. If political parties ensured that each infrastructure related election commitment had jumped through these hurdles, incoming governments would be much more 'battle ready' for leadership of the nation. Where this does not happen, incoming governments need to devote the necessary time and resources to develop election commitments to the point that their purpose is clear, they provide value for money for the community, and they can be effectively implemented.

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[250] Prime Minister, 2008, Address to Heads of Agencies and Members of Senior Executive Service, 30 April, http://pandora.nla.gov.au/pan/79983/20080512-0000/www.pm.gov.au/media/Speech/2008/speech_0226.html (accessed 17 June 2014).

Contemporary thinking on policy making maintains that a new public policy process would go through the following steps, which could be readily applied to all election commitments when they are being considered and developed. This list has changed little over the past decades.

- Clearly define the public policy problem that is to be addressed.
- Identify why there is a legitimate reason for government to intervene in this issue.
- Demonstrate that government has the capacity to intervene successfully.
- Explore alternatives to government action.
- Identify the objectives, outcomes, goals or targets that are being sought.
- Specify relevant decision parameters.
- Identify the risks, constraints or barriers to achieving the objectives.
- Specify a range of genuine and viable alternative policy options.
- Test that the options can achieve the stated policy objectives.
- Identify who is likely to be affected by each option and assess the economic, social and environmental costs and benefits as well as how those costs and benefits are likely to be distributed.
- Propose a preferred policy option and policy instruments to give effect to it.[251]

Recommendation 1: When political parties include in their election commitments a promise to implement large infrastructure projects or infrastructure related funding, they should also commit to having the project (or projects) fully and independently costed by the Productivity Commission or Infrastructure Australia before the project proceeds, and to disclose fully the costs of the project to the public. They should also commit to preparing a full project plan and to releasing it for public comment before the project commences.

6.2.2 Role Of Expert Advisors - The ACCC's Role In The RFP Process

The Panel of Experts chosen by the Government to conduct the RFP process brought together individuals with an appropriate range of skills and experience, supported by key government agencies and specialist advisors. The ACCC had a specific role in advising on pricing and competition issues, its area of expertise. However, it also

[251] Althaus, Bridgman, & Davis, 2013, pp. 59-100; Australian National Audit Office, 2001, *Some Better Practice Principles for Developing Policy Advice*, Canberra; The Department of the Prime Minister and Cabinet, 2012, *The Cabinet Handbook*, 7th Edition, March 2012. Retrieved from http://www.dpmc.gov.au/guidelines/docs/cabinet_handbook.pdf.

provided its views on technology options, and the cost and economic viability of those options.

As noted in Chapters 3 and 4, the ACCC provided formal advice on at least three occasions on technology options and the cost and economic viability of those options:

- in May 2008, during an early meeting of the Panel of Experts
- in January 2009, in its presentation and its formal written advice on proposals submitted under the tender
- in February 2009 via a response on a technology questionnaire, when the Government was considering a new way forward to support the development of the NBN.

From the available evidence, on the first occasion, the ACCC raised the issue of whether FTTN would provide a stepping stone to the later deployment of FTTP. On the second occasion, it was more categorical that FTTN would not provide a stepping stone to the later deployment of FTTP. It indicated that the node-related costs of a FTTN network might be up to 70 per cent of the total build cost and would not be used in any subsequent upgrade to FTTP and therefore would be 'stranded costs' in future FTTP roll out.

This figure was derived by the ACCC as its estimate of costs attributable to these elements in the Optus and Acacia proposals.[252] In other ACCC documents, node-related costs are estimated variously at between 45 and 90 per cent.[253] The ACCC argument that FTTN did not provide a stepping stone to FTTP was curious because it was not borne out in the international literature at the time.

For example, in 2008, a report by Analysys Mason for the UK Broadband Stakeholder Group suggested that deploying FTTC did not preclude a later deployment of FTTH, arguing that about 50 per cent of the initial FTTC (Fibre To The Curb) investment could be re-used in a FTTH upgrade.[254] This same position on later deployment has been argued elsewhere.[255] These various responses and papers provide a quite nuanced

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[252] ACCC, 2009, *Assessment of Proposals, National Broadband Network Process*, Report to the Expert Panel, January 2009, extract pp. 7-33.
[253] ACCC FOI Request 23-2013, Retrieved from http://foi.accc.gov.au/foi-disclosure-log.
[254] Analysys Mason, Final report for the Broadband Stakeholder Group, *The costs of deploying fibre-based next-generation broadband infrastructure*, Final report, 8 September 2008.
[255] Analysys Consulting, 2006, *Final Report for the ACCC, Comparative Costing of NGN Fibre Access Networks in Australia*, 5 May 2006.

discussion that also involves the structure of the market, which is not present in the publicly available material in the RFP tender process, nor has it come out of my discussions. Even if the cost differentials between FTTN and FTTP were much more modest, it is not clear that the ACCC argument can be sustained, nor how it arrived at its position.

The ACCC also does not appear to have made any comment in its assessment of proposals on the comparative costs of technologies (for example, the accepted view that in general a FTTP network would cost multiples of a FTTN network[256]), nor the timeframe during which an upgrade to FTTP might be expected. This information would have gone to the materiality and relevance of the point being made by the ACCC given that a clear understanding of pay back periods, depreciation arrangements and the comparative costs of FTTN versus FTTP would have been required before any reasonable assessment could be made on the relative merits of FTTP versus FTTN or any other network configuration. Interestingly, the Analysys Mason report concluded that the deployment costs for FTTH were around five times those for FTTC and that, by the time the active electronics in a FTTC network are fully depreciated, there may be a more compelling case for FTTH.

The ACCC's predisposition towards a FTTP network was also at odds with the FTTN NBN solution put forward by most proponents, which arguably could be considered the closest to a market solution at the time.

The observations of the Panel of Experts[257] appear to draw heavily on ACCC views expressed in their report to the Panel. It is not clear why the Panel of Experts relied on the ACCC as a technology, cost and economic advisor, when the normal and appropriate role of the ACCC was more limited to

> 'issues such as wholesale access services and prices, access arrangements, proposed legislative or regulatory changes and the likely impact of Proposals on pricing, competition and the long term interests of end-users in the communications sector.'[258]

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[256] See for example, Ovum, 2007, *Comparative Costs for Fibre to the Node and Fibre to the Home Rollouts in Australia Final Report to ACCC*, 10 August 2007, p. 3.
[257] DBCDE, 2009, Evaluation Report for the Request for Proposals to Roll-Out and Operate a National Broadband Network for Australia, 20 January 2009.
[258] DBCDE, 2008, *Request for Proposals to Roll-Out and Operate a National Broadband Network for Australia*, op. cit, p. 36.

I acknowledge the ACCC has a role in relation to the long-term interests of end-users in the communications sector and hence assessing factors that impact on the efficient deployment of infrastructure.

However, from a public policy process perspective I have three concerns.

My first concern is the extent to which the absolute and relative costs of a FTTN and a FTTP build were properly estimated during the development of NBN Mark I or II. For example, if there was a concern within Government of the possibility of 'stranded costs' as the network transitioned from FTTN to FTTP, work should have been commissioned to test these concerns because a high FTTP build cost could well and truly outweigh any stranded investment, particularly due to the high depreciation rates for node electronics present in FTTN. The ACCC's advice did not place its comments about node equipment costs within such a framework.

In addition, the evidence around willingness to pay for the immediate use of a more expensive FTTP option was conspicuously absent from any analysis, particularly in relation to the development of NBN Mark II. Demand analysis may have indicated that waiting seven or eight years may in itself have been a sensible medium-term path on the way to a network with a higher FTTP content or alternatively indicated a more rapid roll out was required. While it is not the role of this Audit to come to any conclusions about the suitability of any one particular network configuration, good public policy development demands that at the very least, there should have been an active debate around these issues, and I have been unable to find evidence in material available to this Audit that this debate in fact ever happened.

My second concern is whether the ACCC overstepped its role in providing technology, cost and economic advice. While I acknowledge the ACCC has and must have available to it a level of technical competence in this area, and indeed undertaking its normal regulatory role requires it to have a broad understanding of technology issues,[259] it is not however its field of expertise. I also acknowledge there is merit in broad-ranging discussions on key issues, but again that does not obviate the need for views and opinions to be seriously challenged and scrutinised by appropriate experts, particularly in a project of this size. In fact, for projects of this size and complexity it should be

[259] See OECD, 2008, p. 37.

obligatory that the government department with carriage of the project, has the resources, capability and credibility to question, scrutinise and put forward independent, alternative views to government on any matter related to the project under consideration. The ACCC has expressed the view that it did not provide technical advice. However, it is clear from my discussions that its advice was taken as both regulatory and technical by a number of parties involved in the public policy process that led to the development of NBN Mark II.

Finding 1: Departments must be resourced with highly knowledgeable 'subject matter experts' if they are to assist Governments with the implementation of large infrastructure projects.

Recommendation 2: Departments should urgently review their strategic objectives so as to ensure that they have highly knowledgeable 'subject matter experts' who are capable of assisting the Department to achieve its overall strategic objectives.

My concern about the appropriateness of the ACCC's role is further elevated by a speech given by the Chairman of the ACCC in May 2009, after the Government had announced its NBN Mark II policy. The speech appears to provide strong advocacy of a technology and policy position, rather than the ACCC's more appropriate role of advising on pricing and competition issues within a given policy framework. In that speech, the ACCC Chairman referred to NBN Mark II (that is FTTP broadband) as 'the most momentous policy initiative in the Australian telecommunications sector…since competition began in the industry more than a decade ago', arguing that it would 'spark a new wave of infrastructure investment, technological change and product innovation'. The Chairman went on to suggest that 'perhaps of even greater significance is the opportunity provided by the announcement to address long standing structural issues in the industry'. He commented that 'the NBN project raises the opportunity to undo the mistakes made by previous governments that decided to leave Telstra in control of both the copper network and its retail operations. The ACCC considers these decisions to have been fundamental errors that have had very serious implications for the development of competition in the telecommunications industry.'[260]

[260] ACCC, 2009, 'National Broadband Network heralds new wave of telecommunications development', Speech by the Chairman to the Australian Telecommunications User Group Regional Conference, 21 May 2009.

While the Chairman's position is consistent with part of the ACCC's advice to the Panel of Experts[261], it was not consistent with the Australia-wide proposals from the market, which were FTTN based. If ubiquitous roll out of FTTP technology was also not supported in countries with significantly higher population densities than Australia (the Chairman noted 'the scale of the FTTP roll out is unprecedented internationally', and that the proposed 90 per cent coverage easily eclipses that of the most broadly available FTTP networks − in South Korea (45 per cent), Hong Kong and Japan (close to 30 per cent) and Taiwan (16 per cent)) it is hard to see why the case would be stronger in Australia, with its low population densities and long distances.

My third concern relates to the use by the Government of information and advice provided in good faith by the Panel of Experts and the ACCC.

The Government's Media Release for NBN Mark II states:

> 'The Panel of Experts has encouraged the Government to invest in optical fibre technology, supplemented by next-generation wireless and satellite technologies. The Australian Competition and Consumer Commission has also endorsed the use of FTTP as a superior technology to Fibre to the Node.'[262]

I have not had access to this advice from the Panel of Experts, and nor have I been able to identify any document that I would consider as the ACCC endorsement.

- However the observations of the Panel of Experts, noted in the extract of the Evaluation Report that has been released, do not support the announcement made by the Government, as business cases do not appear to have been undertaken. In addition, the Panel of Experts ceased to operate after presenting its report so it is unlikely that it could have provided any advice other than that outlined in its Evaluation Report.
- In addition, the ACCC advised[263] it did not provide either formal or informal advice during the FTTP policy development period (late January to April 2009), beyond completing a technology questionnaire that it returned to DBCDE on

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[261] ACCC, 2009, *Assessment of Proposals, National Broadband Network Process*, Report to the Expert Panel, January 2009, extract pp. 7-33, pp. 9-10.
[262] Prime Minister, Treasurer, Minister for Finance, Minister for Broadband, 2009, 'New National Broadband Network', Joint Media Release, 7 April 2009.
[263] Discussions with ACCC Officers and Commissioners.

13 February 2009, although it did prepare a paper in April 2009 entitled 'Fibre to the Home Information Paper'.[264]

- The only plausible explanation I can find for the Government's statement that FTTP was 'endorsed' by the ACCC is that the Government was referring in its Media Release to a short overview of the ACCC's answers to the technology questionnaire sent to the ACCC and other Government agencies in February 2009. Here, the ACCC ranked FTTP/H higher than other fixed broadband access technologies in relation to dedicated speeds available to end users, upgradeability of the technology and its reliability. However a close reading of the full text of the ACCC's response to the questionnaire suggests the ACCC is more equivocal about the preeminence of FTTP.[265]
- The ACCC has confirmed it did not endorse the use of FTTP for the NBN in its response to the technology questionnaire or anywhere else.

In public policy terms, misusing information provided to governments has important implications. First, it discourages experts from within the community from contributing to important public reviews and inquiries. Second, when misusing information provided by statutory institutions, it not only diminishes community trust in the Government of the day and its policies, it diminishes the standing of those important statutory institutions with the public, standing which is essential if they are to perform their functions appropriately.

6.2.3 Probity Issues

As noted earlier probity plans were put in place for the RFP tender process. I have been shown two probity plans, one for the overall project and a second plan covering the conduct of non-Commonwealth members of the Panel of Experts. The plans contain sign offs at various stages through the tender process, for example on advisor procurements, the RFP documents, the RFP evaluation plan and finally sign off.[266] The ANAO discusses probity issues at length in its Performance Audit Report, and concludes probity issues were taken seriously and managed well. I generally agree with that assessment.

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[264] ACCC, 2009, Fibre To The Home (FTTH) Information Paper, ACCC FOI Request 23-2013-Document 8 and email from ACCC to Audit Secretariat, 12 May 2014.
[265] ACCC, 2009, Letter from ACCC to DBCDE 'Re: Questionnaire on broadband technologies', 13 February.
[266] Scala, J., 2008, 'National Broadband Network Project Probity Plan', Version 1.0 6 March 2008; Scala, J, 2008, 'National Broadband Network Project Probity Plan For Non-Commonwealth Members Of The Panel Of Experts', Version 1.0, 23 June 2008.

I would, however, make one further comment on this matter, which relates to the post completion review of probity processes.

While the approach to probity during the NBN Mark I tender process goes some way to satisfy what I would regard as better practice, an examination of probity in the context of the overall tender process is in my view an important part of any public policy process that involves probity issues. Indeed, a fulsome examination of the strengths and weaknesses of the approach to probity should be an important part of all 'wash up' reviews of projects like the RFP tender.

6.3 Rebooting The NBN Public Policy Process – The Role Of Taking Stock

Confronted with recommendations from the Panel of Experts that the proposals submitted under the RFP did not provide an appropriate vehicle for delivering the 2007 election commitment, the issue before the Minister and the Government was to determine the appropriate way to move forward.

The RFP Evaluation Report could have provided the Government an opportunity to take stock and reconsider the most appropriate way forward. The 'failure' of the RFP process may have been in part attributable to the GFC and its effect on the availability of funding, but it could also have been a reflection of the collapse of the relationship between the Government and Telstra, the company most likely to have been able to deliver successfully the Government's policy. Taking stock would have enabled the Government to better understand whether the most direct and recent manifestation of the breakdown in this relationship was the fact that Telstra's full proposal was not submitted for consideration.

Information obtained over the course of the tender process would have helped clarify key issues around regulation, compensation risk, overbuild protection and technologies. Setting up a 12 month Task Force, for example, would have allowed time for the policy objectives to be clarified, analyses of demand, costs and benefits to be undertaken and

fed into the process, other policy options to be re-examined and a possible re-engagement with Telstra to be considered.[267]

However, from the Government's perspective, its announced ambitions of finalising the tender process by mid-2008 and having construction commence by end 2008 had already been derailed. More than a year into its term, the Government had effectively made no tangible progress against a central election commitment. This would have been an important factor in its decision to press ahead in a quite unexpected way.

The Government, like its predecessor, was still firmly of the view that government had a role to play in the diffusion of very fast broadband. It also still had to grapple with the equally pressing issue of the appropriateness of the regulatory framework in a world of more pervasive broadband, and whether the issue of structural separation of Telstra needed revisiting in earnest.

The Panel of Experts had effectively indicated that the election commitment could not be satisfactorily progressed, although it did comment that with 'the right technology mix and incentives to create sound business cases being developed'[268]… 'the Panel can see a way forward to achieve the outcomes sought by the Government.'[269]

In a public policy process sense, I am firmly of the view that the next step should have been to apprise the full Cabinet of developments and to take stock of options to move forward. In a sense, any licence provided by the 2007 election commitment to defer good public policy process had expired and, at that point, a more considered new process was needed.

Informing the full Cabinet and the market that the RFP process had yielded some useful information but insufficient value for money would without doubt have been politically challenging on a number of levels, including, for example, leaving the Government open to the claim that it had nothing to show in relation to an iconic election commitment half way through its term of government, particularly compared to the position it might have been in had the OPEL contract not been cancelled in early 2008. It would, however, have

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[267] The RFP process for a similar project in Singapore was a year in the planning and successful proponents were announced nine months after the release of the RFP. (ANAO, 2010, op. cit., p. 44).
[268] DBCDE, 2008, op. cit., para. 1.2.6.
[269] Ibid., para. 1.2.10.

cleared the air and allowed proper detailed consideration of options for moving forward. Political considerations are of course a central part in any public policy process, and a key reason why Cabinet consideration at this point seems essential.

Taking stock would have:

- informed the market in a timely way of the outcome of the RFP process (reducing uncertainties for carriers that were investing in broadband infrastructure at the time)
- permitted a detailed review of 'learning' from the RFP process
- enabled the Minister to go to the Cabinet with a summary of progress to the end of 2008, and an outline of a detailed process to move forward, including a full coverage of the risks attached to each of the possible options, including the preferred approach.

Instead, the Government very quickly set course on an approach that:

- quickly shut down option development
- went from being a competitive market based testing of options to a proposal for full government provision of important telecommunications services without any testing of the benefits and costs
- put the Government firmly back in the role of a supplier of telecommunication services, when a couple of years previously the Government had completed a process of getting out of the telecommunications business
- developed the new policy without any detailed discussion with the industry
- created a 'start-up' GBE that was completely untested and ill-prepared to deliver one of the largest, most complex infrastructure projects in Australian history within a very tight timeframe
- did so without any detailed consideration of the regulatory framework that was needed to make such an exercise work.

Better practice would suggest a public policy process building on the information provided through the RFP tender processes, examining the very significant questions that were being raised around the nature of future demand, technology, market structure and regulation, and compensation, and allowing all those propositions to be thoroughly tested, including through appropriate consultation. It would also have been an opportune time to re-examine the issue of the appropriate role of government in the delivery of NBN services.

Australia has a 'gold standard' for examining in a very public way, the case for and against government involvement in large infrastructure projects, in the Productivity Commission (PC) inquiry process. The PC inquiry process helps enhance understanding of the key issues on specific infrastructure and reform projects across the community and government. An effective public policy process was critical in the tariff reform debate in the 1980s, it has been critical when undertaking major tax reform, and in many transport projects developed by state and federal governments. Many of the issues raised later in this Chapter reflect the lack of an open inquiry process to test options for government to consider.

Finding 2: Better practice public policy development relies on learning from 'failed' public policy processes. 'Taking stock' should be seen for what it is: a necessary part of good government and good public policy processes.

Recommendation 3: Governments should use a 'taking stock' approach to public policy development when it is clear that the initially chosen approach to major infrastructure projects or reforms is unlikely to deliver expected outcomes. The well-established Productivity Commission public inquiry process provides a well-tested starting point for 'taking stock' when required.

6.4 Use Of The Cabinet Process

The first stage in a better practice consideration of NBN Mark II would have been developing a submission for consideration of the Cabinet.

NBN related issues were not discussed by the full Cabinet between the time the Evaluation Report was handed to the Government until it was asked, in a perfunctory way, to sign off the radically restructured NBN Mark II model on the morning of 7 April 2009, just before the announcement was made.[270]

[270] Senate Standing Committee on the Environment, Communications and the Arts, 2009, Budget Estimates Hearings May 2009, Questions on Notice, Question No 10, Hansard Ref: ECA 69, 'Cabinet Meeting Dates Regarding NBN Expert Panel Report and Cabinet Subcommittee Considerations'.

I consider this to be a very significant public policy process failure. As Nicola Roxon commented, 'a progressive party needs to be able to argue over issues'.[271] At the very least, the Cabinet should have been informed of the outcome of the RFP process and the proposed next steps. It should have been given detailed advice on why the tender process failed, what useful information it delivered, and been able to consider and discuss a range of options for going forward before agreeing on a course of action.

As the Cabinet Handbook fifth edition issued in November 2002 noted:

> 'The Cabinet itself is the apex of executive government. Meeting regularly, it sets the broad directions of government, takes the most important decisions facing a government and resolves potential conflicts within government.' [272]

While it is for the government of the day, and in particular the Prime Minister, to determine how the Cabinet system operates, the NBN was a key Government policy commitment. To not keep all Cabinet ministers informed is difficult to understand and undermined good public policy development and scrutiny in relation to this important Government initiative.

Strict drafting requirements for Cabinet submissions ensure clear identification of the scope of a proposal, the problem it is seeking to address, the financial implications and the implementation risks. The new NBN Mark II ranked among the largest, riskiest and most complex of infrastructure and regulatory propositions to be considered by governments in recent decades. Better practice public policy demands that projects of this nature form a central part of the Cabinet agenda.

Ideally, after an initial consideration by the Cabinet a new policy development process would have followed, almost certainly involving SPBC, leading eventually to a second round of Cabinet consideration. At this point, the preferred option for NBN Mark II should have been placed in the context of other options (and there were certainly other options), and the pros and cons explored. An important part of this consideration would have been a fully developed regulatory impact statement (RIS), exploring the implications of the proposed course of action for the regulatory framework, the

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[271] Roxon, Nicola, 2013, John Button Memorial Lecture 2013, published 17 October 2013, http://www.smh.com.au.
[272] Department of the Prime Minister and Cabinet, 2002, *Cabinet Handbook*, Fifth Edition, November 2002 p. 1..

requirements for further regulatory reform, and the impact of those reforms. As it was, an exemption from the RIS process was sought and obtained from the Prime Minister for the eventual 7 April 2009 Cabinet Submission.

The Prime Minister is responsible for managing the flow of business to the Cabinet and to Cabinet committees. Consideration by a Cabinet committee is not unusual.

> 'Some work of the Cabinet sensibly falls to be dealt with by its committees. Committees serve a useful purpose in dealing with the highly sensitive...; the relatively routine…; and business that is labour intensive or requiring detailed consideration by a smaller group of ministers…'[273]

There is little doubt that the SPBC would have been able to play an important role, even if it was very stretched at the time. The new NBN proposal was complex and involved a potentially huge government investment. In fact, SPBC did play this role: over the 11 weeks it considered well over 1000 pages of documents; lengthy documents were provided, often the day before meetings, everything undertaken at breakneck speed. [274]

I consider the policy development process could not have been properly undertaken in 11 weeks, no matter how hard SPBC and the group of public servants worked, and how devoted they were to developing the new NBN Mark II. And from the evidence provided to me it is clear that both groups worked extremely hard to develop the proposals that were announced in early April 2009.

If a full Cabinet process (involving at least two full discussions in full Cabinet, and the appropriate use of SPBC) had been followed, buttressed by a considered policy development process, including appropriate consultation, it is likely that at least some of the problems that have subsequently emerged in relation to NBN Mark II could have been avoided.

Finding 3: Effective use of Cabinet processes is critical to better practice public policy process. The rigours of a well-argued Cabinet submission contribute to scrutiny,

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[273] Ibid, p. 1.
[274] Email Correspondence to the Audit Secretariat, 23 April 2014; Lindsay Tanner, 2012, *Politics with Purpose: Occasional Observations on Public and Private Life,* Chapter 6, ebook, Loc 4243 of 4410, Scribe Publications; Advice from PM&C, 4 July 2014.

informed debate and decision-making within government. The full Cabinet should play an important role in assessing larger, complex infrastructure proposals.

6.5 Developing NBN Mark II – The Need To Establish The Problem And Test The Solution

Once the Government had determined not to take stock after the failure of NBN Mark I but to proceed with a new NBN Mark II, better practice public policy suggests that a new approach was needed to set out clearly the problem the Government was seeking to address. I can find no evidence that this was undertaken. The project had dramatically transformed into something quite different from the 2007 election commitment in scope and delivery, and in its impact on the telecommunications regulatory framework. In addition, the Government's objectives and rationale for its re-involvement in the direct provision of telecommunications infrastructure and services lacked clarity.

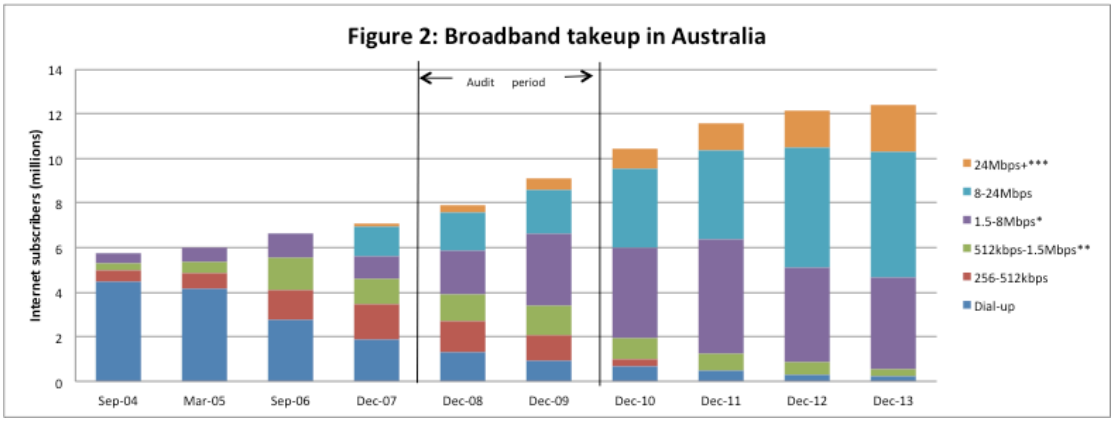
The development of NBN Mark II was being undertaken when the earlier NBN Mark I (RFP) process was still alive, resulting in some sensitivities of the Government's own making. The effect of seeking a simultaneous announcement of the outcome of the RFP process (NBN Mark I) and setting up a new GBE to run the NBN network (NBN Mark II) constrained discussion of ideas with outside specialists, industry and other stakeholders, and prevented modelling to estimate important elements of demand from being undertaken.

For example, an important element missing from the policy development process during early 2009 was consideration of the level or nature of demand for broadband services. Although quantification of demand for rapidly changing or emerging technologies is challenging, the case for government involvement is difficult to prosecute without some understanding of the level of demand and the community's willingness to pay. At no stage was there any detailed survey work on willingness to pay or cost benefit analysis undertaken. There was simply an underlying presumption that very fast broadband was 'good for society'.

If the Government was intending to re-enter the business of telecommunications it was incumbent on it to act and behave as a business would in these circumstances, that is, produce a thorough, detailed business case. In addition, from a better practice public policy perspective, all large public infrastructure projects require clear definition of the

policy problem to be addressed, sensible demand analysis, and cost benefit analysis showing the community benefit of government involvement.

Figure 2 below, which describes one example of the change that has occurred in broadband technology and takeup in Australia over the past decade, illustrates the impact of market forces in this period rather than the role of the Government.[275] Changes were taking place in the telecommunications market place as the Government sought to decide its broadband policy. Government investment through this period was small, but it was a period during which both broadband speeds and take up increased significantly. Very high speed broadband was far from ubiquitous, but it was a period of massive change that owed very little to government actions. Figure 2 underscores that identifying the problem that government intervention is seeking to address was and remains a central question in broadband policy in Australia, if public resources are to be well used. The rapid changes in demand for telecommunications and data services taking place at the time of the development of NBN Mark II were well documented and yet the uncertainty implicit in this rapidly changing environment did not seem to have figured in its design and implementation.



* Prior to Dec 2007 this figure included all speeds above 1.5Mbps

** From Dec 2011 this figure includes all subscribers on download speeds of 256kbps-1.5Mbps

*** From 2011 these figures include a measurable and increasing number of subscribers on plans of 100Mbps or greater.

Source: ABS, *Internet Activity*, op. cit.

[275] Detailed description of internet use in Australia, with some international comparisons, has been left to reports commissioned by the Independent Cost-Benefit Analysis and Review of Regulation, which is scheduled to report in mid-2014.

As discussed briefly above, a missing feature of NBN Mark I and Mark II was any significant study of the nature of future demand for broadband services. At least three objectives of the Government's NBN Mark I covered the need to respond to demand (objectives 3, 4 and 9).[276] While an absence of demand studies in NBN Mark I is perplexing, but to some extent explainable, it is beyond understanding why demand studies were not conducted in the preparatory phase of NBN Mark II, where the cost of the proposed intervention on government resources increased by nearly ten fold.

A better practice public policy process would have required sufficiently detailed estimates of benefits and costs to better understand the case for intervention, the nature of the intervention, and business case and, if there was a case, the priorities in infrastructure roll out. The detailed business case for the preferred option should have included a detailed cost benefit analysis and assessment of implementation and project deliverability, including risks.

The arguments used by the Minister to bypass undertaking a cost benefit analysis for NBN Mark II appear to rest on a presumption and an assumption.

- The presumption is that the best available technologies should be used. This is very much a statement about technology, and the view that adopting the technology of choice was important, even critical. The juxtaposing view is that the commercially sound technology path should be adopted because it is the outcome not the technology that matters.
- The assumption relates to the benefits of high speed broadband. There is little doubt that the movement from dial up to fast internet (such as ADSL2) yields substantial net benefits. Whether the move from fast broadband to very fast broadband (eg from ADSL2 to fibre) provides similar benefit is less conclusive.[277] It is not for me to form a view on this subject, suffice to say that good public policy would require this assumption to have been thoroughly tested, but no study of its benefits and costs was undertaken prior to announcing NBN Mark II.

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[276] See DBCDE, *Request for Proposals to Roll-Out and Operate a National Broadband Network for Australia*, Request for Proposals Number DCON/08/18, 11 April 2008, section 1.3.1.
[277] Kenny, R, 2013, 'Ultra-Fast Broadband – A Solution in Search of a Problem?' April 19 2013. Retrieved from: http://www.commcham.com/storage/Rob Kenny IEP presentation.pdf; Kenny, R, 2011, Fact checking Stephen Conroy's NBN speech to the Press Club, December 2011. Retrieved from http://www.commcham.com/storage/publications/ConroyFactCheck.pdf.

During the policy development phase, and once a decision had been taken in principle, Treasury and the Department of Finance and Deregulation focused on developing, as best they could, the Government's nominated option.

- The Department of Finance and Deregulation focused on its core business, providing as much rigour to the costing process as it could, but recognising it could not win an argument on the veracity or otherwise of the overall case. I have been advised that several government departments came to the view that because the Government was so determined to take the course of action it did, the best option was to try to ensure, that at the very least, the introduction of the new policy was accompanied by a post announcement implementation study that at least created the possibility of some more thoughtful ex-post consideration of matters not fully addressed during the development of NBN Mark II. [278]

- In the case of the Treasury, it is my understanding that its concerns were most focused on budgetary classification issues, and that the approach being adopted could deliver a more efficient telecommunications sector through the effective structural separation of Telstra, which Treasury believed would have been an important beneficial long-term outcome of the new policy. The summaries of the NBN Working Group meetings that took place in February and March 2009 suggest that the regulatory framework was an important element of discussions and papers that were put to SPBC. However, important regulatory matters remained unresolved when the Government's announcement was made on 7 April 2009. [279]

In the short timeframe demanded by the Government for the development of NBN Mark II, it was impossible for the public service to adequately address all of these difficult and complex issues. The Government was well aware of the limitations of the process it chose. Political motivations clearly drove the Government's timetable. This meant that much of the analysis that should have informed decision-making prior to the Government's 7 April 2009 announcement was actually deferred until after the decision was made. This included the Implementation Study undertaken by KPMG and McKinsey & Company (the contract for which was signed on 6 August 2009 and the report presented to the Government in March 2010), scoping of regulatory issues, opening

[278] From the Minister for Finance and Deregulation's perspective, the deliberations of SPBC included 'consideration of issues such as financing, budget accounting, project risk, and allowance for contingency'. Email Correspondence to the Audit Secretariat, op. cit.
[279] PM&C, 2014, Summaries of NBN Working Group Meetings, 13 May 2014.

discussions with Telstra over the use or lease of its copper network and development of the first preliminary business case for the project by NBN Co (presented to the NBN Co Board in March 2010).

The Government was well aware of the important role played by evidence and good process in decision-making. It passed the Infrastructure Australia legislation in March 2008, and Infrastructure Australia was at the time championing its preferred assessment framework, which is set out in Appendix 9. There was also the Building Australia Fund Evaluation Criteria, which were formally transmitted to Infrastructure Australia in January 2009 to guide it in providing advice to the Government on the application of funds under the *Nation-building Funds Act 2008*.[280] Better practice public policy process for large infrastructure projects and major economic reforms requires full cost benefit analyses, the development of business cases and regulatory impact statements. The Cabinet Handbook provided the overarching framework while guides were available for undertaking cost benefit analyses, and the preparation of business case and regulatory impact statements alike. The Government chose a different sequencing for NBN Mark II and in doing so chose to ignore the many guides on better practice public policy process available to it. My view is that its chosen approach to sequencing for NBN Mark II did not reflect best practice public policy and led to the major issues that continue to be experienced today in the roll out of the NBN.

Finding 4: Better practice public policy development for large infrastructure projects and major economic reforms requires very clear definition of the problem being addressed, the case for government intervention if that is being proposed, full development of cost benefit analyses, business cases and regulatory impact statements. The Cabinet Handbook provides the overarching framework for what constitutes good policy development, while up to date guides exist within government for undertaking cost benefit analysis, preparation of a business case and regulatory impact statements.

Recommendation 4: Large public sector infrastructure projects with costs above $1bn should be subject to a cost benefit analysis study and the results made public prior to the commencement of the project.

[280] Commonwealth of Australia, 2008, Building Australia Fund Evaluation Criteria, Retrieved from Australian Government Com Law: http://www.comlaw.gov.au/Details/F2008L04764

Recommendation 5: The Government should give consideration to preparation of a single whole of government guide (or website) for evaluating infrastructure proposals and reforms that might involve some form of government intervention. This could draw together the essence of key guidebooks already available, developed with the specific purpose of assisting Ministers, Ministers' Offices, Opposition equivalents, public servants and others wanting to promote a public policy proposal, to better understand their role in preparing cases for large infrastructure projects and reforms.

6.6 Implementing The NBN Mark II Vision

The Government's original NBN vision had multiple objectives, as illustrated by the 18 objectives specified in the original RFP.

At the point of announcement of NBN Mark II, there were three key elements to delivering the Government's NBN vision:

- an Implementation Study was commissioned to fill out many of the unknowns at the time of its announcement
- putting in place a start-up GBE to develop planning for the NBN, and to deliver the infrastructure on the ground in a cost effective manner
- regulatory arrangements to support equivalent access to the wholesale network and underwrite strong competition within the sector more broadly.

6.6.1 The Implementation Study – Developing The Business Case After The Fact

From a public policy process perspective, commissioning an Implementation Study was a very direct way to have the project scoped and costed, or in its words 'of translating high-level policy objectives into tangible actions for both Government and NBN Co to implement…[and] how to translate the policy objectives into a mandate for NBN Co, including supporting legislation and regulation.' [281]

As noted in Chapter 5, a noteworthy feature of the Implementation Study is an early disclaimer about what the Study did not do – 'it does not:

- Evaluate Government's policy objectives;
- Evaluate the decision to implement the NBN via establishment of NBN Co;

[281] *Implementation Study for the National Broadband Network*, op. cit., p. i-ii.

- Undertake a cost benefit analysis…...'[282]

NBN Mark II had progressed to the implementation phase without any real attempt to undertake these three significant exercises.

The Implementation Study itself is a very solid document that derives from considerable effort by advisors and government agencies to understand the issues that underlay the very large investment being contemplated. It was to provide a starting point for NBN Co:

> 'NBN Co must be the principal architect of the corporate plan. However, Government will wish to ensure that the plan is consistent with its expectations, requiring additions to the plan where necessary. An exhaustive list of elements that should be included in the corporate plan is beyond the scope of the Implementation Study.'[283]

From a public policy process perspective, it is clear that the public service put considerable effort into coordinating, facilitating and conciliating when necessary the work of the KPMG and McKinsey & Company advisory team, the NBN Co and the Government, as evidenced by the work of the NBN Implementation Study Steering Committee.[284] There was much in the Implementation Study that was of assistance to NBN Co[285] and the Implementation Study would have provided a valuable resource (rather than blueprint) for the start-up GBE to develop its business plan.

However, the Implementation Study was prepared for its client, the Government, not for NBN Co. This is sensible if the Study is viewed as a policy development document for government, rather than an analysis for NBN Co itself. But, it is clear that as the Study proceeded, the gap between the Study and NBN Co's own developing plan of action was widening to the extent that the NBN Co CEO indicated that some of the

[282] Ibid.
[283] Ibid., p. 496.
[284] This assessment is based on a review of the agendas and attendance at the meetings, and a cross section of the Agenda Papers prepared for the Steering Committee.
[285] NBN Co CEO, 2010, Letter to the Minister for Broadband, Communications and the Digital Economy, 23 March 2010 (access provided by NBN Co).

recommendations of the Implementation Study 'are likely to substantially undermine NBN Co's business case...'[286]

6.6.2 The Start-Up GBE: Fit For Purpose?

A salutary anecdote I have heard on several occasions during this Audit relating to the early days (August 2009) of NBN Co was the comment 'all we had (to guide us) was the press release and a bunch of business cards'.

From a public policy perspective, the issue is whether the start-up approach was 'fit for purpose'. Overall, it is hard to conclude that the options analysis that preceded the decision to establish a start-up GBE was sufficient to determine that this approach was the best way to ensure the efficient and effective delivery of the Government's revised NBN policy, particularly within the Government's self imposed very tight timeframe. The Implementation Study outlines many risks, and the NBN Co Board papers identify concerns as they emerged, and approaches to mitigate these significant risks.

NBN Co was a genuine start-up with the task of delivering a massive infrastructure project. In the early months, the Board met fortnightly, and the small number of employees and contractors had to set up corporate systems (financing, bank accounts, insurance, brand and logo design, advice on the role of a GBE Board and responsibilities and powers of Directors, and corporate governance arrangements) and start to prepare the business case and corporate plan.[287] It was not until beyond the period of this Audit that the full complement of Board Committees had been formed.

6.6.3 NBN Co Governance

Two governance issues in relation to NBN Co merit some discussion.

The first issue is the appointment of an interim Executive Chairman at the point of start-up of the independent Board, prior to appointing a Non Executive Chairman some eight months later.

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[286] NBN Co CEO, 2010, Briefing to the Minister for Broadband, Communications and the Digital Economy and Minister for Finance and Deregulation, 24 March 2010 (access provided by NBN Co)Ibid.

[287] For example see NBN Co, 2009, Board Minutes, Board Meeting, 13 August 2009; Board Minutes, Board Meeting, 2 October 2009.

The process of appointing members to the Board of NBN Co initially started with a scope of work being provided to a recruitment firm for the appointment of a Chairman, who would be available to comment on the selection of the remainder of the Directors. It was initially intended that the Board would then appoint a Chief Executive Officer (CEO).[288] This approach is in line with better practice set out in the Commonwealth's *Governance Arrangements For Commonwealth Business Enterprises*.[289]

At some point, however, the Government determined that it wanted someone from outside the 'Director's club' (the list of candidates usually considered for appointment to Australian public company boards), sharply reducing the number of experienced candidates for consideration. The issue that then arose was that the shortlisted candidates were interested in doing more than the job description of the 'part time' Chairman.[290] As a result, an Executive Chairman (which combined the role of Chair and CEO) was appointed as an interim arrangement that later was to have an impact on the Shareholder Ministers/Board relationship. For example, I have been advised, and Board papers appear to confirm, that in May 2010 the scenarios outlining coverage of the proposed NBN fibre network were discussed and agreed between the Minister and the Executive Chairman, and the outcome of this discussion was then presented to the Board.[291] However, NBN Co suggests it was not until 2013 that a formal, detailed paper covering these issues was presented to the Board.[292] The Executive Chairman established close relationships with many key stakeholders, including with the Minister, before reverting to a more standard CEO role. To some extent this is to be expected in an environment of frenetic activity, lack of clear instructions from the Government, and ad hoc decision-making where many of the instructions to NBN Co were coming direct from the Minister. This early period of role overlap appears to have affected the interaction between the incoming 'part time' Chairman and the Minister after the initial Board governance arrangements were unwound.

The second is the very late conveying of a formal Statement of Expectations to the Board of NBN Co. While the formal guidance at the time, the 1997 *Governance Arrangements For Commonwealth Business Enterprises*, makes no mention of such a statement, the

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[288] DBCDE, File Note; DBCDE, Request for Quote number (ATM09/80) for (Assistance with the appointment of the NBN Company Board), May 2008.
[289] *Governance Arrangements for Commonwealth Business Enterprises*, June 1997, mimeo, paragraphs 3.4 to 3.9.
[290]Presentation, 2009, NBN Board – CEO Appointment, 17 July 2009.
[291] NBN Co, 2010, Meeting No. 23, op. cit.
[292] Advice from NBN Co, 11 June 2014.

2003 Uhrig Review Of The Corporate Governance Of Statutory Authorities And Office Holders suggests this is important:

> 'it is recommended that each Minister issue a Statement of Expectations to statutory authorities within their portfolio where the Minister has a role in providing direction. This document would outline relevant government policies, including the Government's current objectives relevant to the authority and any expectations the Government may have on how the authority should conduct its operations. Statements would need to be framed carefully, respecting the areas of necessary independence provided for in the statutory authority's enabling legislation.'[293]

The first formal Statement of Expectations from the Shareholder Ministers to the Board came more than 16 months after the appointment of the Executive Chairman. Board Papers record that the expectations of Shareholder Ministers, such as the commerciality of its investment, were a concern as early as mid August 2009.[294] There were informal statements of expectations in letters of appointment, and no doubt messages conveyed in discussions between Ministers/the Minister and the CEO and Chairman, and later in letters to the Chairman[295], but that was clearly inadequate for a project of this scale, scope and risk and being rolled out by a fledgling company.

I have been provided with two plausible explanations for the delay in the provision of a Statement of Expectations. The first is that the Government was waiting for the completion of the Implementation Study, and in the interim provided informal 'directions' through letters of appointment and face-to-face discussions. However, this explanation does not adequately account for the gap between March 2010 (when the Government received the Implementation Study) and December 2010. But the gap could be explained by the ongoing negotiations between NBN Co and Telstra, which as noted in Chapter 4 reached a Heads of Agreement stage in June 2010, just beyond the period of this Audit.

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[293] Uhrig, J., 2003, *Review of the Corporate Governance of Statutory Authorities and Office Holders*, pp. 7-8.
[294] NBN Co, 2009, Board Minutes Items 5 and 6, Board Meeting 13 August 2009 (access provided by NBN Co).
[295] For example, Minister for Broadband, Communications and the Digital Economy, 2010, Letter to Chairman NBN Co, guidance to Inform NBN Roll out, undated (post 19 June 2010).

A second explanation is that the April 2009 NBN Mark II announcement was established by the Government as a stalking horse for structural separation of Telstra.

Both explanations would help to explain reluctance by the Government to lock down the Statement of Expectations at an earlier date, but they also underscore the weakness in the overall approach adopted under NBN Mark II. The Board of the start-up NBN Co was placed in the invidious position of not having a clear set of directions about the strategy of the Government and the expectations of the Shareholder Ministers, and having to delay lodgment of its corporate plan because the Government was not ready to receive one.[296]

My conclusion is that the approach adopted by the Government was not better practice, and left the Board of NBN Co without clear guidance on its priorities. This undermined the ability of the NBN Co Board and its management to meet the Government's demanding objectives as outlined in its 7 April 2009 announcement.

6.6.4 Regulatory Arrangements

I have described in Chapters 3 and 4 the processes put in place for developing the telecommunications regulatory arrangements to respond to the development of an NBN throughout the Audit period, as a part of putting in place NBN policy. Better practice public policy processes for large infrastructure projects demand that policy development and regulatory arrangements are developed in parallel, with one informing the other. This is of particular importance in areas of regulatory and policy complexity such as with telecommunications policy, where complex matters related to the existence of 'natural monopolies' require careful and considered thought as to how to best encourage both the incentive to continuous investment while, at the same time, maintain efficient access regimes that encourage competition and its benefits.

As no new significant regulations applying to the NBN were put in place during the Audit period it is not for me to come to any firm judgments about the efficacy of the regulatory arrangements that were eventually put in place.

However, four points can be made about the regulatory public policy process.

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[296] NBN Co Shareholder Ministers, 2010, Letter to the Chairman NBN Co, 11 June. (access provided by NBN Co).

- The considerable regulatory uncertainty during NBN Mark I contributed to the eventual failure of the RFP process. This issue is discussed at length in the ANAO's performance audit.[297]
- This regulatory uncertainty continued during the first year of NBN Mark II (the remainder of the period of the Audit). Initially, this uncertainty related to how certain Telstra assets would be regulated under the Government's new telecommunications policy framework, given that NBN Mark II was initially conceived as a separate stand-alone network. The Government's April 2009 Regulatory Discussion Paper provided only a cursory overview of the implications of NBN Mark II for the regulatory framework, indicating that the Government's approach would be informed by the Implementation Study. Moreover, the Discussion Paper did not seek advice on these regulatory issues, indicating it would consult separately on them at a later date.[298]
- The Government's approach to the regulatory framework appeared to focus on first defining the shape of the physical infrastructure rather than giving deep consideration to the regulatory challenges to maintain competition that would confront the market as new technologies became cost effective. Many of these issues were outlined in the March 2010 Implementation Study.
- The negotiation between NBN Co and Telstra covering purchasing and leasing of certain Telstra assets, which occurred over a lengthy period extending well beyond the period of this Audit, was to have significant regulatory ramifications, as it embodied the effective structural separation of Telstra. It provides a partial explanation for the lack of priority given to regulatory certainty, given its potential impact on investment.

Structural Separation

In November 2007 the election commitment of the incoming Labor Government was to create a NBN, including 'regulatory reforms to facilitate the roll-out of [a] pro-competitive open access network providing equivalence of access charges, and scope for access seekers to differentiate product offerings'.[299]

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[297] ANAO, 2010, op. cit., see particularly 2.67, 3.26 and 3.56.
[298] Department of Broadband, Communications and the Digital Economy, 2009, *National Broadband Network: Regulatory Reform for 21st Century Broadband*, Discussion Paper, April, pp. 7-11.
[299] ALP, 2007, *New Directions for Communications*, p. 19.

The RFP tender document took up the theme of open access and equivalence set out in the election commitment - open access arrangements should apply to wholesale services to be provided over the NBN - but then referred to the situation where a proponent would be supplying both wholesale and retail services. The tender documents contemplated vertically integrated carriers providing the NBN services.[300] During the RFP process nothing was ruled out in terms of regulatory possibilities, and Telstra was not given clear answers with respect to questions it asked about whether structural separation would be required. Indeed, the issue of structural separation had come to the fore during the RFP process through the accompanying regulatory submissions process. A large number of the submissions on regulatory issues submitted to the Panel of Experts in June 2008 supported strict separation measures - in particular, structural separation - to ensure effective competition in the wholesale market. These arguments primarily cited examples of Telstra's existing market dominance to make their case.[301]

When it came time for the Government to consider its options following the unsuccessful RFP process, Lindsay Tanner commented '(t)he SPBC was also conscious of the fact that it was seeking to address two intersecting problems, the inadequate state of high-speed broadband access across Australia, and the stifling impact of Telstra's vertical integration and associated market dominance on telecommunications in Australia. I regarded these related issues as absolutely central to Australia's future prosperity, and I believe that the passage of time has confirmed this assessment.'[302]

Thus when the Government was making decisions about NBN Mark II, the issue of future telecommunications industry structure was also being considered, as well as the form that an off budget government intervention to roll out the infrastructure might take. In explaining the NBN policy announcement of April 2009, DBCDE confirmed that what the Government wanted to deliver was 'future-proof high-speed broadband' but it 'also wanted to address structural issues in the industry by setting up a wholesale-only

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[300] DBCDE, 2008, *Request for Proposals to Roll-Out and Operate a National Broadband Network for Australia*, op. cit., Section 1.5.16.
[301] ACCC, 2008, *Assessment of Proposals National Broadband Network Process – Report to Expert Panel, Appendices Confidential Version*, January 2009, pp. 149-150, retrieved from http://www.smh.com.au/reports/NBNReport.pdf.
[302] Extract from email from former Minister for Finance and Deregulation to the Audit Secretariat, 23 April 2014.

network. Those things informed and drove the policy framework which the government announced'.[303]

It is hard to disentangle the two policy objectives of the Government – its proposal to put in place physical infrastructure using NBN Mark II on the one hand, and the appropriate regulatory arrangements on the other. In general, the public policy process for regulatory reform was far from transparent. The significant change in direction of NBN Mark II (from the proposal for a stand alone wholesale network separate to Telstra's copper network to one involving it) appears on the surface to have been significant in regulatory terms, and to have significant ramifications that have never really been publicly explained. It was not until well outside the period of this Audit that these issues began to be resolved.

In a public policy process sense there were two possible explanations. The first is that the approach on regulation was to wait and see what emerged through the NBN Co - Telstra negotiations (and showed little concern for the costs of the impact of this approach on investment in the telecommunications sector more generally and on the eventual cost of this approach on consumers of broadband services). A second possible explanation was that the approach was chaotic, and that the necessary work had not been done before the Government embarked on the reform. Whatever the case, there was a lack of public transparency in the whole regulatory process during the period of the Audit. In a sense, as the investor in NBN Mark II, the Government could adopt this approach as it was the major risk carrier, but it would have been untenable had a private sector company been the owner of the NBN, and the eventual loser from this approach has been the broader Australian community.

6.7 Timeframes – Setting Aside Adequate Time

An overarching observation from examining the NBN public policy processes during the Audit period was the focus on getting the job done as fast as possible.

I have mentioned above:

- the overly ambitious timetable for implementing the election commitment

[303] Senate Select Committee on the National Broadband Network, *Official Committee Hansard*, 20 July 2009, p. NBN 106.

- the effect on the likelihood of a successful conclusion of the RFP process from the decision to establish a 'one stage' tender process, rather than a more traditional, two or three stage process
- the decision to continue with the approach to NBN Mark I despite market soundings indicating significant concerns among tenderers
- the short timeframe for the ACCC and the Panel of Experts to evaluate proposals
- the extremely short timeframe allocated to develop and test NBN Mark II
- the unrealistic timeframe to roll out NBN Mark II, particularly in the context of the start-up GBE delivery mechanism selected.

All these decisions undermined the public policy process, and this in turn undermined the ability of the Government to achieve its NBN policy goals. Better practice requires aligning timeframes (and resourcing) with the task at hand.

NBN Mark I

DBCDE established a rigorous policy process for implementation of the 2007 election commitment, and indeed had undertaken substantial work on it before the election. This included undertaking a detailed analysis of the Government's NBN policy proposal and identifying key issues to be resolved. It had engaged with the Minister in lengthy meetings immediately after the election on these matters, but unrealistic timing considerations by the Government imposed significant constraints on how DBCDE proceeded.

On 7 December 2007 the Minister publicly committed to finalise a tender process by the end of June 2008, setting in place a very ambitious timeline. The timetable was immediately under threat almost as soon as it was announced.

The headlong rush to announce the RFP meant that, despite best endeavours by the public service, important issues were either unresolved, or given only limited consideration. For example:

- policy details appear to have been settled within two months of the election suggesting limited opportunity for consideration of alternative approaches
- the time provided for review of the draft RFP was very limited and the ability to incorporate suggestions and additional details was constrained, creating the need for a large number of clarifications and addenda to be issued through the RFP process

- a regulatory framework had not been established and needed to be considered in parallel with the RFP, introducing considerable uncertainty for potential proponents
- network information was not available to proponents when the RFP was issued, leading to a blowing out of deadlines during the tender period (and calling into question the earlier decision to cancel the OPEL contract).

Timeframe To Develop NBN Mark II

Just 11 weeks elapsed between the completion of the Evaluation Report by the Panel of Experts and the announcement of NBN Mark II. In a very real sense, the timeframe represented the period taken to complete, often in a very truncated way, the tasks the Government determined would be undertaken - not how long was required to undertake a new, complex and much more ambitious task. There was no taking stock, no careful definition of the problem the Government was seeking to address, no careful consideration of options that might have involved less risk or better use of public monies. There was no detailed attempt to understand the effective subsidy embodied in the use of a 'commercial' start-up GBE. While the involvement of SPBC was substantial, the role of the Cabinet was perfunctory. The Prime Ministerial exemption from the requirement to include a RIS in the Cabinet Submission no doubt saved considerable time (at the time), but it meant that the Government had only limited understanding of the regulatory impact of its proposal.

If the Government had decided to take stock, and work through the issues outlined above, it is likely the process would have taken 15 to 18 months. In my view, this approach would have produced a much more robust set of options on which to base a decision of this magnitude, and a much better understanding of risks and impacts. The management of risk was almost entirely put into the Implementation Study basket.

Timeframe To Deliver The NBN Mark II

The announcement of NBN Mark II in April 2009 noted the Government's objective of delivering the NBN within 8 years.[304] This was an increase from the five years in NBN Mark I. But as early as the beginning of September 2009, the likely time to complete roll out of the NBN was, according to the Government's Implementation Study advisors, around eight years from the roll out commencing. If roll out commenced in late 2010,

[304] Prime Minister, Treasurer, Minister for Finance and Minister for Broadband, 2009, 'New National Broadband Network', Joint Media Release, 7 April 2009.

the project completion date had moved to end 2018, or nine and a half years after its announcement.[305] The eventual success of the negotiations with Telstra, whereby there would be some reuse of Telstra infrastructure, should have reduced the build timeframe. While outside the Audit period, estimates of time to completion continued to lengthen. Key reasons for this at the time were the availability of skilled labour and construction company expertise (and in some areas this remains an issue today).[306] Assumptions made about the ease of roll out have proved manifestly incorrect.

Giving the task of rolling out such a complex infrastructure project to a start-up company inevitably meant there would be delays. With a project of this scale, risk and time pressure, each task that needed to be started from scratch distracted scarce management resources from the task of planning and rolling out the NBN. The issue confronted time and again by those within the public sector and NBN Co dealing with this policy was the practical task of delivering the project in a very compressed timeframe. Not having the regulatory framework in place, nor sufficient guidance from the Government in relation to the use of existing telecommunications infrastructure, made it clear almost immediately after the April 2009 announcement that the timetable was unachievable. Inevitably, this led to increasing perceptions that the project was 'running behind' or 'off the rails'. It is clear that having such a project undertaken by a start-up inevitably meant that world best practice roll out could not be achieved, and certainly not within the unrealistic timeframes set by the Government.

Recommendation 6: Government should take special care in determining and deciding appropriate, realistic timeframes are put in place for the design and implementation of large and complex infrastructure projects and reforms.

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[305] McKinsey & Company, 2009, NBN Implementation Study, Preliminary NBN Co Roadmap, 28 September 2009, mimeo.

[306] The *National Broadband Network: Fibre-to-the-premises in greenfield estates Consultation paper* proposed a requirement to install FTTP in greenfield sites from July 2010. The Western Australian Local Government Association submission termed this 'very optimistic', reflecting a combination of extremely high demand to install FTTP across the state, combined with a shortage of available skilled and suitably qualified workers to undertake this type of work (see Western Australian Local Government Association, 2009, Interim Submission Western Australian Local Government Association – Australian Government Department of Broadband, Communications and the Digital Economy National Broadband Network Fibre-to-the-premises in Greenfield estates Consultation Paper, June).

6.8 A Final Related Matter

There is one other matter, not directly related to the terms of reference for this Audit, but which has constantly arisen in the course of this Audit and has profound implications for public policy development and implementation. It is clear to me that during the whole of the period of this Audit, public officials involved in the NBN policy development process, in both its manifestations, worked with remarkable dedication and commitment to attempt to make this policy work. There can be no doubting the commitment and dedication of the Australian Public Service to serving the Government of the day in relation to this project.

However, it is also clear from the evidence provided to this review and from the comments from those I interviewed from within the public service that they had difficulty in having their 'voice' heard on many of the most important public policy matters related to the Labor Government's NBN policy. They often found their advice ignored, or they were excluded from contributing to the most important elements of development of this particular policy. In effect, the public service found itself focusing only on second and third order issues, because in effect they had come to the view that it was on only these issues that they were likely to be both welcomed and productive.

It is tempting to assume that this was simply circumstantial and related to the very special circumstances and operating culture of the Rudd Labor Government at the time. However, this may be too convenient an explanation. There have been many other times in Australia's history when similarly difficult and complex policy issues have emerged and have created tensions between the Executive and the most senior levels of the public service, and yet, robust advice has still been provided to Ministers and the Executive, and this advice has been taken seriously and taken into account as policy was formulated.

Because it was not possible to investigate all of these matters during the conduct of this public policy process audit, it is not possible for me to come to any conclusions about this matter. However, this is too serious a matter to be left without serious consideration.

Recommendation 7: The leaders of the Australian Public Service should examine whether its inability to have its views seriously considered on the important

matters related to the Rudd Labor Government's NBN Policy was circumstantial or whether it signals a more serious malaise within the Australian Public Service that needs addressing.

Appendix 1

INDEPENDENT AUDIT OF THE NBN PUBLIC POLICY PROCESS

Terms Of Reference

The Minister for Communications and the Minister for Finance will appoint an individual to conduct an independent audit into the public policy process that resulted in the establishment of NBN Co Limited ('NBN Co').

The audit is to cover the period from April 2008 (when the Australian Government issued a request for proposals for a national broadband network solution) to May 2010 (when the implementation study for the National Broadband Network ('NBN') was released).

The audit should:

(a) Outline the public policy process undertaken to support decisions by the Australian Government relevant to the NBN policy. This should include a description of:

  (i) the advice and processes that led to the establishment of NBN Co;

  (ii) the origin and basis for NBN Co's mandate to run fibre to the premises (FTTP) to 90-93 per cent of Australian premises; and

  (iii) the approach taken in regard to obtaining cost benefit or independent reviews of the project.

(b) Provide recommendations in relation to the NBN public policy process. This should include recommendations on what future actions should be taken by the Australian Government when considering major projects / reforms such as the NBN.

It is expected that the independent auditor will consult with relevant entities and individuals (both within and outside Government) and will access legally available information. These enquiries and the information provided will necessarily be constrained as the terms of reference raise matters where access to information is restricted.

Appendix 2

INDEPENDENT AUDIT OF THE NBN PUBLIC POLICY PROCESS
INDEPENDENT AUDITOR

Access to Commonwealth documents and information

It is anticipated that you will consult with relevant entities and individuals (both within and outside the Government) and will be given access to information within the scope of the terms of reference, unless there is a restriction on providing such access.

These restrictions include non-disclosure of information that would be contrary to long standing conventions which involve maintaining confidentiality of Cabinet material and that Ministers do not seek access to Cabinet and other deliberative material of previous Governments. These restrictions will cover:

(i) Minutes and other records of meetings of the Cabinet and subcommittees of the Cabinet evidencing decisions relating to the RFP and NBN processes.

(ii) Advice (written and oral) provided to the Cabinet, subcommittees of the Cabinet and relevant Ministers by departments. This would include material in Incoming Government Briefs for the 2007 election.

(iii) Advice (written and oral) provided by staff of Ministers to those Ministers.

There may be other material that is not available to you. For example, material may not be provided if it is subject to legal professional privilege or if there is an obligation of confidence to another entity.

You will have no statutory or other legal power to compel the production of information (either documents or via interviewing witnesses.) Departments will assist you by giving material to you where no restriction is considered to apply. The restrictions will also apply to information given to you by current and former Departmental officials you interview.

It is expected that any non-public material or information provided to you by Departments or by Department officials will, except to the extent it is included in your report, be treated as confidential. You may also wish to implement appropriate procedures to ensure that such information is secured against loss and unauthorised access, use or disclosure. Upon completion of the audit you will be required, if requested by the relevant party, to return any documents of the Commonwealth to the party from whom they were obtained and destroy all copies.

You may also receive confidential information from persons other than the Commonwealth. You may consider putting in place the same or similar process to deal with that confidential information, which you will need to agree with the person from whom you obtain such information.

You may wish to appoint legal advisers to assist you in the performance of your audit. If you wish to do so, please contact the Secretary of the Department of Communications to arrange this.

Source: Department of Communications, 2014

Appendix 3

NBN Public Policy Process Audit - Information Sources

(a) Discussions

Mr Scales has had discussions with a number of current and former departmental heads, officers and former officers of the Department of Communications, the Department of Finance, the Treasury and the Department of the Prime Minister and Cabinet. He has spoken with some members of the Panel of Experts, a former Chair and two Commissioners of the ACCC, officers of the ACCC, AGS, and NBN Co, and consultants and business people.

The Audit Secretariat has separately had discussions with officers of the Department of Communications, Department of Finance, the Treasury and the Department of the Prime Minister and Cabinet.

A number of people declined invitations to speak with the Auditor.

(b) Advice and Documents

The Audit Secretariat has been provided advice and documents by the Department of Communications, Department of Finance, the Treasury, the Department of the Prime Minister and Cabinet, the ACCC, NBN Co and a number of other bodies and individuals.

(c) Public submissions

Public submissions were invited in an advertisement on 11 April 2014 (see Appendix 10).

(d) Bibliography

The bibliography lists the documents used in this Audit.

Appendix 4

Chronology of events related to the NBN public policy process

Date	Policy related events and Regulation related events	Key events International/ National
	Pre-2007	
	Telstra substantially privatised through progressive sale of shares in 1997, 1999 and 2006.[i] In 2005 Telstra proposed a *Digital Compact & National Broadband Plan* to build high capacity (6Mbps) broadband infrastructure within 3-5 years (with Government support) serving 98 per cent of Australian homes and businesses.[ii] In 2006 Telstra held discussions with the ACCC regarding a special access undertaking to upgrade its fixed network to bring fibre closer to the home for 4 million businesses and homes, which were too far from an exchange to receive broadband speeds of 12Mbps or more. Telstra discontinued these talks in August 2006.[iii]	In September 2006 there were 500,000 business and government and 3.4 mn household broadband subscribers in Australia. 71 per cent had a connection speed less than 1.5Mbps.[iv]
	2007	
February	The Australian Government's residual 17 per cent shareholding in Telstra is transferred to the Future Fund.[v]	
March	The ALP's communications policy *New Directions for Communications* is released and includes a commitment to a Fibre To The Node (FTTN) national broadband network (NBN) that will provide speeds of at least 12Mbps to 98 per cent of households[vi]. Government begins negotiations with Telstra regarding the company's FTTN plan, which is approved by its Board and ready to go. Talks continue into June as confirmed in a letter to staff from CEO Sol Trujillo on 13 June 2007.[vii]	
2 April		New Century Financial (largest US subprime lender) files for Chapter 11 bankruptcy[viii]
6 May		25 subprime lending banks declare bankruptcy in US[ix]
30 May	FANOC Pty Limited (FANOC) lodges a Special Access Undertaking with the ACCC relating to its proposed FTTN Broadband Access Service. FANOC proposed to roll out a Hybrid Fibre Twisted Pair (HFTP) FTTN network to 4 million homes in 5 capital cities. Street-corner cabinets ('nodes') containing DSLAMs would be installed in the network at points closer to homes than the current local exchanges. The end result would have been that almost all homes within the network footprint would have had copper lengths from node to home of less than 1.5km, allowing for the near-universal of high-speed broadband services such as ADSL2+ or VDSL2 to these customers.[x]	

18 June	Howard Government announces *Australia Connected* initiative to ensure 99 per cent of the population has access to 12Mbps broadband by June 2009. This included delivering a new national high speed wholesale network for regional and rural areas through a competitive $600mn grant and facilitating a commercial fibre network build in cities and larger regional centres via competitive bids.[xi]	
13 & 15 Aug	Minister for Communications, Information Technology and the Arts announces first Regional Telecommunications Independent Review Committee and invites public submissions for the Universal Service Obligation review.[xii]	
9 Sep	Minister for Communications, Information Technology and the Arts announces the Howard Government has signed a funding agreement with OPEL Networks to roll out a $958mn wholesale broadband network in rural and regional Australia.[xiii,xiv]	
20 Sep	Expert Taskforce appointed by the Coalition Government calls for industry proposals to roll out a new high speed broadband network in Australia's capital cities and major regional centres.[xv]	
9 Oct		Dow Jones industrial average closed at pre-GFC all-time high of 14,164.[xvi]
10 Oct	Minister for Communications, Information Technology and the Arts announces funding agreement with Telstra through the *Australian Broadband Guarantee* to switch on ADSL broadband at 211 exchanges across Australia.[xvii]	
1 Nov		S&P/ASX 200 reaches a high of 6,851.[xviii]
24 Nov		Labor wins government.
	Incoming Government Brief on the NBN advises the cost of a FTTN 'likely to be very significant' and, under current technology, would require using Telstra's network. DBCDE advised Minister it would continue to develop cost estimates for FTTN roll out[xix]	
3 Dec		Labor Government sworn in with Kevin Rudd as Prime Minister and Stephen Conroy as Minister for Broadband, Communications and the Digital Economy.
07 Dec	Minister for Broadband, Communications and the Digital Economy (Minister) announces the Government is committed to building a national high-speed broadband FTTN network, and that an open and transparent process will be used to determine who will build the network[xx].	
17 Dec	ACCC issues draft decision to reject FANOC's Special Access Undertaking relating to its proposed FTTN Broadband Access Service.[xxi]	
Dec	DBCDE advised Government that Telstra had estimated the total cost of its 2005 broadband proposal had risen to $12bn, would take eight years rather than five, and require multiple technologies to cover 98 per cent of homes and businesses.[xxii]	S&P/ASX 200 ends the year at 6,339.[xxiii] There were 697,000 business and government broadband subscribers and 4.5mn household broadband subscribers in Australia.[xxiv]
2008		
8 Jan	DBCDE engages probity adviser for RFP process.[xxv]	

21 Jan	The Government agrees to establish a Panel of Experts to implement the competitive assessment process for an NBN.[xxvi]	
6 Feb	Minister commends Telstra on its decision to enable 900 exchanges serving 2.4 million houses with ADSL2+ in order to provide speeds of up to 20Mbps.[xxvii]	
13 Feb	First reading of the Telecommunications Legislation Amendment (Communications Fund) Bill 2008. The Bill was to allow money in the Communications Fund to be used for deployment of a national broadband network, but was not passed.[xxviii]	
27 Feb	The Minister sought voluntary disclosure of network information to assist proponents in preparing proposals to roll out and operate the NBN.[xxix]	
6 Mar	Decision by High Court of Australia concerning access to Telstra's customer access network suggested to some industry participants that cut-over would not constitute an acquisition of property requiring compensation being payable to Telstra[xxx]. However, legal advice subsequently obtained by DBCDE advised the circumstances of the High Court matter and cut-over were sufficiently different that there was still a significant risk of compensation being payable to Telstra[xxxi].	
7 Mar	FANOC withdraws its Special Access Undertaking, but anticipates lodging a replacement special access undertaking to address the matters identified by the ACCC in its draft decision.[xxxii]	
11 Mar	Minister announces the Panel of Experts to assess proposals to build the NBN. Panel comprised of Patricia Scott (Secretary DBCDE). John Wylie (CEO Lazard), Tony Mitchell (Allphones Chairman), Prof Rod Tucker (University of Melbourne), Prof Reg Coutts (University of Adelaide), Tony Shaw (former Chair, Australian Communications Authority) and Dr Ken Henry (Treasury Secretary). [xxxiii]	
17 Mar	Minister invites industry and the public to provide submissions by end March to assist in the development of the NBN RFP tender documents.[xxxiv] DBCDE appoints specialist advisors for the RFP process: KPMG as the investment, financial and commercial advisor and Corrs Chambers Westgarth as the legal advisor. [xxxv]	
19 Mar	The Telecommunications Legislation Amendment (National Broadband Network) Bill 2008 was introduced into Parliament.[xxxvi] This Bill was to amend the *Telecommunications Act 1997* to require telecommunications carriers to disclose certain information to the Commonwealth which could be disclosed to companies considering responding to a RFP for the development of a NBN.	
20 Mar	DBCDE appoints Gibson Quai-AAS as specialist technical advisor for the RFP process.[xxxvii]	
30 Mar	Closing date for public submissions on the development of the NBN RFP tender documents.[xxxviii]	
31 Mar	First meeting of the Panel of Experts (of a total of 42 meetings).[xxxix]	S&P/ASX 200 ends the month at 5,355 having fallen 15 per cent in 3 months.[xl]
2 Apr	Minister announces cancellation of contract with OPEL (entered into with former government).[xli] The agreement was to provide coverage reasonably equivalent to 90 per cent of under-served premises identified by the then Department of Communications, Information Technology and the Arts as being within its coverage area. DBCDE analysis determined the OPEL network would cover only 72 per cent of identified under-served premises.	
9 Apr		IMF global stability report predicts US$1 trillion loss.

11 Apr	Minister announces the release of the RFP to roll out and operate the NBN using either FTTN or Fibre To The Premises (FTTP) with a closing date of 25 July 2008.[xlii] Minister invites industry and public interest groups to provide submissions on regulatory issues associated with the NBN.[xliii]	
11 Apr	Minister invites submissions on policy and funding initiatives to provide high speed broadband to the estimated 2 per cent of premises that are unlikely to receive a service under the NBN.[xliv]	
Early to mid May	First round of market soundings to determine which proponents are likely to lodge a bid bond and issues impacting on their consideration.[xlv]	
6 May	DBCDE appoints Frontier Economics as specialist regulatory economic advisor for the RFP process.[xlvi]	
08 May	The Treasurer announced: the establishment of the Building Australia Fund (BAF); the closure of the Communications Fund; the transfer of the balance of the Communications Fund to the BAF; and that the BAF would provide the funding source for the Government's contribution to the NBN.[xlvii]	
09 May	First formal RFP clarification released (number 1 of 33).[xlviii]	
14-15 May	Telecommunications Legislation Amendment (National Broadband Network) Bill 2008 passed by both houses of Parliament.[xlix]	
22 May	Minister announces that parties participating in the NBN process will have 12 weeks to consider network information from the date all material is made available, an extension of 3 weeks from the original 9 weeks.[l]	
23 May	Final date for potential proponents to meet pre-qualification requirements including lodging a bid bond of $5mn and signing a confidentiality deed.[li]	
26 May	The *Telecommunications Legislation Amendment (National Broadband Network) Act 2008* receives Royal Assent.[lii]	
28 May	ACCC provides 'unsolicited' advice to the Panel and DBCDE questioning whether FTTN is a stepping stone to FTTP.[liii]	
10-12 Jun	DBCDE holds first of four rounds of bilateral meetings with eight pre-qualified proponents. One proponent subsequently withdrew.[liv]	
25 Jun	Closing date for submissions on regulatory issues associated with the NBN.[lv]	
30 Jun	Closing date for submissions for policy and funding initiatives to provide high speed broadband to the estimated 2 per cent of premises unlikely to receive a service under the NBN.[lvi]	S&P/ASX 200 ends the financial year at 4,977, down 21 per cent in six months.[lvii]
02 Jul	82 submissions on NBN regulatory issues published on www.dbcde.gov.au.[lviii][lix]	
15 Jul	29 submissions on policy and funding initiatives published on www.dbcde.gov.au.[lx]	
18 Jul	Minister releases draft instruments for consultation setting out the network information nominated carriers are to provide and rules to safeguard the information.[lxi]	
25 Jul	Original closing date of the RFP to roll out and operate the NBN.[lxii]	
31 Jul-4 Aug	DBCDE holds second round of bilateral meetings.[lxiii]	
Aug	DBCDE engages strategic advisor to provide advice to DBCDE on NBN process.[lxiv]	

07 Aug	Minister releases final network instruments setting out the network information carriers are to provide for the NBN process.[lxv]	
Mid August	DBCDE first notes possible options for progressing the Government's broadband policy within, subsequent to, or outside of, the RFP process.[lxvi]	
20 Aug	DBCDE advises Minister that a recurring theme among proponents is the difficulty they are facing in developing and financing their proposals, given the flexibility of the Government's approach.[lxvii]	
22 Aug	Final date for submission of network information to RFP process by carriers.	
25 Aug	Addendum number one to the RFP released.[lxviii] The addendum inserts new clauses that relate to the introduction of new members of pre-qualified consortia and give the proponents access to network information.	
Sep	DBCDE advises Minister that industry and media commentary suggests the cost of building a FTTN network is in the range of $10-20bn.[lxix]	
Sep	DBCDE seeks advice on legal principles for estimating the compensation that may be payable to Telstra for cut-over of its customer access network. [lxx]	
Sep	DBCDE advises Government that overbuild protections could potentially breach international trade obligations. [lxxi]	
03 Sep	Addendum number two to the RFP released. The addendum set a new final closing date of 26 November 2008 for submission of proposals and also related to proponents' ability to submit alternate proposals and internet protocol readiness.[lxxii]	
07 Sep		US Treasury Department announces takeover of Fannie Mae and Freddie Mac. Financial markets disrupted.
14 Sep		Lehman Bros files for bankruptcy.
18 Sep		US announces US$700bn financial rescue plan.
21 Sep		ASIC temporarily bans short selling of any ASX stocks.[lxxiii]
Sep-Oct	Second round of market soundings to give a reasonable idea of what each proponent intends to submit. DBCDE advises Minister of the results.[lxxiv]	
7 Oct	Indicative financial model template provided to proponents under the RFP.[lxxv] Telstra responds to shareholder group letter 'Shareholder risks associated with the NBN' indicating the Telstra board was yet to decide whether the company would enter a bid.[lxxvi]	
08 Oct	Trujillo speech to Financial Service Institute of Australasia indicates Telstra would not build or bid if further separation required.[lxxvii] Media coverage quotes him as referring to a network build of $10-15bn.[lxxviii]	
12 Oct		Australian Government announces it will guarantee for three years bank deposits and wholesale debt securities for Australian owned

		banks, locally incorporated subsidiaries of foreign banks, credit unions and building societies up to $1mn.[lxxix]
13-17 Oct	DBCDE holds third round of bilateral meetings with RFP proponents.[lxxx]	
21 Oct	DBCDE releases indicative commercial terms to pre-qualified proponents in line with the final RFP document, which states that further guidance in this domain would be forthcoming.[lxxxi] However, because it was provided late in the process, it was indicative only and would not form part of the evaluation of proposals.[lxxxii]	
Late Oct	Alternative methods of delivering the Government's broadband policy begin to be looked at 'more formally', should the RFP process not result in any acceptable proposals.[lxxxiii] DBCDE advises Minister that all national non-Telstra proposals (except one) are going to propose cut-over of Telstra's customer access network.[lxxxiv]	
6-7 Nov	Fourth round of bilateral meetings.[lxxxv]	
8 Nov	DBCDE provides evaluation checklist to RFP proponents.[lxxxvi]	
14 Nov	Last formal RFP clarification released (number 33 of 33).[lxxxvii]	
26 Nov	Minister approves RFP evaluation plan before closing time for proposals.[lxxxviii] Closing date for proposals.[lxxxix] Four national proposals received from Telstra, Optus, Axia NetMedia and Acacia Australia and two state/territory proposals received from the Tasmanian Government and TransACT.[xc]	At end November S&P/ASX 200 at 3,742, down 45 per cent since its high just over a year before.[xci]
Early Dec	PM&C paper to the Prime Minister sets out 'broad options for the Government to build an alternative network. The pros and cons of each option were canvassed, along with their financial and legal consequences.'[xcii]	
5 Dec		The Australian Government announces a $2bn special fund, established by leading Australian banks, to provide liquidity to car dealers and their financiers, following the exit of GMAC Finance and GE Money from Australian wholesale and retail car financing.[xciii]
13-15 Dec	DBCDE conducts RFP proponent presentations (Canberra).	
15 Dec	Minister announces exclusion of Telstra from RFP process for failing to submit an SME plan.[xciv]	Telstra share price falls 11.6 per cent, the largest one-day percentage fall since its listing in 1997. [xcv]
19 Dec	Acting Prime Minister writes to Minister asking DBCDE (with PM&C and Treasury) to prepare a paper for Government outlining contingency options in the event the RFP process does not identify an acceptable	By December 2008 there were 1.1mn business and government broadband

	proposal.[xcvi]	subscribers and 5.6mn household broadband subscribers in Australia.[xcvii]
2009		
12 Jan	ACCC provides report to the Panel of Experts.[xcviii]	
20 Jan	Panel of Experts signs letter of transmittal concerning Evaluation Report and the Report is transmitted to the Minister the next day.[xcix,c]	
21 Jan	Prime Minister and Minister discuss RFP process on VIP jet Sydney-Melbourne and the next day Melbourne-Brisbane.[ci]	
29 Jan	SPBC considers NBN policy on a number of occasions between 29 January and 6 April.[cii]	
3 Feb		Australian Government announces $42bn economic stimulus package.[ciii]
7 Feb		Black Saturday – Victorian bushfires claim the lives of 173 people, with 414 more injured and a number of towns and more than 2,000 homes destroyed.
25 Feb	Secretaries-level NBN Working Group, chaired by PM&C Secretary and including Treasury, Finance and Deregulation and DBCDE as well as a representative of the Prime Minister's Office, meets for the first time.[civ]	
26 Feb	Telstra announces Sol Trujillo to step down as CEO by 30 June 2009 (one year short of his five year term).[cv]	

Early Mar		ABS reports -0.5 per cent growth in Australian economy during December 2008 quarter, first negative growth in 8 years.[cvi] S&P/ASX 200 hits its GFC low of 3,111, 55 per cent lower than its November 2007 high.[cvii] Dow Jones industrial average reaches its low point during the GFC at 6,547, its lowest close since April 1997.[cviii]
7 Apr	Government announces intention to create a new company to build and operate a NBN to connect 90 per cent of all Australian premises with internet speeds up to 100Mbps using FTTP, and to connect all other premises with next generation wireless and satellite technologies delivering speeds of up to 12Mbps.[cix] Government releases the *National Broadband Network: Regulatory Reform for 21st Century Broadband Discussion Paper*, seeking public comment by 3 June 2009 on ways to improve telecommunications regulations.[cx]	
8 Apr	Australian and Tasmanian governments announce Tasmania will be the launch state for new superfast NBN.[cxi]	
9 Apr	Company (A.C.N. 136 533 741 Limited), later named NBN Co, established to build and operate the NBN.[cxii]	
23 Apr	Minister announces the Regional Backbone Blackspots Program to create additional transmission links in areas with limited competition in backhaul services. Input is sought on priority locations for investment.[cxiii]	
24 Apr	Publication on Austender of Request for Expressions of Interest (REOI) for Provision of Lead Advisory Services for the NBN Implementation Study.[cxiv]	
28 Apr	Minister announces NBN Co established and an executive search firm to be appointed to assist in selection of CEO and Board members.[cxv]	
12 May	Budget 2009: Government announces initial investment in NBN.[cxvi]	
12 May	Closing date for submissions in response to the Regional Backbone Blackspots Program stakeholder consultation paper – 61 submissions received.[cxvii]	
19 May	Closing date for REOI for Provision of Lead Advisory Services for the NBN Implementation Study.[cxviii]	
May-Jun	Debriefings for proponents in RFP process.[cxix]	
29 May	Minister announces release of *National Broadband Network: Fibre-to-the-premises in greenfield estates* consultation paper regarding proposed installation of fibre to all premises in new greenfield property developments from 1 July 2010.[cxx]	
3 Jun	Closing date for submissions on the regulatory reform options identified in the discussion paper *National Broadband Network: Regulatory Reform for 21st Century Broadband.* [cxxi]	ABS reports 0.4 per cent growth in the economy in the March quarter 2008.[cxxii]
4 Jun	Auditor-General advised the Minister, Shadow Minister and Secretary DBCDE that a performance audit of the NBN RFP process would be undertaken.[cxxiii]	

12 Jun	More than 130 Submissions responding to *Regulatory Reform for 21st Century Broadband* published.[cxxiv][cxxv]	
25 Jun	Telecommunications Legislation Amendment (National Broadband Network Measures No. 1) Bill 2009 introduced into the Parliament to require utilities (in addition to telecommunications providers) to disclose required network information. It is not passed.[cxxvi]	
1 Jul	Minister announces the first round of regional locations to receive funding under the Regional Backbone Blackspots Program.[cxxvii]	
3 Jul	Minister seeks views on the legislative framework for NBN Co including the access regime as well as operation, ownership and control of the company.[cxxviii]	
16 Jul	Australian and Tasmanian governments announce fibre tender as first stage of FTTP broadband roll out in Tasmania.[cxxix]	
25 Jul	Prime Minister and Minister announce appointment of Mr Mike Quigley as Executive Chairman of NBN Co[cxxx]. Prime Minister, Premier of Tasmania and Minister announce the communities in Tasmania to receive the first broadband connections under the NBN.[cxxxi]	
30 Jul	Closing date for submissions on the legislative framework for NBN Co.[cxxxii] 34 submissions were received and they were published on 4 September 2009.[cxxxiii]	
4 Aug	NBN Co prescribed as a Government Business Enterprise.[cxxxiv]	
6 Aug	Minister for Finance and Deregulation and Minister announce 5 board appointments for NBN Co – Doug Campbell, Peter Hay, Siobhan McKenna, Diane Smith-Gander and Gene Tilbrook.[cxxxv] KPMG-McKinsey&Co appointed as Lead Advisor for Implementation Study.[cxxxvi]	
13 Aug	Tasmania NBN Co Limited established with Mr Doug Campbell as Chair.[cxxxvii] First meeting of permanent board of NBN Co.[cxxxviii]	
14 Aug	Minister announces formation of Stakeholder Reference Group to advise on greenfield broadband deployment and 90 submissions from the consultation process published.[cxxxix]	
19 Aug	Telecommunications Legislation Amendment (National Broadband Network Measures – Network Information) Bill 2009 introduced into the Parliament to require utilities (in addition to telecommunications providers) to disclose required network information. It is not passed.[cxl]	
21 Aug	First Board Meeting for Tasmania NBN Co.[cxli]	
1 Sep	Minister for Finance and Deregulation advises NBN Co of reporting requirements and outlines guiding principles.[cxlii]	
15 Sep 15 Sep	Minister announces reforms to telecommunications regulation addressing Telstra's vertical and horizontal integration, reforms to the competition regime, strengthening consumer safeguards and removal of unnecessary red tape.[cxliii] Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2009 introduced into the Parliament. It is not passed.[cxliv]	
24 Sep	Announcement of the official commencement of work on the Cambridge to Midway Point section of the NBN in Tasmania.[cxlv]	
21 Oct	Australian and Tasmanian governments announce seven new locations in Tasmania to receive superfast broadband.[cxlvi]	

4 Dec	Government announces NextGen Networks as successful contractor that will construct 6,000km of regional fibre links under the Regional Backbone Blackspots Program.[cxlvii]	
7-18 Dec		Copenhagen Climate Change Conference
18 Dec	Telstra and NBN Co agree on Terms of Engagement for negotiations regarding Telstra's participation in the roll out of the NBN.[cxlviii]	
23 Dec	Government announces appointment of Clem Doherty and Terrence Francis as additional directors for NBN Co.[cxlix] Minister releases for comment an exposure draft of legislation to support the roll out of fibre optic networks in greenfield developments around Australia.[cl]	By December 2009 there were 1.4mn business and government and 6.7mn household broadband subscribers in Australia.[cli]
2010		
17 Feb	Minister visits Mt Isa to launch the first mainland fibre optic backbone link for the NBN as part of the Regional Backbone Blackspots Program.[clii]	
24 Feb	Government releases exposure drafts of legislation to establish a regulatory framework for the operation of the NBN and NBN Co Limited.[cliii]	
1 Mar	Minister announces Government will make an injection of $100mn to NBN Tasmania, to facilitate the further roll out of FTTP.[cliv]	
2 Mar	Minister announces the first five sites to receive high speed broadband on mainland Australia.[clv]	
5 Mar	KPMG-McKinsey&Co Implementation Study provided to Minister.[clvi]	
15 Mar	Minister opens a Proof-of-Concept Test Centre and announces the first retail service providers to offer high speed broadband in Tasmania.[clvii] Comments due on exposure drafts of NBN legislation. 22 submissions received.[clviii]	
18 Mar	Telecommunications Legislation Amendment (Fibre Deployment) Bill 2010 introduced into the Parliament providing for fibre connections to be installed for new homes from 1 July 2010. It is not passed and lapses at dissolution of Parliament in 2010.[clix]	
24 Mar	Mr Harrison Young announced as Chairperson of the board of NBN Co Limited. Mr Quigley continues as CEO and Director.[clx]	
16 Apr	Position paper publicly released on the subordinate legislation which will give operational effect to the Fibre Deployment Bill.[clxi]	
6 May	NBN Implementation Study publicly released.[clxii]	
20 June	Agreement signed between Telstra & NBN Co concerning sale of Telstra's copper network to NBN Co.[clxiii]	
24 June		Kevin Rudd replaced as Prime Minister by Julia Gillard.
Early July	First retail customers connect to the NBN in Tasmania.[clxiv]	
21 Aug		Federal election.
14 Sep		Gillard Government sworn in.

20 Oct	Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill 2010 introduced into the Parliament. The Bill proposed to reform the existing telecommunications regime including amending processes around declarations such as requiring the ACCC to set up-front price and non-price terms and streamlining processes around making determinations and issuing competition notices.[clxv]	
25 Nov	National Broadband Network Companies Bill 2010 and Telecommunications Legislation Amendment (National Broadband Network Measures—Access Arrangements) Bill 2010 introduced into the Parliament.[clxvi]	
29 Nov	*Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Act 2010* passed.[clxvii]	
17 Dec	Government sends Statement of Expectations to NBN Co and releases NBN Co Corporate Plan.[clxviii,clxix]	By December 2010 there were 2.1mn business and government and 7.6mn household broadband subscribers. 4.4mn or 45 per cent had an advertised download speed of 8Mbps or higher.[clxx]
2011		
3 Mar	First of the backbone backhaul links under the Regional Backbone Blackspots Program completed, to Geraldton (WA) and Victor Harbor (SA). South West Gippsland (VIC) route completed in April 2011, Broken Hill (VIC-NSW-SA) route in November 2011 and Darwin (QLD-NT) route in January 2012.[clxxi]	
25 Mar	Fibre Deployment Bill introduced into the Parliament requiring developers to install fibre ready infrastructure into new developments. The Bill is passed on 13 September 2011 and becomes the *Telecommunications Legislation Amendment (Fibre Deployment) Act 2011*.[clxxii]	
28 Mar	Regulatory framework for the NBN established by passage of the *National Broadband Network Companies Act 2011*) and the *Telecommunications Legislation Amendment (National Broadband Network Measures—Access Arrangements) Act 2011*. These pieces of legislation add to the existing generic telecommunications regulatory framework.[clxxiii]	
	Telstra and NBN Co enter into Definitive Agreements on the roll out of the NBN.[clxxiv]	
30 Jun		At 30 June 2011, NBN Co's roll out has passed 10,575 premises and 786 premises have an active connection.[clxxv]

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Appendix 5

Brief Overview Of National FTTN Proposals Under The RFP

Optus Network Investments Proposal[307]

Optus Network Investment's (ONI's) proposal offered to create a FTTN network via three 'last mile' access technologies: fibre connected xDSL copper nodes to 92 per cent of premises, fibre connected WiMAX nodes to 4 per cent and Ka Band satellites with fibre connected earth stations to 2 per cent of the population. The proposal would have provided 12Mbps to 98 per cent of Australian premises. The network was designed to enable future direct fibre connections from the node, making it ready for FTTP upgrades. The network would have offered direct fibre connections to schools as well as other business premises and greenfield sites. The design would in general have precluded infrastructure based competition at the local loop level (no local loop unbundling possible or allowed) but would have allowed some infrastructure based competition from points of interconnection. Direct funding from Government was within the $4.7bn envelope with a mix of Government equity and debt and the initial project build cost was to be $13.6bn. Optus was also seeking a government debt guarantee for the $8bn debt financing required.

The proposal included broad demand analysis based on current and forecast broadband penetration rates, the migration mix, usage, business broadband and backhaul. The proposal explicitly did not describe which elements of the network were commercial and non-commercial although it did note the significant increases in funding required to increase coverage from 80 to 98 per cent.

ONI's regulatory and other requirements included structural separation for the NBN, a cost-based price control mechanism, access to Telstra facilities and services at specified prices and service level agreements, legislated one-time (100 per cent) cutover of Telstra's copper loops and legislated overbuild protections (during the 5 year build plus 5 years) as well as free spectrum allocation by the Government to meet wireless needs and assistance from the Government in accessing satellite orbital slots. While the pricing aspects relating to use of Telstra infrastructure were based to an extent on existing prices and the business case included significant anticipated payments to Telstra, there were additional assumptions included about pricing and these payments.

[307] Optus Network Investments (ONI), 2008, Proposal to roll out and operate a National Broadband Network for Australia RFO DCON/08/18, Executive Summary (access provided by Optus).

Acacia Australia's Proposal[308]

Acacia Australia's bid offered to create a network that would cover 100 per cent of Australia using a combination of FTTN covering approximately 92 per cent of premises (which may include up to 3 per cent FTTH for new housing) and satellite technologies covering the other 8 per cent. The network would provide speeds of 12 to 60Mbps. Wherever possible the network would include existing infrastructure (on a commercial basis) and fibre would be rolled out to cabinets (sited close to existing pillars) with built-in automated cross-connects. This automated system would allow remote switching. There would be mandatory cutover of broadband services and cutover for telephony would occur then when RSPs (and potentially Telstra) moved their customers from the old network to the new (this would allow legacy telephony services to remain intact for those who chose it). The network was designed to allow FTTP to be introduced as and when appropriate – new estates, redevelopment, or ultimately as part of a future wide-scale upgrading. The capital expenditure for the FTTN element of the proposed network was $11.8bn with funding from Government of $4.7bn as well as at least $400mn under other existing broadband programs. The Government would also be asked to guarantee up to $2.5bn of debt facilities. The Government would receive a license fee during the period the company ran the network, as well as dividends when excess cash was generated and a 50 per cent reversionary interest at the end of the licensing period. Overall the commercial risk would need to be 'contained' by the establishment of utility conditions by Government.

The proposal included a broad analysis of demand but did not analyse economic and non-economic parts of the network in a detailed way as the proposal was to cover 100 per cent of premises in Australia.

Acacia's regulatory requirements included that the network would be wholesale only, the proponent would get a 20 year exclusive licence to provide fixed line broadband services, the network would get significant protection from overbuild and this would endure for the life of the project as well as restricting use of some other technologies (including HFC), guaranteed access to third party owned data and infrastructure (and an agreed pricing framework) plus any upgrades of third party infrastructure would need to be properly maintained and upgraded for compatibility with the NBN. Acacia proposed to provide wholesale broadband services under a licence rather than the existing regime in Part XIC of the TPA. Under certain conditions it would

[308] Acacia Australia, 2008, Acacia Australia's Response to the Request for Proposal: DCON/08/18 Australia National Broadband Network, Executive Summary and Extracts (access provided by Acacia Australia)

be able to change prices over the terms of the licence with changes subject to independent external audit.

Appendix 6

Responses to Intra-Commonwealth Questionnaire on Broadband Technologies

Characteristic	Organisation		Technology ranking								
			FTTP/H	HFC	FTTN with VDSL	3G	Wireless/ WiMAX	Satellite	BPL	Satellite (HEO)	Satellite (LEO)
Dedicated speed available to end users	**ACCC**		1	2	3	4	5	6	-	-	-
	ACMA		1	3	2		4	-	-	-	-
	CSIRO		1	5	2	4	3	6	-	-	-
	GQ-AAS		1	2	3	4	4	-	6	5	7
	NICTA		1	3	2	-	4	5	-	-	-
Track record of technology	**ACCC**		3	1	4	2	6	5	-	-	-
	ACMA		4	2	3	-	1	-	-	-	-
	CSIRO	**In Aus.**	6	3	-	2	5	-	-	-	-
		Overseas	5	1	-	4	6	-	-	-	-
	GQ-AAS		1	1	1	4	4	-	6	5	7
	NICTA		3	2	4	-	5	1	-	-	-
Upgradeability of broadband services	**ACCC**		1	2	4	3	6	5	-	-	-
	ACMA		2	3	4	-	1	-	-	-	-
	CSIRO		1	5	2	4	3	6	-	-	-
	GQ-AAS		1	2	3	4	4	-	6	5	7
	NICTA		1	3	4	-	2	5	-	-	-

Characteristic	Organisation	Technology ranking								
		FTTP/H	HFC	FTTN with VDSL	3G	Wireless/ WiMAX	Satellite	BPL	Satellite (HEO)	Satellite (LEO)
Reliability of broadband technology	**ACCC**	1	2	4	3	6	5	-	-	-
	ACMA	1	3	4	-	2	-	-	-	-
	CSIRO	1	3	2	5	6	4	-	-	-
	GQ-AAS	1	4	2	3	3	-	6	5	7
	NICTA	2	4	3	-	5	1	-	-	-
Technical suitability for urban areas	**ACCC**	1	1	1	-	-	-	-	-	-
	ACMA	1	4	1	-	3	5	-	-	-
	CSIRO	1	3	2	4	5	6	-	-	-
	GQ-AAS	1	3	2	-	-	-	2	-	-
	NICTA	1	-	-	-	-	2	-	-	-
Technical suitability for rural areas	**ACCC**	-	-	-	1	1	1	-	-	-
	ACMA	5	4	3	--	1	2	-	-	-
	CSIRO	1	6	5	4	3	2	-	-	-
	GQ-AAS	2	-	2	1	1	-	2	1	-
	NICTA	-	-	-	-	-	2	-	-	-
Technical suitability for remote areas	**ACCC**	-	-	-	-	-	1	-	-	-
	ACMA	-	-	-	-	2	1	-	-	-
	CSIRO	1	6	5	4	3	2	-	-	-
	GQ-AAS	-	-	2	-	2	-	-	1	-
	NICTA	-	-	-	-	-	2	-	-	-

Sources: ACCC, 2009, Submission to DBCDE, 'Re: Questionnaire on broadband technologies', 13 February; ACMA, 2009, Submission to DBCDE *Questionnaire on Broadband Technologies, 9 February 2009,* 9 February; CSIRO, 2009, Letter to the Secretary DBCDE with responses to Technology Questionnaire, 9 February; GQ-AAS, 2009, Submission to DBCDE, 'Questionnaire on Fixed Broadband Technologies'; NICTA, 2009, 'Response to Intra-Commonwealth Questionnaire on Broadband Technologies', 9 February.

Appendix 7

NBN Mark II – Media Release

Senator the Hon. Stephen Conroy
Minister for Broadband, Communications and the Digital Economy
Deputy Leader of the Government in the Senate
Minister Assisting the Prime Minister on Digital Productivity

Joint media release

PRIME MINISTER
TREASURER
MINISTER FOR FINANCE
MINISTER FOR BROADBAND

New National Broadband Network

The Rudd Government today announced the establishment of a new company to build and operate a new super fast National Broadband Network.

This new super fast National Broadband Network, built in partnership with private sector, will be the single largest nation building infrastructure project in Australian history.

This new National Broadband Network will:

- Connect 90 percent of all Australian homes, schools and workplaces with broadband services with speeds up to 100 megabits per second100 times faster than those currently used by many households and businesses
- Connect all other premises in Australia with next generation wireless and satellite technologies that will deliver broadband speeds of 12 megabits per second
- Directly support up to 25,000 local jobs every year, on average, over the 8 year life of the project.

Under the Rudd Government's new national broadband network every house, school and business in Australia will get access to affordable fast broadband.

OWNERSHIP AND FINANCING

The Rudd Government's National Broadband Network will be built and operated by a new company specifically established by the Australian Government to carry out this project.

The Government will be the majority shareholder of this company, but significant private sector investment in the company is anticipated.

The Government will make an initial investment in this company but 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 and identity security considerations.

This company jointly owned by the Government and the private sector will invest up to $43 billion over 8 years to build the national broadband network.

The Government's investment in the company will be funded through the Building Australia Fund and the issuance of Aussie Infrastructure Bonds (AIBs), which will

provide an opportunity for households and institutions to invest in the national broadband network.

The new investment is also the biggest reform in telecommunications in two decades because it delivers separation between the infrastructure provider and retail service providers. This means better and fairer infrastructure access for service providers, greater retail competition, and better services for families and businesses.

This announcement follows the Government's decision to terminate the NBN Request for Proposals (RFP) process on the basis of advice from the independent Panel of Experts that none of the national proposals offered value for money. The Panel noted the rapid deterioration of the global economy had a significant impact on the process.

This historic nation-building investment will help transform the Australian economy and create the jobs and businesses of the 21st century.

SPECIFICATIONS

The new superfast network will:

- connect homes, schools and workplaces with optical fibre (fibre to the premises or 'FTTP'), providing broadband services to Australians in urban and regional towns with speeds of 100 megabits per second - 100 times faster than those currently used by most peopleextending to towns with a population of around 1,000 or more people
- use next generation wireless and satellite technologies that will be able to deliver 12 megabits per second or more to people living in more remote parts of rural Australia
- provide fibre optic transmission links connecting cities, major regional centres and rural towns
- be Australia's first national wholesale-only, open access broadband network
- be built and operated on a commercial basis by a company established at arm's length from Government and involve private sector investment
- be expected to be rolled-out, simultaneously, in metropolitan, regional, and rural areas.

Every person and business in Australia, no-matter where they are located, will have access to affordable, fast broadband at their fingertips.

High speed broadband is increasingly essential to the way Australians communicate, and do business. It will help drive Australia's productivity, improve education and health service delivery and connect our big cities and regional centres.

The Government will invest in this major nation-building infrastructure to stimulate jobs in the short-term and pay a dividend to the Australian people through enhanced productivity and innovation in the long-term.

This is a major nation-building project that will support 25,000 jobs every year, on average, over the life of the project. At its peak, it will support 37,000 jobs. Given the productivity gains associated with this investment, the full benefits will continue to flow for decades beyond the completion of the project.

The Government's announcement today has been informed by expert advice. The Panel of Experts has encouraged the Government to invest in optical fibre technology, supplemented by next-generation wireless and satellite technologies. The Australian Competition and Consumer Commission has also endorsed the use of FTTP as a superior technology to Fibre to the Node.

The preliminary estimate is that the enhanced NBN network will cost up to $43 billion, which has been developed taking into account advice from specialist technical advisers.

The Government's objective is to achieve 90 per cent coverage of the FTTP network, and remaining coverage to be delivered through wireless and satellite technologies, within this funding envelope. Initial advice to the Government is that this objective is achievable, but this estimate will be subject to an implementation study.

The Government will seek private investment in the company to draw on private sector capacity and expertise. However, ownership restrictions will be established to protect the Government's objective of a wholesale open-access network.

PLAN OF ACTION

To turn its vision into action the Government will immediately:

- Commence an implementation study to determine the operating arrangements, detailed network design, ways to attract private sector investmentfor roll-out early 2010, and ways to provide procurement opportunities for local businesses
- Fast-track negotiations with the Tasmanian Government, as recommended by the Panel of Experts, to build upon its NBN proposal to begin the rollout of a FTTP network and next generation wireless services in Tasmania as early as Julyan immediate start on a nation-wide investment.
- Implement measures to address 'black spots' 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.
- Progress legislative changes that will govern the national broadband network company and facilitate the rollout of fibre networks, including requiring greenfields developments to use FTTP technology from 1 July 2010.
- Make an initial investment in the network of $4.7 billion.
- Commence a consultative process on necessary changes to the existing telecommunications regulatory regime.

The initiative announced today is a historic nation-building investment focused on Australia's long-term national interest. It will fundamentally transform the competitive dynamics of the telecommunications sector, underpin future productivity growth and our international competitiveness.

CANBERRA
7 APRIL 2009
PRESS OFFICE (02) 6277 7744

Portfolio

- Australian Broadcasting Corporation
- Australian Communications and Media Authority
- Australia Post
- Department of Broadband, Communications and the Digital Economy
- Get Ready for Digital (Digital Switchover Taskforce)
- NBN Co
- Special Broadcasting Service

Quick links

- Australian Communications Consumer Action Network
- Australian Parliament House
- Telecommunications Industry Ombudsman
- Freedom of Information

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Appendix 8

Fast-tracking Regional Roll Out

On 23 April 2009 the Minister announced steps to fast-track roll out of the NBN in regional Australia. This project would involve investing $250mn in backbone fibre optic transmission links where there was limited competition in providing backhaul services. The ACCC had confirmed that locations with only a single provider included Geraldton in Western Australia, Mt Gambier in South Australia, Broken Hill in New South Wales, Mildura in Victoria, Mt Isa in Queensland, and Darwin in the Northern Territory. A 7 page document titled *Backhaul Blackspots Initiative Stakeholder Consultation Paper* was released to help identify and prioritise regional locations for investment, and sought comment on technical parameters, arrangements for funding, the delivery of services and ownership of the infrastructure. Submissions were due on 12 May 2009 with the aim of commencing a request for tender later that month and construction activities in September 2009.

There were 61 responses to the consultation paper. There were many suggestions for places where provision of additional backhaul capacity would be worthwhile. While the initiative was aimed at providing backhaul in areas where there was a lack of competition, some submissions directed attention to areas underserved in terms of the existing telecommunications network that would benefit in particular from deployment of fibre due to terrain or natural disaster issues. A number of submissions noted the need for the technical specifications of any new backhaul links to be compatible and scalable in order to fit cohesively into the full NBN deployment.

Concerns were raised regarding the impact of this initiative and the full NBN roll out on telecommunications infrastructure deployment. This unease focussed around the impact that uncertainty (especially regarding timing) around the backhaul project and the broader NBN would have on investment. It was noted that the backhaul initiative (and the broader NBN) was likely to stall planned deployment of infrastructure in some states and questions were raised about whether ISPs would be likely to deploy additional DSLAM infrastructure given uncertainties around the likely timing of the NBN roll out and resultant stranding of investments.

Some submissions also noted that a cost benefit analysis should be undertaken of the broader NBN and the backhaul blackspots initiative specifically. Telstra raised the issue of competitive neutrality regarding future upgrade of networks where uneconomic duplication of infrastructure occurs. On 1 July 2009 the Government announced the locations for its initial $250mn investment and called for tenders to undertake the work.

Sources: Minister for Broadband, Communications and the Digital Economy, 2009, 'Fast-track for National Broadband Network in regional Australia', Media Release, 23 April; DBCDE, 2009, *Backhaul Blackspots Initiative Stakeholder Consultation Paper*, April 2009, p. 3; http://www.communications.gov.au/consultation_and_submissions/previous_consultation_and_submissions/regional_backbone_blackspots_program_submissions; Minister for Broadband, Communications and the Digital Economy, 2009, 'Priority National Broadband Network investment for regional Australia', Media Release, 1 July 2009.

Appendix 9

Infrastructure Australia Assessment Framework

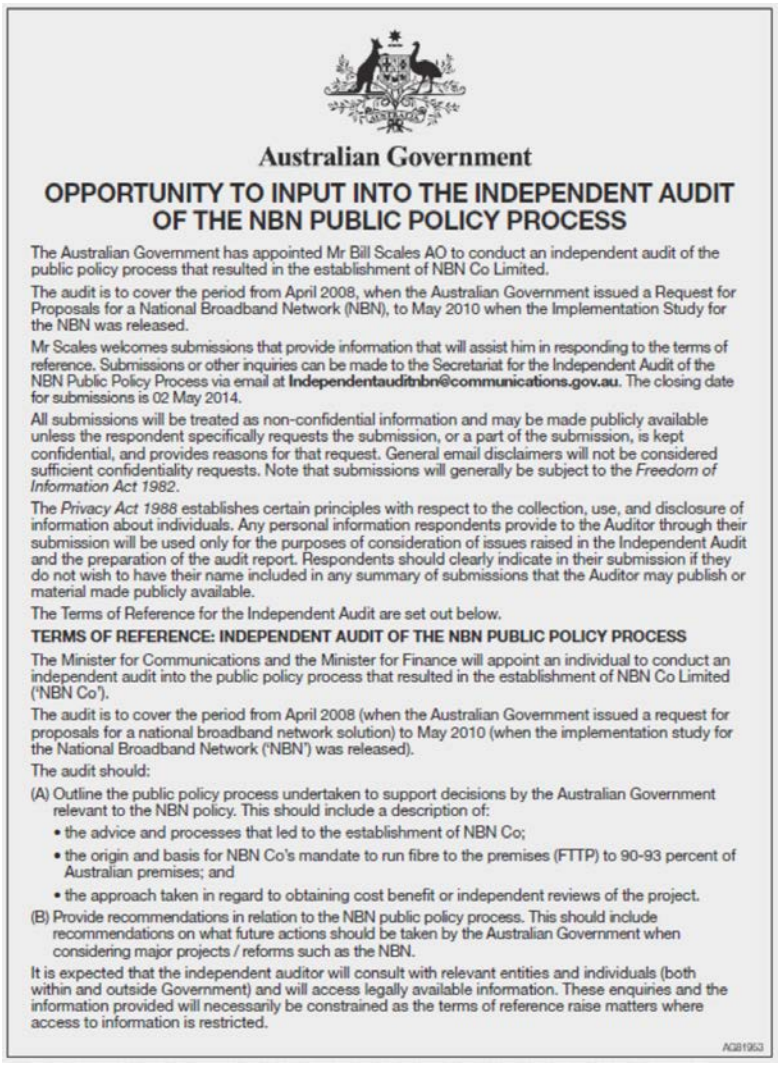
STAGE	DESCRIPTION	COMPONENTS REQUIRED	RATIONALE
1. Goal definition	Definition of the fundamental economic, environmental and social goals that society seeks to achieve, for example: sustained economic growth and increased productivity, lower carbon emissions and lower local pollution, greater social amenity and improved quality of life.	• Formalised comprehensive, and agreed goals/targets. • Quantified, objective and specific goals/targets.	A performance benchmark is needed against which the adequacy of infrastructure can be assessed.
2. Problem identification	Objective, specific, evidence-based, and data rich identification of deficiencies with the condition, operation and services provided by infrastructure that may hinder the achievement of those economic, environmental and social goals.	• A list of specific problems clearly identified, including network or geographical location. • Those problems accurately quantified and defined, including an assessment of future trends.	Specificity regarding inadequacies is essential in order to take targeted and therefore more effective action.
3. Problem assessment	Objective and quantified appraisal of the economic, environmental and social costs of those deficiencies, so that the most damaging deficiencies can be identified and prioritised.	• Accurate and objective assessment of the ec on/envt/soc impacts of those problems. • Priorities identified which reflect the scale of impacts.	Understanding the costs/impact of deficiencies allows the worst problems to be identified and prioritised.
4. Problem analysis	Objective policy and economic analysis of why these deficiencies exist – i.e. what is the underlying cause (depending on the sector, reasons could include market failure, government failure, capital restrictions, etc). This should include an assessment of non-infrastructure reasons for the problem – e.g. land use patterns, peak demand; or education/business hours	• For each deficiency, analysis of why those problems have developed. • Covers both immediate and underlying causes (e.g. not just 'lack of investment', but causes of under investment ,e.g. regulatory environment).	Understanding the causes allows effective and targeted solutions to be created. Infrastructure not the only cause of problems.
5. Option generation	Development of a full range of interventions that might address the issue – e.g. pricing, regulatory, better use, packages/systems, capacity increases, informed by the Problem Analysis completed at Stage 4.	• A full range of option types have been identified for each deficiency/problem. • Those options have been objectively assessed, without some options having been ruled out early or favoured	Looking at a range of options rather than relying on early judgements is more likely to identify the best solutions
6. Solution assessment	Use of cost-benefit analysis to assess those options/solutions. The appraisal should incorporate the full range of economic, environmental and social impacts (including agglomeration and trade impacts, carbon impacts, noise, and social amenity) so that the impact on all society's goals is measured and understood as far as is possible	• Accurate and justifiable Cost-Benefit Analysis has been used to appraise options. • Cost-Benefit Analysis is comprehensive and includes wider economic, environmental and social impacts.	An understanding of the impact of solutions on all goals is essential to understand how the portfolio will achieve those goals.
7. Solution prioritisation	Identification of policy and project priorities from the list of solutions, on an objective basis. The objective basis should give primacy to the Benefit-Cost Ratio (BCR) of policies, but could include broader considerations set out in a transparent framework – such as portfolio/package issues, deliverability, risk, and affordability.	• Priority List clearly identified. • Priorities reflect primacy of BCR analysis alongside objective framework. • Relationship to State-funded policies/ projects clear – i.e. prioritisation reflects all ideas, not just the unfunded.	BCRs provide the best available objective evidence as to how well solutions will impact on goals – but not the whole story

Source: Infrastructure Australia, 2009, *Infrastructure Australia Assessment Framework,* National Infrastructure Priorities, p. 5, May.

Appendix 10

Public Submissions to the Audit

The auditor sought public submissions that would assist him in responding to the terms of reference for the review. The following advertisement appeared in The Australian and Australian Financial Review newspapers on Friday 11 April 2014.



Australian Government

OPPORTUNITY TO INPUT INTO THE INDEPENDENT AUDIT OF THE NBN PUBLIC POLICY PROCESS

The Australian Government has appointed Mr Bill Scales AO to conduct an independent audit of the public policy process that resulted in the establishment of NBN Co Limited.

The audit is to cover the period from April 2008, when the Australian Government issued a Request for Proposals for a National Broadband Network (NBN), to May 2010 when the Implementation Study for the NBN was released.

Mr Scales welcomes submissions that provide information that will assist him in responding to the terms of reference. Submissions or other inquiries can be made to the Secretariat for the Independent Audit of the NBN Public Policy Process via email at **Independentauditnbn@communications.gov.au**. The closing date for submissions is 02 May 2014.

All submissions will be treated as non-confidential information and may be made publicly available unless the respondent specifically requests the submission, or a part of the submission, is kept confidential, and provides reasons for that request. General email disclaimers will not be considered sufficient confidentiality requests. Note that submissions will generally be subject to the *Freedom of Information Act 1982*.

The *Privacy Act 1988* establishes certain principles with respect to the collection, use, and disclosure of information about individuals. Any personal information respondents provide to the Auditor through their submission will be used only for the purposes of consideration of issues raised in the Independent Audit and the preparation of the audit report. Respondents should clearly indicate in their submission if they do not wish to have their name included in any summary of submissions that the Auditor may publish or material made publicly available.

The Terms of Reference for the Independent Audit are set out below.

TERMS OF REFERENCE: INDEPENDENT AUDIT OF THE NBN PUBLIC POLICY PROCESS

The Minister for Communications and the Minister for Finance will appoint an individual to conduct an independent audit into the public policy process that resulted in the establishment of NBN Co Limited ('NBN Co').

The audit is to cover the period from April 2008 (when the Australian Government issued a request for proposals for a national broadband network solution) to May 2010 (when the implementation study for the National Broadband Network ('NBN') was released).

The audit should:

(A) Outline the public policy process undertaken to support decisions by the Australian Government relevant to the NBN policy. This should include a description of:

- the advice and processes that led to the establishment of NBN Co;
- the origin and basis for NBN Co's mandate to run fibre to the premises (FTTP) to 90-93 percent of Australian premises; and
- the approach taken in regard to obtaining cost benefit or independent reviews of the project.

(B) Provide recommendations in relation to the NBN public policy process. This should include recommendations on what future actions should be taken by the Australian Government when considering major projects / reforms such as the NBN.

It is expected that the independent auditor will consult with relevant entities and individuals (both within and outside Government) and will access legally available information. These enquiries and the information provided will necessarily be constrained as the terms of reference raise matters where access to information is restricted.

AG81953

Submissions were due on Friday 2 May 2014. Two submissions were received and they were from Mr Francis Collins and Every Battery Pty Ltd.

Both submissions related to migration issues in the transition from the existing telecommunications network to NBN Co. The lack of upgrade in services between the announcement and roll out of new services under the NBN was raised as well as the inability of Internet Service Providers to provide adequate information to customers about how certain services such as EFTPOS and alarms would be supported during the switch to fibre.

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